

## \title{ * <br> <br> ALLIED RADIO

 <br> <br> ALLIED RADIO}100 N. WESTERN AVE. CHICAGO 8O, ILLINOIS • HAYmarket 1-6800

## ALLIED RADIO ${ }_{\text {corporation }}$

100 N. WESTERN AVE. CHICAGO 8O. ILL.

OFFICE DP THE PRESIDENT

Dear Friend:
You will see on the following pages all the newest developments in electronics. You have the world's largest selections at your command. And the big. important news is this: More than ever, your money goes further at Allied.
You will be especially interested in the following highlights:

You get more with your Allied Credit Fund Plan -yes, more buying power for the same low monthly payments-read the details beginning on the next page.
You get more with exciting new Knight-Kits ${ }^{*}$ and Knight products -see the latest developments in quality build-your-own electronics equipment-advanced new Stereo hi-fi, new CB radios, new ham gear, new hobby kits-at worthwhile savings.
You get more in extra-special values--"bonus buys" and Allied exclusives selected for our old-time friends and for new customerssee the last six special pages of this catalog.
Over and over again, you will find in this catalog proof that your money goes further at Allied.
As always, you can buy with confidence, because we guarantee satisfaction or your money back.
We welcome every opportunity to save you time and money, and to satisfy you completely.

A. D. Davis

# NOW! MORE BUYING POWER with your hllied credit fund 

## now you get even more for the same low monthly payment!

## get these outstanding advantages

1 More buying power-your Allied Credit Fund Plan gives you more than ever

Not a penny down required

Take up to 24 months to pay

A definite amount is set aside in a Credit Fund for your use

Make "add-on'" purchases at any time

You always know where your account stands
-you get a full statement each month

Your Credit Fund automatically increases every time you make a payment

## plus benefits

A single low monthly payment brings you anything Allied sells. You save money, because all you pay is a small monthly service charge, which is automatically reduced every time you make a payment. No service charge at all if paid in 30 days.

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## this is the Allied Pledge

- to save you time and money
- to ship speedily and safely
- most Allied orders are filled and on their way to you within 24 hours after being received.
- to satisty you completely - every item you buy from us must satisfy you in every way or we want you to return it for exchange, repair or refund...

ALLIED RADIO CORPORATION<br>100 N. WESTERN AVENUE - CHICAGO 80, ILL. Phone: HAymarket $1-6800$ (area code 312)

the world's largest electronic supply house


## Here are the ALLIED CREDIT FUND highlights and advantages:

You always know what you have in your Credit Fund. You know exactly how much buying power you have, from the moment you open your account and place your first order. When you make purchases they are charged against your Credit Fund. Each payment you make decreases the balance due and at the same time increases your credit. The monthly statement we send you shows clearly how much unused credit you have.

Shopping is quicker, easier. You never have to figure freight or delivery charges -we prepay them. We send your orders prepaid and add the charges to your account. You don't have to keep extra cash on hand to pay C.O.D. chargesthere's no fuss or bother.

You pay only for what you use. For instance, your Credit Fund may have been set at $\$ 400$ on the basis of an $\$ 18$ monthly payment, but if your order is for only $\$ 220$, your monthly payment will be only $\$ 11.00$ (see Table, next page).

Make "add-on" purchases at any time. This is a big advantage. You don't have to complete payments on a previous purchase to make a new purchase. In most cases, there's no change in your monthly payment. To illustrate: Supposeyou have a balance of $\$ 50$ on a purchase of $\$ 160$. You have been paying $\$ 8$ per month. You can now order up to $\$ 110$ more for the same $\$ 8$ per month. If your "add-on" order is for more than $\$ 110$,
make full and regular use of your Allied Gredit Fund have continuous buying power

The Allied Credit Fund Plan makes possible your immediate enjoyment and use of everything you want in electronics! It places at your command a definite, always-known credit fund that now can give you MORE in buying power for the same low monthly payment. Just open an Allied Credit Fund Account. Use it any time. Buy what you want without a penny down. Use it for "add-on" purchases any time-still no money down. Enjoy maximum buying power with your Allied Credit Fund!
your monthly payment will be adjusted in accordance with the terms in the Table on the next page.

Only your signature on "add-on" orders. After your first order, your signature in the space provided on the back of the order blank is all you need to make your purchase. There is no minimum on "addons," and no further information or down payment is required.

No complicated records for you to keepno bookkeeping problems. We send you a personal statement of your account every month. It shows your purchasés, payments, unpaid balance, and most im-portant-the amount of unused credit you have available. Remember-you pay only for what you use.

There's only a small service charge. A service charge of only $11 / 2 \%$ is added to your monthly balance. The exact amount is shown in your statement, and it's reduced each time you make a payment. No service charge at all if paid in 30 days.

## Your Allied

## CREDIT FUND

now gives you
EXTRA BUYING POWER
for the same low
monthly payment

## here's how the Allied CREDIT FUND works:

When you first open an Allied CREDIT FUND account, we set up a Credit Fund in your name. It allows you a definite amount which we set aside in a Fund for your use. Buy anything you want without a penny down-covers "add-ons," too.

You always know exactly how much more credit is available to you. Under the CREDIT FUND Plan, you can actually enjoy more
buying power than ever before possible for the same low monthly payment. Example: For a monthly payment of only $\$ 20.00$ you can now buy in the amount of $\$ 480.00$, as compared to $\$ 400.00$ under the old regular terms.

SEE HOW MUCH MORE YOU CAN NOW BUY FOR THE SAME LOW MONTHLY PAYMENT

## Credit Fund Payment Table

| Monthly <br> Payment | Unpaid Batance <br> Toon <br> Bum |
| :---: | :---: |
| Only | Buys Up To |
| $\$ 5$ | $\$ 100$ |
| $\$ 6$ | $\$ 120$ |
| $\$ 7$ | $\$ 140$ |
| $\$ 8$ | $\$ 160$ |
| $\$ 9$ | $\$ 180$ |
| $\$ 10$ | $\$ 200$ |
| $\$ 11$ | $\$ 220$ |
| $\$ 12$ | $\$ 240$ |
| $\$ 13$ | $\$ 260$ |
| $\$ 14$ | $\$ 280$ |
| $\$ 15$ | $\$ 310$ |
| $\$ 16$ | $\$ 340$ |
| $\$ 17$ | $\$ 370$ |
| $\$ 18$ | $\$ 400$ |
| $\$ 19$ | $\$ 440$ |
| $\$ 20$ | $\$ 480$ |
| $\$ 21$ | $\$ 500$ |
| $\$ 22$ | $\$ 525$ |
| $\$ 23$ | $\$ 550$ |

OVER \$550-Monthly payments will be in proportion to a mounts on chapt.

SMALL SERVICE CHARGE. Only a small service charre of $11 / 2 \%$ is added to your monthily balance. There are no other charges. Your monthly statement shows exactly what you pav. what you owe and how much unused credt you have.

## NOW! New Lower Terms

## Greater Buying Power

## than ever with your ALL/ED

## CREDIT FUND PLAN

NEW EXTRA BUVING POWER LIKE THIS: FOR ONLY $\$ 5$ MONTHLY YOU CAN BUY UP TO $\$ 100$ \& SEE DETAILS
enjoy everything you need and want in electronics-today..!


# NEW! from and Loaded with Deluxe Features... 



## C-22 Citizens Band Transceiver Kit

Only<br>S0095

- 5 Crystal-Controlled Transmit-Receive Channels; Tunable Receiver
- Operating Range Up to 20 Miles
- Efficient, Fuli 5-Watt Transmitter
\$5 monthly
- Sensitive Superheterodyne Receiver

All new from Knight-Kit and highlighted by a host of deluxe features, this magnificent transceiver kit offers crystal-controlled transmitter and receiver sections that operate on any 5 switch-selected channels-or flip the switch and manually tune receiver section through all 22 channels. Edge-illuminated front panel beautifully displays controls. 5 -watt transmitter section has RF output indicator. Sensitive superhet receiver section has two 1650 -kc IFs, planetary-drive vernier tuning, variable squelch, AVC, noise limiter, $3^{\circ}$ speaker. 12 tube-functions. $4.9 / 16 \times 10-13 / 16 \times 10-1 / 2^{*}$. With wire, solder, press-to-talk mike, instructions. Less crystals, below. For $110-$ $\$ 25$ v., 60 cycle AC or 12 VDC. Shpg. wt., 12 lbs.
83 Y X 802-J. \$5 Monthly
ONLY 69.95
$\varepsilon 3$ Y $\times 801$-J. Standard Model. For fixed-station use. For $110-$ 125 v.,60 cycle AC only.

ONLY 64.95
83 Y X 009-J. Mobile Mtg. Bracket. For C-22. 3 lbs . ONLY 4.95 83 YY 046-J. Transmitting Crystals. Specify chiannels 1-22. (C-22 accommodates 5). Wt., 3 oz.

EACH 2.50
83 Y Y 045-J. Receiving Crystals. Specify channels 1.22.
(C-22 accommodates 5). Wt., 3 oz.
EACH 2.50

[^0]


## All-Transistor Hi-Fi Components by Knight-Kit




11

## New! knight-kit® KG-70 all-transistor STEREO MULTIPLEX FM-AM TUNER KIT

> Only
> s9995

Less Case

- 15 Transistors and 14 Diodes for Unexcelled Performance
- IF Strip and FM Front-End Assembled and Aligned
- Automatic Stereo Multiplex Indicator Light
- Micro-Accurate FM-AM Signal-Strength-Type Tuning Meter for Peak Performance

Another exciting "first" from the world's most experienced manufacturer of solid-state hi-fi components in kit form ..., an all-new transistor tuner kit that gives you breath-taking stereo multiplex FM, plus wideband FM and sensitive AM. Since no tubes are used, you enjoy virtual elimination of hum and heat, freedom from microphonics, and fantastic durability. In addition, the KG-70's FM front-end and IF circuits are pre-wired and pre-aligned. This feature, plus advanced all-transistor design, gives you the highest level of performance attainable in a tuner kit-and enormously simplified assembly.
Deluxe features include low-impedance outputs that allow long cable runs; effortless flywheel tuning; signal-strength type tuning meter; and tuned RF stages on both FM and AM. FM circuit also has 2 wideband IFs, an interterenceblocking limiter, a wideband ratio detector, AFC to lock-in stations without a trace of drift, and an automatic gain control circuit for stable fringe-area reception. On AM, a 10 -kc IF bandwidth offers top fidelity. Supplied complete with 2 audio cables, wire, solder, easy-to-follow, step-by-step instructions. Dimensions and styling exactly match those of the KG-60 amplifier on the facing page-a perfect "stereo pair." Less case, below. For operation from $110-125$ v., 60 cycle AC. Shpg. wt., $5 \frac{1}{2}$ lbs.
83 YU 704-J. $\$ 5$ Monthly
83 YX 033-J. Metal Case for KG-70. Shpg. wt., 5 lbs.
83 YX 032-J. Oiled Walnut Case for KG-70. 5 lbs.
FM SPECIFICATIONS. Usable IHFM Sensitivity: $2 \mu v$ for 30 db of quieting. Response: $\pm 1 \mathrm{db}, 20 \cdot 20,000 \mathrm{cps}$. IF and Detector Bandwidth: 200 kc . Hum and Noise: 60 db below 1 v. Channel Separation: 30 db . Antenna: External $300-\mathrm{hm}$ twin-line folded dipole. AM SPECIFICATIONS. Sensitivity: $3 \mu v$ for 10 db signal/noise ratlo. IF Bandwidth: 10 kc . Hum and Noise: 60 db below 1 v . Antenna: Built-in ferrite loopstick.

Enjoy More of the Good Things-Use Your Allied Credit Fund

ONLY 99.95
ONLY 4.95 ONLY 9.95

## All-New

 like twice the price... and so easy to assemble

# New KG-250 20-Watt Stereo Amplifier Kit with Every Feature for True Hi-Fi Response 

- Deluxe Styling and Features at Amazingly Low Cost Only
- New Output Transformers For Cleaner Sound
- DC on Preamp Tube Filaments for Lowest Hum and Noise
- Simplified, Exceptionally Easy-to-Operate Controls
- Magnetic Phono Inputs-Push-Pull Outputs-Pilot Light

The finest 20 -watt stereo amplifier kit you can buy 1 You get sophisticated styling, top dollar-value, 10 clean watts of continuous sine wave power on each channel, and uncluttered point-to-point wiring for the easiest assembly imaginable. Bullt-in preamps, with DC-operated tube filaments, and twin push-pull output circuits with new, improved transformers deliver pure, vibrant sound over the audio spectrum. Other highlights: RIAA-equalized Magnetic Phono inpuis; clutch-type volume controls; separate boost-and-cut bass and treble controls: and an AC accessory outlet. Special two-piece chassis design also aids assembly -the KG-250 is a real delight to build. With precut wire, solder, step-by-step instructions. Less case, below. $41 / 8$ (plus $5 / \mathrm{m}^{\circ}$ legs) $\times 131 / 4 \times 8 \frac{1}{2}{ }^{2}$. For $110-125 \mathrm{v} ., 60$ cycle AC. Shpg. wt., 16 Ibs.
83 YX 317-J. $\$ 5$ Monthly
ONLY 39.95
83 YX 031-J. Metal Case for KG-250. 5 lbs .
ONLY 3.95
83 YX 030-J. Oiled Walnut Case for KG-250. 5 lbs
ONLY 9.95

SPECIFICATIONS. Power Output: 20 watts continuous sine wave power, Response: $\pm 1 \mathrm{db}, 30 \cdot 15,000 \mathrm{cps}$ at 20 watts. Harmonic Distortion: Below $1.5 \%$ at 20 watts. Hum and Noise: Tuner, -65 db at 20 watts; Mag Phono, -50 db at 20 watts. Inputs: Magnetic Phono; Ceramic (or Crystal) Phono; Tuner; Auxiliary. Output Impedances : 4, 8,16 ohms. Output Tubes: Four ECL82s.

## NO MONEY DOWN

Buys Any Kit of Your Choice

## Deluxe Stylling Includes

 Front Panel of Solid, Extruded Aluminum for a "Protessional Look".

Dual-Concentric ClutchType Control Varies Channel Volume Separately or Simultaneousiy.


A Single Switch Selects Inputs as well as Stereo, Stereo Reverse, or Monophonic Operation.
knight-kit


Panel Light Flashes On Whenever Stereo is Bes ing Received


FM Front End Is Both Pre-Wired and Aligned for Perfect Operation.


Advanced Circuitry Includes G.E. Compactron -Does the Work of FOUR Tubes!

FM SPECIFICATIONS. IHFM Sensitivity: $3 \mu$ for 30 db of quieting. Response: $\pm 1 \mathrm{db}, 50 \cdot 15,000 \mathrm{cps}$. IF and Detector Bandwidth: 200 kc . Hum and Noise : 40 db below 1 v . Channei Separation: 30 db . Antennas: Built-in, plus 300 -ohm twin-line unit. AM SPECIFICATIONS. Sensitivity: $3 \mu \mathrm{v}$ for $10 \mathrm{db} \mathrm{s} / \mathrm{n}$ ratio. IF Bandwldth: 10 kc . Hum and Noise: 40 db below 1 v . Antenna: Ferrite loopstick.

## ONLY 69.95

ONLY 3.95 ONLY 9.95

Get More Buying Power With Allied's Credit Fund

## Kntight-kits'... umanteret or



## in experience

* FIEST
in newest design
* FIRST
in research
*FIRST
in dependability

In this spacious, ultra-modern plant in Maywood, Illinois, staffs of designers, engineers, technical writers, draftsmen, illustrators, purchasing specialists,
production, and quality control experts conceive, design, produce and market Knight-Kits. Continually, new ideas, modern engineering techniques and the finest quality materials flow into this plant. Our goals:
To bring you the highest quality electronic equipment . . . To assure you of the easiest assembly . . .To provide you with substantial savings.


From drawing board to finished product, each KnightKit is the product of an experienced organization, devoted exclusively to providing you with the finest electronic equipment in easy-to-build kis form. Every Knight-Kit

#  

ONLY KNIGHT-KIT GIVES YOU ALL OF THESE IMPORTANT EXTRAS THAT MAKE YOU A KIT-BUILDING EXPERT THE VERY FIRST TIME

"CAN'T MISS" INSTRUCTIONS. You always know where you are with these expertly written step-by-step instructions. In addition, there are large diagrams and pictures. There's no guessworkl


CARDED RESISTORS. No technical knowledge required. All resistors are mounted on cards-each with an identlfying number. You just remove the resistor specified in the manual. Easiest way everl


ALL WIRE PRE-CUT AND COLOR-CODED. NO measuring and no untangling. All wire has been cut to the length required, stripped, tinned and color-coded. It's the height of do-it-yourself convenlencel


ONE-YEAR WARRANTY ON ALL PARTS. AII parts supplied with your Knight-Kit are of the finest quallty. In addition, you're protected by our one-year warranty against defects in materials.

## Identified Parts

 Values are clearly marked on ali capacitors and other components for instant Identification. No previous kit-bullding experience or knowledge of electronics is required with KnightKits:
## Quick-Set Solder

With your Knight-Kit, you receive Eutectic solder. Ideal for kit-building, it passes directly from molten to solid state-helps prevent "cold" solder joints.

## Pre-Punched Chassis

 Heavily cadmium-plated chassis have all holes prepunched. Sockets, controls, and other parts fit perfectly in place. There's never any metal working or drilling necessary when you build a Knight-Kit.Consulting Service We'll be happy to answer your questions-elther before selection or after your kit is completed-there's no charge for this service. You can also have your Knlght-Kit checked at a nominal charge.

## Buy any knight-kit



# KU-45 Stereo Multiplex FM-AM Receiver Kit 

## only 13995

less case

- Excellent Sensitivity- $21 / 2$ Microvolts Usable IHFM for 30 db Quieting
- Pre-Assembled and Pre-Wired Front End-Needs No Further Adjustments
- AFC and DSR Assure Drift-Free, Distortionless Stereo and Monophonic FM
- "Tuning Eye" Indicator Provides Easy Tuning on Both AM and FM Signals


## INCLUDES THESE FINE CUSTOM FEATURES

Latest Style
Pushbutton
OT゙TーOn
Switch

Eliminates resetting volume when unit is turned "On".


## Bar Type <br> Tuning

"Eye"
For pinpoint tuning accuracy on both $A M$ and $F M$ signals.


8-Position Selector Control

Fingertip command of all modes and signal sources.

Here's everything you need in an exclusive "Audio Center" kit-priced right and with features never offered before in a unit of this typel On a single chassis you get: a 32 -watt stereo amplifier; dual preamps for records and tapes with a full set of controls; FM-AM tuner; plus the very latest built-in stereo multiplex FM circuitl Add only speakers and stereo record changer or tape transport to have a complete stereo system of unexcelled quality. You'll get marvelous sound and the finest performance from this blue-ribbon winner each and every time you use it!
FM section highlights include: Automatic Frequency Control for "lock-in" tuning of stations: Dynamic Sideband Regulation to compensate for distorted or overmodulated FM station transmissions; pre-assembled, pre-aligned FM "front end" for quick, easy assembly with no critical adjustments, and rocklike stability, and precision multiplex circuitry for all the beauty and realism of FM stereo reception.
Amplifier section features: tapped-screen linear output for clean reproduction of sound across the entire audio range; full set of controls including tape recorder inputs and outputs; center channel output for a third stereo speaker or extension speaker: and 32 watts of continuous sine wave power output. includes AM loopstick and FM folded-dipoe antennas, all parts, tubes, wire, solder, instructions. Panel in satin gold and mocha brown. Less case, below. Size, $43 / 4 \times 16 \frac{1}{2} \times 13^{\circ}$. For $110-125$ v., 60 cycle AC. WI., 39 lbs .
83 YU 993-J. $\$ 7$ Monthly.
83 YX 646-J. Metal Case. In Cordovan Gray. Wt., 5 Ibs.
ONLY 139.95
ONLY 7.95
83 YX 021-J. Wood Case. In attractive walnut. Wt., 9 lbs...
ONLY 14.95

## SPECIFICATIONS

Amplifler Section-Power Output: 32 watts continous sine wave. Frequency Response: $\pm 1 \mathrm{db}, 30$ to $16,000 \mathrm{cps}$ at full rated power. Harmonic Distortion: $1.0 \%$ at full rated power. Hum and Noise: -75 db or better in Tuner position. Output Impedances: $4,8,16$ ohms each channel; 8 and 16 ohms center channel. Tuner Section-FM Sensitivity: $21 / 2$ microvolts usable IHFM for 30 db quieting. IF Bandwidth: 200 kc at 3 db down. AM Sensitivity: 3 microvolts for $10 \mathrm{db} \mathrm{S} / \mathrm{N}$ ratio. Tube complement: 18 tubes, plus rectifier.


## NEW

## KG-320 32-Watt Transistor Stereo Amplifier Kit

Only - No Warm-Up Required-Plays Instantly<br>- 14 Transistors and 4 Diodes Employed<br>- Better Than 35 db of Channel Separation<br>- Direct-Coupled Output-Uses No Output<br>less case Transformers or Blocking Capacitors

This brand new fully transistorized 16 -watt per-channel stereo amplifler with advanced circuitry, gives you truly mangificent per-formance-will provide years and years of listening pleasure. Low in cost and extremely compact, the KG-320 amplifier offers a host of fine features: instant and cool operation, freedom from microphonics, functionally grouped controls, modern decorator styling, plus balance control for individual adjustment of the speakers and master volume control for overall level.

Uses genuine direct coupling between output stage and your speakers. No output transformers of DC blocking capacitors to mar faithful stereo reproduction. Features the Knight-Kit pioneered "Thermal Feedback" circuit that protects output transistors from overload, acts as a fuse device for your speakers, and helps maintain circuit stability at all times.

Has 5 pairs of inputs including tape head; separate ganged bass and treble controls; rugged printed circuit construction; tape recorder outputs; 2 switched AC outlets; and stereo-mono switch. Extruded aluminum panel is beautifully styled in Sierra Gold and black. With all parts, wire, solder, and detailed, step-by-step instructions. Size, $23 / 4 \times 10 \times 8 \frac{1}{2}$ ". Less case, below. For $110-125 \mathrm{v}$., 60 cycle AC. Shpg. wt., 7 lbs
83 YX 601-J. $\$ 5$ Monthly
ONLY 59.95
83 YX 016-J. Wood Case. Altractive walnut. 5 lbs . . ONLY 9.95
$\mathbf{8 3}$ Y $\times$ 017-J. Metal Case. Cordovan Gray. 5 lbs .
ONLY 4.95

## SPECIFICATIONS

Output Impedance: Matches 8 or 16 -ohm load. IHFM Music Power Output: 32 watts. Frequency Response: 25 to $18,000 \mathrm{cps}$ ( $\pm 1 \mathrm{db}$ ) at full rated power. Harmonic Distortion: $1 \%$ at full rated power. Hum and Noise: -77 db . Channel Separation: 35 db or better. Treble Boost and Cut: 10 db at $10,000 \mathrm{cps}$. Bass Boost or Cut: 10 db at 100 cps . Power Consumption: 10 watts with no signal.

EASY-TO-BUILD Knight-Kits are a world of fun to put together. Careful packaging and attention to detail, plus clearly identified parts make them a snap to assemble-even if you've had no previous electronic experience. You get the world's easiest-to-follow instructions, carefully written and clearly illustrated. Anyone çan build a perfect Knight-Kit!

Finest Pertormance, Up-to-Date Styling.. A Superior Value


## KA-55 Deluxe 40-Watt Stereo Hi-Fi Amplifier Kit

## Only <br> ${ }^{5} 79^{95}$

$\$ 5$ monthly

- Custom Features Usually Found in Costlier Components
- Giant Array of Front-Panel Controls Puts You in Full Command
- Specially-Designed Full-Range Center Channel Speaker Output Permits Adding "Center-Channel" or Extension Speakers
- Modern Printed Circuit Construction For Assembly Ease


#### Abstract

AMAZING VERSATILITY, Five pairs of stereo inputs including "Tape Head"-plus stereo recorder output-give complete fiexibility.


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NG00,0% 9%0925:30:
```


## SOLID EXTRUDED

 ALUMINUM PANEL.Beautifully styled in Desert Beige and Sand Gold.


## PRINTED CIRCUIT SWITCHES

AND "PACS." "PAC" resistorand capacitor units and convenient Knight-Kit prlnted-circuit switches Insure fast, remarkably easy assembly.

For outstanding performance, years-ahead features, for styling of lasting beauty, the KA-55 represents an incomparable value. Easy to assemble, it delivers a full stereophonic output of 20 watts per channel, continuous sine wave power. Its fully integrated stereo preamplifier section accommodates every stereo or monophonic sound source. Amplifier section incorporates a specialiy-designed center-channel output-feed the full audio range to a center speaker and /or hook it up to extension speakers in other rooms.

Dual-concentric, clutch-type controls regulate bass and treble on either channel separately or on both simultaneously. Five pairs of stereo input jacks, including Magnetic Phono, Ceramic Phono, Tuner, Auxiliary and tape head. Has stereo balance control, mode switch that selects regular or reversed stereo, left or right channel alone or through both speakers.
Has tape recorder output jacks, rumble and scratch filters, loudness-volume control. You get step-by-step instructions and giant picture diagrams-fun to build even if you have had no electronic experience. Cordovan Gray metal cablnet, Desert Beige and Sand Gold front panel. With cabinet, all parts, wire and solder, instructions. $41 / 4$ (plus $5 \%^{\circ}$ legs) $\times 15 \frac{1}{2} \times 111 / 3^{\circ}$. Knobs extend $11 / 4^{\prime \prime}$. For 110-125 v., 60 cycle AC. Wt., 26 Ibs.
83 YU T74-J. $\$ 5$ Monthly.
ONLY 79.95

## SPECIFICATIONS

[^1]

# KF-90 Wideband Stereo Multiplex FM-AM Tuner Kit 

| Only | - Fully Equlpped Multiplex Circuit—Nothing Else for You to Buy |
| :--- | :--- |
| $\$ 0095$ | - $11 / 2$ Microvolt Usable IHFM Sensitivity |
|  | - Variable AFC Provides Drift-Free "Lock-In" Tuning |
| $\$ 5$ monthly | - "Stells and IF Transformers are Factory Pre-Aligned |
|  |  |

Deluxe built-in multiplex circuit, improved wideband FM circuit, variable AFC, superb DSR circuit, precise "magic eye" tuning indicators-all this in an FM-AM tuner that you can easily build-and at a price so low that it's hard to believe. You'll tove the dazzling brilliance of stereo multiplex FM, as well as the sparkling high fidelity of conventional FM broadcasts, and the sensitive reception of your favorite AM programs.
And, thanks to the KF-90's "stereofinder," you never have to guess when a station is transmitting FM stereo. Handy, frontpanel Dimension control is turned counter-clockwise for "stereofinder" function-and only picks up stereo broadcasts in this position. Once you're tuned to stereo, just turn the control clockwise, and you're all set for breathtaking stereo FM.
With Allied-pioneered Dynamic Sideband Regulation, the KF-90's FM section sets new standards in distortion-free reception. A form of inverse feedback, DSR reduces to insignificance distortion caused by overmodulation at the
station. Wideband circuit is dual limiter-discriminator type -provides extremely high sensitivity. AFC assures driftfree listening-adjusts for tuning weak signals adjacent to strong ones. Customized AM section offers high sensitivity, plus choice of narrow and wide IF bandwidth for sharp or broad tuning. Also has 10 kc whistle fitter and built-in loopstick antenna. All circuitry on the KF-90 is on printed circuit boards for fastest, easiest assembly. RF and if transformers are carefully sweep-aligned at the factory.

Cathode-follower-type outputs have individual level controls. Moving bar-type "magic-eye" tuning indicators and weighted flywheel make "dialing" the KF-90 a pleasure. Styling matches Knight-Kit KA. 95 and KA- 55 Stereo Amplifiers, KP- 50 Stereo Preamp and KP- 70 Tane Preamp Cordovan Gray steel case-extruded aluminum panel in Desert Beige and Sand Gold. With wire, solder, step-by. step instructions. $41 /$ (plus $5 / 6^{\circ}$ legs) $\times 151 / 2 \times 161 / 2^{\circ}$. Knobs extend $11 / /^{\circ}$. For 110.125 v ., 60 cycle AC. 29 lbs .
83 YU 914-J. $\$ 5$ Monthly
ONLY 99.95

## KS-11 MULTIPLEX ADD-IN ADAPTER KIT

Builds into Knight-Kit Deluxe Hi -Fi Tuners ( $83 \mathrm{YU} 731 / 83 \mathrm{YU} 732$ ) for conversion to FM stereo. Printed circuit board construction. Takes power from your tuner. 3 tubes, all parts, instructions. 3 lbs
83 Y 907 -J.
ONLY 17.95

## SPECIFICATIONS

FM Sensitivity: $1 \frac{1}{2}$ microvolt usable IHFM sensitivity for 30 db quieting. IF Bandwidth: 200 kc at $50 \%$ down on curve. Hum and IF Noise: 60 db below I volt. AFC Pull-in: $\pm 150 \mathrm{kc}$, variable. Image Rejection: 60 db . Frequency Response without Deemphasis: Essentially flat from $20-20,000 \mathrm{cps}$. Multiplex Channel Separation: 30 db ; Storecast Slgnal Suppression: 60 db or better. AM Sensitivity: 3 microvolts for 10 db S/iN ratio. $10-\mathrm{Kc}$ Whistle Filter: 40 db rejection. Hum Level: 60 db below 1 volt. Frequency Response : Narrow- $20107,000 \mathrm{cps}, 6 \mathrm{do}$ down at 3.5 kc . Wide-20 to $10,000 \mathrm{cps}, 6 \mathrm{db}$ down at 6.5 kc


## WITH CASE

## Model KA-95 70-Watt Stereo Hi-Fi Amplifier Kit

Only \$1995 \$6 monthly


Tape-Source Monitor. Selects playback from tape or from sound source-lets you hear your tape while you are recording!


Dual Concentric Bass and Treble Controls. Ganged clutch-type tone controls permit you to adjust each channel separately or both channels simultaneously. Let you correct for differences in speaker response, as well as room acoustics.

- Ideal As the "Heart" of a Super-Power Home Muslc System
- Six Pairs of Stereo Input Accommodate Every Music Source
- Clutch-Type Dual Concentric Bass and Treble Tone Controls
- DC on All Preamplifier Tube Filaments For Minimum Hum
- Independent Tape Inputs and Outputs on Each Channel

A masterpiece of brilliant engineering, the mighty KA-95 includes every feature necessary for maximum flexibility and finest stereo reproduction. Another truly outstanding value-in easy-to-assemble, money-saving KnightKit form. Its flexible preamplifier section has stereo "Blend" control that lets you electronically "move" your speakers together or apart for optimum stereo. Has special "center-channel" speaker output-also permits hookup of remote speakers. Two switches let you phase all channels to one another.
Six pairs of stereo inputs accommodate every music source. Clutch-type concentric bass and treble controls let you individually or simultaneously adjust channels for the tone you desire. Has single-knob "Balance" control, stereo tape inputs and outputs. "Source-Tape" monitor switch permits comparison of recording with input signal.
Also: Tape Head equalization; input paralleling switch for playing mono records; RC rumble and scratch fitters; ganged master volume control switches to loudness control; tuner level set controls; low noise resistors in critical circuits; high sensitivity at Phono and Tape Head inputs; DC on all preamp filaments. Panel markings permit simple operation. Handsome steel case in Cordovan Gray with heavy, extruded aluminum panel in Beige and Gold. With wire, solder, easy-to-follow instructions. $41 / 8^{\prime \prime}$ (plus $5 / 8$ legs) $\times 17 \frac{1}{2} \times 13 \frac{1}{2} 2^{\text {". }}$. Knobs extend $11 /{ }^{\prime \prime}$. For $110-125 \mathrm{v}$., 60 cycle AC. 31 Ibs.
83 YU 934-J. $\$ 6$ Monthly.
ONLY 119.95

## SPECIFICATIONS

[^2]

## Model KF-75 Stereo Multiplex FM Tuner Kit



## OFFERS YEARS AHEAD DELUXE FEATURES

## "STEREOFINDER"

Finds stereo broadcasts for you. Turn Dimension control counterclockwise, tune-you only hear stereo signals-now turn control clockwise and adjust for most pleasing sound.

"Magic-Eye" Tuning. For pin-point accuracy. A moving bar of light glides across the dial-closes to a slit on perfectly tuned station.

- Offers $11 / 2 \mu V$ Sensitivity IHFM for Greater-Than-Ever "Pull-In" Power
- Built-In Multiplex Circultry Provides Thritling Stereo FM Reception
- Continuously Variable AFC Gives Absolutely Drift-Free Performance
- Exclusive Dynamic Sideband Regulation Effectively Reduces Distortion
- STEREOFINDER Dimension Control Helps You Find Stereo Broadcasts

A deluxe FM tuner, fully equipped for breath-taking stereo multiplex FM reception. Multiple circuitry provides sparkling high fidelity stereo with excellent channel separation; brilliant reception of monophonic FM broadcasts, too. $11 / 2 \mu \vee$ IHFM useable sensitivity gives you greater-than-ever "pull-in" power-terrific for fringe areas where slgnals are weak.
Unique STEREOFINDER helps you locate stations broadcasting stereo FM. Turn Dimension Control counter-clockwise for STEREOFINDER functiontune across FM band for multiplex signal-its the only one you'll hear-then turn control clockwise and you're set for superb stereo reception. Dimension Control adjusts channel separation for optimum stereo effect. Other features: Dynamic Sideband Regulation for distortion-free reception; AFC for drift-free listening. All circuitry is on printed circuit boards for fast, easy assembly. RF and IF transformers are factory pre-aligned. Cathode-follower outputs have individual level set controls. All this in one self-contained, beautlfully-styled tuner.
SPECIFICATIONS: Sensitivity: $1 \frac{1}{2} \mu \mathrm{~V}$ IHFM for 30 db quieting. Response: $50-$ $15,000 \mathrm{cps}$. Separation: 30 db . Bandwidth: 200 kc . Hum \& Noise: 60 db below 1 v . With same handsome case and extruded aluminum panel as Model KA-95 Stereo Amplifier Kit on opposite page. $4 \frac{1}{8}$ (plus $5 / /^{\prime \prime}$ legs) $\times 15 \frac{1}{2} \times 15^{\prime \prime}$. Knobs extend $11 / 4$. For $110-125 \mathrm{v}$., 60 cycle AC. 26 Ibs. 83 YU 918-3. $\$ 5$ Monthly.

ONLY 84.95

## KS-11 Add-In Multiplex Adapter Kit for 83 YU 731 and 83 YU 732 Tuners

## Only <br> $17^{95}$

Calling all owners of Knight-Kit Deluxe FM and FM-AM Tunersl Here's easy "inboard" conversion to stereo Multiplex FM-and at a cost so low it's hard to believe. This complete adapter uses a single, printed-clrcuit board chassis-builds right into your monophonic tuner quickly and easily. Takes power from tuner. 3 lbs.
83 YX 907 -J.
ONLY 17.95


## Only <br> $\$ 59^{95}$

less case

YOU GET THESE SUPERIOR FEATURES AT NO EXTRA COST


## KG-400 32-Watt Stereo Amplifier Kit

- Independent Tape Inputs and Outputs on Each Channel
- DC on All Preamp Tube Filaments for Negligible Hum
- Ganged Bass and Treble Controls for Easy Adjustiment
- Center Channel Output for Extension Speaker

Presenting an updated verslon of a hi-fi masterpiece-sure to be enthusiastically received by budget conscious do-it-yourself'ers. Capable of strikingly pure reproduction, the KG-400 delivers 16 watts of continuous sine wave power per channel for a total of 32 watts of stereo power output. Two fully integrated preamps provide precise RIAA equalization for all magnetic cartridges. Also in. corporates stereo inputs for ceramic cartridge, tuner, tape head, olus auxiliary source. Versatile controls give you full command of stereo and monophonic reproduction with unexcelled ease and orecision.
A center channel output permits adding additional speakers for sound through. out the home, or for reintorcing stereo effect with center speaker when using widely spaced stereo speakers. Additional features: Ganged bass and treble controls that boost or attenuate both channels simultaneously for simpte adjustment of tonal quality to precisely suit your taste; single-knob control for optimum channel balance; slide switch for paralleling channels when playing monophonic discs; DC preamp filaments for minimum hum and noise; and nolse; and tape recorder outputs unaffected by volume and tone controls.
Has two accessory AC outlets, one switched on and off with amplifier. Comes with lustrous platinum /yellow gold panel-harmonizes beautifully with any decor. Less cabinet, below, $41 / 4 \times 143 / 8 \times 113 / 4$. Includes all parts, wire, solder, and instructions. For $110.125 \mathrm{v}, 60 \mathrm{cycle} \mathrm{AC}. \mathrm{Wi.} 24 lbs.$,
83 YU 413-J. $\$ 5$ Nonthly
ONLY 59.95
83 Y $\times 023$-J. Wond Case. Attraclive walnut. 5 lbs ,
83 YX 024-J. Metal Case. Cordovan gray finish. 5 lbs.
ONLY 9.95
ONLY 3.95

## SPECIFICATIONS

[^3]
# Model KG-65 Economy Hi-Fi FM-AM Tuner Kit 


less case

- No-Drift AFC Circuit Securely "Locks-In" FM Stations
- Pre-Aligned RF and IF Coils-No Further Adjustments
- Multiplex Output Jack for Easy Addition of Stereo FM Adapter
- Compact Size-Beautifulty Styled Panel-Easy to Build

Get genuine hi-fi performance at far less cost than comparable factory-wired tuners! The KG-65 offers amazingly sensitive $F M$ and $A M$ reception on a single, compact chassis. It's easily the finest tuner in its class! Among the many standout features are: AFC circuit that "locks in" FM stations to prevent annoying drifting-plus AFC Defeat that allows you to tune weak stations adjacent to strong ones; cathode-follower output that lets you run a long lead to your amplifier without high-frequency loss; plus heavy flywheel tuning for gliding effortlessly from station to station. Multiplex output jack equips set to receive FM stereo whenever you add an adapter (see Knight-Kit KG-12 in this section). Easy-to-build, printed circuit construction. Has beautiful platinum /yellow gold panel. $4 \frac{1}{4} \times 131 / 4 \times 8^{6}$. With all parts, instructions. Less case, below. For 110-125 v., 60 cycle AC. Wt., 13 lbs.

83 YX $315-\mathbf{J} . \$ 5$ Monthly
83 YX 018-J. Wood Case. Attractive walnut. 5 lbs.
83 YX 019-3. Metal Case. Cordovan gray finish. 5 lbs.

ONLY 49.95
ONLY 9.95
ONLY 3.95

## SPECIFICATIONS

IHFM FM Sensitivity: $4 \mu v$ for 30 db quieting. Hum and IF Noise: 60 db below 1 volt. IF Bandwidth: 200 kc at $50 \%$ down on curve. Image Rejection: 60 db .
Frequency Response: 20.20 .000 cDS without de-emphasis.

AM Sensitivity: 3 microvolts for 10 db S/N ratio. IF Bandwidth: 8 kc at $50 \%$ down on curve. Hum Level: -60 db . Image Rejection: 20 db . Response: 20 to 8000 cps .

## New! KG-35 Hi-Fi FM Tuner Kit

For high-fidelity FM at a price anyone can afford-for outstanding performance and top-quality components-the number one choice is the KG-35 tuner kit. Designed for assembly ease, this tuner uses a 7 tube circuit for extraclean, first-rate FM reception. Features: modern printed circuit construction: automatic frequency control (AFC) for "lock-in", drift-free tuning; pre-aligned RF and IF transformers; effortless flywheel tuning; cathode-follower main output; multiplex adapter output for FM stereocasts (see Knight-Kit KG-12 in this section). Decorative platinum/gold panel. Less case, uses same as KG-65 above. For 110-125 v., 60 cycle AC. 13 lbs .
83 Y $\times 408-\mathrm{J}$. $\$ 5$ Monthly
ONLY 35.95
less case


## SPECIFICATIONS

[^4]

## Model KG-12 Deluxe Stereo Multiplex Adapter Kit

Only<br>$\$ 2095$

\$5 monthly

- Stereo Indicator Bar Automatically Llghts During Multiplex Broadcasts
- Front Panel Separation Control for Adjusting for Optlmum Stereo Effect
- Compatible With Most Wideband Tuners; Completely Self-Powered
- Incorporates Noise Filters and Tape Recording Filters

Thrill to the exciting depth and full richness of stereophonic FM broadcasts by using this deluxe multiplex adapter kit with your present wideband FM or FM/ AM tuner. It's simple to buitd, and really easy to connect-detailed instructions show you the way. Then sit back and relax, you'll love the life-like realism of FM stereo sound. Positive identification of stations broadcasting multiplex is achieved by a front panel indicator which lights up and reads "STEREO" when stations are transmitting stereo FM. A front panel function switch allows you to completely bypass the adapter during conventional FM broadcasts. The KG-12 is self-powered and does not require any power from your tuner. Has built-in nolse and tape-filters for best performance. 30 db separation; adjustable by panel control. Response, $\pm 1 \mathrm{db}, 50-15,000 \mathrm{cps} .4$ lubes, pilot light. Decorator-styled platinum/gold panel. With cables, wire, solder, instructions. Cordovan Gray case. $4 \frac{3}{4} \times 6 \times 7 \frac{1}{2}$. For $110-125$ v., 60 cycle AC. 6 lbs .
83 YX 734-J. $\$ 5$ Monthly.
ONLY 29.95

## Model KS-10A Low-Cost Stereo Multiplex Adapter Kit



- Use With Any Wideband FM Tuner
$\$ 995$
- Self-Powered-Has Handy On-OH Switch
- Adjustable Stereo Separation Control
- Noise Filter for Fringe Area Reception

Enjoy a wonderful new dimension in FM listening-the breath-taking beauty of stereo multiplex reception. The KS-10A adapter kit, when used with any wideband FM tuner and stereo amplifier, provides sparkling hi-fl stereo with excellent 30 db channel separation. Easy- 10 -build, detailed instructions guide your every move, and show how to make tuner connections. Includes both separation control and noise filter for pleasing stereo effect and better fringe area reception. Self-powered, adapter may be installed out of sight. 3 tubes; 2 dual-purpose, 1 triple purpose. With all parts, wire, solder, cabinet. Size, $37 / 8 \times 8 \frac{1}{2} \times 4^{\prime \prime}$. For 110-125 v., 60 cycle AC. 4 lbs.
83 Y 656-J. $\$ 5$ Monthly.
ONLY 19.95

# Model KM-20 Popular 18-Watt Hi-Fi Amplifier Kit 

Only<br>'3995<br>\$5 monthly

- Has 8 Inputs to Accommodate Virtually Every Sound Source Required
- Uses RCA 6973 High-Fidelity Audio Output Tubes for Top Performance
- Wide, Smooth, True HI-Fi Frequency Response from 30-16,000 cps at 18 Watts
- Exclusive Printed Circuit Switch and Boards for Easy, Simplified Assembly

Get more for your hi-fi dollar in features, performance and styling with this blue-ribbon winner! The KM-20 amplifier is a perfect choice as the heart of any monophonic system-or as a splendid "add-on" unit for stereo. Delivers 18 watts of continuous power at an imperceptible 0.5\% distortion; uses RCA 6973 high-fidelity audio output tubes for the best possible performance. Highlights include: separate recorder output for taping a program source independently of amplifier controls; equalized input for tape head; 4 high-gain inputs; 4 lowgain inputs; AC convenience outlet; 7 record equalization settings; and easy-to-use, simplified controls. Utilizes the famous Knight-Kit printed circult selector switch and circuit boards for easy, pleasurable assembly. With attractive Cordovan Gray case and Desert Beige/Sand Gold panel. Size, 41/4 (plus $5 /{ }^{\circ}$ legs) $\times 131 / 4 \times 8^{\circ}$. With all parts, tubes, wire, solder and complete assembly instructions. For 110-125 v., 60 cycle AC. Shpg. wt., 15 lbs. 83 YX 930-J. $\$ 5$ Monthly

## SPECIFICATIONS

Rated Power Output: 18 watts continuous sine wave. Frequency Response: $\pm 1 \mathrm{db}, 30$ to $16,000 \mathrm{cps}$ at 18 watts. Harmonic Distortion: $0.5 \%$ at full rated power output. Hum and Noise: (Tuner) Better than 70 db below 18 watts. (Magnetic Phono) 52 db below 18 watts. Sensitivity: (Full output) Tape Head and Mag. Phono, 5 mv ; Mic., 35 mv ; Aux. and Tuner, 1.8 volts: Ceramic Phono, 0.5 volts; Tape, 0.4 volts. Impedance: $4,8,16$ ohms

## Model KM-15 Economy 12-Watt Hi-Fi Amplifier Kit

$199^{075}$

- Push-Pull EL84 Output for Clean Sound
- Equalized Magnetic Input Plus Tuner
- Separate Bass and Treble Controls
- Exceptionally Low Distortion

Anyone can build it-everyone can afford it! Exceptionally compact yet custom-engineered for quality, the KM-15 represents a great hi-fi value. Features push-pull output; 15 db of inverse feedback for clean, true sound; inputs for magnetic phono and tuner; separate bass and treble for complete control of tonal color; minimum hum and noise ( -65 db in Tuner position); and output for 4, 8, and 16 ohm speakers. An ideal choice for conversion to stereo, with another monophonic amplifier. With parts, wire, solder, instructions. Black finish. Less cover, below. $5 \times 9 \frac{1}{2} \times 6^{\circ}$. For $110-125$ v., 60 cycle AC. 8 Ibs.
83 Y 784-J. $\$ 5$ Monthly.
ONLY 19.95
83 Y 783-J. Top Cover. Gray/Chrome, 2 Ibs.. . . ONLY 3.95



# New Model KG-240 20-Watt Stereo Amplifier Kit 

less case

- Delivers 10 -Watts Per Channel IHFM Music Power Output
- Accommodates Both Tuner and Ceramic Phono Sources of Signal
- I ccludes Ganged Bass and Treble Controls for Tonal Adjustments
- Dual Concentric Volume Control for Independent Channel Balancing

A solid value at an unusually low price, the new KnightKit KG-240 Amplifier Kit is heartily recommended for economy stereo home music systems. Two pairs of Inputs are provided to accommodate ordinary sources of stereo sound-tuner and ceramic phono-which are easily selected by a front panel slide switch. Ganged bass and treble controls for both channels let you make tonal adjustments to sult your listening pleasure with ease and accuracy. A dual concenmic volume control allows fast and simple channel balancing, and will compensate for the positioning of your speakers and room acoustics-provides the best stereo effect. All controls are front-panel mounted for utmost convenience. This top value ampllfier uses quality ECL-86 tubes in push-pull circuitry for distortion-free

audio reproduction. Siyled in platinum bronze, accented by a white escutcheon with black knobs and chrome trim. Fused transformer-type power supply. Size, $5 \times 10 \times 7^{\prime \prime}$. With alf parts, tubes, wire, solder, instructions. Less cover, below. For $110-125 \mathrm{v}$., 60 cycle AC. Wt., 8 lbs .
83 YX 602-J. $\$ 5$ Monthly.
ONLY 29.95
83 Y 020-J. Metal Cover for Above. 2 lbs...... ONLY 3.95

## SPECIFICATIONS

Power Output: 10 watts per channel (IHFM). Frequency Response: $\pm 11 / 2 \mathrm{db}, 35$ to $15,000 \mathrm{cps}$. Harmonic Distortion: $1.5 \%$ at 1 kc . Sensitivity: $1 / 2$ volt. Hum and Noise: 60 db below rated output. Separation: -35 db or better. Treble and Bass: -10 db at $15 \mathrm{kc},+10 \mathrm{db}$ at 100 cps .

## Budget-Priced Stereo System Complete System $\$ 0495 \begin{gathered}\$ 5 \\ \text { monthly }\end{gathered}$

SAVE $\$ 4.85$ OFF COST OF INDIVIDUAL COMPONENTS PURCHASED SEPARATELYI Carefully chosen by Allied's audio staff to provide good stereo reproduction at exceptionally low cost. System Includes: Knight-Kit KG-240 Stereo Amplifier Kit (less cover); Admiral Ensign Record Changer With Ceramic Stereo Cartridge (less base); Two Knight KN-809 Full-Range $8^{\circ}$ Speakers. Also included are all necessary interconnect. ing cables. Changer plays 4 speeds, $16 \%$, $331 / 3,45$ and 78 rpm. Intermixes $10^{\prime \prime}$ and $12^{\prime \prime}$ records. Speakers reproduce both highs and lows faithfully. Shpg. wt., 30 lbs.
22 HF 034-J. $\$ 5$ Monthly.
ONLY 64.95
73 RX $062 \mathrm{C}-\mathrm{J}$. Wood Base for Changer. In mahogany, limed oak or walnut. Specify finish. Wt., 4 lbs. ONLY 4.49

Reduced $\$ 14.55$ From Last Year's Catalog <br> \section*{\title{
Model KB-85 70-Watt Stereo Basic Amplifier Kit
}} <br> \section*{\title{
Model KB-85 70-Watt Stereo Basic Amplifier Kit
}}

- Extremely Wide Frequency Response Even At Full Rated Power Output
new low price

A superb stereo basic amplifier that meets the most critical professional requirements. Its powerful 70 watts continuous power output makes it ideal for use with highcompliance, low-efficiency speaker systems as well as all good-quality, high-efficiency speakers. Highlights include: low-noise resistors in all critical circuitry: 35 db of negative feedback per channel for flawless sound; superior quality high-fidelity output tubes; monophonic changeover switch. Uses 2 printed circuit boards for easy, accurate assembly. Chassis in chrome and black. With wire, solder, instructions. Less cover, below. $81 / 2 \times 14 \times 9^{\prime \prime}$. For $110-125 \mathrm{v}$., 60 cycle AC. 39 lbs .
83 YU 618-J. $\$ 5$ Monthly. 83 Y $\times 779-\mathrm{d}$. Metal Cover. Wt., 5 Ibs. .

ONLY 69.95
ONLY 6.50

Unsurpassed Stereo Hi-FI QualityTruly the Finest In Its Class

- Tremendous Reserve Power-Excellent for Use With Low-Efficiency Speakers
- Unexcelled Design; Premium-Quallty Parts; Gleaming Chrome Chassis
- Highly Sensitive -0.54 Volts per Channel Produces full 70 Watt Level


## Model KP-50 Deluxe Stereo Preamplifier Kit

## 000000 <br> Only $\$ 59^{95} \underset{\text { monthly }}{\$ 5}$ <br> new low price <br> This Integrated Control is $A$ Perfect Mate For the KB-85 Basic Amplifier, Above

This deluxe, easy-to-build preamp kit offers every facility for the ultimate in stereo or monophonic sound. Has 5 pairs of inputs; dual-concentric controls for separate or simultaneous adjustment of bass, treble and level on both channels; DC filaments and shielded power supply; channel reverse; recorder outputs independent of volume and tone controls; LC-type scratch filters; rumble filters; and low-nolse, premium-type tubes. Also cathode-follower outputs, and 2-AC convenience outlets. $41 / 4$ (plus $5 / 8^{\circ}$ legs) $\times 131 / 4 \times 71 / 2^{\prime \prime}$. Cordovan Gray case. Beige/Gold panel. For 110-125 v., 60 cycle AC. 14 lbs.
83 Y X 768-J. $\$ 5$ Monthly . . ... 59.95

## SPECIFICATIONS

Rated Power Output: 70 watts continuous sine wave. Frequency Response: $\pm 0.5 \mathrm{db}, 15$ to $31,000 \mathrm{cps}$ at full rated power. Distortion: Harmonic, $0.25 \%$ intermodulation, $0.15 \%$; both at full rated power. Hum and Noise: 90 db below full rated output per channel. Input Sensitivity: 0.54 volts for full rated power. Output Impedances: 4, 8, 16, and 32 ohms, each channel. Damping Factor: 17.4 to 290, stereo connected. Controls: Level $A_{i}$ Level $B_{\text {; }}$ StereoMonophonic Switch; Monophonic Gain Balance Test Switch; Off-On; and Cathode Current Balance (2). Tubes: 2-EF86/Z729/6267; 2-ECC83/12AX7/7025; 4-EL37; 2GZ34/5AR4 rectifiers. Power Consumption: 280 watts.

## SPECIFICATIONS

Frequency Response: $\pm 1 / 2 \mathrm{db}, 7$ to $120,000 \mathrm{cps}$ al tuner input $i_{i} \pm 1 / 2 \mathrm{db}, 10$ to $80,000 \mathrm{cps}$ at mike input. Harmonic Distortion: Less than . $15 \%, 20 \cdot 20,000$ cps at 1 volt output. IM Distortion: Less than $.7 \%$ at 1 volt output. Hum and Noise: Tuner, 80 db below 1 volt; Phono, 60 db below 1 voll. Bass and Treble Controls: Boost or attenuate 15 db at 20 cps and $20,000 \mathrm{cps}$ respectively. Crosstalk Between Channels: -45 db or better. Sensitivity for 1 Volt Output Per Channel: Tape Head and Magnetic Phono, 2.5 millivolts: Ceramic Phono, 70 millivolts; Tuner, 150 millivolts; Auxiliary, 500 millivolts.


## Model KP-70 Stereo Tape Record-Playback Preamp Kit

## PACKED WITH FEATURES


"SOUND-ON-SOUND""
Accompany yourself in a duet. Special switching permits duplicating recordings from channel to channel -adding another "part" each time.


## "ECHO-CHAMBER"

Professional-type echo chamber effect may be switched in at any time to enhance your recordings. No external cable patching is necessary.


## CALIBRATED VU METERS

High-quality VU meters permit proper recording level adjustment. Provide accurate readings of both record and playback level at all times. 2-color scales are calibrated -20 to +3 db .

PROFESSIONAL QUALITY AT AMAZINGLY LOW COST Only - Recording and Playback With Any Tape Transport s895

- Separate, Dual-Channel Record and Play Pre-amps
- "Sound-on-Sound" and "Echo Chamber" Effects
$\$ 5$ monthly - Ultra-Flexible-Adjusts to Match Any Tape Head
Famous for its superb performance and sensational array of features, this ultra-flexible preamp provides high-fidelity playback and recording with any stereo tape transport. Its broad response covers the range from the lowest bass notes through the highest overtones of any musical instrument. Can be used for 2 or 3 -head operation-with 3 -head transports, such as the Knight KN-4000, you can create studio effects-"echo chamber," "sound-on-sound," etc.
The KP-70 has dual, concentric, clutch-type level controls for mike and auxiliary inputs, and for playback. Panel switch selects equalization for either $7 \frac{1}{2}$ or $3 \frac{3 / 4}{}$ ips on both record and playback modes. Mike and aux inputs (tuner, etc.) can be mixed on each channel for truly professional recordings. A.B monitor switch permits comparison of tape and source.
Aluminum panel is styled in Desert Beige and Sand Gold. With instructions, all parts, wire and solder. Less case, below. Size: $4 \frac{1}{8}$ (plus $5 /{ }^{\prime \prime}$ legs) $\times 15 \frac{1}{2} \times 91 /{ }^{\prime \prime}$. For $110-125$ v., 60 cycle AC. Supplied for 3-head operation-2-head operation requires switch listed below. Shpg. wt., 15 lbs .


## 83 YU 916 -J. <br> ONLY 89.95

83 YU 559-J. As above, but factory wired. For 2 and 3 heads.
83 YX 936-J. Cordovan Gray Metal Case for KP-70.5 Ibs. 95 DU 575-J. Portable Carrying Case. For Knight-Kit KP. 70 and Knight KN. 4000 Tape Transport. Cream and brown. $20 \times 161 / 2 \times 111 / 2{ }^{\prime \prime} .15 \mathrm{lbs}$....... NET 24.95 83 Y 940-J. 2-Head Switch. 402. NET 1.95

## SPECIFICATIONS

[^5]

## Complete Professional Stereo Tape Recording Systems

OPTIONAL EXTRAS
Listed in Systems at Right


Tape Splicing, Editing, Cleaning and Care Kit


Knight KN-4500 Dynamic Microphones


## PORTABLE CARRYING CASE

Durable wood case for systems at right. Fabrikoid cream and brown finish. $20 \times 16 \times 11 \frac{1}{2}$ ". Shpg. wt., 15 lbs.

## SAVE ON THESE DELUXE COMBINATIONS

As Low As - Full 4-Track Stereo and Monophonic Taping Facilitles ${ }^{5} 21595$

- Transport has Three Heads, Three 4-Pole Motors
- Preamp has a Top-Versattlity Control Complement
\$11 monthly - Double Savings on Systems With Preamp in Kit Form
SYSTEM NO. 1-BASIC SYSTEM. Save $\$ 11.44$ on components purchased separately. Everything you need for recording studio-quality, 4-track stereo and monophonic tapes. Plays tapes back through your stereo music system. Complete provision for "sound-on-sound" and "echo-chamber" effects. Just assemble the easy-to-build KP-70 preamp kit, and your taping system is ready to use.
The KP- 70 Stereo Tape Record/Playback Preamp Kit matches the KN-4000 transport perfectly. It features a complete set of concentric, clutch-type level controls, dual VU meters and an A-B monitor switch. It is $4 \frac{1}{8}$ (plus $5 / 8^{\circ}$ legs $\times 15 \frac{1}{2} \times 9^{\circ}$. (See facing page for a complete description.)
The KN-4000 Deluxe Pushbutton Tape Transport features three separate heads, three heavy-duty 4 -pole motors, and seven convenient "keyboard" controls to handle all functions. Includes positive DC dynamic braking, tape counter and automatic shutoff. $71 / 2$ and $33 / 4$ ips speeds. Size, $131 / 2 \times 151 / 4 \times 7^{7}$. (See Knight section of catalog for a complete description.)
Both units are in Desert Beige and Sand Gold. With 3-1200-ft. reels of Knight KN-15 $11 / 2$-mil tape and tape booklet. For $110-125 \mathrm{v} ., 60 \cdot \mathrm{cycle}$ AC. Preamp is supplied less case (see below). Shpg. wt., 44 lbs .


## 22 HF 035-J.

ONLY 215.95
22 HF 036-J. No. 2. Above With Factory-Wired Preamp
ONLY 262.95
SYSTEM NO. 3. Basic system, plus high-fidelity stereo headset and splicing kit. Shpg. wt., 47 lbs .
22 HF 037-J. Save $\$ 13.38$ On Components Purchased Separately. ONLY 249.50
22 HF 038-J. No. 4. Above With Factory-Wired Preamp
ONLY 296.95
SYSTEM NO. 5. Basic system, plus high-fidelity stereo headset, splicing kit and two KN- 4500 microphones. Shpg. wt., 55 Ibs .
22 HF 039-J. Save $\$ 15.83$ On Components Purchased Separately. ONLY 292.95
22 HF 040-J. No. 6. Above With Factory-Wired Preamp......... ONLY 339.95
83 YX 936-J. Metal Case for KP-70. Shpg. wt., 5 lbs.
ONLY 4.95


ECONOMY STEREO HI-FI PHONO SYSTEM SYSTEM PRICE SAVES YOU UP TO \$51.391

- Individual Components Purchased

Separately Cost Up to \$184.34
Less Cose

- 820 's Give 40-13,000 cps Response

Complete custom ensemble for thrilling stereo record listening, centered around the new Knight-Kit KG-320 All-Transistor 32.Watt Amplifier. KG-320 in easy-to-build kit form, utilizes 14 transistors, 4 diodes-no warmup time, virtually no heat or hum. System Includes: Knight-Kit KG-320 32-Watt Stereo Amplifler Kit; Garrard Autosllm Record Changer and Base; your choice of any one of four stereo cartridges: Empire 880, Shure M3D, Pickering U38AT, or Knight KN505X; plus two Knight KN-820 $12^{\circ} \mathrm{Hi} \mathrm{Fl}$ Speakers. You get all cables for easy hook-up. Garrard Autoslim changer has quiet 4 -pole motor. Knight KN-820 Speakers give smooth response. Less amplifier case, below. Changer base in mahogany, limed oak or walnut-specify. 33 lbs ,
22 HF $003 \mathrm{C}-\mathrm{J}$. Specify Cartridge.
ONLY 132.95

## ALTERNATE WITH SHELF-SPEAKER SYSTEMS

 SAVE UP TO $\$ 56.84$ OFF THE COST OF COMPONENTS PURCHASED SEPARATELY. Includes components above with 2-Knight KN-281 Wainut Shell-Speaker Systems in place of KN-820's; walnut changer base. Less amplifier case. 69 lbs .22 HF 0M-J. Specify Cartridge.
ONLY 193.50


## LOW-COST STEREO HI-FI PHONO SYSTEM SYSTEM PRICE SAVES YOU UP TO \$55.391

System Price - Individual Components Purchased

5 $63^{35}$
Less Case

Separately Cost Up to $\$ 219.34$ - 12 KN-830's Offer 3-Way Design

- AT-6 Changer Plays All 4 Speeds

A tremendous value in a superb array of custom components. Save on Allied's system price, and by building the superb, all-transistor KG-320 yourself. System Includes: Knight-Kit KG-320 32-Watt Stereo Amplifier Kit; Garrard AT- 6 Automatic Turntable and Base; your choice of any one of four stereo cartridges: Empire 880, Shure M3D, Plckering U38AT, or Knight KN505X; plus two Knight KN$83012^{*}$ 3-Way HI-FI Speakers. All connecting cables are included. AT-6 Turntable combines changer convenlence with turntable performance. Knight KN-830's provide brilliant, $40-18,000 \mathrm{cps}$ response. Less amplifier case, listed below. Changer base in mahogany, limed oak, walnutspecify. Shpg. wt., 54 lbs .
22 HF 005C-J. Specily Cartridge
ONLY 163.95

## ALTERNATE WITH SHELF ENCLOSURES

SAVE UP TO $\$ 59.29$ OFF THE COST OF COMPONENTS PURCHASED SEPARATELY. Includes all of the components of above system with the addition of Knight KN-1286 Walnut Shelf Speaker Enclosures. You can place the KN-1286's on shelves, mantels, etc. Walnut changer base. Less ampliffer case, below. 104 lbs.
22 HF $006-\mathrm{J}$. Specify Cartridge.
ONLY 219.95

## OPTIONAL CASES FOR KG-230 AND KU-45

83 YX 017 -J. KG-320 Brown Metal Case. 5 Ibs. . 4.95 83 YX 016-J. KG-320 wood Case. Walnut. $5 \mathrm{lbs} . . .9 .95$ 83 Y $\times 646-\mathrm{J}$. KU-45 Brown Metal Case. $5 \mathrm{lbs} . . . .7 .95$ 83 Y $\times 021-\mathrm{J}$. KU-45 Wood Case. Walnut. $7 \mathrm{lbs} . .14 .95$


Knight-Kit KG320 32-Watt Stereo Amplifier Kir


## STEREO MULTIPLEX FM/AM PHONO SYSTEM SYSTEM PRICE SAVES YOU UP TO $\$ 60.391$

System Price - Individual Components Purchased<br>'219 ${ }^{51}$ Separately Cost Up to $\$ 280.34$ - $8^{n} \mathrm{KN}-829^{\prime} \mathrm{s}$ Give Amazing Response Less Case<br>- Autoslim Plays All 4 Speeds

Get thrilling stereo listening from your records or FM with this complete custom hi-fi ensemble. Big double savings: save on the cost of individual components; save because you build the receiver yourself. System features the Knight-Kit KU-45 Stereo FM/AM Receiver. In easy-to-build kit form, offers powerful 32 -watt stereo output for brilliant response from any source; highly sensitive FM section with built-in multiplex clrcuit for reception of stereo multiplex FM broadcasts; plus AM section for keeping in touch with news, sports, etc.
System Includes: Knight-Kit KU-45 Receiver Kit; Garrard Autoslim Record Changer and Base; your choice of any one of four stereo cartridges: Empire 880, Shure M3D, Pickering U38AT, or Knight KN505X; plus two Knight KN-829 $8^{\circ}$ Coaxial HI-FI Speakers. You also get all connecting cables for easy hookup of your system.
Popular Garrard Autoslim has quiet 4 -pole motor, gently handies your preclous records. Knight KN-829 Speakers offer 40-15,000 cps response. Have $8^{*}$ woofer cone bass; compression-type fweeter for clear highs. Perfect for cus-tom-mounting. Less receiver case. 65 lbs . Changer base in mahogany, limed oak or walnut-specify.
22 HF 007C-J. Specify Cartridge.
ONLY 219.95

## ALTERNATE WITH SHELF ENCLOSURES

SAVE UP TO $\$ 62.74$ OFF THE COST OF COMPONENTS PURCHASED SEPARATELY. Includes all of the components above, with the addition of Knight KN-1284 Walnut Shelf Enclosures. Extremely compact-you can place them anywhere. Walnut changer base. Less receiver case. Shpg. wt., 95 lbs.
22 HF 008-J. Specify Cartridge
ONLY 257.50

## DELUXE STEREO HI-FI PHONO SYSTEM SYSTEM PRICE SAVES YOU UP TO $\$ 65.391$

System Price - Individual Components Purchased
$\$ 284^{95} \quad$ Separately Cost Up to $\$ 350.34$
Less Case

- KN-2200's Offer 3-Way Design
- Deluxe "A" Plays All 4 Speeds

This superb custom system components provides unusual flexibility of installation, striking luxurious styling, and truly thrilling performance. Brings you big double savings: save on the cost of individual components purchased separately; then save again because you build the amplifier yourself. System is highlighted by the new Knight-Kit KG-320 All-Transistor 32-Watt Stereo Amplifier in easy-tobuild kit form. Elimination of output transformers and coupling capacitors makes possible a response that is virtually flawless.
System Includes: Knight-Kit KG-320 32-Watt Stereo Am= plifier Kit; Garrard Type "A" Automatic Turntable and Base: your choice of any one of four stereo cartridges: Emplre 880, Shure M3D. Pickering U38AT, Knight KN505 X ; plus two Knight KN-2200 3-Way High Compliance Speaker Systems. All connecting cables are provided.
Garrard Type " $A$ " Automatic Turntable combines changer with turntables; Knight KN-2200 Speaker Systems employ 4 speakers $-10^{\circ}$ wooter, two $31 / 2^{\prime \prime}$ mid-range/treble, and dome-type, UHF tweeter. Speaker systems and base in oiled walnut. Less amplifier case, listed on previous page. 108 lbs.
22 HF 009-J. Specify Cartridge
ONLY 284.95

## 50-Watt Stereo Hi-Fi Systems.



## ECONOMY STEREO HI-FI PHONO SYSTEM

 SYSTEM PRICE SAVES YOU UP TO \$54.39!Systom Price - Individual Components Purchased

| $\$: 4995$ | Separately Cost Up To $\$ 204.34$ |
| :--- | ---: |
|  | - 12" KN-820's Give $40-13,000 \mathrm{cps}$ |
| less Cose | Autoslim Intermixes All Size |

Distinguished by modern styling and reliable performance, this custom system is the ultimate in flexibility. The keystone of this ensemble is the all-new Knight-Kit KG. 60 50 -Watt All Transistor Amplifier in easy-to-build kit form. Compact, can be placed anywhere-never any heat problems. System Includes: Knight-Kit KG-60 50-Watt Stereo Ampllfier KIt; Garrard Autoslim Record Changer and Base; your choice of any one of four stereo cartridges: Empire 880, Shure M3D, Pickering-U38AT, or Knight KN505X; plus two Knight KN-820 $12^{\circ}$ Hi-FI Speakers. You get all connecting cables. Garrard Autoslim Changer handles records with care. Knight KN-820 Speakers are only $4^{\prime \prime}$ deep. Less amplifier case, below. Changer base in mahogany, limed oak or walnut-specify. 34 lbs.
22 HF 010C-J. Specify Cartridge.
ONLY 149.95

## ALTERNATE WITH SHELF ENCLOSURES

SAVE UP TO $\$ 60.29$ OFF THE COST OF COMPONENTS PURCHASED SEPARATELY. Includes components in above system with the addition of two Knight KN-1286 Walnut Shelf Speaker Enclosures; walnut record changer base. Less amplifier case. 84 lbs .
22 HF 011-J. Specify Cartridge.
ONLY 203.95


## LÓW.COST STEREO HI-FI PHONO SYSTEM SYSTEM PRICE SAVES YOU UP TO $\$ 59.39$ !

System Price - Individual Components Purchased
\$17995
Separately Cost Up To $\$ 239.34$

- AT-6 Changer Plays All 4 Speeds

Less Cose

- 12" KN-830's Offer 3-Way Design

Get stunning stereo with this fine array of custom components. System features the new Knight-Kit KG-60 50-Watt All-Transistor Stereo Amplifier in easy-to-build kit form. Utilizes 20 transistors and 6 diodes-no heat or hum problems. System Includes: Knight-Kit KG-60 50-Watt Stereo Amplifier Kit; Garrard AT-6 Automatic Turntable and Base; your choice of any one of four stereo cartridges: Empire 880, Shure M3D, Plckering U38AT, Knight KN505 X ; plus two Knight KN-830 12* Hi-Fi Speakers. You get all connecting cables. Garrard AT- 6 offers smooth performance. Knight KN-830 Speakers provide 40-18,000 cps. Less amplifier case, below. Changer base in mahogany, limed oak or walnut-specify. 55 Ibs.
22 HF 012C-J. Specify Cartridge.
ONLY 179.95

## ALTERNATE WITH FLOOR ENCLOSURES

SAVE UP TO $\$ 63.29$ OFF THE COST OF COMPONENTS PURCHASED SEPARATELY. Includes components in above system with the addition of two Knight KN-1285 Floor Enclosures. Specify mahogany or walnut finish. 115 lbs.
22 HF 013C-J. Specify Finish and Cartridge. ONLY 245.95

## OPTIONAL CASES FOR KG-60 AMPLIFIER

 METAL CASE. Brown finish. 5 lbs.83 YX 644 -J.
ONLY 4.95
WOOD CASE. Hand-rubbed oiled walnut. 5 lbs .
83 YX 645-J.
ONLY 9.95

## Featuring Modern KG-60 All-Transistor Amplifier Kit



DELUXE STEREO HI-FI PHONO SVSTEM SYSTEM PRICE SAVES YOU UP TO \$61.39!

System Price - Individual Components Purchased
'22335
Less Case Separately Cost Up To $\$ 285.34$

- KN-281's Offer 2-Way Design
- AT-6 Changer Plays All 4 Speeds

Breathtaking stereo and full flexibllity-a winning custom combination. Features the new Knight-Kit KG-60 50-Watt All-Transistor Amplifier. Easy-to-build, decorator stylingvirtually no hum or distortion. System Includes: KnightKit KG-60 50-Watt Stereo Amplifier Kit; Garrard AT-6 Automatic Turntable and Walnut Base; your choice of any one of four stereo cartridges: Empire 880, Shure M30, Pickering U38AT, Knight KN-505X; and two Knight KN-281 2-Way Walnut Shelf Speaker Systems. All connecting cables are included. Garrard AT-6 combines changer convenience and turntable performance. Knight KN-281's have $10^{\prime \prime}$ woofer, $2-31 / 2^{\prime \prime}$ tweeters, $30 \cdot 15,000 \mathrm{cps}$ response. Fit on shelves or even hang on walls. Less amplifier case. Wt., 73 lbs.
22 HF 014-J. Specily Cartridge.
ONLY 223.95

## ALTERNATE WITH 3-WAY SPEAKER SYSTEMS

 SAVE UP TO $\$ 66.39$ OFF THE COST OF COMPONENTS PURCHASED SEPARATELY. Includes components above with 2 Knight KN-2200 3-Way Walnut Speaker Systems in place of KN-281's; walnut changer base. Offer $10^{\circ}$ woofer, $31 / 2^{\prime \prime}$ mid-range and tweeter. 101 lbs.22 HF 015-J. Specify Cartridge.
ONLY 278.95


## SUPER-DELUXE STEREO PHONO SYSTEM SYSTEM PRICE SAVES YOU UP TO $\$ 65.391$

System Price
s $2644^{95}$
Less Case

- Individual Components Purchased Separately Cost Up To \$330.34
-3-Way KN-612HC's Glve Superb Response
- Type "A" Is Garrard's Finest

For those who insist upon the best, reproduces sound with fidelity to delight even a professional musician. Keystone is the new Knight-Kit KG-60 All-Transistor 50-Watt Stereo Amplifier. In easy-to-build kit form-provides flawless reproduction. System Includes: Knight-Kit KG-60 50-Watt Stereo Amplifier Kit; Garrard Type "A" Automatic Turntable and Base; your choice of any one of four stereo cartridges: Empire 880, Shure M3D, Pickering U38AT or Knight KN-505X; plus two Knight KN-612HC 3-Way $12^{\prime \prime}$ Hi-Fi Speakers. You get all connecting cables. Deluxe Type " $A$ " combines changer convenience with turntable performance. Knight KN-612HC's offer 25-19,000 cps response. Less amplifier case. Changer base in mahogany, limed oak or walnut-specify. 86 lbs.
22 HF $016 \mathrm{C}-\mathrm{J}$. Specify Cartridge.
ONLY 264.95

## ALTERNATE WITH 3-WAY SPEAKER SYSTEM

SAVE UP TO $\$ 70.39$ OFF THE COST OF COMPONENTS PURCHASED SEPARATELY. Includes components in above system with 2 Knight KN-2300 3-Way Walnut Speaker Systems in place of KN-612HC's; walnut changer base. Offer $25-20,000 \mathrm{cps}$ response. 153 lbs . 22 HF 017-J. Specify Cartridge.

ONLY 339.95

Lowest Prices, Highest Quality, Best Service

## 20-Watt Stereo Hi-Fi Systems



ECONOMY 20-WATT STEREO PHONO SYSTEM SYSTEM PRICE SAVES YOU UP TO $\$ 50.391$

$$
\begin{array}{ll}
\begin{array}{c}
\text { Systom Price } \\
\text { - } \\
\$ 995
\end{array} & \begin{array}{c}
\text { Individual Components Purchased } \\
\text { Separately Cost Up to } \$ 150.34
\end{array} \\
\text { less case } & \text { - An-809's Dellver } 50-12,000 \mathrm{cps} .
\end{array}
$$

Enjoy fine stereo sound at moderate cost with this speclally selected system. Features the extraordinary Knight-Kit KG-250 20 -watt Stereo Amplifier Kit. With each channel delivering 10 watts of continuous sine-wave power, you're assured of ample stereo sound of excellent quality. System Includes: Knight-KIt KG-250 20 -watt Stereo Amplifier Kit; Garrard Autoslim Changer and Base; your choice of any one of four stereo cartridges-Empire 880, Shure M3D, Plckering U38AT or Knight KN-505X; two Knight $8098^{8}$ Hi-FI Speakers. Plus all cables needed. Garrard Autoslim plays all four speeds precisely and quietly. Knight $8^{\bullet}$ speakers feature shallow construction and excellent fidel. ity. Less amplifier case (lower right). Changer base in mahogany, limed oak or walnut-specify. Shpg. wt. 41 lbs. 22 HF 018C-J. Specify cartridge. ONLY 99.95

## ALTERAATE WITH SHELF ENCLOSURES

 SAVE UP TO $\$ 51.74$ OFF THE COST OF COMPONENTS PURCHA SED SEPARATELY. As above, but with the addition of two Lincoln $\mathrm{L}-150$ shelf enclosures. Mahogany, blonde or walnut leatherette filish. Shog. wt., 67 Ibs.22 HF 019C-J. Specify finish and cartridge. ONLY 122.50


DELUXE 20-WATT STEREO PHONO SYSTEM. SYSTEM PRICE SAVES YOU UP TO $\$ 53.781$
System Price - Indlvidual Components Purchased
$\$ 124^{95}$

A music system offering remarkable stereo fidelity that everyone in the family will enjoy. Basic to the system is the exciting KG-250 20-Watt Stereo Amplifier that includes DC on all preamp tube filaments, four stereo inputs and a host of other important features. System Includes: Knight-Kit KG-250 20-Watt Stereo Amplifier; Garrard AT-6 Automatic Turntable and Base; your choice of any one of four stereo cartridges-Empire 880, Shure M3D, Pickering U38AT or Knight KN-505X; Two Knight KN-820 $12^{\prime \prime} \mathrm{Hi}-\mathrm{FI}$ Speakers. And you get all necessary connecting cables. The AT- 6 offers precision operation. The KN-820 speakers feature superior sound. Less amplifier case (listed below). Changer base in mahogany, limed oak or walnut-specify. Wt. 47 lbs .
22 HF 020C-J. Specify cartridge.
ONLY 124.95

## ALTERNATE WITH SHELF ENCLOSURES

 SAVE UP TO $\$ 60.29$ OFF THE COST OF COMPONENTS PURCHASED SEPARATELY. As above, but with the addition of two Knight KN-1286 shelf enclosures. In walnut finish only. With walnut changer base. Specify cartridge. 97 lbs .22 HF 021 C-J. $\$ 9$ Monthly.
only 178.95
OPTIONAL CASES FOR AMPLIFIERS. 5 lbs.83 YX 031-J. Metal Base For KG-250.3.95
93 Y X 030-J. Wood Case For KG-250. Walnut. ..... 9.95
33 YX 024-J. Metal Case For KG-400 ..... 3.95
83 Y X 023-J. Wood Case For KG-400. Walnut. ..... 9.95

# Money-Saving 32-Watt Stereo Hi-Fi Systems 



## ECONOMY 32-WATT STEREO PHONO SYSTEM

 SYSTEM PRICE SAVES YOU UP TO $\$ 54.39$ !| Systam Price | - Individual Components Purchased |
| :---: | :---: |
| Separately Cost Up to $\$ 184.34$ |  |
| $\$ 12995$ | - KN-820's Deliver 40-13,000 cps |
| less case | - Autosilm Intermixes All Sizes |

Exciting stereo sound from carefully balanced components is yours with this budget-priced music system. Features the fun-to-build KG-400 32-watt Stereo Amplifier with ganged bass and treble controls, separate recording outputs, oneknob balance control and many other highlights. System Includes: Knight-Kit 32-Watt Stereo Amplifier; Garrard Autoslim Changer and Base; your choice of any one of four cartridges-Empire 880, Shure M3D, Pickering U38AT or Knight KN-505X; two Knight KN-820 Hi-Fi Speakers. And all connecting cables. Autoslim changer shuts off automatically after last record-handles records gently. KN-820 speakers utilize two cones for superior sound. Less amplifier case (facing page). Changer base In mahogany, Ilmed oak or walnut-specify. 50 lbs .
22 HF 022-J. Soecify cartridge
ONLY 129.95

## ALTERNATE WITH SHELF ENCLOSURES

SAVE UP TO $\$ 60.73$ OFF THE COST OF COMPONENTS PURCHASED SEPARATELY. AS above, but with the addition of two KN-1286 shelf enclosures. In walnut tinish only. With walnut changer base. Specify cartridge. Shpg. wt., 100 lbs.
$2 \mathbf{2 H F}$ 023-J. \$10 Monthly
ONLY 183.50


## DELUXE 32-WATT STEREO PHONO SYSTEM

 SYSTEM PRICE SAVES YOU UP TO $\$ 59.391$system Price - Individual Components Purchased SK995 Separately Cost Up to $\$ 219.34$
less case

- KN-830's Deliver 40-18,000 cps
- AT-6 HasWeighted Turntable

A music system that delivers wide-range, full dimensional, extraordinarily natural stereo sound. Highlights the Knight-Kit KG-400 32-watt Stereo Amplifier Kit offering many deluxe features. System Includes: Knight-Kit 32Watt Stereo Amplifler; Garrard AT-6 Automatic Turntable and Base; your choice of any one of four cartridges -Empire 880, Shure M3D, Pickering U38AT or Knight KN-505X; two KN-830 3-Way Hi-FI Speakers. Plus all necessary cables and plugs. The AT-6 Automatic Turntable combines changer convenience with the smooth. précision performance. KN-830 3-way speakers have woofers, mid-range radlators and UHF driver for superb sound. Less amplifier case (facing page). Changer base in mahogany, limed oak or wainut-specify. 71 lbs.
22 HF 024C-J. Specify cartridge .......... ONLY 159.95

## ALTERNATE WITH SHELF SPEAKER SYSTEMS

 SAVE UP TO \$61.84 OFF THE COST OF COMPONENTS PURCHASED SEPARATELY. As above, but with two 2-way KN-281 speaker systems in oiled walnut veneer on all sides. Also Includes matching walnut changer base. Specify choice of cartridge. Wt., 89 lbs.22 HF 025 C.J. $\$ 11$ Monthly.
ONLY 203.50


## ECONOMY STEREO HI-FI PHONO SYSTEM SYSTEM PRICE SAVES YOU UP TO $\$ 53.841$

System Price - Individual Components Purchased

$177^{50}$<br>$\$ 9$ monthly Separately Cost Up to $\$ 230.34$

- KN-1200's Dellver 40-14,000 cps
- Autoslim Changer Plays all 4 speeds

A system carefully selected to offer superb stereo at a moderate price. Heart of this system is the easy-to-build Knight-Kit KA-55 Stereo Amplifier delivering 40 -watts of power. Features full-range center-channel output and has five pairs of stereo inputs. System Includes: Knight-Kit KA-55 40-Watt Stereo Amplifier Kit; Garrard Autoslim Record Changer and Base; your choice of any one of four stereo cartridges-Empire 880, Shure M3D, Pickering U38AT or Knlght KN-505X; two Knight KN-1200 $12^{*} \mathrm{Hi}-\mathrm{Fi}$ Speakers. Plus connecting cables. Garrard Autoslim Changer plays smoothly. KN-1200 speakers deliver wide frequency range. With amplifier case. Changer base in mahogany, limed oak or walnut-specify. 71 lbs.
22 MF 026C-J. Specify Cartridge.
ONLY 176.50

## ALTERNATE WITH SHELF ENCLOSURE

SAVE UP TO $\$ 62.29$ OFF THE COST OF COMPONENTS PURCHASED SEPARATELY. As above, but with the addition of Knight KN-1286 shelf enclosures; walnut changer base. In walnut finish. Specify choice of cartridge. 124 lbs.
22 HF 027-J. $\$ 12$ Monthly.
ONLY 227.95

## MONEY-BACK GUARANTEE ON KNIGHT-KITS. Knight-Kits must meet with your satisfaction or your purchase price will be refunded. <br> NO MONEY DOWN WITH ALLIED'S CREDIT FUND PLAN. You can take up to 24 months to pay. Boosts your purchasing powerl



DELUXE STEREO HI-FI PHONO SYSTEM SYSTEM PRICE SAVES YOU UP TO $\$ 56.39$ :

System Price
$\$ 182^{35}$
$\$ 10$ monthly

- Individual Components Purchased Separately Cost Up to $\$ 239.34$
: KN-830's Deliver 40-18,000 cps
- AT-6 Plays All Speeds

A deluxe phono system that reveals the full range of the stereo sound spectrum through outstanding components. Central to the system is the Knight-Kit KA-55 Stereo Amplifier Kit. Has separate bass and treble controls, centerchannel output and many other features. System includes: Knight-Kit KA $=5540$-watt Stereo Amplifler Kit; Garrard AT-6 Automatic Turntable and Base; your choice of any one of four Stereo cartridges-Empire 880, Shure M3D, Pickering U38AT or Knight KN-505X; Two Knight KN-830 3-Way $\mathbf{1 2}^{\prime \prime}$ Speakers. Also all connecting cables you need. Garrard AT- 6 combines best features of turntable and changer, KN-830 speakers have ceramic Indox magnets and $2^{*}$ edgewound voice coils. With amplifier case. Changer base in mahogany, limed oak or walnut -specify. 73 lbs .
22 HF 028C-J. Specify-cartridge
ONLY 182.95

## ALTERNATE WITH SHELF SPEAKER SYSTEMS

 SAVE UP TO $\$ 60.39$ OFF THE COST OF COMPONENTS PURCHASED SEPARATELY. As above, but with two 2 . way KN-281 speaker systems in oiled walnut veneer on all sides. Walnut changer base. Specify cartridge. 91 lbs . 22 HF 029-J. \$12 Monthly.ONLY 224.95

# Big Savings on 70-Watt Stereo Hi-Fi Systems 



ECONOMY 70-WATT STEREO PHONO SYSTEM SYSTEM PRICE SAVES YOU UP TO \$59.391 System Price - Individual Components Purchased ${ }^{\text {s }} 1199^{95}$ $\$ 11$ monthly Flawless sound throughout the entire stereo range is yours with this wonderful music system. Features the easilyassembled KA. 95 Stereo Amplifier Kit that gives 70 watts of undistorted power and has every conceivable control. System Includes: Knight-Kit KA-95 70-Watt Stereo Amplifier Kit; Garrard AT-6 Automatic Turntable and Base; your choice of any one of four Stereo cartridges-Empire 880, Shure M3D, Pickering U38T or Knight KN-505X; two Knight KN-830 3-Way 12 Speakers. And all connecting cables necessary. Garrard AT- 6 offers turntable performance and changer convenience-records sound better and last longer. KN-830 speakers employ woofers, midrange radiators and VHF drivers. With amplifier case and changer base. Changer base in mahogany, limed oak or walnut. Shpg. wt., 77 Ibs.
22 HF 030C-J. Specify Cartridge
ONLY 219.95

## ALTERNATE WITH SHELF SPEAKER SYSTEMS

SAVE UP TO \$66.39 OFF THE COST OF COMPONENTS PURCHASED SEPARATELY. As above, but with Knight KN-2200 3 -way speaker systems finished in oiled walnut. Walnut changer base. Specify your choice of cartridge. Wt., 123 lbs.
22 HF 031-J. $\$ 15$ Monthly


DELUXE 70-WATT STEREO PHONO SYSTEM SYSTEM PRICE SAVES YOU UP TO \$65.391
System Price - Individual Components Purchased Separately Cost Up to $\$ 370.34$

- 612 HC's Deliver 25-18,000 cps
${ }^{5} 304{ }^{95}$
$\$ 15$ monthly
- Versatile Type "A" Turntable

Stereo magnificence-you get the ultimate in breathtaking stereo sound from this deluxe system. Its center is the outstanding Knight-Kit KA. 95 Stereo Amplifier Kit. Furnishes 70 watts of undistorted power and offers every needed con-trol--center channel output, balance adjustments and unique monitoring facillities-to mention a few. Deluxe ensemble includes: Knight KA-95 70-Watt Stereo Amplifier Kit; Garrard Type " $A$ " Automatic Turntable and base; your choice of any one of four Stereo cartridgesEmpire 880, Shure M3D, Pickering U38AT or Knight KN505 X ; two Knight 612 HC 3 -way $12^{*}$ Speakers. Plus all cables and speaker hook-up wire. The Type " $A$ " is Garrard's finest unit. 612 HC speakers produce natural sound. With amplifier case and changer base. Changer base in mahogany, limed oak or walnut. 107 lbs.
22 HF 032C-J. Specify Cartridge.
ONLY 304.95

## ALTERNATE WITH SHELF SPEAKER SYSTEMS

 SAVE UP TO $\$ 70.39$ OFF THE COST OF COMPONENTS PURCHASED SEPARATELY. As above, but with two KN-2300 3-way speaker systems in oiled walnut; walnut changer base. Specify choice of cartridge. Wt., 175 lbs . 22 HF 033-J. $\$ 18$ Monthly.ONLY 379.95

# (大) knight-kit ${ }^{\circ}$ <br> <br> Build Your Own Ham Station 

 <br> <br> Build Your Own Ham Station}

AMATEUR GEAR

Punches Out A Great Signal-Gets Through The QRM!



Voltage Regulator in Bi for Stable Operation

Pi-Net Output Matches 40-600 Ohm Antennas

Standby, Remote Standby and Power Takeoff Plugs
$\checkmark$ Buffer Stage Isolates Oscillator from Output


## STABLE VFO

Only Drifts 200 cps from 10-30 Minutes ; Practically Stands Still After That.

## TWIN 6746's

Tubes are ParallelConnected for RF Output; Conservatively Operated for Long Life.


## HANDY METER

Reads Buffer and Final Grid Current, Final Plate Current. Relative Power Out.

## New! T-150 150-Watt, AM-CW Transmitter Kit

> Only $\$ 119^{95}$

$\$ 6$ monthly

- 150-Watt Input 80-10 Meters; 100-Watt on 6 Meters
- Controlled Carrier Screen Modulation for Max Power
- Stable Built-In VFO Has Planetary Drive Tuning
- Clean, Chirpless Keying-No HV at Key Terminals
- Adjustable Pi-Net Output Matches 40-600 Ohm Ant

Jam-packed with features for the Amateur who appreciates a clean, quality signal and wants the most "watts-per-dollar" in his rigl The Knight-Kit T-150 operates with 150 watts peak AM/CW input on 80 through 10 meters and 100 watts peak AM/CW on 6 meters. A specially designed VFO provides highly stable frequency control on all bands. The VFO has indirectly iltuminated dial scale and planetary drive for easy tuning without backlash. A socket is provided for optional crystal operation-switch selected with VFO.
Outstanding features include: controlled-carrier screen modulation for maximum talk-power; adjustable pi-network output circuit matches 40 to 600 -ohm antenna impedances; buffer stage isolates oscillator from output stage; silicon diodes for reliable high-voltage; voltage regulator in $\mathrm{B}+$; pair of 6146 tubes in parallel for output; single-knob bandswitching; minimum TVI with all leads in and out of case by-passed for RF.

Meter switch allows quick, precise reading of buffer grid current, final grid current, final plate current, and relative power output. Frequency spotting selectorswitch positlon allows tuning of the transmitter before switching on the final amplifier. This also enables you to zero beat an incoming signal without placing the transmitter on-the-air. Keying is clean and chirpless with no high-voltage appearing at the key terminals. For phone operation, mike circuit accepts Hi-Z dynamic or crystal mikes; uses Amphenol PCIM type connector. A standard phone jack is used for key.
Rear panel has provision for standby, and remote standby control; 117 VAC for antenna relay. Acceșsory power take-off furnishes 700 VDC at 50 ma and 6.3 VAC at 1 amp . Case is styled in attractive gray satin metal, matches companion R-100A receiver kit. Tubes: 12BY7, 12AX7, 6CL6, 6DR7, OA2, 7189, 26146 . With plugs, wire, solder and instructions. Less mike, key, crystals. $81 / 2 x$ $17 \times 10 \frac{1}{2}$ ". For $110-125 \mathrm{v} ., 60$ cycle AC. 28 Ibs.

# Vith Our DX-Getting Mates! 

eremitures, and to the superior components all contribute Amateur equipment . of the smart protes ... and you'll be proud ance-your assurancenally-styled appear-ance-your assurance of top trade-in value.


R-100A Receiver Shown With Optional S-Meter Accessory

## New! R-100A Communications Receiver Kit

## Only $\$ 99^{95}$

- Better Than $11 / 2$ Microvolt Sensitivity for $10: 1 \mathrm{~S} / \mathrm{N}$
- Built-In Q Multiplier Works on CW /AM /SSB-Peaks Desired Signal or Nulls QRM-Has 60 db Notch
- Continuously Variable Selectivity 300 cps to $41 / 2 \mathrm{kc}$
$\$ 5$ monthly
- Covers 540 to 30 mc -Bandspread on 80-10 Meters

A world-famous value in communications equipment, the R-100A receiver kit is the top choice of the experienced Amateur who knows and wants the very bestl Designed by Ham engineers to meet every Ham need, this receiver has all the features, selectivity, sensitivity and stability of factory-wired units costing far more. Employs the Knight-Kit printed circuit bandswitch and modern etched clrcuit boards to eliminate critical "lead dress", to reduce construction time, and assure stable, reliable performance.
Coverage is from 540 kc to 30 mc in 4 bandswitched ranges, with calibrated electrical bandspread on all Ham bands. Built-in Q multiplier works on CW/ AM /SSB, peaks desired signals or nulls out interference- 60 db notch really knifes through QRMI Selectivity is continuously variable from 300 cps to $41 / 2$ kc at 6 db down. VR tube-regulated $\mathrm{B}+$ on HF oscillator permits switching from standby to receive without drift. Has Exalted BFO injection for quality SSB reception; MVC; delayed AVC; and noise limiter.
Exceptional sensitivity on 10 meters-better than $1 / 2$ microvolts for a $10: 1$ signal-to-noise ratio. On 40 and 80 meters, sensitivity is actually $1 / 2$ to $3 / 4$ microvolts for the same $10: 1$ signal-to-noise ratiol Close tolerance, slug-tuned $\mathrm{Hi}-\mathrm{Q}$ coils assure minimum alignment time. Has coax and screw terminal antenna connections for 50 to 300 -ohm lines; convenient front-panel located headphone jack: and provision for building in a crystal calibrator. Tubes: $68 Z 6,6 \mathrm{BH} 8$, 2-6AZ8, 6BC7, 6AW8A, 12AX7, OB2, and 6 X 4 rectifier.
Step-by-step instructions with picture diagrams make error-free assembly an easy matter. Gray metal case, $91 / 8 \times 171 / 6 \times 95 / /^{\circ}$. With all parts. Less $S$-meter, speaker, below. For $110-125 \mathrm{v}$., 60 cycle AC .31 lbs.
83 YU 406-J. $\$ 5$ Monthly
ONLY 99.95
83 Y 423-J. S-Meter Kit. Reads to +20 db over S9. Wt., 12 oz.
ONLY 12.95
83 Y 424-J. Speaker Kit. Special-design $4^{\circ}$ speaker peaks woice frequencies. Styled to match R-100A. $61 / 8 \times 65 / 855 / 6^{*}$. Wt., 4 lbs ..

ONLY 9.95

$\checkmark$ Circuit Boards Eliminate Critical "Lead Dress"
( Built-In Q Multiplier Works on CW /AM /SSB
$\checkmark$ Exalted BFO Injection for Quality SSB
$\checkmark$ No Dial StringingVernier Shaft Drive


## CONVENIENT PRINTED CIRCUIT BANDSWITCH

A Knight-Kit innovation-reduces assembly time to a minimum, and makes an extremely important contribution to stability and overall performance. Simply plug the bands witch into the RF circuit board, solder, and you've made 32 error-free connections! Eliminates critical lead dress in oscillator, RF, and mixer sectlons-you really can't go wrongl


## THERE'S MORE FOR THE HAM IN KNIGHT-KITSI



## ACCEPTED LEADERSHIP

For many years, beginners in Amateur Radlo, as well as seasoned Hams, have looked to Knight-Kit for the best selection, best value, and finest Ham-to-Ham treatment. You can choose from the world's foremost designed array of do-it-yourself equipment-secure in the fact that Ham quality, pace-setting design, per-formance-proven circuitry, plus substantial dollar savings over the cost of factory-bullt rigs afe an integral part of every Knight-Kit.

## CREDIT FUND PLAN

Why wait?-Now's the time to put together that station you've always wanted. Allied's Credit Fund Plan gets you on the air with no money down and up to 24 months to pay. Own any of the FB Knight-Kit gear for just a small monthly payment. Bring the shack up to dateenjoy DX, ragchews and contests right away. See details on Page 456.

## T-60 60-Watt AM-CW Transmitter

## Only $\$ 49^{95}$

- Phone and CW on 80 Through 6 Meters
- 60 Watts CW /Peak AM Input-Slightly Less on 6
- Controlled-Carrier Screen Modulation-Pi-Net Output
- Clean, Chirp-Free Keying - No High Voltage On Key \$5 monthly
- Single-Knob Bandswltching-Fast, Easy Tune-Up

The Knight-Kit T-60 is one of the greatest values in an AM phone and CW transmitter available anywhere. It contains all the most wanted features asked for by Novices and newly licensed Generals looking for a "first rig"-plus more than enough power and frequency coverage to make it an excellent transmitter for the Techniclan or advanced Amateur who needs a "standby" unit. It's the ideal "second rig" for emergency use, portable work on Field Day, vacations, summer outings, etc.
Has: 60 watts input, peak AM and CW, on 5 bands (slightly less on 6 meters). single-knob bandswitching; efficient peak carrier-controlled modulation; clean. simultaneous-cathode keying system with bias resistor-no high voltage at key; adjustable pi-coupler matches any $40-600$ ohm antennas; "Tune" position protects final by limiting input during easy tune-up procedure--you merely tune for maximum RF on the large panel meter; plenty of filtering and bypassing to reduce TVI; fused silicon rectifier power supply.
Final works "straight through" on all bands but 6 meters, where it doubles. Requires VFO or crystals ( $3.5-\mathrm{mc}$ types for 80,7 -mc types for $40-10,8$-mc types for 6). Rear-panel socket provides 410 VDC and 6.3 VAC to power VFO, TR switch, etc.: also has relay switching terminals. $5 \times 12 \times 7^{\circ}$. With wire, solder, instructions. Less key, mike, crystals. For 110-125 v., 60 cycle AC. 16 Ibs.
83 YX 294-J. $\$ 5$ Monthly
ONLY 49.95

BLOCK DIAGRAM

| CRYSTAL <br> OR <br> V.F.O. |  |  | FINAL AMPLIFIER 6DQ6B |
| :---: | :---: | :---: | :---: |
| MICROPHONE INPUT | $\begin{gathered} \frac{1}{2} \\ 12 A X 7 \\ \text { SPEECH } \\ \text { AMPLIFIER } \end{gathered}$ | $\begin{aligned} & \frac{1}{2} \\ & 12 A X 7 \\ & \text { FIRST } \\ & \text { AUDIO } \end{aligned}$ |  |



## R-55 Communications Receiver Kit

## Only 5595

new low price

- 5 Bands-Tunes 530 kc to 36 mc and 47 to 54 mc
- Fused Transformer Power Supply With Filter Choke
- Two IF Stages for High Sensitivity Selectlulty
- Calibrated Electrical Bandspread-Easy Tuning
- Large, Edge-llluminated Slide Rule Dial

Whether you're a discriminating shortwave radio fan, red-hot electronics enthusiast, or beginning Ham, here's an advanced-design receiver just for you. The R-55, created for reliable 'round-the-world listening, tunes the broadcast and shortwave bands from 530 kc to 36 mc , plus 471054 mc . Separate directreading scales are provided for the 80 through 6 meter Ham bands with electrical bandspread on all bands.
The superhet circuit has two 1650 -kc IF stages for top sensitivity, sharp selectivity and high image rejection. Other "expensive set" features include: AVC circuit to avoid "blasting" and reduce fading; noise limiter; BFO for code reception; standby switch; antenna trimmer; and a headphone jack. Flywheelloaded main tuning, bandspread control and huge slide-rule dial all contribute to smooth, effortless station selection.

Includes provision for adding a crystal calibrator (see below). Has fused, transformer-type power supply with filter choke for excellent voltage regulation Special modular coil assemblies provide greater ease of construction and improved shielding. Gray metal cabinet has charcoal-gray and aluminum panel, black knobs. With all parts, speaker, wire, solder and instructions. 8x $141 / 4 \times 11^{\prime \prime}$. For $110-125 \mathrm{v}$., 60 cycle AC. Shpg. wt., 24 Ibs.
83 YU 935-J. $\$ 5$ Monthly
ONLY 59.95
83 Y 256-J. Crystal Calibrator Kit. Builds into R-55. Gives 100 -kc markers. Size, $31 / 2 \times 21 / 2 \times 1 \frac{1}{2} 2^{\prime \prime}$. Shpg. wt., 1 lb .

ONLY 10.95

## SPECIFICATIONS

Tuning Ranges: BAND A, $530-1900 \mathrm{kc}$; BAND B, $1800 \mathrm{kc}-6.3 \mathrm{mc}$; BAND C, 6-14.5 mc; BAND D, $11.5-33 \mathrm{mc}$; BAND E, $47-54 \mathrm{mc}$. Antenna inpu Impedance: 52 ohms. Image Rejection: 42 db at 80 meters; 14 db at 6 meters. IF: 1650 kc . Tube Complement: 5 plus EZ90 rectifier.

## JUST THREE OF ITS OUTSTANDING FEATURES

SLIDE RULE DIAL


Extra-large dial scales are accurately calibrated for every band-edgeilluminated for easy reading, too. Red and green pointers show main tuning and bandspread tuning at a glance. Clear plexiglass dial.


BANDSPREAD TUNING
Electrical bandspread is incorporated on all Amateur bands from 80 to 6 metersindividual scales are calibrated to read direct on each scale. Fly. wheel tuning.

## BUILT-IN SPEAKER

A specially-de= signed $31 / 2^{\text {" }}$ speaker is mounted on the right side of the cover. It has perfect response for the frequencies used in communications. R-55 can also be used with headphones.

## Outstanding Features

FlexIble 2 Unit Design Full Kilowatt Capacity Requires No Power/Batteries Reads SWR from 1:1 to 20:1 Can be Left in Line as Constant Monitor Accuracy Better than $10 \%$ Has Coax Connectors For Unbalanced $50-72$ Ohm Lines-Amateur and CB Range from 1.8 to 432 Mc Negligible Insertion Loss Has Sensitivity Adjustment


## Model P-2 SWR / Power Meter Kit

$\$ 4^{95}$

Only -For 50 to 72 Ohm Lines-Amateur and Citizens Band

- Full Kilowatt Capacity; Range from 1.8 mc to 432 mc
- Flexible 2-Unit Design-Coupler and Indicator
- Negligible Loss-May Be Left in Line Permanently

Be sure you're getting the most from your transmitter and antennal Use this new "in-line" type SWR/power meter to provide a constant check of your rig's efficiency. It measures relative power being fed to antenna and standing wave ratio reflected from it. Permits making your own matching adjustments between line and driven element for maximum RF.
With negligible power loss, it may be left in line permanently. Features two unit construction-coupler and indicator units, connected by a four-foot shielded cable. Uses coax connectors. Full kilowatt capacity, too. Requires 35 watts for full scale meter deflection on 80 meters; less than 1 watt at $3 / 4$ meter; accuracy better than $10 \%$. Operating range is from 1.8 to 432 mc .
Designed for unbalanced $50-72$ ohm lines, Amateur and Citizens Band. Requires no AC power or batteries. 100 microvolt meter reads SWR from 1:1 to 20:1, and relative power from 0 to 10. Styled in gray satin-matches T-60 and T-150 Knight. Kit transmitters. Sizes: coupler, $2 \times 5 \times 2 \frac{1}{2}$; indicator, $2 \frac{1}{8} \times 61 / 4 \times 3^{\circ}$. Complete with all parts and instructions. Shpg. wt., 2 lbs.
83 YX 627-J.
ONLY 14.95

## Low Cost 100-Kc Crystal Calibrator Kit

## Only $50^{95}$

- Gives Marker Every $100-\mathrm{Kc}$ to About 35-Mc
- Convenient Trimmer for Zero-Beating With WWV
- Builds Into Knight-Kit R-100A and R-55 Recelvers

Here's a low-cost secondary frequency standard producing harmonics every 100 kc , usable to about 35 mc . Ideal for Knight-Kit R-100A and R-55 receivers as well as other recelvers. Requires power from receiver; 6.3 volts AC or DC at 150 milliamps, and 150 to 300 volts DC at 6 and 3 milliamps respectively. The 100 kc harmonics give check points in the 160 to 10 meter Ham bands, and through the International shortwave radio bands. These markers provide extremely accurate callbration for shortwave and Amateur receivers. Includes trimmer for zero-beating with WWV; and on-off switch. Crystal is hermetically sealed. Complete with all parts, instructions. $31 / 2 \times 2 \frac{1}{2} \times 1 \frac{1}{2} .12 \mathrm{oz}$.
83 Y 256-J.
ONLY 10.95


Only<br>$522^{25}$<br>- Continuous Overlapping Coverage, 1.5 to 300 mc<br>- Easy-to-Read-Each Range Colored to Match Coil<br>- Coil Socket Accepts Standard Spaced Crystals

You'll find hundreds of uses for this invaluable instrument in and around your Amateur station. It not only serves as a grid dip oscillator to determine the frequency of resonant circuits, but as an oscillating detector, signal generator, and absorption wavemeter. Covers 1.5 to 300 mc in 6 overlapping ranges. Finely calibrated dial and movable hairline cursor, allow precise setting and highly accurate readings-on any segment of its frequency range! Excellent for receiver alignment, determining the exact length of transmitting and receiving antennas, adjustment of wave traps, finding parasitic oscillations, adjusting antenna matching stubs, and many, many more.

- Use As Signal Gen., Wavemeter and Oscillator meter mored coded to match coils. Has undamped meter movement for quick response and varlable sensitivity control for optimum grid current adjustment. Stable oscillation-entire band may be tuned with one adjustment of the gain control. High-grade molded socket withstands rugged use-holds plug-in coils securely, too. A phone jack permits use as a modulation monitor and regenerative detector. Use also for determining inductance and capacitance. Uses a 6AF4A osciliator; selenium rectifier. Size, $63 \times 31 / 4 \times 1 \%^{*}$. Includes plastic case with 6 coils, all parts. For $110-125$ v., 50-60 cycle AC. 2 lbs.

ONLY 22.95

## Model V-44 Self-Powered VFO Kit



## Only <br> ร2995 <br> \$5 monthly

- Can Be Directly Keyed for Break-In Operation
- Has "Callibrate" Position for Zeroing VFO to Receiver
- Designed for High Stability-Uses Clapp Oscillator


## - Extremely Compact-Only $11 / 2^{*}$ Deep

- Undamped Meter Movement Assures Quick Response



## CITIZENS BAND TRANSCEIVER KITS

IT'S EASY TO BUILD YOUR OWN LOW-COST 2-WAY RADIO. Every detall is engineered for the maximum in building ease. You are guided through each step of the fun-filled assembly by the world's finest "do-it-yourself" instructions. Carefully marked parts eliminate guesswork.
NO LICENSE EXAMINATION IS NECESSARY. Any U.S. citizen, 18 years of age or older, is entitled to enjoy the many business and personal benefits of Citizens Radlo simply by applying to the Federal Communlcations Commission for a station permit. Just fill out and mail the form you get with your Knight-Kit transceiver.
OPERATING RANGES. Effectlve ranges vary with the height and type of antennas used, and terrain. With the maximum legal input of 5 watts, ranges of from 5 up to 25 miles may be expected.

MONEY-BACK GUARANTEE. YOU must be satisfled with your KnightKit or your purchase price will be promptly refunded.

CREDIT FUND PLAN. You can own a Knight-Kit Citizens Band system for no money down, low monthly payments and up to two years to pay. Details on our Credit Fund Plan are at the back of this catalog.

## New Model C-22 Transceiver Kit

## ony ${ }^{5} 69^{95}$

\$5 monthly

- Provision for 5 Crystal-Contralled Transmit-Receive Channels-Plus Tunable, All-Channel Reception
- Efficlent, Fully Modulated 5-Watt Transmitter
- Sensitive Superhet-Variable Squelch-Nolse Limiter
- Operating Range to 20 Miles Over Ideal Terrain

UNIVERSAL MODEL. Just out . . . a versatile transcelver kit simply jam-packed with important features for the discriminating Citizens Band operatorl Designed in the Knight-Kit tradition of craftsmanship and dependability at modest cost, the C-22 offers top-notch performance elther as a fixed or mobile station. Compact size, easy accessibility of controls, handy press-to-talk'operation, and self-contained power supply for $110 \mathrm{VAC} / 12 \mathrm{VDC}$-all combine to make it superb for any CB application.
The C-22 employs crystal-controlled transmit-receive sections that operate on any 5 switch-selected channels (with crystals, below)-or, at the flick of a switch, receiver may be manually tuned through all 22 channels. Transmitter runs a full, $100 \%$ modulated 5 -watts input with an adjustable pi-network circuit for positive impedance match with any antenna. Front-panel RF indicator permits fast tune-up for maximum power output. Superheterodyne recelver provides excellent sensitivity and selectivity figures. Sensitivity, $1 \mu \vee$ for 10 db signal-to-noise ratio. Selectivity is $61 / 2 \mathrm{kc}$ at 6 db down with 25 db of adjacentchannel rejection-highly important in big city interference. Receiver also has varlable squelch control, noise limiter, smooth-tuning planetary drive mechanism, plus $21 / 2$-watt audio section and $3^{\prime \prime}$ speaker for loud, clear reception. EdgeIit panel illuminates essential controls. 54 -mc harmonic trap reduces TV inter-
 With all parts, wire, solder, press-to-talk ceramic mike, and easy-to-follow instructions. Less crystals, below. Fused power supply for $110-125$ volts, 60 cycle AC or 12 volts DC. Wt., 12 lbs.
83 YX 802 -d. $\$ 5$ Monthly.
ONLY 69.95
83 YX 801 -J. Std. C-22. For $110-125$ v., 60 cycle AC only
ONLY 64.95
83 YX 009-J. Moblie Mtg. Bracket. For C-22. Wt., 3 lbs . .
ONLY 4.95
83 YY 046-J. Transmitting Crystals. Specify channels 1-22 (C-22 accommodates 5). Shpg. wt., 3 oz . . . . . . . . . . . . . . ............................ EACH 2.50
83 YY 045-J. Receiving Crystals. Specify channe/s (C-22 takes 5)
EA. 2.50


## Complete CB Base Station Kit

$5977^{80}$

- Fixed-Station Package Featuring the Standard Model C-22 Kit
- For Home, Office, Farm, Dock
- Absolutely Nothing Mare to Buy

Another Knight-Kit Citizens Band exclusive that's really easy on the pocketbook! It's a complete, easy-to-build base-station communications setup-and you save $\$ 4.33$ over the cost of the components purchased separately. Here's what you get: 1 all-new Standard C-22 Transceiver Kit with Press-to-Talk Microphone, Coll-Cord, and builtin AC Power Supply; 1 all-directional Ground-Plane Antenna; 1 Transmitting Crystal; 1 Receiving Crystal; 50 Feet of rugged, weatherproofed RG58/U Coaxial Cable for transmisslon line; and all necessary Connectors.
Ground-plane antenna is a full-sized $1 / 1$-wave radiating element with 4 radials. Provides $360^{\circ}$ radiation pattern for efficient, all-directional base-station coverage. Two U-bolts hold all-aluminum antenna firmly to any pipe or mast up to $13 /{ }^{\prime \prime}$ dia. (Mast is not supplied.) Standard C-22 Transceiver Kit has power supply for $110-125$ volts, 60 cycle AC. Complete with 1 transmitting and 1 receiving crystal (specify channels 1-22), all tubes, parts, and famous Knight-Kit step-by-step, easy-to-follow instructiòns. Shpg. wt., 26 lbs.
21 HF 062-J. $\$ 5$ Monthly
ONLY 77.50


## Complete CB Mobile Station Kit

Only $\$ 86^{95}$

\author{

- Mobile-Station Package Featuring the Universal Model C-22 Kit
}
- For Car, Truck, Tractor, Boat
- Absolutely Nothing More to Buy

A brand-new, easy-to-assemble Knight-Kit mobile station priced $\$ 4.58$ below the normal cost of the individual components. Makes a splendid "add-on" mobile unit to any existing Citizens Radio communications system. Bargain package consists of: 1 all-new Universal C-22 Transceiver Kit with Press-to-Talk Mlcrophone, Coll-Cord, and selfcontalned Power Supply for either moblie or base-station use; Under-Dash Mounting Bracket; 102" Whip with Bumper Mounting Strap; 1 Transmitting Crystal; 1 Recelving Crystal; 15 Feet of weatherproofed RG58 /U Coax for transmission line; all Connectors.
Mobile antenna, a stainless steel whip $102^{\prime \prime}$ long, has chrome-plated hardware and mounting strap to fit any car bumper. Rugged RG58/U coaxial cable serves as your transmission line. All necessary connectors are supplied. Universal C-22 Transceiver Kit is for either 110-125 volts, 60 cycle AC (may be used as a base unit) or 12 volts DC. With 1 transmitting and 1 receiving crystal (specify choice of channels 1-22), all parts, and Knight-Kit step-by-step instructions. Shpg. wt., 24 lbs.
21 HF 063-J. $\$ 5$ Monthly . . . . . . .
ONLY 86.95

## (1) $\underset{\text { crivens }}{ }$ night-kit ${ }^{\circ}$ <br> citizens radio



## C-11 Citizens Band Transceiver Kit

## Only 33995

 $\$ 5$ monthly- Full 5-Watt Transmitter For Maximum Signal Strength
- Intercom-Type Switch Selects Transmit/ReceIve
- Super-Regenerative Circuit With RF Stage Provides Excellent Sensitivity

A super-va communication within reach of any U.S. citizen, 18 years of age or older. Exceptionally low in cost, the C-11 incorporates an efficient 5 -watt transmitter and a manually tunable, 22 -channel super-regenerative receiver. A handy Intercombtype switch selects "Transmit" and "Recelve" functions. Switch incorporates two "Transmit" positions-one with automatic spring-return to "Receive" position, the other to lock unit in "Transmit." Other front-panel controls are Off-On-Volume, and Channel Tuning knob. Ceramic mike hangs on handy front panel hook when not in use.
Has automatic volume control and noise limiting; high audio output overrides background noise; transmitter section's critical wiring Is on printed circuitry to assure frequency stability. A pleasure to build-you're gulded through each and every step by the world's finest "do-it-yourself" instructions. With all parts, mike, wire-type doublet antenna; less transmit crystals, below. Operates on 110-125 $v, 60$ cycle AC. For 12 VDC mobile operation, use power supply below. Size, $6 \frac{1}{3} \times 113 / 8 \times 71 / 4$. Wt., 12 lbs .

$$
83 \text { Y } 713 \text {-J. } \$ 5 \text { Monthly. }
$$

ONLY 39.95
USEFUL ACCESSORIES FOR C-11 TRANSCEIVERS
83 Y 724-J. Mobile Mounting Bracket. For under-dash mounting. 3 lbs. . . 4.95
83 Y 937-J. 12-Volt Moblle Power Supply Kit. Shpg. wt.t 5 lbs. . . . . ONLY 7.95
83 YY 921. Transmitting Crystal. Channels 1.22 , specify, 3 02....... ONLY 2.50


# Complete 2-Station Base / Mobile CB System 

Complete<br>- Everything You Need for 2-Way CB Communications-Nothing More to Buyl

System

- Features 2 Efficient, Easy-to-Bulld Knight-Kit C-11 Transceivers

ร|l3 ${ }^{35}$

- Auto-to-Home, Auto-to-Office and Many More Uses
- Comes With Famous Knight-Kit Step-by-Step Assembly Instructions

Here's a budget-priced Knight-Kit exclusive-your own mobile /base communications system in one easy-to-build packagel It's perfect for auto to home, auto to office, truck to garage, and a host of other business, personal and farm applications. And you save $\$ 7.36$ on the cost of the components in the bargain!

System includes: 2 Knight-Kit C-11 Transceiver Kits with Ceramic Microphones; choice of 2 Transmitting Crystals; 12-Volt Mobile Power Supply Kit with Cables; Mobile Under-Dash Mounting Bracket; Ground-Piane Antenna for base station; Whip Antenna with Bumper Mounting Strap; Connectors; 65 Feet of weatherproofed RG58/U Coaxial Cable for transmission line.

Full-sized $1 / 4$-wave ground plane provides efficient $360^{\circ}$ coverage-has U-bolts for pipe or mast up to $134^{\circ \prime}$ dia. (Less mast.) Stainless whip has bumper strap and chromeplated hardware. For $110-125$ v., 60 cycle $A C$ and 12 v . DC. With 2 transmitting crystals (specify ch. 1-22), tubes, parts, easy instructions. Wt., 56 lbs.
22 HF 041-J. \$6 Monthly.
Build-It-Yourself and Save with Knight-Kit
MOBILE STATION PACKAGE. Add this mobile station to the system at left to have 2 separate mobile units contacting your base station. Includes: 1 Knight-Kit C-11 Transceiver Kit with Mike; 12 -Volt Power Supply Kit with Cables; Under-Dash Mounting Bracket; 1 Transmitting Crystal; 102"Whip with Bumper Mounting Strap; 15 Feet of RG58 /U Coax; Connectors. For 12 v. DC. With transmitting crystal (specify channels 1-22), all parts, and step-by-step instructions. Wt., 28 lbs.
21 HF 065-J. $\$ 5$ Monthly. .
ONLY 63.50

BASE STATION PACKAGE. Lets you add another base station to your present system, or to the base/mobile system at left. Package consists of: 1 Knight-Kit C-11 Transcelver Kit with Microphone; 1 Transmitting Crystal of your cholce; all-directional Ground-Plane Antenna; 50 Feet of RG58/U Coax for transmisslon line; Connectors. For $110-125$ v., 60 cycle AC. With transmitting crystal (specify channels 1-22), all parts, and step-by-step instructions. Wt., 28 Ibs.
21 HF 064-J. \$5 Monthly.
ONLY 51.50


the only research-quality scope in kit form... 10-mc DC Lab Oscilloscope Kit

## WITH INTERCHANGEABLE VERTICAL PREAMPLIFIERS

Only<br>s $3955^{\circ 0}$

less preamps

- Vertical Frequency Response from DC to 10 Mc
- DC-Coupled Triggered Sweep; Up to x20 Expansion DC-Coupled Amplifiers
- Less Than 40 Nanoseconds Rise Time
- Preamps for Dual Trace or Differential/High Gain
- 1\% Sweep Timing Accuracy with Built-In Markers

Meeting or surpassing the most stringent requirements of industry and labora tory, this years-ahead $10 \cdot \mathrm{mc}$ DC Lab Scope represents your finest value in a professional instrument. Accuracy, reliability and versatility, plus ingenious modular construction for rapid and efficient assembly, make this precision kit comparable to factory-assembled units selling for over double its pricel
Trigger and amplifler circuits are DC coupled for uses where very low frequencies, or DC levels must be displayed. Push-pull amplifiers and electronic power supply regulation assure top stability. CRT deflection plate connections are brought out through the glass-eliminates socket capacity and reduces drive requirements-assures wide frequency response to 10 mc . Sweep timing accuracy is adjustable to $1 \%$ with built-in markers. Optional plug-in, interchangeable vertical preamps fulfill almost every scope requirement.
Time-mark and voltage calibrator outputs are available at the front panel for external use. A complete cooling system assures long component life and continuous duty operation. Printed circuitry and modular assembly provide building ease and quick access for calibration and maintenance. With all parts. detailed instructions and operator's handbook. Less preamps, below. 161/2x $12 \frac{1}{2} \times 21 \frac{1}{8}$. For 105.130 volts, 60 cycle AC. Shpg. wt., 60 lbs. 83 YZ 945-J. $\$ 18$ Monthly.


## DIFFERENTIAL PREAMP KIT

Cancels unwanted or interfering signals. 5000-1 rejection for common mode signals. Also serves as highgain preamp-responds to as low as 1 mv signal. DC to 100 kc response. Calibrated, $1 \mathrm{mv} / \mathrm{cm}$ to $50 \mathrm{v} / \mathrm{cm}$, in 15 steps. (Variable). 5 lbs.
83 YZ 946-J. $\$ 5$ Monthly.
59.95

33 Y 977-J. Blank Preamp Chassis Kit. (not illus.) With panel and three matching knobs. $21 / 2 \mathrm{lbs}$. ONLY 7.95

ONLY 395.00

## SPECIFICATIONS

VERTICAL-Using Dual-Trace Preamolilier. BANOWIDTH. OC to 10 mc , within 3 db down. Relerence to 50 kc , with vertical display hoight of 2 em . RISE TIME, 40 nsec , vertical display height of 2 cm or less. SENSITIVITY, $50 \mathrm{mv} / \mathrm{em}$ to $20 \mathrm{v} / \mathrm{cm}$. INPUT IMPEDANCE. 1 meg shunted by 40 mmf .
HORIZONTAL BANDWIDTH, DC to 2.5 mc within 3 do down. CAUBRATED SWEEP RANGE, $0.5 \mathrm{sec} / \mathrm{cm}$ to $50 \mathrm{nsec} / \mathrm{cm}$ in 30 ranges by use of basic sweep ranges ( 100 $\mathrm{msec}, 10 \mathrm{msec} 1 \mathrm{msec} ; 100 \mathrm{mlcrosec}$. 10 microsec. 1 microsec) and amplifier galn ( $X 1$. X5. and XZO); also horizontal sweep 10:1 mulupller vernier control. Proviston for oxternal capactior for very slow sweeps.
SENSITIVITY. Approx $0.1 \mathrm{v} / \mathrm{em}$ and $1 \mathrm{v} / \mathrm{cm}$. 10 to 1 attenuator. Gain control. TIME MARKS. Intensity modulated at 10 mierosec. 100 microsec and 1000 microsec Intervats-at front panel. Adjustable sweep timing accuracy to $1 \%$. TRIGGERING, SENSITIVITY, 100 my external, 2 mm dellection internal. $I \mathrm{~N}$ PUTS, tine, external AC or DC, and preset. LEVEL, adjustable for triggering at selected wavelorm polnts.
VOLTAGE CALIBRATOR, 1 kc Equaro wave. 10 mv to 50 v ., peak-to-peak $* 1 \%$, $\ln 12$ ateps. Output available at front panel. LOW-VOLTAGE POWER SUPPLY, regulated -150 , $+100,+250$, and +420 volts. HIGM-VOLTAGE SUPPLY, reguiated -1750 and +3500 volte. POWER CONSUMPTION, 400 watte with Ouat-Trace Preamplifier. NUMBER of TUBES, 38 (excluding oreamplifiers) plus W $\times 5006 / P 2$ Dost-accelerator CRT and 15 dlodes. POWER REQUIREMENTS, 105-130 volts, 60 cycle AC.


MOBILE TRANSPORT CART
Steel frame. Swivel top locks in 2 positions. Ht., $361 / 10281^{\prime \prime \prime}$. Wt., 15 lbs . 39.95
83 YU 67 -J. $\$ 5$ Month/s... ONLY 39.9


## DUAL-TRACE PREAMP KIT

Provides independent or simultane. ous presentation of wave form from each channel from DC to 10 mc in 9 steps. Dual step-type attenuators with vernier for P-P measurements. Rise time, 40 nanosec. Range, .05 $\mathrm{v} / \mathrm{cm}$ to $20 \mathrm{v} / \mathrm{cm} .5 \mathrm{lbs}$.
83 YZ 948-J. $\$ 5$ Monthly
79.95

83 Y 949-J. Low-Capacity Probe. (not illus.) Ready to use. Minimizes circuit loading. 2 lbs.


# another first from knight-kit? . . . PRESENTING THE NEW 

## Knight-Kit KG-2000 Professional DC to 5 Mc Scope



- Wide Vertical Frequency Response from DC to $5 \mathrm{Mc} ; 85$ Nsec Rise TIme
- DC-Coupled Amplifiers-Shunt-Series Peaking for Faithful Pulse Reproduction
- Triggered-Sweep-200 Nanoseconds/cm Down to .05 Seconds
- Has Stable Voltage-Regulated Power Supply; Freq.-Compensated Attenuators
$\$ 10$ monthly
- Illuminated Graticule; Vertical Position Indicators; Flat Face $5^{\circ}$ CRT

Precision, rellability, and highest quality engineering are vital test equipment necessities in this space-age. In answer to this demand, Knight-Kit presents the scope that engineers, technicians and servicemen have been waiting for. Performance Is of a caliber that meets virtually any requirement in lab or shop.
The wide frequency response of the vertical amplifler (DC to 5 mc ) permits the display of pulses of fast rise time. Trigger and amplifier circuits are DC coupled throughout, for applications where very low frequencles or DC levels must be displayed. Vertical off-scale indicators are provided for maximum convenience in viewing traces. Horizontal displacement design is such that the pattern is never off scale to the left or right.
Preset lock-in of the signal eliminates the need to synchronize the sweep with input signals of various amplitudes or frequencies. Preset may be disabled; a separate control permits locking in on any portion of a signal, including a choice of positive or negative slope.

Other features include: choice of internal or external triggering: facilities for feeding the Internal horizontal amplifier externally; adjustments for intensity, focus, astigmatism and positioning; DC coupled vertical and horizontal amplifiers; camera mounting studs for standard camera mounts; BNC type connectors; and voltage regulated power supplies for best stability.
Uses triggered/driven sweep; A signal as small as $1 / 2 \mathrm{~cm}$ on the CRT face will permit triggering. Speed is adjustable from 1 microsecond $/ \mathrm{cm}$ to 50 milliseconds $/ \mathrm{cm}$. An external capacitor can be connected to external binding posts for slower sweep speeds. Includes X5 expand with switch control. Sweep timing accurary capability within $3 \%$.
Controls grouped by function for fast use. Graticule illumination adjustable, Black knobs, white and red markings. With all parts, CRT, instructions. $141 / 4 \times 101 / 8 \times 151 / 2{ }^{\prime 2}$. For 105-125 v., 50-60 cycle AC. 30 lbs.
83 YU 910 -J. $\$ 10$ Monthly.
ONLY 184.95
83 Y 949-J. Low-Cap Probe. 2 ibs....
ONLY 16.50

## SPECIFICATIONS

[^6]HORIZONTAL BANDWIDTH: DC to 200 kc within 3 db down.
SENSITIVITY: Approximstely $15 \mathrm{v} / \mathrm{cm}$. Has variable attenuator. INPUT IMPEDANCE: I megohm
SWEEP RANGE: . $55 \mathrm{ec} / \mathrm{cm}$ to $200 \mathrm{nsec} / \mathrm{cm}$ in 16 ranges by use of basle
 and horizontal sweep plue X5 expension. 10:1 multiplter verntes control: Multiplier switch. Provision for adding externel capacitor for very slow sweeps. Sweed timing accuracy capablity within $3 \%$.
TRIGGERING: Sensitivily, 200 mv external, Xcm deflection internal. Inputs, line, external AC and DC, Internal AC and DC. Level adjustable to prowlde triggering at selected points on wavetorm, or preset.
CRT DISPLAY AREA: $\mathbf{B x} 10 \mathrm{~cm}$.
VERTICAL SCALE CALIBRATION: +6 to $-9 \mathrm{db} i x$ and y linear orid. SIZE: Helght, $141^{*}$; WIdth, $10 \%^{*}$ : Depth, $15 /^{\circ}$.
COLOR: Ulght grey case-dark gray panet with ied and white markings. SHIPPING WEIGHT: 30 pounds.

ACCURATE, DEPENDABLE AND PERFORMANCE-PROVEN IN THE FIELD

Knight-Kits are the number one choice of the serviceman, technician and hobbyist . . . and all others who must get the most for their test equipment dollar.


## Famous-For-Quality Electronic VTVM Kit

## SPECIFICATIONS

## DC VOLTMETER

Ranges: 0.1.5-5-15-50-150-500.1500 full scale. With optional HV Probe reads to 50,000 volts.
Input Resistance: 11 megohms (1 meg in probe) to 1500 v scate. Accuracy: $\pm 3 \%$ of full scale. AC VOLTMETER
RMS Ranges: $0-1.5-5-15-50-150$ -$500-1500$ volts full scale.
Peak-to-Peak Ranges: 0-4.2-14-42-140-420-1400-4200 volts.
Decibels: -10 to +65 ( 7 ranges).
Response: 30 cps to $3 \mathrm{mc}, \pm 1 \mathrm{db}$; 30 cps to $5 \mathrm{mc}, \pm 3 \mathrm{db}$. To 250 mc with optional HF Probe.
Accuracy: $\pm 5 \%$ of full scale.

## OHMMETER

Ranges: $0-1000 \cdot 10,000 \cdot 100,000$ ohms; 0-1-10-100-1000 megohms. Center Scales: 10, 100, 1000, $10,000,100,000$ ohms; 1. and 10 megohms.
Battery: $11 / 2$ volt, size "C."
TUBE COMPLEMENT
Miter Bridge: 12AU7A
Full-WaverRectifier: 6AL5
B+ Supply: Selenlum rectifier.

- 11-Megohm Input Resistance Minimizes Circuit Loading
- Precision $1 \%$ Multiplier Resistors for High Accuracy
- 200-Microamp Movement-Large $41 / 2^{\prime \prime}$. Two Color Scale
- Provision for Convenient External Calibration

Offering the big "plus"-up-to-the-minute design, the precision Knight-Kit VTVM stands unequalled in both performance and value. All the quality that years of experience and research in the fietd of kit development can provide has been incorporated in this superb unit. Components of the finest qualitycoupled with famous Knight-Kit easy, positive assembly-produce the kind of Vacuum Tube Voltmeter demanded by the quality-conscious technician, serviceman, and "do-it-yourself" enthusiast
Highlights include: low-leakage type switches: finest grade printed circultry; film-type $1 \%$ precision resistors and multipliers; easy-to-read, two-color $41 / 2^{*}$ meter with $200-\mathrm{mic}$ roamp sensitivity; zero-center scale plus direct reading type decibel scale; DC polarity reversing switch; push-pull balanced-bridge clrcuit for maximum accuracy and meter protection: and 11 megohm input impedance to reduce circuit loading-assures true readings.
Step-by-step instructions with giant-size picture diagrams are easy to follow. Gray metal case, charcoal gray panel, plus black vinyl carrying strap. With tubes, wire, solder, 3 test leads, battery, and all parts. Size, $75 / 8 \times 5 \frac{3}{8} \times 4 \frac{1}{4}$. For $110-125$ volts, 60 cycle AC. Shpg. wt., 7 lbs.
83 Y 125-J. $\$ 5$ Monthly.
ONLY 26.95
$83 \vee 504-\mathrm{J}$. As above, but factory-wired. $\$ 5$ Monthly.
ONLY 39.95
83 Y 126-J. High Voltage Probe Kit. To 50,000 VDC. $1 \frac{1}{2}$ Ibs.
ONLY 4.50
83 Y 127-J. High Frequency Probe Kit. To 250 mc on AC. $11 / 2 \mathrm{lbs}$.
ONLY 3.50

Up to 24 Months to Pay With Allied's Credit Fund Plan


# Best Buys in Easy-To-Assemble, Accurate VOM Kits 


#### Abstract

1000 OHMS/VOLT VOM KIT > ony

> \{155 - $41 / 2$ " Meter; 400 -Microamp Movement - $1 \%$ Precision Resistors and Multipliers - 12-Position Range Switch; 38 Ranges - Complete with Test Leads and Battery new low price

Measure AC-DC volts, current and resistance with this outstanding value VOM that has 1000 ohms-per-volt sensitivity on both AC and DC. Reliable and versatile, it features a big $41 / 2$ meter with large, two-color, easy-to-read calibrations. All multipliers used are precision, $1 \%$ film-type resistors that provide high accuracy and continued dependability. Has 38 ranges to cover most general-type measurements. Assembles and is ready for use in a matter of a few hours. Step-by-step instruction manual is clearly written and wellillustrated to guide your every move. A "How to Use" section helps you take advantage of all the capabilities of this performance-proven meter. Has black bakelite case with carrying strap. Includes battery, test leads, wire, solder, and all parts, $63 / 4 \times 51 / 4 \times 23 / 4^{\prime \prime}$. Wt., 3 lbs. 83 Y 128-J. $\$ 5$ Monthly. ONLY 15.95 83 Y $429-\mathrm{J}$. Above Kit, but with $5 \%$ tolerance resistors in place of $1 \%$ values. Shpg. wt., 3 lbs...... ONLY 13.95


20,000 OHMS/VOLT VOM KIT

Only<br>- $4 \frac{11 / 2}{2}$ Meter; 50 -Microamp Movement<br>s2995<br>- One-Knob Range-Function Switch<br>- Accurate Within $2 \%$ of Full Scale<br>- $1 \%$ Precision Resistors and Multipliers $\$ 5$ monthly

You get the most for your money-outstanding quality and performance-with this time-tested, caretully engineered VOM. An indispensable test instrument, you'll find that It soon pays for itself. Its 50 -microamp meter sensitivity provides 20,000 ohms-per-volt input resistance on DC to assure accurate measurements in critical circuits. For AC voltage tests, input resistance is 5000 ohms-per-volt.
All multipliers are $1 \%$ precision resistors; meter, a part of the panel, has an easy-to-read $41 / 2^{\circ}$ scale, accurate to $2 \%$ of full scale reading; front panel zero adjust control; single switch for selection of function and range.
Building the Knight-Kit VOM is a pleasant and rewarding experience. Step-by-step instructions and comprehensive picture diagrams guide your every move. Black bakelite case, with carrying strap. 32 ranges. With test leads, batteries, wire and solder. $63 / 4 \times 5 \frac{1}{4} \times 23 / 4 *$. 4 lbs.
85 Y 140-J. $\$ 5$ Monthly.
ONLY 29.95

## SPECIFICATIONS

AC, DC, and Output Volts: 0.2.5-10.50-250-1000-5000 volts; 6 ranges each.
Resistance: 0-2000-200,000 ohms; 0-20 megohms (center scale at 12, 1200, 120,000 ohms); 3 ranges.
DC Current: 0-0.1-10-100 ma; 0-1-10 amps; 5 ranges.
Decibels: -30 to $+63 ; 6$ ranges.
Meter Sensitivity: $50 \mu \mathrm{a}$ full scale.
Accuracy: $2 \%$ of full scale.

[^7]
## SPECIFICATIONS



# Only <br> High-Sensitivity $5^{"}$ Wide-Band Scope Kit <br> the lowest priced oscilloscope kit with the all important extra features . . . 

 your best value for color and black and white television servicing.Wide sweep range, broad response and high sensitivity make this popular Knight-Kit a best buy for shop and lab allke. With highest quality components throughout its expertly designed circuitry, this top performer is simply great for color as well as black and white TV servicing, plus hundreds of other applications. Makes your service work easier and faster-increases profits.
Push-pull vertical and horizontal amplifiers with cathode-follower inputs assure minimum circuit loading and almost zero wave-form distortion. 2nd anode voltage of 1400 volts provides a high-intensity trace. Excellent synchronization on complex wave-forms is achieved by positive and negative locking. Includes frequency-compensated input attenuator, 1-volt P.P calibrator, internal astigmatism control, retrace blanking, Z-axis input, and directly coupled vertical and horizontal positioning controls.
Uses 2 printed circuit boards and a laced wiring harness for quick, rellable assembly. Handsome gray steel case, $141 / 4 \times 10 \frac{1}{3} \times 151_{2}^{\prime 2}$, has charcoal gray panel. With test leads, 5UP1 CRT, all parts, wire, solder, instructions. For $110-125 \mathrm{v}$., 60 cycle AC. Shpg. wt., 28 ibs.
83 YU 14 -J. $\$ 5$ Monthly.
83 YU 502-J. As above, but factory wired. \$8 Monthiy.

## ONLY 69.95

ONLY 109.95

## SPECIFICATIONS

VERTICAL AMPLIFIER SENSITIVITY 25 mv (AMS) per inch. VERTICAL AMPLIFIER RESPONSE, $\pm 3$ $\mathrm{db}, 5 \mathrm{cps}$ to 5 mc ; only 1 db down at 3.58 mc color buret frequency. VERTICAL AMPLIFIER INPUT IMPEDANCE, with XI senaliviliy- 2.9 megohms and 21 mmf ; with X 0.1 and X 0.01 senstitivity -3.4 meoohms and 12 mml .
HONIZONTAL AMPLIFIER RESPONSE, down only 3 db at 600 kc ; down only 4 db at 1 mc . Locks in as hlgh as 9 mc . HORIZONTAL AMPLIFIER SENSITIVITY, 600 mv (RMS) per Inch. SWEEP GENERA. TOR RANGE, 15 cpE to 800 mc . SWEEP GENERATOR SYNCHRONIZATION, internal positive internal negative, external, and lino frequency.
POWER SUPPLIES. Iow voltage supply hes $6 \times 4$ rectlier with 6 C4 voltage repulator. High voltage supply has IV2 rectlfler producing approstmately 1400 volts to CRT for high-Intensity trace. CALI. BRATOR. 1 wolt Peak-to-Poek at tront panal. CATHOOE RAY TUBE. SUP1.


VOLTA GE CALIBRATOR KIT. Makes your scope an accurate voltage measuring instrument. Provides variable square wave from . 01 to 100 volts. Has switch for comparing external signal. $71 / \times 53 / 6 \times 41 / 4{ }^{\prime \prime}$. For $110-125 \mathrm{v} ., 60$ cycle AC. $43 / 4 \mathrm{lbs}$.
83 Y 136-J.
ONLY 12.95

## ACCESSORY PROBE KITS

83 Y 147-J. 12-Mmf Low-Capacity Probe Kit. Shpg. wt., 100z..ONLY 3.75

83 Y 148-J. 250-Mc RF Demodulator Probe Kit. Wt., 8 oz... .... ONLY 3.75


## Our Finest Emission-Type Tube Tester Kits

## Only <br> $\$ 39^{95}$

- Check Over 1900 Recelving, TV and Hi-FI Tubes
- Provision for Setting Up Future Tube Types Quickly
- Multi-Colored, Easy-to-Read "GOOD-?-REPLACE" Scale
- Also Check for Shorts, Open Elements and Leakage
\$5 monthly
MODEL 600-A PORTABLE. Equip your shop or hobby corner with this dependable, low-cost Knight-Kit Tube Tester. With this handsomely styled unit on your test bench, you can check over 1900 tubes-including the very latest types I Sockets accept nuvistors, compactrons, novars, 4, 5, 6, and 7-pin large, 7, 9, 10-pin miniatures, octals, loktals, and pilot lamps.
Tube performance is accurately measured by the amount of cathode emission. The large, full-view meter clearly shows tube condition by a three-color, "GOOD-7-REPLACE" scale. A neon indicator shows filament circuit continuity and leakage or shorts between elements. Line-adjust circuit is provided to correct for variations in line voltage and maintain proper testing conditions. Filament switch lets you select 16 different voltages from 0.63 to 117 volts.
Illuminated roll chart features a smooth action thumbwheel drive. Supplied complete with all parts, wire, solder, and easy-to-follow instructions. in gray fabrikoid-covered portable wood case with handle. $6 \frac{1}{2} \times 141 / 2 \times 101 / 2^{*}$. For 110 125 v. $50-60$ cycle AC. Shpg. wt., 13 lbs.
83 YX 636-J. $\$ 5$ Monthly
ONLY 39.95
87 Y $\times 518$-J. As above, but factory wired
ONLY 53.95


## HODEL 600-A BENCH OR COUNTER TUBE TESTER KIT

Includes the same outstanding features as the Knight-Kit $600-A$ Portable Tube Tester described above, except tester is housed in a sturdy gray steel case. Size, $51 / 1 \times 141 / 8 \times 101 /{ }^{\prime \prime}$. Shpg. wt., 15 Ibs.
83 YX $635-\mathrm{J}$. \$5 Monthly
ONLY 35.95
$87 \mathrm{Y} \times 519-\mathrm{J}$. As above, but factory wired
ONLY 49.95

(A) TV PICTURE TUBE HARNESS. Fof checking picture tubes up to $90^{\circ}$ on Model 600-A Tube Testers. 8 oz .
83 Y 141.
ONLY 4.50
[B] $110^{\circ}$ ADAPTERS. For TV tube harness above, checks $110^{\circ}$ picture tubes. 202.
83 Y 271. Set of 2. ONLY 3.D4
REPLACEABENT ROLL CHART. For updating previous Knight-Kit 600 and 600-A Testers. 2 oz.
83 Y 117
ONLY 1.50
CONVERSION KIT. Check nuvistors, novars, compactrons, 10 -pins on older Model 600 Testers. Uses existing socket on checker. Shpg. wt., 2 Ibs. 83 Y 633.

ONLY 3.95

## (I) <br> knight-kit <br> TEST EQUIPMENT



## Time Saving Resistor and Capacitor Testing Kits

RESISTOR-CAPACITOR TESTER KIT

- Proven Bridge-Method Measurement

$\$ 1095$
\$5 monthly

The Knight-Kit R/C Tester Kit is an extremely versatile, highly accurate test unit. Specifically designed for top. notch performance in the service shop, lab, or on productlon lines, it will save you work and trim valuable time from hundreds of servicing and testing jobs.
Resistances and capacitances are measured with an accuracy of $\pm 10 \%$ by the dependable AC- operated bridge method. Power Factor test provides a direct-reading indication of electrolytic capacitors' efficiency. Leakage checks, with appropriate voltages applied, show the true condition of the component-open, shorted, leaking.
Has a large, easy-to-read dial and "magic eye" null indicator, to show resistance and capacity values at a glance. Gray wrinkle case with charcoal gray panel. With tubes, pre-cut wire, solder and instructions. $71 / 4 x$ $101 / 85 \frac{1}{1 / 4}$. For $110-125 \mathrm{v} .60$ cycle $A C .10 \mathrm{lbs}$.
83 Y 124-J. $\$ 5$ Monthly .................... ONLY 19.95
${ }^{83}$ Y 503 -J. As above, but factory wired
ONLY 29.95

## SPECIFICATIONS

[^8]
## "IN-CIRCUIT" CAPACITOR CHECKER KIT

## Only <br> - No Capacitor Unsoldering Required

- Wide Range- 20 Mmf Thru 2000 Mfd
- "Magic-Eye" Shows Opens or Shorts
- Very Easy to Bulld and Operate

The Knight-Kit "In-Circuit" Capacitor Checker Kit actually permits testing capacitors while they are wired in the circuit. This valuable, time-saving feature is a real boon to servicemen, technicians, and hobbyists who maintain electronic equipment. There's no need to unsolder con-nections-just connect the test leads across the suspected component, press the proper switch, and the "magic eye" shows open or short condition (not leakage).
Checks by-pass, blocking, coupling and filter capacitors. The fest for opens and shorts can be made on any capacitor of 20 mmf or greater capacity, even if the capacitor is in parallel with a resistance as low as 50 ohms. The test for shorts can be made on any capacitor up to 2000 mid, even when shunted by as low as 50 ohms. You get accurate readings at a glance-important when testing the many capacitors In today's TV sets, radios, hi.fi, etc.
Has a sturdy steel case with attractive gray finish and contrasting charcoal gray panel; black vinyl handle for ease of porlability. No special tools are required for assembly-a soldering iron, screwdriver and pliers are all you need. Clearly written step-by-step instructions plus wall-sized picture diagrams make assembly a marvel of simplicity. Complete with all parts, pre-cut wire, solder, test leads and builder's manual with easiest-to-follow step-by-step instructions. Size, $73 / 45 \% \times 55^{5}$. For operation from $110-125$ v., 60 cycle AC. 6 . bs .
83 Y 119-J.
ONLY 14.95


WITH TEST LEADS


WITH TEST LEADS
AND EATTERY

Lowest-Cost, Accurate Bench Equipment

FLYBACK AND YOKE CHECKER KIT
Only
${ }^{5} 2{ }^{95}$
$\$ 5$ monthly

- Indispensable for TV Servicing
- Large, Easy-to-Read $41 / 2^{\circ}$ Meter
- Self-Contained Power Supply
- Positive Good or Bad Readings

First choice for the budget-minded TV technician and servicer! You'll race through TV deflection circuit repairs with this low-cost kit. Instantly checks on the condition of all types of horizontal output transformers and deflection yokes, as well as linearity and width coils in TV sets. Provides an accurate test of any standard component with shorted turns and continuity checks.
Positively indicates the presence of shorted turns for any coil with a $Q$ greater than 1, and an inductance between .0003 henry and 2 henries. Determines the continuity of any circuit with a resistance between 0 and 0.5 megohms. A $41 / 2$ full-view meter with 400 -microamp sensitivity provides clear and accurate readings. Circult uses a $654 \AA$ tube in a pulsed oscillator arrangement. Has a self-contalned power supply of the isolation transformer type, for full safety during servicing of any type TV set.
This versatile, valuable addition to the test bench is aiso unusually easy to build. Assembly can be completed in a matter of hours using only the simplest of tools-you need just a screwdriver, long-nose pliers, and a soldering iron or gun. The well-lliustrated manual, in addition to containing step-by-step instructions, also includes helpfut hints on getting the most out of this fine instrument. Gray metal case has black vinyl handle; charcoal gray panel. With all parts, wire, solder. $73 / 4 \times 53 / 6 \times 5^{\circ}$ For 110.125 v , 60 cycle AC. 6 lbs.
83 Y 118-J. $\$ 5$ Monthly
ONLY 21.95

TRANSISTOR AND DIODE CHECKER KIT


Here's a handy tester that fills a real need for experimenters, hobbyists, radio and TV servicemen, studentsanyone requiring a compact and reliable checker for testing transistors, diodes, and rectifiers. The Knight-Kit Transistor and Diode Checker measures the leakage-togain ratio of all types of junction, point contact and surface barrier transistors. In addition, matched pairs of transistors, whether they be of similar or dissimilar types, can be precisely selected by checking and comparing their leakage and gain currents.
Germanium and silicon diodes plus selenium and copper oxide rectifiers can be checked for excessive reverse current conduction, and for front-to-back conduction ratio. Another important feature is the provision that enables the user to listen to the noise generated by a transistor. This noise level test makes it possible to carefully select low noise transistors for use in high gain stages. Either a signal tracer or headphones can be used with tester for these noise level measurements.
Highlights include: spring-return leakage gain switch, adjustable forward current control, separate sockets for PNP and NPN transistors, sensitive, Dynamometer-type movement, self-contained $221 / 2$ volt battery. Housed in bakelite case with lustrous aluminum panel. Complete with all parts, test leads, battery and easy, step-by-step instructions. Size, $61 / 4 \times 31 / 4 \times 2 \frac{1}{3^{\circ}}$. Shpg. wt., 2 lbs. 83 Y 149-J.

## (k) knight-kit ${ }_{\text {TEST EQ }}$ TEST EQUIPMENT



WITH TEST LEADS

# Pace-Setting Best Buys In RF And Sweep Generators 

## RF SIGNAL GENERATOR KIT

## Only <br> $19^{95}$

- 160 kc to 112 mc On Fundamentals
- Precision-Wound Coils Throughout
- Three Outputs: Modulated, Unmodulated, and 400 cps Audio \$5 monthly - Can Be Used With External Modulation Build this time and labor-saving trouble-shooter-get big savings over the cost of comparable factory-wired equipment. This extremely stable signal generator's wide fundamental output is divided into five separate bands. A large, clearly calibrated dial, vernier drive and easy-togrip knob permit exceptionally high accuracy in the setting of individual frequencies. Excellent for use as a marker generator. Has step and continuous-type attenuator controls for precise adjustment of output. Uses precision. wound coils in a Colpitts circuit-requires no calibration.
Output can be unmodulated (also jack for external modulation), or modulated by 400 cps built-in oscillator. 400 cps at 10 volts externally available. Gray case-charcoal gray panel. Includes all parts, wire, solder, instructions. $71 / 4 x$ $10 \frac{1}{8} \times 51 / 4$. For $110-125 \mathrm{v}$., 60 cycle AC. 11 lbs . 83 Y 145-J. $\$ 5$ Monthly.

ONLY 19.95
83 Y 546-J. As above, but factory wired ..... ONLY 29.95

## RF SWEEP GENERATOR KIT

Only - Built-In Crystal Marker Oscillator<br>'44 ${ }^{45}$<br>- RF Output In Excess of 0.15 Volts<br>- Flat Output- 300 kc to 250 mc<br>$\$ 5$ monthly - Variable Sweep Width-O to 13 mc

An outstanding, low-cost instrument for TV and FM alignment. Produces a wide, linear, and stable sweep and continuous frequency coverage from 300 kc to 250 mc in 4 bands-all on fundamentals. Excellent for production line testing, electronic training and technical use. Highlights include: electronic retrace blanking; voltage regulation; automatic gain control circuit; electro-mechanical reactance modulator circuit; continuously variable sweep width; bullt-in crystal marker oscillator with dual crystal socket and switch for selecting either of two marker crys. tals (not included, listed below).
Complete with all parts, wire, solder and instructions. $85 \times 12 \frac{1}{6} \times 7^{\prime \prime}$. For 110.125 v., 60 cycle AC. 15 lbs.
83 Y $\times 123$-J. $\$ 5$ Monthly.
ONLY 44.95
83 Y 052-J. 4.5 me Marker Crystal. $\approx .005 \% .30 z$. NET 4.80
83 Y 050-J. 5 mc Marker Crystal. $\pm .02 \% .3$ 02. . NET 3.95 83 Y 051-J. 10.7 mc Marker Crystal. $\pm .02 \% .3$ oz.. NET 3.95

## SPECIFICATIONS

[^9]
## SPECIFICATIONS

> Frequency Range: $300 \mathrm{kc}-250 \mathrm{mc}$ continuous, 4 bands. RF Sweep Output: In excess of 0.15 volts, regulated to a ssure constant output within 1 db on all bands. Sweep Frequency and Width: 60 cycles; 0.13 mc . Horizontal Sweep Voltage: 5 volts, RMS; 60 cycle. Phase Control: Blanking shift 0.180 degrees.


# Performance-Proven Equipment at Budget Prices 

SINE WAVE AUDIO GENERATOR KIT

\author{


- Full 10-Volt Output, $\neq 1 \mathrm{db}$ to 1 mc
- Covers 20 cps to 1 mc in 5 Ranges
- Two Cathode-Follower Output Stages for Extremely High Stability


## \$5 monthly

Ideal for precise testing of high-fidelity amplifiers, tonecontrol circults, speakers, etc.- speeds up and adds highest accuracy to any servicing requiring calibrated, continuously variable audio signals. Features an up-to-date circuit developed by the Bureau of Standards, to give extremely stable, uniform output on all ranges.
The Knight-Kit Audio Generator operates into either high impedance or 600 ohm loads. A step-attenuated output voltage control plus a continuously variable level control allow precise output adjustment. Optimum isolation between oscillator and load is provided by means of a second cathode-follower stage, resulting in exceptional stability. Gray steel case with contrasting charcoal gray panel. Supplied complete with all parts, pre-cut wire, solder and step-by-step instructions with pictorial diagrams and schematic. Size, $71 / 4 \times 101 / \times 81 / 2^{\prime \prime}$. For operation from 110.125 v., 60 cycle AC. Shpg. wt., 15 Ibs.

83 YX 137-J. 85 Monthly
ONLY 35.95

## SPECIFICATIONS

Frequency Coverage: 20 CDS to 1 mc in 5 ranges.
Output: Continuously variable and step attenuated, 0 to 10 volts rms into 600 ohms, flat within $\pm 1 \mathrm{db}$.
Distortion: Less than $25 \%$ from 100 cps to 20 kc . Less than $.3 \%$ over the entire funing range. Less than $.5 \%$ when driving 600 ohms load at 2 volts output.

## Only

HIGH-GAIN SIGNAL TRACER KIT

- Tests RF, IF and Audio Circuits
- High Amplification-Gain of 91,000
- Jacks for External Scope and VTVM
\$5 monthly
- Binding Posts for External Servicing

Build this highly versatile test instrument for your service bench or nobby corner. Permits fast, accurate servicing of radios, TV sets, hi.ffi, amplifiers, etc.-lets you check RF, IF, video and audio circuits. Can be used as an audio amplifier for utllity purposes, too.
"Magic eye" tube with calibrated attenuators clearly indicates signal presence and permits stage-by-stage gain measurements. Built-in $4^{*}$ speaker permits audible signal tracing. Wattmeter is calibrated from 25 to 1000 watts for checking electrical devices. Use of a pentode front-end gives remarkably high amplification gain of 91,000 -greater than any other unit in this price class
Binding posts, from internal circuitry, allow easy substltution servicing. Speaker, output transformer, and 280-v. 8+ supply may be connected to unit being serviced. Other posts are for direct connection of oscilloscope or VTVM when multiple measurements are required. A 2 .position RF.AF prote, supplied, affords complete testing versatility -one position for checking RF, IF and video stages, the other for testing audio frequency stages.
Noise test facilities let you apply DC to volume controls or other suspected components for amplification of noise characteristic. Gray steel case-charcoal gray panel. Complete with wire, solder, probe and instructions. $71 / 8 \times 101 / x^{x}$ $51_{4}^{\prime \prime}$. For $110.125 \mathrm{v} ., 60$ cycle AC. 12 lbs.
83 Y $\mathbf{1 3 5}$-J. \$5 Monthly
ONLY 26.95


# Low-Cost Kits For Every Testing Requirement. 

A RESISTANCE SUBSTITUTION BOX KIT Only<br>$\$ 595$<br>- 36 Different Resistor Values Available in 2 Switch-Selected Ranges<br>- Rotary Switch for Rapid Settings

This handy resistance substitution box kit provides convenient switch-selection of any one of 36 E.I.A. standard $10 \%$ 1-watt resistor values, ranging from 15 ohms to 10 megohms. You can easily find the correct resistance value required in a circuit in seconds-saves valuable time in radio and TV servicing as well as in equipment design. 2 ranges: 15 to 10,000 ohms; 15,000 ohms to 10 megohms. Has 18 position rotary switch for rapid setting. With all parts, leads, alligator clips, instructions, black bakelite case. Size, $61 / 4 \times 33 / 4 \times 2^{\prime \prime}$. Shpg. wt., $13 / 4$ lbs.
83 Y 139-J.
ONLY 5.95
(B) CAPACITANCE SUBSTITUTION BOX KIT

## Only <br> $\$ 595$

- ElghteenStandard E.I.A.CapacitanceValues
- Offers Quick Selection of Capacitors
- Large, Easy-to-Read Selector Panel

Contains eighteen $20 \%$ capacitors which cover a capacitance range from .0001 to .22 microfarads. A great time and labor-saving device, it's tremendously popular among servicemen, experimenters and hobbyists. Each of the eighteen capacitors can be switched in and out of a circuit without disconnecting test leads. Makes it very easy to determine optimum capacitance value. All capacitors are rated 600 volts, except .15 and .22 mid which are 400 volts. With case, leads and instructions. $61 / 4 \times 3^{3} / 4 \times 2^{\prime \prime} .1^{3} /$ l lbs
83 Y 138-J.
ONLY 5.95

## HANDY 6 -12 VDC BATTERY ELIMINATOR KIT Only - Current Capacity- 15 Amps at 6 Volts, 10 Amps at 12 Volts-Continuous

 ร38 $8^{95}$- Efflcient Filter For Low-Ripple Output $\$ 5$ monthly - Variable Voltage-0-8 and 0-15 Volts Whether you're a serviceman, experimenter or hobbyist, you'll find dozens of uses for this heavy-duty power supply. Serves as a ready, reliable source of 6 or 12-volt DC power for servicing auto radios, mobile Ham and communica. tions equipment, hybrid and full transistor radios, vacuumtube portables, and other low-voltage equipment.
Great, too, as a deluxe power supply for model railroading. Also, its high current capacity permits charging 6 and 12 volt auto batteries overnight. Two panel meters continuously monltor output voltage and current. Meters are calibrated $0-15$ VDC and $0-20 \mathrm{amps}$ DC. Two ranges of variable DC output: 0-8, and 0-15 VDC.
Gray metal case, charcoal-gray panel. With all parts, wire, solder, and easy-to-follow, step-by-step instructions. 9x $121 / 8 \times 7 \frac{3}{4}$ ". For $105-125 \mathrm{v}$., 60 cycle AC. 20 lbs. 83 YX 129-J. $\$ 5$ Monthly ................... ONLY 38.95 83 Y $\times 505-\mathrm{J}$. As above, but factory wired... ONLY 47.95


## SPECIFICATIONS

Current Ratings: Continuous; 15 amps at 6 volts, 10 amps at 12 volts. Intermittent; 17.5 amps at 6 volts, 12.5 amps at 12 volts
Power Consumption: 220 watts maximum. Protection: Line fuse and thermal cut-out.


## HODDEL 4O0A ECONOMY TUBE CHECKER KIT

Only - Checks More Than 1600 Different Tube $\$ 19^{95}$ Types For Cathode Emission

## - Isolation-Type Power Transformer

$\$ 5$ monthly • Unique Flip-Over Cards For Tube Chart An easy-to-build tube checker offered at a price so low that no hobbyist, part-time radio-TV serviceman, or experimenter can afford to be without one. Not a "continuity" tester, the Knight-Kit 400A is a genuine emission tester of amazing versatility-permits accurate, comprehensive checking of all tube elements. Checks over 1600 commonly used radlo, TV, and hi-fi tubes for cathode emission and shorted elements, as well as filament continuity.
Tests Compactrons, Nuvistors, Novars, 10-Pins, Octal, Loctal, 9-Pin and 7-Pin Miniatures. Incorporates a unique selector switch circuit that makes the tester obsolescenceproof for future releases of tubes. Safety-designed, it uses a true two-winding power transformer (not an autoformer) for full isolation from the power line. A handy slide-out drawer holds "flip-card" tube chart. Index tabs for fast location of tube types. A wide, two-color meter scale clearly shows good or bad tube condition.
Assembly is very easy-all parts are carefully identifiedeither by mounting on cards, or by numbers on the individual component. Step-by-step instructions guide your every move-giant-size illustrations show you exactly where each part should go. Complete details on how the tester works and how to use it are included. Gray case has beige front panel. With all parts, wire, solder, charts. $3 \times 9 \%$ $\times 8^{\circ}$. For $110-125 \mathrm{v}$., 60 cycle AC. Wt., 7 lbs . 83 Y 625-J. $\$ 5$ Monthly.

## POPULAR 1000 OHAM /VOLT POCKET VOM KIT

- Now Available at a New Low Price

Hardly larger than a pack of cigarettes, this top-performing VOM kit gives you both sensitivity and ultra-compact size. It's perfect for hobbyists, experimenters, in-the-home servicemen. Hams-anyone who wants good quality at extremely low cost. $2 \frac{1}{2}$ " meter movement has an easy-toread 2-color scale.
DC Voltage Ranges: 0-5-15-50-150-500 volts. AC Voltage Ranges: 0-15-50-150-500 volts RMS. Resistance Range: $0-30,000$ ohms, mid-scale reading is 1200 ohms . Current Ranges: 0-1-10-100 milliamps DC. Input resistance is 1000 ohms-per-volt on all DC ranges. Uses $5 \%$ tolerance multipliers and shunts. Has front-panel zero adjustment.
Assembly is quick and easy thanks to simplified point-topoint wiring to input jacks pre-installed in case. Detalled, well-illustrated manual guides your every move-explains how your tester works as well as its many uses. Complete with all leads, battery, wire, solder and case. Size, $2 \frac{1}{6} \times 3 / 4$ x1 $1 / 2^{\circ}$. Shpe, wt., 1 lb.
83 Y 708-J.
ONLY 7.95

YOUR SATISFACTION IS GUARANTEED on ev. ery Knight-Kit. After you assemble your kit, it must meet with your satisfaction or your purchase price will be refunded.

## (1) knight-kit ${ }^{\circ}$ <br> INTERCOM KITS

Requires no On-Off switch! Draws a maximum of 4 watts of power-hardly more than an ordinary electric clock.

# Transistor 2-Station Wireless Intercom Kit 

new low price - Squelch Circuit Eliminates Power Line Interference

It's completely transistorized-it's wireless-it's the finest, most advanced intercom kit you can buyl Offering top flexibility, this deluxe 2 -station system provides you with years of dependable, noise-free communication in your home, office, or shop; from your house to garage; or even between adjacent homes or buildings on the same electric-company powerline transformer. And it's completely portable-move stations from place to place as desired. Just plug into any wall outlet and you're ready to talk.
You get all the advantages of transistorized operation, too. Complete freedom from noise, hum and microphonics; virtually maintenance-free operation; compact size; extremely cool operation. Has amazingly low current drainhardly more than an ordinary electric clock-requires no On-Off switch. A special noise-silencing squelch circuit provides quiet, static-free standby operation. A variable frequency system control lets you operate two wireless intercom sets simultaneously and independently. Also featured-a specially designed volume control that makes it impossible to inadvertently turn the volume below an audible level and miss a call.
Stations employ extra-large press-to-talk buttons with press-to-side "lockon" design-lets your intercom "baby sit" while you are in the basement, out on the porch, etc. Beautiful molded-plastic cases are styled in Oxford Gray and Eggshell White. Each unit is $3 \times 81 / \times 53 / \mathrm{h}^{\prime \prime}$. Includes transistors, all parts, wire, solder, and step-by-step, easy-to-follow instructions. For operation from 110-125 v., $50-60$ cycle AC or DC. Shpg. wt., 5 Ibs.
83 YX 991 -J. 2-Station System. $\$ 5$ Monthly.
ONLY 39.95
83 Y 992-d. Additional Station Kit. Any number can be used for complete
coverage and convenience, Shpg. wt., $31 / 2$ Ibs. $\$ 5$ Monthly EACH, ONLY 20.95

saves you time . . saves you steps ... saves you money . . . use it in the home, office, plant and store.

## ENJOY THE ENORMOUS

 ADVANTAGES of a line Knight-Kit intercom systemyou'll have the best time and step-saving communication available. And, you can use Allied's popular Credit Fund Plan for your purchase-no money down-up to 24 months to pay.
## SATISFACTION IS GUAR-

 ANTEED on every Knight-Kit. After you assemble your kit, it must meet with your satisfactlon or your purchase price will be refunded. Bulld the best-bulld Knight-Kits-a quality product of Allied Radio.
## IT'S WIRELESSI

Just plug into any wall outlets.


Completely portable . . . move station from place to place as desired . . . requires no wiring between stations.

## Low Cost 2-Station Wireless Intercom Kit

new low price - Attractively-Styled Cabinets Blend with Any Decor
Build your own up-to-date, 2 -station wireless intercom in just a few short hours-you'll be delighted with the dozens of time and money-saving uses. Sensitive receiver has plenty of reserve gain for reliable communications between distant stations. May even be operated between adjacent bulldings or apartments, as long as both are served by the same power-company line transformer. Just plug stations into wall outlets to set up-no wiring is required. And you can use as many stations as needed-all can originate calls.
Convenient Talk-Listen switch tets you "press-to-talk" or lock station in "Talk" position for extended periods of transmission without holding the switch down manually. Ideal for "baby-sitting" from the nursery to the kitchen or other room. Noise-silencing circuit assures quiet "standby"-no annoying interference. A variable frequency control lets you operate separate systems at the same time-each system remaining independent of the other-extremely useful for selective office or plant intercommunication. Volume control and "on-off" switch are front-panel mounted for easy access.
The smartly-styled, cream-toned, molded plastic cabinets blend with any room decor. Dark brown knobs complement the styling. Modern, efficient vacuum tube design uses 4 tubes and a silicon-diode power supply rectifier. Supplied complete with all parts for building a 2 -station system, tubes, wire, solder, and world-famous Knight-Kit step-by-step assembly instructions. Size of each unit is a compact $5 \frac{1}{2} \times 9 \times 51 / 2^{*}$. Add extra stations, below, as needed. For operation from $110-125 \mathrm{v}_{\mathrm{o}}, 60$ cycle AC or DC. Shpg. wt., 7 lbs.
83 Y $\times 917$-J. 2-Station System. $\$ 5$ Monthly
ONLY 29.95
83 Y 941-J. Additional Station Kit. Extra stations may be added as desired to expand any system. Shpg. wt., $31 / 2 \mathrm{lbs}$.

- Variable Frequency Control Allows Separate Systems
- Super-Efficient Squelch Circuit for Silent Standby
- No Cables to Connect-Just Plug into Any Wall Outlet



# 2-Station Economy Intercom System 

Only $54^{95}$

- Amazing Sensitivity-Responds To Even A Whisper
- Complete Station-Includes Both Master and Remote
- With Simplified Step-by-Step Instruction Manual; Can Easily Be Assembled by Anyone

A tremendous time and step-saver-at a bargain price! One of the most useful kits ever designed, it's perfect for electronic "baby-sitting." The remote unit can be installed in the nursery to permit continuous listening in-in the office or shop, communication can be private or non-private by simple use of the "Press-to-Talk" switch on the Master and "Talk-Listen" switch on the remote. Can be used with as many as three remotes parallel-wired.
Master has volume control to adjust loudness of system; only the Master station needs to be plugged into a power outlet. All Remotes can talk with each other when Master is turned on. Thanks to Master's extremely high-gain amplifier and the use of quality $4^{*}$ PM speakers, it picks up even the slightest soundsactually responds to a whisper!
Attractive metal cabinets are styled in ivory with contrasting brown speaker grilles. With all parts, tubes, wire, solder, and easiest-to-build instructions. Each unit, $5 \times 6 \% \times 41 / 2^{*}$. For $110-125 \mathrm{v}$., AC or DC. $71 / 4 \mathrm{lbs}$.
83 Y 297-J. Complete 2-Way System.
ONLY 14.95
83 Y 298-J. Extra Remote Station Kit. Less cable, below. $21 / 2 \mathrm{Ibs}$.. . ONLY 3.95
49 W $604-\mathrm{J}$. Extra Cable. Shpg. wt., $100 \mathrm{ft} .13 / 4 \mathrm{lbs} . . .{ }^{2}$. NET PER FOOT $3 \mathrm{c}^{\text {I }}$
High Quality 4* Speakers Are Used on Both Master and Remote for Clear Sound and Ample Volume.


Only Master Has Volume Control to Set Entire System Level. No Adjustments Are Needed At Remote.

FOR HOME, STORE, OFFICE AND SHOP


In the Kitchen


In Work Areas


In the Office

## (k) knight-kit ${ }^{\circ}$ <br> RADIO KITS



## "Ranger III" AM Clock-Radio Kit

## Only $24^{95}$

- Features Telechron Clock with Luminous Hands
- Automatically Turns OH After You've Fallen Asleep
- Turns on Any Household Appliance at Desired Time
- Printed Clrcuitry, Plug-In Modules for Easy Assembly


## EVERYONE ENJOYS BUILDING THESE KNIGHT-KIT RADIOS

It's so easy-and so much fun to assemble a Knight-Kit radio. No expensive special tools are required-just a pair of long-nose pllers, a screwdriver and a soldering iron are all you ever need. Clearly written, step-by-step instructions are easy to follow-and each manual is loaded with large, clear diagrams and pictorials, too. Even if you've never built anything before-you can build a perfect Knight Kit radio. Satisfaction Guaranteed!

A real favorite-as a receiver, provides crystal-clear reception of the AM broadcast band-as a clock-radio, offers an array of useful conveniences. It pleasantly awakens you to the sound of music in the morning-should you oversleep, it sounds an alarm ten minutes later. In the evering, lets you fall asleep to music-"Sleep Switch" shuts off radio after any desired time lapse up to one hour. 1200-watt outlet on rear of set automatically starts your coffee-maker, turns on lamp or other appliance. Also may be used as a security precaution, to turn on lights at nightfall when you're away from home.

Building the Ranger Clock-Radio is so easy and so much fun-all you need are long-nose pliers, screwdriver and soldering iron. Two unique module units (preassembled resistor and capacitor assemblies) plug into a printed circuit board and are soldered into place. With handsomely styled ebony and white cabinet. Tubes: 12BE6, $12 B A 6,12 A V 6,50 C 5$; and $35 W 4$ rectifier. Size, $51 / 4 \times 95 / 8 \times 53 / 8$. Complete with all wire and solder, instructions, wall-size diagrams. Telechron clock. For 110.125 volts, 60 cycle AC. Shpg. wt., 6 lbs. 83 Y 737-J. $\$ 5$ Monthly..

ONLY 24.95


Telechron Clock



Starts Coffee


## "Ranger III" AM Superhet Radio Kit

You'll enjoy the outstanding reception of standard AM broadcasts, you'll appreciate the handsome styling that fits in anywhere, and you'll marvel at the easy, fun-filled assembly. Includes such important features as Alnico $V$ speaker and acoustically designed cabinet for clear, full tone; automatic volume control that cuts blasting and fading: and sensitive superhet circuit for top-notch performance. Miniature tubes include: 12BE6, 12BA6, 12AV6, 50C5; 35W4 rectlifier. Highly efficient, built-in hi-Q loop antenna provides maximum sensitivity. Complete with all parts, black cabinet accented in white, wire and solder and easy-to-follow instructions. $53 / 8 \times 85 / 8 \times 4 \frac{3 / 8}{8}$. For 110-125 volts, $50-60$ cycle AC or DC. Shpg. wt., $41 / 2$ lbs. 83 Y 736-J.

ONLY 16.95

## only ${ }^{5} 6^{95}$

- Has Sensitive Superhet Circuit
- With Smartly Styled Cabinet
- Very Easy to Assemble
- Efficient, Full-Toned PM Speaker
- Built-In Hi-Q Loop Antenna
- Cadmium-Plated Steel Chassis
- AVC Prevents Blasting and Fading


## ALL-TRANSISTOR AMA RADIO KIT

A portable 5-transistor radio with precision engineered circuitry and a big $31 / 2^{\circ}$ speaker for superior sound. Ebony-trimmed ivory case has two satin-gold metal endplates. Includes off-on/ volume and tuning controls. Has built-in loopstick antenna. Complete with wire, solder and easy-to-follow instructions. Less battery and earphone, below. $33 / 4 \times 8 \times 2^{\prime \prime} .21 / 4 \mathrm{lbs}$.
83 Y 922-J. $\$ 5$ Monthly.......... ONLY 19.95 83 Y 002-J. Std. 9-v. Btry. 4 oz......... NET . 21 83 Y $003-\mathrm{J}$. Earphone. For private listening. With cord and plug. Wt., $502 . \ldots .$. . NET 1.67



## Log the Wide World from Your Armchair With Knight-Kits



ILLUMINATED "S" METER
Accuratelyindicates maximum signal strength of a station plus correct tuning for peak performance.


SLIDE RULE DIAL
This large dial is clearly marked for quick station selection. $7 \frac{1}{2}$ / long and illuminated for easy logging.


SENSITIVITY CONTROL
Adjusts for optimum reception when listening to voice or code.

## NEW! "STAR ROAMER" 5-BAND RECEIVER KIT

## Only $\$ 3995$ <br> \$5 monthly

- 5-Bandswitched Ranges-200 kc Through 30 mc
- "S" Meter Measures Signal Strength, Tuning
- Sensitive Superhet With Regenerative IF Stage
- Calibrated Bandspread for Sharp Tuning
- Has Automatic Volume Control, Noise Limiter

Tune in the world! Hear history-making events as they happen and where they happen-on the fantastic new "Star Roamer" 5-Band Shortwave Receiver Kit. Low-priced for the tops in economy, and easy to build, this flexible and sensitive receiver covers 200 kc to 30 mc (except 400.500 kc ) in 5 -ranges. At fingertip command, you have the marine and aeronautical bands, with calls from ships at sea, planes aloft, beacons, up-to-the-minute aviation weathercasts, and marine distress calls. Your favorite AM radio programs are on the standard broadcast band, and you'll hear the many voices of the world on the international shortwave bands, plus Hams, press stations and much, much more.
Has illuminated " S " meter that accurately indicates maximum signal strength plus correct tuning of a station. Calibrated electrical bandspread control acts as a fine tuning device that separates the station you want from the .many signals present-important in the clusters of shortwave transmissions. Other features: AVC to reduce "fading" and "blasting"; ANL for noise reduction; IF Sensitivity control for improving signal-to-noise ratio, preventing overloading, increasing selectivity, and for optimum code reception; Antenna Trim for maximum signal; and headphone jack. And as an added feature, the "Star Roamer" can also be used as a code practice oscillator.
It's great fun to build, too. Detailed instructions and identified parts mean easy assembly and swell results. Includes all parts, large $4^{*}$ speaker, tubes, wire, solder. Charcoal gray, aluminum trim; black dial. $5 \frac{1}{2} \times 121 / 4 \times 8^{\prime \prime}$. Less antenna, below. For $110-125 \mathrm{v} ., 60$ cycle AC. Wt., 8 lbs .
83 YX 102-J. $\$ 5$ Monthly.
ONLY 39.95
83 Y 025-J. Outdoor Antenna Kit. With accessories. Wt., $11 / 2$ Ibs... ONLY 1.03 83 Y 027-J. Dual Headset. 2000-ohm impedance. Wt., 1202.


## Your Personal Passport to Exciting Shortwave Listening

SPAN MASTER 4-BAND SHORTWAVE RECEIVER KIT

- Bandspread Control Makes Tuning Fun and Easy
- Regenerative Circuit for World-Wide Reception
- Transformer-Powered for Maximum Performance
- Built-In Speaker Plus Headphone Terminals
\$5 monthly

\author{

- Modern Up-to-the Minute Styling-Wood Cabinet
}

Travel the world from your armchair-hear history in the makingI The famous Knight-Kit Span Master is actually your passport to the fascinating space-age hobby of shortwave listening. Featuring a super-sensitive regenerative circuit, it provides 4 band coverage of international shortwave plus favorite standard AM broadcasts. You'll tune in on fasclnating foreign broadcasts, listen in on ships at sea and aircraft, hear interesting messages on the Citizens Band, and and receive exciting Amateur stations on the 160,80,40,20, 15 and 10 meter bands-it's a thrilling new world of listening adventurel
Highlights include: continuous tuning from 540 kc through 30 mc ; bandspread tuning and fine regeneration controls simplify tuning and separate crowded stations; headphone terminals and speaker cut-out switch permit private headphone reception if desired; coils for each tuning range have their own antenna windings to assure maximum sensitivity; AC transformer power supply for peak efficiency vacuum tube performance; handy bandswitch for the 4 tuning ranges; attractively-styled wood cabinet included; built-in speaker; and 6 operating controls: calibrated Main Tuning, Bandspread Tuning, Bandswitch, Volume with On-Off Switch, Coarse and Fine Regeneration.
A listing of foreign broadcasting stations included with this kit is a valuable aid in tuning in transmissions from all over the world. Manual includes sections on International Morse Code to help you learn code transmissions. With cabinet, tubes, wire, solder, instructions. Less antenna, below. Size, $61 / 4 \times 14 \times 63 /{ }^{\circ}$. For $110-125$ v., 60 cycle AC. Shpg. wt., 8 lbs.
83 Y $\times 258$-J. $\$ 5$ Monthly
ONLY 25.95
83 Y 025-J. Outdoor Antenna Kit. With accessories. Wt., $1 / 1 / 2$ lbs.
ONLY 1.03 83 Y 027-J. Dual Headset. With pins for Jacks. Wt., 12 oz.

ONLY 2.08


BANDSPREAD CONTROL
Simplifies tuning where stations are crowded.


## BANDSWITCH CONTROL

Changes frequency bandssaves time; no coils to change.


FINE REGENERATION
Adjusts galn-excellent on the higher frequencles.


## Enjoy Reliable "Round-The-World" Listening Fun

## SPACE-SPANNERO SHORTWAVE/BROADCAST RECEIVER KIT


with case

- Covers 540-1700 kc and 6.5-17 mc Bands
- Front Panel Control For Quick Bandswitching
- Has Its Own Built-In Clear-Toned $4^{*}$ Speaker
- Electrical Bandspread For Easy, Accurate Tuning

Hear thrilling shortwave broadcasts from overseas on a receiver you build yourself! Amazingly fow in cost, the 2-band Space Spanner pushes back the horizon as it reaches out for exciting messages from the farthest corners of the earth. You'll hear foreign broadcasts, messages from ships and planes, Amateur radio operators talking and sending code on the 40 and 20 -meter bands-plus all your favorite radio programs on the standard broadcast band.
Selector switch permits easy switching between the $6.5-17 \mathrm{mc}$ shortwave range and 540.1700 kc standard broadcast range. Electrical bandspread control provides easy, accurate tuning and effectively aids separation of crowded stations. Beam-power amplifier and built-in $4^{\circ}$ speaker give clear, full-toned reception, Headphone connectors and speaker cut-out switch on rear panel allow private listening. Six controls: Main Tuning, Bandspread, Antenna Trimmer, Bandswitch, Regeneration and Volume.
Building the Space Spanner is an ideal wáy to learn about the fundamentals of radio-as well as an economical way to own a fine receiver. With all parts, case, wire, solder, and easy, step-by-step instructions. Slze, $77 / 8 \times 11 \times 5 \frac{5}{6}$. For $110-125$ v., 50.60 cycle AC or DC. Shpg. wt., 7 lbs.
83 Y 209-J.
ONLY 18.95

## ACCESSORIES


(A) ANTENNA KIT. Includes 50 feet of outdoor antenna wire, 25 feet of lead-in, insulators, standoffs, ground strap and window feed-thru. $11 / 2$ lbs. 83 Y 025-J.

NET 1.03
[B] DUAL HEADSET. 2000
ohm. Has dual tip pins for head phone jacks on all KnightKits on these pages. 12 oz . 83 Y 027-J. . . . . . . . NET 2.08 SINGLE HEADPHONE. (Not illus.) 1000 ohm. With pins for jacks. Shpg. wt., 8 oz.
83 Y 028-J.
NET 1.08

THIS CHART SHOWS YOU THE RADIO SERVICES
क् MARINE
$\frac{\pi}{*}$ AERONAUTICAL
\% CONSOLAN
条 DISTRESS



## Open Up New Frontiers In Shorrwave Listening

## "OCEAN HOPPER" 6-BAND RECEIVER KIT

## Only <br> ${ }^{5} 6^{95}$

- Plug-In Coils For 165 kc to 35 mc
- Receives Longwave and AM Broadcast
- Covers 4 Shortwave Bands Too
- Easy-to-Build-Simple to Operate

One of the most popular kits ever offered, this amazing set covers AM broadcast plus both shortwave and long. wavel Efficient regenerative circuit, with handy plug-in coils, tunes from 165 kc (longwave) all the way to 35 mc for local programs, foreign broadcasts, Hams, planes, beacons, the 500 kc distress frequency and other services. See frequency listing chart, below. On strong stations, receiver will operate a $3-4$ hm PM speaker (not supplied). With cabinet, broadcast band coll, wire, solder, and the easiest-to-follow instructions. Less exira coils (below), and headphones and antenna (facing page). $63 / 4 \times 10 \frac{1}{2} \times 5 \frac{1}{2}$. For $110-125 \mathrm{v} ., 50.60$ cycle AC or DC. 7 Ibs.

## 83 Y 749-J.

ONLY 16.95

## PLUG-IN COILS FOR "OCEAN HOPPER"

Set of 5 plug-In coils with complete over-lapping coverage from 165 kc through 35 mc . Less broadcast coil included with "Ocean Hopper", above. Wt., $11 / 2$ Ibs. 83 Y 748-J.

## ALL TRANSISTOR "DX'ER" RECEIVER KIT

$14^{55}$new low price

- All-Transistor Regenerative Circuit
- Battery Powered-Works Anywhere
- Covers 540-1500 kc/6-17 mc
- Hear Shortwave and Broadcast Bands

Hours and hours of listening adventures are packed into this top-performerl Powered by economical penlight batteries, it's the first low-cost transistorized kit to offer standard broadcast plus shortwave reception. The 3 -transistor circuit tunes $540-1500 \mathrm{kc}$ and $6-17 \mathrm{mc}$ for $A M$ stations, ships, aircraft, shortwave, 20 -meter Hams.
Regeneration control lets you "peak" receiver for best signal on voice or code. Handy, front panel control for quickly switching from AM to shortwave. Antenna trimmer permits "tuning up" for maximum signal strength. Silderule dial with ranges clearly calibrated in large black numerals against a smart, fiat-finish aluminum background. Large, easy-to-grip knob for easy tuning. Also includes Off-On switch and headphone jacks. With $25 \cdot \mathrm{ft}$. indoor antenna, gray metal cabinet, wire, solder, and instructions. Less outdoor antenna and headphones, facing page, and batteries, below. $5 \times 9 \times 53 / 4 \mathrm{~s} .6 \mathrm{lbs}$.
83 Y 943-J.
ONLY 14.95
83 Y 026-J. Penlight Cells. Takes 4. Wt., 3 oz. EACH 10 c

## YOU CAN HEAR AND WHERE TO FIND THEM

|  | 40-METER AMATEUR INTERNATIONAL BROADCAST |
| :---: | :---: |
|  | MARINE AERONAUTICAL |
|  | INTERNATIONAL BROADCAST |
| - | AERONAUTICAL INTERNATIONAL BROADCAST MARINE |
|  | 20-METER AMATEUR |
|  | AERONAUTICAL |
|  | WWV TIME SIGNALS AERONAUTICAL INTERNATIONAL BROADCAST MARINE |
| ${ }^{3}$ | 15-METER AMATEUR |
| $\cdots$ |  |
|  | INTERNATIONAL BROADCAST MARINE AERONAUTICAL GOVERNMENT INDUSTRIAL |
| $\stackrel{3}{ }$ | CITIZENS BAND |
|  | GOVERNMENT |
|  | 10-METER AMATEUR |
|  | AERONAUTICAL |
|  | PUBLIC SERVICE INDUSTRIAL |
|  | ©-METER AMATEUR |


... and It's a Quality Audio Amplifier, too!


## Radio Broadcaster/Audio Amplifier Kit

> Only $\$ 12^{95}$

- Plays Through Any AM Radio
- Use It With a Phonograph or Microphone
- Excellent As A WIreless "Baby Sitter"
- Requires No License or Permit


## ALL SORTS OF EXCITING USES

Sing, speak or play records through radio. Unit becomes amplifier when attached between player and speaker.

Simply jam-packed with fun for the entire family, this popular Knight-Kit actually lets you broadcast through any AM radiol Just plug in a microphone or record player and you're "on the air." Surprise visiting friends by tuning in radio shows on which you are the announcer, disc jockey, news commentator or musical entertainer. Enjoy records anywhere in the house by tuning them in on the nearest radio, without direct connections to the setsI May be easlly attached between a record player and any external PM speaker to become a phono amplifler. Also handy as a P.A. system or an electronic "baby-sitter"lets you listen for sounds from the nursery.

Can also be used with any standard AM radio as a remote sound monitor for TV sets or Citizens Band units. Just like a regular broadcasting station, this easy-to-build Broadcaster tunes to any frequency from 600 to 1500 kc . to 'select' any spot on radio dial. Can be used with magnetic, crystal or ceramic phono cartridges, and with high output microphones (magnetic cartridge equalization disconnects to permit use with microphones). With instructions, all parts, wire and solder. Less mike, below. $4 \frac{1}{2} \times 5 \times 6^{\prime \prime}$. For $110-125 \mathrm{v}$., $50-60$ cycle AC or DC. $23 / 4 \mathrm{lbs}$.
83 Y 706-J.
ONLY 12.95
57 S 166-J. Crystal Microphone. 1 ib.
NET 2.59

## NEW Transistorized Code Practice Package-Great for Beginners



> Complete \$ ${ }^{95}$

HERE'S WHAT YOU GET: Transistorized CP Oscillator Kit Two 1000-Ohm Headphones Two Smooth-Acting, Adjustable Keys Hookup Wire and Easy Instructions
Scouts, builders, students, Amateurs-to-bel Learn to send and receive code in a jiffy with this low-cost "twoman" package-two can practice code almost as cheaply as onel It's just the thing for self-practice, teaching or monitoring too. Everything you need is included in the set: Knight-Kit Transistorized Code Practice Oscillator Kit; two smooth-action keys with adjustable arms; two dependable single headphones with headbands; all required hookup wire and simple, detailed instructions. Kit can be assembled in very little time-operates for months on a single penlight cell. Oscillator has durable, black bakelite case with aluminum panel. Size, $33 / 4 \times 23 / 3 \times 11 / 2^{\prime \prime}$. Complete with all parts, wire, solder, battery and famous Knight-Kit instructions. Wt., 5 lbs.
$83 \mathrm{YX} 436-\mathrm{J}$.
ONLY 9.95
83 Y 239-J. Code Oscillator Only.
ONLY 4.95

## knight-kit ${ }^{\circ}$ All-Transistor Walkie-Talkie Transceiver

## NEVER BEFORE AT THIS LOW PRICE!



## MODEL C-100 WALKIE-TALKIE KIT

- Talk to Neighbors, Family and Friends Up to $1 / 2$ Mile A way
- Weighs 9 oz.-Operates Up to 75 Hours on 1 Battery
- No License, Exam, Permit, Age Limit-Anyone Can Use It

Here's a great new Knlght-Kit everyone's been waiting for! In a few fun-packed hours you'll have this 3 -transistor beauty assembled and ready for reliable, on-the-move communications. It's great for camping, hiking, flshing, hunting, boating, picnic outings, etc. You'll talk with buddles, family and friends up to $1 / 2$ mile away. And Mom and Dad will find many applications for a pair of these 2 -way radios around the home, too. Fully modulated for maximum talk power and range, unit is "on the air" the instant you press the push-to-talk button-built-in $2^{*}$ speaker also serves as mike. Release button to listen over your super-regenerative receiver. Fits snugly in your hand-only $5^{111} 13 \times 21 / 8 \times 13^{\prime \prime}$. Operates uo to 75 hours on low-cost cell. With crystal for channel 7,40* telescoping whip, high-impact blue case, parts, wire, solder, easlest-of-all instructions. Less carrying case and battery, below. Wt., 9 oz . Buy two for a matched 2 -way system/
83 Y 804.J.
83 Y 013-J. Leatherette Carrying Case. 6 oz. 83 Y 002-d. 9-Voit Battery. For above. Wt., 4 oz.....

> 101 USESOUTDOORS AND INDOORS

EACH, ONLY 9.95
ONLY 98C ONLY 21c


## ONLY

$\$ g_{\text {tacen }}^{95}$

## SO EASY TO BUILD!



Youngsters, get started in electronics with a Knight-Kit! You'll learn as you build and have lots of fun. And remember-Knight-Kits are famous for their easy-tofollow step-by-step instructions.

## (A) knight-kit ELECTRONIC LABS





BUILD OVER 100 THRILLING SPACE-AGEPROJECTS!


12 Different AM Radio Receivers -One Even Operates from SunHght


Radio Broadcaster-Be Your Own Announcer or Disc-Jockey.


Metronome-Stucy Rhythm by Visual as well as Aural Measurements.


Light Meter-Reads Changes in Light Intensity on a Real Photo-cell.

PLUS over 80 more-including:
Resistor and Capacitor Checkér

- Alr-Powered Earphone Amplifier - "S" Meter - Lle Detector • Audio Ampllfier - Code Transmitter - Tel-ephone-Type Intercom Electronic Timer - Conelrad Monitor - SoundPowered Telephone . Microphone Preamplifier - Photoelectric Relay - Electronlc Scale - Flre Alarm
- Burglar Alarm - Voice Operated Relay - Electronic Switch - CW Monitor - Applause Meter - Flasher - Light Beam Recelver - Magic Music Osclilator Polarity Checker - Ohm-Meter - DC Voltmeter - AC Voltmeter - Electrolysis Detector - Vacuum Tube Voltmeter. Signal Generator - Electronic Cat - Code Buzzer - Signal Injector - Boat Horn - Many others!


Electronic Ther-mometer-Measures Changes in Temperat ure

Battery ChargerRevitalizes Weak Flashlight Cells



## 21-in-1 Transistor Laboratory Kit

## BUILD ANY ONE OF 21

 CIRCUITS LIKE THESE

Electronic Solar-Powered Light Scale Oscillator Receiver


Audio Amplifier Code Oscillator

## PLUS 16 MORE!

1 Transistor Radio - 2-Stage AM Radio - Solar-Powered Radio - CW Transmilter - Magic Music Maher - Burglar Alarm - Signal Injector Electronic Cat - Electronic Switch - Telephone - LightOperated Relay - Electronic Flasher - Wireless Broadcaster - Voice-Operated Relay - Body-Capacity Alarm . Electronic Tlmer
newlowprice

- Plug-In, Pin-Type Leads Allow Changing Projects Quickly
- Components Mount on Quality Printed Clrcuit Board
- 21 Project Guide Cards-No Duplication of Wiring
- Includes Clearly Written Manual and Explanation

Attention all experimenters and hobbyists! The new, amazing $21-\mathrm{in} \cdot 1$ Transistor Lab lets you operate your own radio station-broadcast through any nearby AM radio. Surprise your friends by turning electrical equipment off and on with your voice, or with a beam of light. Hear local radio stations loud and clear on any of the AM receivers-there's even one that runs from sunlightI Practice sending Morse Code with either of the 2 code oscillators-one broadcasts through your own AM radio. Catch the "burglar" with either of 2 body-capacity type alarms. Make an automatic light flasher or an accurate electronic timer. Use your headphones as either a speaker or microphone with the audio amplifier. Weigh yourself or friends with the electronic scale. Imitate musical instruments and even cats with the magic music maker and electronic cat. All in all, you easily perform 21 separate, interesting, fun-filled projects and you learn, too.
Simple assembly-just put easily identffiable components into marked PC board and solder. Special guide cards show each circuit layout and plug-in leads interconnect numbered components to form each experiment. Go quickly from one enjoyable project to another just by changing the guide card and by rearranging the plug-in leads. You get positive, error-free results!
Detailed manual includes a clearly written explanation on what each circuit does and what makes it work. Supplied complete with transistors, headset. wires, solder. Battery powered; less battery, below: Wt., 2 lbs.
83 Y 624-J
83 Y 213-J. Battery for Above. Shpg. wt., 2 oz.
ONLY 14.95
Increase Your Buying Power With Our Credit Fund Plan


# 12-in-1 Electronic Laboratory Kit 

BUILD 12 OUTSTANDING CIRCUITS LIKE THESE



Code Practice Electronic



Electronic Timpr Light Relay


Audlo


Capacity Relay C.
$+\quad+\quad$

Electronic
Switch


Voice Relay (2) Broadcast Recelver


Wireless Broadcaster $\frac{15}{3} 6$
Br Magic Music Oscillator

## Only $\$ 155^{55}$

\author{

- Permanent Parts Mounting-Change Circuits Quickly
}
- Absoiutely Safe-No Voltage in Circultry Exceeds 25 Volts
- No Circult Dupilication-Actually 12 Separate Projects
- Circuits Demonstrate Important Electronic Principles

Think of all the fun you'll have making electronic "magic" with this fascinating and educational Electronic Lab Kitl You'll learn the basic fundamentais of electronics the enjoyable way-while performing practical and interesting projects. Surprise everyone by broadcasting your voice through any AM radio in the house. Control electrical devices by stepping on a metal plate, by speaking into a microphone, or by flashing a light on a photocell. Make music by moving your hands in a beam of light. LIsten to your favorite programs on your own AM receiver. Build a code oscillator, code transmitter, electronic switch, timer, fiasher and audio amplifier, too.
Easy to assemble and operate-anyone can build it quickly and without error. Once you solder the basic parts into place, there's no need to change their position as you go from circuit to circuit-simply relocate a few wires according to the clear instructions given in the manual. Each project demonstrates important electronic principles-it's the most fun-filled way to explore the magic world of space-age electronics! And the $12-\mathrm{In}-1$ kit is perfectly safe. Power transformer is of the isolation-type and no voltage in the circuitry exceeds 25 volts for absolute electrical safety.
Informative manual also includes sections on symbols, Morse Code, and colorcode markings. Includes $8 \times 11^{\circ}$ mounting board, 12 K 5 tube, photocell, mike, wire, solder, instructions. Less headphone, listed below. For operation from 110-125 v. $50-60$ cycle AC. Shpg. wt., 4 lbs.
83 Y 207-J. 12-in-1 Lab Kit with FREE Book.
ONLY 15.95
83 Y 028-J. Single Headphone for Above. Shpg. wt., $8 \mathrm{oz} .$.
ONLY 1.07


## Precision Transistorized Electronic Tachometer Kit IMPROVES MOTOR PERFORMANCE-INCREASES FUEL ECONOMY



Can Be Dash-Board MountedHousing Can Be Tilted to Any Desired Angle

## Only $21^{95}$

- Linear Meter Registers Engine Speed from 0-8000 rpm
- Provides Exceptlonal 3\% Full Scale Accuracy
- Precision D'Arsonval Movement for Top Reliability
- Zener Diode Regulation for High Stability new low price - 20,000 Ohm Hi-Z Input-No High Voltage Loss Rugged, reliable and loaded with special features for better, all-around motoring efficiency, this precision tachometer is comparable to assembled units costing many times its low price. Accurately registers engine speed in rpmelectronically. Helps you set engine for top fuel economy-or to develop maximum horsepower. This exciting unit makes a marvelous accessory for compact, standard and sports cars, boats with outboard engines, motorcycles, etc. A perfect gift for auto or boat enthusiasts!
Transistorized switching and zener diode regulation provide exceptional 3\%-of-full-scale accuracy-regardless of temperature or voltage changes I Operates with 1.8 cylinder, 2 cycle or 1.16 cylinder, 4 cycle engines using ignition coil and distributor-9-32 VDC. Also operates with magneto and 6 VDC systems when used with accessory 9-v battery (not supplied, see below). A handy, red, adjustable reference pointer may be preset to any desired speed-lets you know at a glance when to shift gears or when maximum torque is achieved.
llluminated meter is easily calibrated from 60 cycle house current. Available in positive-ground and negative-ground models. (Virtually all late-model U.S. cars have negative-ground ignition systems.) Has highly durable, extruded housing for high resistance to shock and vibration. Remarkably easy-to-build, assembly is simply a pleasant evening's work-requires only a screwdriver, long-nose pliers and a soldering iron. Supplied complete with all parts, cables, mounting base, strap and detailed instructions for building and using. Black housing with gleaming chrome trim. $47 / 8 \times 31 / 4 \times 31 / \mathrm{B}^{\prime \prime}$. Shpg. wt., 4 lbs.
83 Y 944 -J. For Negative-Ground Systems. $\$ 5$ Monthly.
83 Y $980-\mathrm{J}$. For Positive-Ground Systems $\$ 5$ Monthly ........EACH
83 Y 909-J. 9 -Volt Battery and Accessories. Shpg. wt., $40 z$.

EACH 21.95
ONLY
NET 1.50

Also Mounts On Steering Column to Any Desired Angle-Head is Rotatable


## SENSITIVE-RESPONDS TO JUST A GLIMMER OF LIGHT

## $12^{35}$

Only - Uses Super-Sensitive Cadmium Selenide Photocell - 1/4 Foot/Candle Light Sensitivity

- Easliy Set For Trip or Automatic Operation
- Provides As Many As 600 Counts Per Minute

You'll find all kinds of uses for this dependable, light-controlled switching de-vice-turning lights on and off, opening doors, counting, burglar alarms, "announcing" customers, etc. It's a swift, silent workman that will do a 1001 jobs for you in your home, store or plant. And you can use any light source to activate it-auto headlights, daylight, even light energy from molten metalsor optional light source kit, at right-sensitivity is $1 / 4$ foot candle.
Features selectable operation: "Trip" for burglar alarm-provides continuous ringing of alarm even though intruder steps out of path of light; and "Auto" -If relay is to be operated each time light is blocked. Supplies 6.3 v . AC at 0.6 amps for direct operation of alarm, counters, etc. Relay contacts are rated at 1.5 amps . Power consumption from line is only 3 watts.

Uses a highly-sensitive, cadmium-selenide photocell (more sensitive than sulphide) in a thyratron circuit. Makes as many as 600 counts per minute. Complete with all parts, photocell, metal case, wire, solder and easy-to-follow instructions. $4 \times 3 \times 5^{\circ}$. For $110-125 \mathrm{v}, 60$ cycle AC. 3 Ibs.

## 83 Y 702-J

ONLY 12.95

OPTIONAL LIGHT SOURCE KIT

Only<br>$7^{75}$<br>- Seaied Beam Bulb<br>- Includes Red Filter<br>- Over 500-Foot Range<br>- Transformer Operated

Designed for use with the Knight-Kit Photoelectronic Relay (left), and other similar-type relays. Consists of a trans-former-operated sealed-beam bulb unit that will actuate relay from over 500 feet. A removable, deep-red plastic filter reduces light beam visibility. Produces light near the Infra-red re-gion-practically invisible by day. barely seen at night. With all parts. instructions. $6 \times 6 \times 4 \frac{1}{4}$. For $110-125 \mathrm{v}$., 60 cycle AC. 5 lbs.
83 Y 703-J.
ONLY 7.75
83 Y007-J. Chime. Pleasant sounding chime for use with above in stores, offices, etc. 2 lbs.

NET 4.70

## 12-Volt Ammeter-Voltmeter Kit

Only
s $g^{95}$

- Replaces Red-Light Indicators in Autos
- Indicates Battery Voltage; Charge-Discharge Rate
- Large, Illuminated Meters

Don't take chances with your car's electrical siystem-know what your generator or alternator is doingl This easy-tobuild kit is for motorists who want more than a red light to tell them how their electrical system is functioning. Easy-to-read, large, illuminated meter scales show amperes from -30 to +30 with 0 center scale. Voltage scale is accurately calibrated from 9.15 volts. Can be used with negative or positive ground systems by simple change of cable location. Meters are mounted on a chrome-plated panel for under-the-dash installation. Vibration-proof lights illuminate the meter faces, which have white numbers on Aqua background. Size, $21 / \times 61 / 2 \times 21 / 2^{\prime \prime}$. With cables for all cars except rear-engine types. $11 / 2 \mathrm{lbs}$.
83 Y 711-J.
ONLY 9.95


# knight-kit <br> MANUALS 

# See Proof of Knight-Kit Superiority . . . in Black-and-White . . . 

 in These Superb Instruction ManualsHere's an easy way to prove to yourself that Knight-KIts lead the field in up-to-the-minute design and in ease of assembly. Get the actual instruction manual for the kit you want to build and you'll be convinced that Knight-Kits are really better by far.

## DIAGRAMS THAT "TALK"

Easy-to-follow, detailed picture diagrams that can be tacked over your work table for clear, ready referenceshow you exactly where every single part is located.


## "CAN'TMISS" INSTRUCTIONS

You always know exactly where you are and what you're doing with these "do and check," step-by-step instructlons. It's Just like having a top-notch instructor working at your side!


84 K 028-J. KG-12 Multiplex Adapter 84 K 029-J. KG-240 20-Watt Stereo Amplifier 84 K 030-J. KG-3000 6-Station Translstor Intercom 84 K 031-J. Star Roamer Shortwave Receiver 84 K 032-J. C-100 Walkie Talkle
38 K 146-J. Transistor Code Practice Oscillator 38 K 296-J. 100-KC Crystal Calibrator
38 K 852-J. G-30 Grid Dip Meter
38 K 180-J. V-44 Amateur Variable Freq. Oscillator 84 K 033-J. SWR/Power Meter
38 K 928-J. Flyback and Yoke Checker
38 K 184-J. Resistance-Capacitance Checker
38 K 188-J. In-Circult Capacitor Checker
38 K 185-J. Vacuum Tube Voltmeter
38 K $183-\mathrm{J}$. VOM; 1000 Ohms Per Volt
38 K 098-J. 6-12 Volt Battery Eliminator
38 K $170-\mathrm{J}$. High Gain Signal Tracer
$38 \mathrm{~K} 099-\mathrm{J}$. Scope Voltage Calibrator
38 K 169-J. Audio Generator
38 K 148-J. Capacitance Substltution Box
38 K 147-J. Resistance Substitution Box
$38 \times 168-\mathrm{J}$. VOM; 20,000 Ohms Per Volt
38 K 166 -J. RF Signal Generator
38 K 199-J. Transistor Diode Checker
84 K 034-J. 400 A Economy Tube Tester
38 K $884-J$. Pochet Size VOM
37 K 289-J. 12-in-1 Electronic Lab
84 K 035-J. 21-in-1 Electronic Lab
38 K 187-J. 2-Band "Space Spanner" Receiver 38 K 298-J. 4-Band "Span Master"
38 K 197-J. 2-Station Intercom
38 K 297-J. Radio Broadcaster/Ampllifier
38 K 853-J. Ammeter-Voltmeter for Cars and Boats
37 K 290-J. "Ranger III' Table Radio
37 K 293-J. "Ranger" Clock Radio
38 K 161-J. Ocean Hopper
38 K 895-J. 5-Transistor Portable Radio
84 K 036-J. Vacuum Tube Wireless Intercom
84 K 037-J. 2-Band, 3-Transistor "DX'er"
84 K 038-J. Transistorized Electronlc Tachometer 84 K 039-J. KS-11 Inboard Stereo Multiplex Adapter ANY MANUAL ABOVE. Postpaid in U.S.A.
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84 K 040-d. KS-10A Multiplex Adapter 38 K 050-J. Crystal Set
38 K 934-J. Photoelectronic Relay
38 K $935-\mathrm{J}$. Light Source
84 K 041-J. Power Supply for C-11 Transceiver
84 K 048-J. VOM; 5\% 1000 Ohms Per Volt
ANY MANUAL ABOVE. Postpaid in U.S.A. EACH
84 K 001-J. KG-70 TransIstor Stereo Tuner
84 K 002-J. KG-50 AM-FM Stereo Multiplex Tuner
84 K 003-J. T-150 150-Watt Amateur Transmitter
84 K 004-J. C-22 Cltizens Band Transceiver
84 K 008-J. KG-2000 Junlor DC-5MC Oscilloscope
84 K 009-J. KG-4000 1-Watt Walkie Talkie
84 K 010-J. KG-320 32-Watt Transistor Amplifier
84 K 011-J. T-60 60-Watt Amateur Transmltter
84 K 052-J. R-100A Communications Recelver
84 K 012-J. R-55 All-Wave Superhet Receiver
38 K 186-J. C-11 Citizens Band Transcelver
84 K 014-J. KB-85 70-Watt Stereo Basic Amplifier
84 K 015-J. KF-75 FM Stereo Multiplex Tuner
37 K 295-J. KP-50 Stereo Preamplifier
37 K 390-J. KA-55 40-Watt Stereo Amplifier
37 K 292-J. KM-15 12-W att Hi-Fi Ampliffer
84 K 016-J. KP-70 Stéreo Tape Record-Play Preamp
84 K 042-J. KF-90 AM-FM Stereo Multiplex Tuner
84 K 055-J. KG-250 20-Watt Stereo Ampllfier
84 K 053-J. KG-65 Hi-Fi FM-AM Tuner
38 K 299-J. KM-20 18-Watt Hi-Fi Amplifier
84 K 054-J. KG-35 Hi-Fi FM Tuner
84 K 023-J. KG-400 32-Watt Stereo Amplifier
84 K 024-J. KA-95 70-W att Stereo Amplifier
84 K 050-J. KG-60 50-Watt Translstor Stereo Amp 38 K 196-J. TV-FM Sweep Generator
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84 K 025-J. Transistor Wireless Intercom
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ANY MANUAL ABOVE. Postpaid in U.S.A.
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84 K 045-J. High Gain Preamp for 5" DC Lab Scope
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## Tool Sets for Kit Building and Other Uses



5-Piece
Tool Set
$54^{49}$

$\underset{\text { Tool Sets }}{\text { 6-Piece }} \$ 1095$

6-PIECE TOOL SETS
WITH SOLDER GUN. Includes a group of highest-quality tools. Consists of: Wen Model 199. 130 -watt solder gun; Knight $6^{\prime \prime}$ long-nose pliers; Knight $5^{\circ}$ diagonal cutters; Knight $6^{\circ}$ screwdriver; Knight $4^{\circ}$ narrow blade screwdriver; $12^{\prime \prime}$ rule embossed blue enamel finish. Rugged steel chest. Shpg. wt., 9 lbs.
83 YX 060-J. $\qquad$ NET 10.95
B-PIECE TOOL SET WITH SOLDERING IRON. As above, but with Wall 14T, 40 125 watt pencil-type soldering iron and stand. Shpg. wt., 8 Ibs. 83 YX 061-J.


Deiuxe
Tool Set
Siece $\$ 6^{95}$

## DELUXE 9-PIECE TOOL SET

An outstanding selection of tools, carefully chosen for quality and utility. Consists of: Weller 8200 K Dual-Heat solder gun kit with solder-aid tool, cleaning brush and solder; Knight $7^{\prime \prime}$ chain nose pliers with cutter; Knight $6^{\circ}$ diagonal cutter; two Knight screwdrivers- $1 / 2 \times 4^{\prime \prime}$ and $1 / 8 \times 6^{\circ \prime} ; 1 / 4^{\prime \prime}$ and $3 / 0^{\prime \prime}$ nut drivers, and Wall 863 soldering pencil. 2-tray seamless chest-has 5 compartments in upper tray: plain lower tray, and $12^{* *}$ rule embossed in green enamel cover.
Shipping Weight, 11 lbs.
83 Y $\quad 062-\mathrm{J}$.
. .NET 16.95

## TOOL AIDS FOR THE KIT BUILDER

(A) WEN MODEL 199 SOLDER GUN. In-
stant heat, 130-watt gun with interchangeable tips. Reaches full temperature in just $21 / 2$ seconds. Wt., $21 / 6 \mathrm{lbs}$.
46 N $358-J$.
NET 5.83

(B)KNIGHT NUT-SCREWDRIVER KIT. 15 pieces. Roll pack holds: plastic han-
 $1 / 10^{\circ}, 1 / 2^{\prime \prime} ; 1$ and 2 Phillips; $1 / 0^{\prime \prime}, 3 / 10^{\circ \prime}, 1 / 0^{\circ}$ slotted screwdrivers. Precision-ground blades. Wt., $1 / 1 / 2$ Ibs.
50 N 788-J.
ONLY 7.95
C WALL MODEL 14T SOLDER IRON.
Pencil-type for close work. 40-125 watts. Thermostatic action. Wt., 7 oz .
46 N 852-J.
NET 5.78
(D) UNGAR IMPERIAL IRON. 40 watts;

50 with two tips. Wt., $11 / 4 \mathrm{lbs}$.
50 N 979-J.
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(E) KNIGHT 5" DIAGONAL CUTTERS.

Quality steel. Wt., 10 oz.
50 N 133-J.
NET 1.84
(f) KNIGHT $6^{\prime \prime}$ PLIERS. Long nose, side-
cutting. Wt., 1002.
50 N 132-J. ...................... NET 2.10

(G)KNIGHT 7\% CHAIN NOSE PLIERS. With cutters. Wt., 10 oz .
50 N 135-J.
ONLY 2.50

> (H)

KNIGHT 6* SCREWDRIVER. Chromevanadium steel blades. Overall length. $95 /{ }^{\prime \prime}$. Shpg. wt., 4 oz.
45 N 378-J.
ONLY 68c

(J)
KNIGHT 4" SCREWDRIVER. Chromevanadium steel blade. Overall length. 63/*. Shpg. wt., 2 oz.
45 N 374-J................. ONLY 33CKNIGHT $\$ 1$ Phillips DRIVER. Chromevanadlum steel blade. Overall length. $61 / 2^{*}$. Shpg. wt. 202.
45 N 382-J.
ONLY 60cKNIGHT 2 PHILLIPS DRIVER. Chrome-vanadium steel blade. Overall length, $7 \% / \%$. Shpg. wt., 2 oz. 45 N 383-J.
(M) K. MILLER MODEL 100 WIRE STRIP-PER-CUTTER. Quickly and easily strips insulation from wire up to 18 , solid or stranded. $5^{\circ}$ long. Shpg. wt., $40 z$. $50 \mathrm{~N} 338-\mathrm{J}$.


724 A

## Lowest-Cost 24-Watt Stereo Amplifier

KN-724A SPECIFICATIONS-
Power Output: 24 watts IHFM
music power; continuous sine-
wave power, 20 watts.
Response: $\pm 1$ db, 30 to $15,000 \mathrm{cps}$
at rated power.
Harmonic Distortion: Less than
$2 \%$ at rated power.
Hum and Noise: Tuner, -72 db ;
Mag Phono, -52 db .
Inputs: Mag Phono; Crystal (or
Ceramic) Phono; Tuner; Aux.
Outputs: 4, 8, 16 ohms, plus 2
hi-2 for recording.
Output Tubes: $4-68 \mathrm{~B} 5$.

Only $\$ 49^{95}$

\$5 monthly

- More Power and Features Than Any Amplifier In Its Class
- Frequency Response Spans the Full Audio Spectrum
- Magnetic Phono Inputs--Stereo Recording Outputs
- Convenience AC Outlets-Push-Pull Outputs-Pllot Light-Single-Knob Balance Control

A solid buy at a surprisingly moderate price, we heartily recommend the KN-724A for economy stereo systems. Well equipped, it gives you inputs for the main sources of stereo sound plus all essential controls. Simply by flickIng a switch, you go from 12-watt-per-channel stereo output to 24 -watt monophonic operation. Separate bass and treble controls let you make tonal adjustments of both channels simultaneously to suit your listening taste to a "T"even if you're using dissimilar speaker systems. Channel-balancing is easy with the handy panel control. Four husky tubes in twin push-pull output circuits give you plenty of low-distortion power. Has two convenience AC outlets (one is switched). Brown metal case, included, is complimented by a polished brass panel-perfectly mates with the KN-170 at right. $41 / 4 \times 13 \times 9^{\prime \prime}$. For $110-120$ volts, 60 cycle AC. Made in U.S. Shpg. wt., 21 lbs.
95 DU 031-J. $\$ 5$ Monthly.
ONLY 49.95

KN-724A 24-Watt Stereo Amplifier


Two Knight
KN-809 8"
Coaxiai Speakers

Knight KN-505X
Cartridge or
Choice of 3 Others

## LOW-COST STEREO PHONO SYSTEM <br> SAVE UP TO $\$ 55.90$ OFF CATALOG PRICES

| only |
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- Marvelous Stereo at a Bargaln Price
- Changer Has Turntable-Type Arm
- Cartridge Has $15-30,000 \mathrm{Cps}$ Response
\$5 monthly - Coaxial 8" Speakers Glve Solid Sound
Our lowest-priced Knight stereo system . . . yet comprised of only first-rate high-fidelity components. Centered around the popular KN-724A, this audio array gives you solid sound and top installation versatility. Includes: Knight KN-724A 24-Watt Stereo Amplifier; Garrard Autosilm/P 4-Speed Changer; two Knight wide-range KN-809 8" Coaxlal Speakers; choice of Knight KN-505X, Empire 880, Pickering U38AT, or Shure M3D cartridge. The record changer has a deluxe, tubular arm to take full advantage of the professional-quality Knight cartridge. Speakers have soft-suspension hyperbolic cones for extra bass. 44 lbs .
22 HF 102C-J. Specify Cartridge.
ONLY 99.95
22 HF 103-J. Save up to \$57.29. Above, plus Lincoln L-150 shelf enclosures and changer base. Mahogany, blonde or walnut-specify. Shpg. wt., 71 lbs.

ONLY 126.95


# Economy Stereo Multiplex FM-AM Tuner 

Only - Our Lowest-Cost FM-AM Stereo Tuner-But Feature58995 Packed for Deluxe Performance

- Receives All Broadcasts-Stereo and Mono FM, and AM
- Automatic Indleator Lights Up When You Tune to Stereo
- Channel Separation Control Adjusts Stereo Effect


## $\$ 5$ monthly

- Foster-Seeley DIscriminator, 2 IF Stages, Limiter, AFC

A rare value at this pleasantly low price, the new KN- 170 was designed to provide a perfectly matched, economical companion for the KN.724A amplifier. Equipped to receive every type of broadcast, it brings you high-fidelity stereo and monophonic FM, and the wide variety of fare offered on AM. What's more, it offers many of the high-quality touches usually found only in higher priced tuners. For example, you enjoy positive identification of FM stereocasts-an automatic indicator lights up whenever a stereocast is being received. A channel separation control assures optimum stereo effect. FM section also has AFC for elimination of drift, and a limiter circuit to block out all static, Sensitive AM circuit has built-in ferrite-rod antenna to pull in distant stations. Has line-cord antenna for FM. With case; same size and styling as KN-742A. For 110-120 v., 60 cycle AC. Made in U.S. 10 lbs .
95 DU 145-J. 85 Monthly.
ONLY 89.95
-KN-170 SPECIFICATIONS-
FM Section
IHFM Sensitivity: 4 microvolts for 30 db of quieting.
Response: $\pm 11 / 2 \mathrm{db}, 30-20,000 \mathrm{cps}$.
IF Bandwidth: 180 kc .
Channel Separation: 25 db .
Harmonic Distortion: less than $0.3 \%$ on signals over $20 \mu \mathrm{~V}$
Hum and Noise: 50 db down.
AM Section
Sensitivity: 6 microvolts for 10 db signal/nolse ratio.
Hum and Noise : 50 db down.

## STEREO FM-AM PHONO SYSTEM

## SAVE UP TO \$64.24 OFF CATALOG PRICES

- Complete-Everything You Need for Stereo FM, AM, and Stereo Records - Prolessional-Quality Magnetic Cartridge
\$11 monthly
- Vented-Port Enclosures for Exira Bass

Here's a complete home entertainment center fully equipped to bring you the thrilling beauty of stereo FM broadcasts, conventional high-fidelity FM, the sports, news and weather available on AM . . . and the glorious music offered on stereo records. System includes: Knight KN724A 24-Watt Stereo Amplifier; matching Knight KN-170 Stereo Multiplex FM-AM Tuner; Garrard Autoslim/P Changer and Wood Base; two Knight KN-809 8* Speakers; and two Lincoln L-150 Speaker Enclosures; and choice of Knight KN-505X, Empire 880, Plckering U38AT or Shure M3D. You get all connecting cable, too. In mahogany, blonde or walnut-specify. 81 lbs .
22 HF 904 C-J. Specify Finish and Cartrldge.
209.95

22 HF 101-J. Save up to \$74.24. As above, but with Knight KN-820 $12^{\prime \prime}$ speakers and KN-1286 enclosures in place of KN-809s and L-150s. Oiled walnut only. 105 lbs..... 249.95



## Includes Metal Case

## All-Transistor 100-Watt Stereo Amplifier

## PROFESSIONAL FEATURES

SEDARATHON
Pushbuttons swiftly and surely select the program source you desire at the touch of a finger-give you noise-free transitions.

Tape Monitor switch lets you listen to tapes as you record them-has 2 positions for monitoring both stereo and monophonic tapes.

Separation Control is continuously variable from full stereo to monophonic. Assures maximum stereo effect regardless of speaker placement.

## ABOUT POWER OUTPUT

The output-power ratings of both Knight and Knight-Kit transistorlzed amplifiers are based on a 4 -ohm speaker impedance. However, these amplifiers are engineered to provide efficient performance with an insignificant reduction of audio power, when used with speakers with 8 or 16 ohm impedances. You'll enjoy all the benefits of transistors, including the extended, amazingly clean bass response that is achieved through the elimination of the output transformers.

## Only

\$10 Monthly

- Tremendous Power Plus Professional Features
- Drives Any Speaker to Its Peak Performance Level
- Reproduces Every Shading and Nuance of Music
- Cool-Running Circult Offers Phenomenal Reliability
- No Output Transformers-Instant Warm-Up

Our very best amplifier! The new KN-450A gives you the astonishingly clean and pure stereo sound that only an ultra-reliable all-transistor design can offer. Created by Knight-a pioneer in transistorized hi-fi-this "100-watter" is the latest and even more powerful version of the famous $\mathrm{KN}-450$.
No output transformers are used, so you enjoy extra-powerful, supremely natural bass. Other highlights are: instant warm-up; very little heat-even after hours of use; rugged military-type terminal board wiring; a full array of 15 controls; stereo headphone jack; a 2-position switch to permit monitoring either monophonic tapes, or stereo tapes as you record; 2 switches for phasing all channels to one another; positive circuit-breaker protection that ellminates fuses; 5 stereo inputs; 2 convenience AC outlets.
The KN-450A includes a dark brown textured metal case with a polished brass control panel. Has 18 transistors and 2 silicon rectifiers. Walnut case optional; see facing page. $33 / 4 \times 137 / 8 \times 123 / 4$ 月 $^{\text {. Made in U.S. For } 110-125 \mathrm{v} \text {., } 60 \text { cycle AC. }}$ Shpg. wt., 17 lbs.
95 DU 027-J. $\$ 10$ Monthly ..... $\qquad$ ONLY 189.95

## KN-450A SPECIFICATIONS

IHFM Music Power: 100 watts; 50 watts per channel.
Frequency Response : $\pm 0.5 \mathrm{db}, 20$ to $30,000 \mathrm{cps}$ at rated power.
Harmonic Distortion: $0.5 \%$ at rated power.
Hum: -90 db at tuner input; -60 db at magnetic phono input.
Inputs (5 pairs): Mag. Phono; Tape Head; Tuner; Auxiliary; Tape Monitor.
Outputs: 4 -16 ohms per channel; 2 high-impedance for recording; headphones; center channel (hi-Z-requires additional amplifier).




MOST ADVANCED DESIGN


Panel Light flashes on to show when FM stations are transmitting stereo-you'll never dial past a "stereocast."

Tuning Meter assures you of opilmum FM or AM reception-just tune for a maximum meter reading.

Silenclng Control completely quiets your speakers while dialing between FM stationsstops hiss and roaring.

WHY USE TRANSISTORS?
Because of the enormous advantages they give to the hi-fi listener! Sound is cleaner, purer than you ever dreamed possible. Heat generated is virtualty negligible-only a minimum of ventilation is required. Transistor circuitry also means: phenomenal reliability; full freedom from mechanical nolses; and high stability. And of course there's another blg extra-transistorized equipment occupies far less space-solves almost all placement problems.

Only $\$ 189^{95}$

Less Case

- Our Best-A Milestone in Wideband Tuner Design
- Flawless Reception of Stereo and Mono FM, Plus AM
- Absolute Freedom from All Mechanical Noise
- Has AFC, Automatic Stereo Indicator Light
- Muting Control for Absolute Silence Between Stations

This remarkable new tuner is masterfully engineered to give you every benefit of advanced all-transistor circuitry. The new KN-160 incorporates all of the skill and experience of Knight engineers, world leaders in transistorized hi-fi, to deliver incredibly realistic stereo FM reception, plus standard FM and AM performance of striking clarity. In addition, a variety of circuit innovations offer the ultimate in convenience: a variable muting control stops inter-station noise while dialing FM; a signal-strength-type meter assures micro-accurate FM-AM tuning; flywheel weighted tuning control has velvet-smooth action; and a tuned RF stage plus a $10-\mathrm{kc}$ whistle filter offer highest fidelity on AM. The FM circuit also has: tuned RF stage; 4 IF /limiter stages; AFC for no-drlft operation; wideband ratio detector; and $300-0 \mathrm{hm}$ antenna input. Includes built-in AM antenna, external FM indoor antenna; 2-3-ft. audio cables. Has 20 transistors, 8 diodes, silicon rectifier. Panel matches KN-450A. Less case, below. $33 / 4 \times 137 / 8 \times 121 / 4$ ". Made in U.S. For 110.120 volts, $50-60$ cycle AC. Shpg. wt., 12 lbs.
95 DU 001-J. \$10 Monthly .................................... ONLY 189.95 95 DX 554 -J. Olled Walnut Case for KN-160 or KN-450A. 6 Ibs... ONLY 14.95 95 DX 002-J. Metal Case for KN-160. Dark brown texture. 3 lbs.. ONLY 4.95

KN-160 SPECIFICATIONS
FM Sensitivity (IHFM): $2 \mu \mathrm{~V}$ for 30 db quieting.
AM Sensitivity: $5 \mu v$ for 20 db signal-to noise ratio.
FM Bandwidth: 260 kc .
Distortion: Negligibte at all listening levels.
FM Stereo Separation: 30 db .
Outputs: 2 low-impedance; 2 high-impedance for stereo taping.


## Entire System

## $\$ 349^{95}$

$\$ 17$ monthly

Knight KN-450A 100-Watt
Stereo Amplifier ........ $\$ 189.95$
Garrard Type " $A$ " Automatic Turntable ..... 79.50
Knight KN-505X Cartridge ..... 39.95
(or choice of 3 others)
Two Knight KN-612HC
3-Way $12^{*}$ Speakers .... 119.90
CATALOG PRICE ..... $\$ \overline{\$ 29.30}$ SYSTEM PRICE ....... 349.95 YOU SAVE $\$ 79.35$


## Custom 100-Watt Phono System

SAVE $\$ 79.35$ OFF CATALOG PRICES. Designed for those who insist on the best and most up-to-date equipment, plus maximum installation flexibllity, this magnificent system reproduces sound with the fidelity to delight even a professional musician. Includes: Knight KN-450A 100-Watt Transistorized Stereo Amplifier in Metal Case; Garrard Type "A" Changer; two Knight KN-612HC $12^{*} 3$-Way Speakers; and choice of Knight KN-505X, Empire 880 , Pickering U38AT; or Shure M3D Cartridges. You also get all necessary cables and plugs. Our KN-450A amplifier has tremendous reserve power to easily handle the most thunderous passages. The changet is the finest made by Garrard, and the deluxe speakers deliver extra-powerful bass reproduction. Mount them anywherel Shpg. wt., 103 lbs.
22 HF 119-J. $\$ 17$ Monthly. Specify Cartridge.
ONLY 349.95
22 HF 120-J. FM-AM Phono System. Save $\$ 94.25$. Above, plus Knight KN160 Stereo FM-AM tuner in Metal Case. 115 Ibs. Specify Cartridge. ONLY 529.95 95 DX 554-J. KN-6. Walnut Case for KN-450A or KN-160. 6 lbs ... ONLY 14.95 73 RX 056-C. Wood Base for Type " $A$ ". In mahogany, limed oak or walnutspecify choice. Shpg. wt., 4 lbs.

NET 4.49

## DANISH MODERN 3-PC. FURNITURE GROUP

Consists of KN- 1500 equipment cabinet and two KN-1275 speaker enclo-sures-a fine "home" for the system above. (Described elsewhere in this
section.) Oiled walnut. 220 lbs .
95 DZ 426-3J. \$12 Monthly ... 239.95 95 DZ 429-3J. As above, but in easy-to-build kit form.

ONLY 194.95

$<$ KNIGHT
STEREO HI-FI MUSIC SYSTEMS

Perfect Musical Balance is assured in any Alled hi-fi system ... components are selected to match in quality and characteristics. Plug-In Connecting Ease is yours too ... cables are color-coded-anyone can connect an Allied system.


## Deluxe 100-Watt Phono System

NOW SAVE \$93.84 OFF CATALOG PRICES. A sensational, ready-to use component array offering phenomenal stereo performance. Just mount the changer on its base and interconnect the components with the cables supplied . in minutes you're set for an exhilarating experience . . . reproduction of your favorite music with such incredible realism that it simply cannot be described. includes: Knight KN-450 A100-Watt Transistorized Stereo Amplifier and Metal Case; Garrard Type "A" Changer and Walnut Base; two Knight KN-2300 3-Way Speaker Systems in Oiled Walnut; and choice of Knlght KN-505X, Empire 880, Pickering U38AT or Shure M3D Cartridges. The changer features a 6 -Ib. turntable; cartridge delivers a $15-30,000 \mathrm{cps}$ responsel Deluxe KN -2300s have three speakers for full response. 140 lbs .
22 HF 121-J. \$19 Monthly. Specify Cartridge.
ONLY 419.95
22 HF 118-J. Save $\$ 108.74$. Above, plus Knight KN-160 Stereo FM-AM tuner in Metal Case. \$25 Monthly. Specify Cartridge. 153 Ibs.

ONLY 599.95 95 DX 554-J. KN-6 Walnut Case for KN-450A or KN-160. 6 lbs .
.ONLY 14.95

## ALL MUSIC SYSTEMS INCLUDE THESE EXTRAS-FREE

Installation instructions makes set-up a snap-no lechnical knowiedge needed.

|  | Instaliation instructions . . . makes set-up a snap-no lechnical knowledge needed. | Pre-sef stylus pressureno adfusiments for you to make. | You get sll cubles and connectors-they're colopcoded tool |  | A copy of Allled"s Own Discount Tape and Recerd Catalog. Saves you up $1040 \%$. | Cryeral-ctear operating instructions held you get the most from your muste system. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Cryetal-ctear operating in structlons held you ge: the most from your muste sysiem.


## All-Transistor 40-Watt Stereo Amplifier

## PERFORMANCE-PROVEN YEARS-AHEAD DESIGN



CIRCUIT FEATURES the use of 16 transistors, 2 temperature-compensating thermistors, plus 4 diode recthiers. No tubes or output transformers are re-quired--truly advanced design!

MISSILE.A GE military-type terminal board wiring-the last word in quality and reliability.

SUPERB SOUND ... that literally must be heard to be believed Reproduces sound in a way that is downright breathtaking in its realism.

NO MICROPHONICS since there are no tubes-instant warm-up, too.

FULLY TESTED in the lab and in the field. Unconditionally guaranteed for one full yearl

## Only <br> sg9s

\$5 monthly

- Enjoy These Advantages-Compact Size, Cool Operation, Positively No Mechanical Noise, Instant Warm-up
- Response Is Within 1 db From 20 to $20,000 \mathrm{Cps}$
- Tape Head Inputs-Scratch \& Rumble Filters
- High-Impedance Outputs for Stereo Recording

Enjoy all the great benefits that solid-state transistor design brings to highfidelity! A prime example of space-age electronic development, the famous KN. 4008 not only gives superlative 40 -watt stereo hi-fi sound, but offers these major advantages: no waiting for tilaments to warm up-turn it on and it plays instantly; full freedom from microphonics-there are no elements in a transistor that generate mechanical noise; greatly reduced heat dissipation due to very low power-consumption-draws a mere 25 thousandths of an amp when operating at quiet levels!
Another benefit of the KN-400B is its fantasticafly rugged construction, Transistorization plus terminal-board wiring make it almost immune to jolts or vibration-it's really built to last. Other features: scratch and rumble filters; a switch to parallel both channels for top performance from monophonic sources; pilot light. Operates with 4.8 or 16 -ohm speakers. With dark brown metal case, polished brass panel. Only $25 / 8 \times 93 / 4 \times 8^{\prime \prime}$ deep. Made in U.S. For $105-$ 120 v., 50-60 cycle AC. Shpg. wt., 9 lbs .
95 DU 028-J. $\$ 5$ Monthly
ONLY 99.95
95 DX 553-J. KN-5 Wood Case for Above. Oiled walnut veneer. 4 lbs . ONLY 7.95

## KN-400B SPECIFICATIONS

[^10]

TRANSISTORIZED STEREO HI-FI


With Metal Case
Transistor-Nuvistor Stereo FM Tuner
Only 11995
\$6 monthly

- Brings You the Fantastic "You Are There" Realism of Stereo Multiplex FM
- Automatic Stereo Indicator Lights When Station is Stereocasting
- Uses RCA Nuvistors for Super-Sensitivity, and Transistors for Small Size, Ruggedization and the Stability of Heat-Free Operation
- Has Automatic Frequency Control, Tuning Meter, Recording Outputs

Skilled Knight engineering has incorporated the latest refinements in this improved version of the famous KN250M ... a high-fidelity instrument with every essential facility including an automatic stereo indicator light. You enjoy the full depth, dimension and movement of a performance just as if you were in a choice music hall seat. You get superior conventional $\mathrm{FM}, \mathrm{too}$. The circuitry making this possible employs four RCA nuvistors in the RF amplifier, mixer, oscillator and AFC stages for splendid signal-getting ability even in poor-signal areas; while the wideband IF and multiplex sections use latest design transistors. The result: a cool-running circuit with superb fidelity, top stability and long life. Signal-strength type meter shows when you're perfectly tuned, and automatic frequency control keeps you there-never any drift. For tape fans, there are high-impedance outputs for "off the air" recording. Also: Mono-Stereo Switch; logging scale.

The KN-250A exactly matches the KN-400B amplifier (facing page) in styling and size. Has 300 -ohm antenna input. Includes metal case; twin-line type external indoor antenna; two $36^{\prime \prime}$ audio cables. Made in U.S. For $110-120 \mathrm{~V} .$, 50-60 cycle AC. Shpg. wt., $71 / 2 \mathrm{lbs}$.
95 DU 003-J. \$6 Monthly. $\qquad$ ONLY 119.95 95 DX553-J. Model KN-5 Wood Case for Above. Beautiful, genuine oiled walnut veneer. 4 lbs . $\qquad$ ONLY 7.95

KN-250A SPECIFICATIONS Usable IHFM Sensitivity: $\mathbf{2 \mu \mathrm { V }}$ for 30 db quleting. Distortion: Negligible at all listening levels.
Frequency Response: 30 to $20,000 \mathrm{cps}$.
IF Bandwidth: 230 kc .
Channel Separation: 30 db .

KN-260CA STEREO MULTIPLEX FM TUNER WITH CLOCK-TIMER
For an extra measure of convenience, use the KN-260CA to automatically control your music system. It's identical to the KN-250A above, but also includes a built-in clocktimer that turns your high-fidelity system on or off at preset times. Easy-to-use controls. Size, just $23 / 4 \times 131 / 8 \times 8^{\circ}$. Shpg. wt., $10 \frac{1}{2}$ lbs.
95 DU 004-J. $\$ 7$ Monthly. ................. ONLY 134.95
Best Way to Buy-Credit Fund Plan
The Height of Convenience!

STEREO HI-FI MUSIC SYSTEMS

## CUSTOA SYSTEM

Enjoy unlimited flexibility of installation . . . mount the speakers in a wall, in your own cablnetry, or in the optional enclosures at right. Changer goes anywhere, too.




Cabinetry Optional


Knight KN-400B AllTransistor Amplifier

Optional: Knight KN-250A Stereo FM Translstor-Nuvistor Tuner

Entire System

$\$ 10$ monthly

| Amplifier |
| :---: |
| Garrard AT6 Changer |
| Knight KN-505X Cartridge (or cholce of 3 others) |
| Two Knight KN-830 12" 3-Way Speakers |
| CATALOG PRICE . ... \$248.30 |
| SYSTEM PRICE.... 189.95 |
| YOU SAVE \$58.35 |



78 ALLIED

## Custom 40-WattStereoPhono System

SAVE $\$ 58.35$ OFF OUR CATALOG PRICES. A super-quality recordplaying stereo system comprised of the newest-design components. Features our Knight transistorized 40-watt amplifier for transparently clear stereo sound plus the many other advantages of solid-state electronics design. System includes: Knight KN-400B 40-Watt Stereo Amplifier and Metal Case; Garrard AT6 4-Speed Automatic Turntable; two Knight KN-830 12" 3-Way Speakers; and choice of Knight KN-505X, Empire 880, Pickering U38AT or Shure M3D Stereo Cartridge. You get pre-set stylus pressure and all necessary cables and plugs, too. The compact AT6 features a precision turntable-type pickup arm. Shpg, wt., 44 lbs.
22 HF 110-J. $\$ 10$ Monthly. Specify Cartridge.
ONLY 189.95
22 HF 111-J. Save $\$ 68,30$. As above, plus Knight KN-250A Transistor-Nuvistor stereo multiplex FM tuner. Wt., 52 Ibs. $\$ 15$ Monthly.

ONLY 299.95
73 RX 057C. Wood Base for AT6. In mahogany, limed oak or walnut-specify choice. Shpg. wt., 4 lbs.

NET 4.49
95 DX 553-J. Wood Case for KN-400B or KN-250A. Genuine oiled walnut veneer. Shpg. wt., 4 Ibs.

## KNIGHT CONSOLETTE and SPEAKER ENCLOSURES FOR ABOVE

KN-2055 CUSTOM CONSOLETTE. Drop-front door. Oiled walnut. Described elsewhere. 60 lbs .
95 DZ 525-J. $\$ 5$ Monthly ONL.Y 69.95

KN-1285 ENCLOSURES. Perfect match-beautiful oiled walnut. Described elsewhere. 30 lbs .
95 DZ 526-J. TWO FOR ONLY 69.90


## Deluxe 40-Watt Stereo Phono System

SAVE $\$ 68.84$ OFF OUR CATALOG PRICES. The amplifier is hardly larger than a book . . . the trim, two-tone changer is a fine showpiece . . . and the compact speaker systems neatly tuck away on shelf or floor, in lowboy or highboy positions . . . a great stereo system for use where space is restricted but no sacrifice in audio quality is tolerable. System includes: Knight KN-400B 40-Watt Stereo Amplifier and Metal Case; Garrard AT6 Automatic Turntable and Walnut Base; two Knight KN-2200 3-Way Speaker Systems in Oiled Wainut; and choice of a Knight KN-505X, Emplre 880, Pickering U38AT, or Shure M3D Stereo Cartridge. Plus-all cables, pre-set stylus pressure. A T6 features: tubular pickup arm with adjustable counterweight, gram pressure scale, silent operation. The famous KN-2200s each have 4 speakers to faithfully re: spond from 30 cps to beyond audibillty! Shpg. wt., 104 lbs .
22 HF 108-J. $\$ 15$ Monthly. Specify Cartridge.
ONLY 289.95
22 HF 107-J. Save \$78.79. As above, plus Knight KN-250A Transistor-Nuvistor Stereo Multiplex FM Tuner. Wt., 112 Ibs. $\$ 18$ Monthly.

ONLY 399.95
95 DX553-J. Wood Case for KN-400B or KN-250A. Genulne oiled wainut veneer. Shpg. wt., 4 lbs. .

ONLY 7.95

## KN-2055 CUSTOM CONSOLETTE EQUIPMENT CABINET

Use this highly compact, console•type unit to provide a striking, customized home for all the components in the system above (except speakers). Has
drop-front door, solid $3 / 4$ paneling, etc. (Described elsewhere in this section). Oiled walnut. 60 lbs .
95 DZ 525-J. \$5 Monthly. ONLY 69.95


Includes Case

## KN

## 310 A Transistor-Nuvistor 40-Watt Stereo FM Receiver

## TUNER SPECIFICATIONS

FM Sensitivity (Usable IHFM): 2 uv for 30 db of quieting.
Hum: Tuner, -90 db ; Mag Phono, -60 db .
IF Bandwidth: 230 kc .
Circuit: 4 RCA Nuvistors in RF and AFC stages, and 8 transistors. AMPLIFIER SPECIFICATIONS
IHFM Music Power Output: 40 watts; 20 watts per channel;
Response: $\pm 1 \mathrm{db}, 20-20,000 \mathrm{cps}$ at full rated output.
Inputs (4 Pairs): Mag Phono; Tape Head; Aux 1; Aux 2.
Outputs: 4.16 ohms; plus hi-Z.
Harmonic Distortion: Below 1\% at full rated output (at 1000 cps ).
Channel Separation: 30 db , min.
Circuit: 16 transistors, 2 thermistors, 4 diodes.

## Only § $199^{95}$

$\$ 10$ monthly

- Most Compact, Most Advanced "All-in-One" Stereo FM Receiver Ever Made-Only $41 / 6 \times 97 / 5 \times 8^{\prime \prime}$ Deepl
- Automatic Stereo Multiplex Indicator Light
- Transistor Circuit Ellminates Output TransformersGet Sound Quality Never Before Achieved in Hi-Fi

The years-ahead KN-310A combines, in an amazingly compact package, an ultra-sensitive Transistor-Nuvistor stereo FM tuner.... and an all-transistor 40-watt stereo ampllfier. Just add a record changer and speakers for a complete music center delivering hi- fl sound of fantastic realism.
Brilliant FM circuitry, using both transistors and tiny advanced-design RCA Nuvistors, gives you stereo reception that flawlessly recreates the original performance-with striking clarity and all of its exciting directional characteristics. You get superb monophonic FM, too. Has AFC and signal-strength tuning meter, plus indicator to show when you're receiving stereo.
Cool-operating amplifier has a full array of controls and inputs. Its transformerless output circuits offer wondrously clean sound with ultra-smooth bass. Has AC convenlence outlet; external antenna; 2-3-ft. cables. Brown case; polished brass panel. Made in U.S. For $110-120 \mathrm{v} ., 60$ cycle AC. Wt., 18 lbs. 95 DU 053-J. $\$ 10$ Monthly.

ONLY 199.95

## Stereo FM Receiver with CLOCK-TIMER

EXCLUSIVE AT ALLIED. An important convenience feature! The KN-310CA is exactly the same as the transistor-Nuvistor stereo receiver described above, but with a slightly wider case that accommodates a handy clock-timer. Gives you an accurate time-piece, plus the added convenience of automatic control-set it to turn your entire hi-fi system on or off at any pre-determined time so that you won't miss favorite FM programs. $47 / 8 \times 131 / 6 \times 8^{\circ}$. Shpg. wt., 20 lbs.
95 DU 054-J. $\$ 11$ Monthly
ONL. 214.95



## Deluxe, Ultra-Compact Stereo FM-Phono System

## Special System Discount

## LOOK HOW YOU SAVE OVER REGULAR CATALOG PRICES

Knight KN-310A 40-Watt
Stereo FM Receiver
$\$ 199.95$
Garrard AT6 4-Speed Automatic Turntable ..... 54.50
Wood Base for Changer ..... 4.49
Knight KN-505X Cartridge with Diamond Needle, (or choice of 3 others) ..... 39.95
Two Knight KN-2200 3-WaySpeaker Systems159.90
REGULAR CATALOG PRICE $\$ 458.79$SYSTEM PLAN PRICE 389.95
YOU SAVE ..... $\$ 68.84$

## NO MONEY DOWN...

... on anything you order from Allied. There's no need to put off enjoying the Knight hi-fi components of your choice if you don't have ready cash. Our liberal Credit Fund Plan lets you own anything in this Catalog without any money down-and with up to two years to pay. You also enjoy up to $50 \%$ more buying power, and many other important advantages and con-veniences-including the opportunity to make "add-on" purchases at any time with just your signature. For details, see Credit Fund page.

## SYSTEM PRICE - One of the Best Music Systems Money Can Buy

## §38995

$\$ 18$ monthly

- Perfectly Balanced for Exciting Full Depth Hi-Fi Sound
- Handsome, Space-Saving-Fits Almost Anywhere
- Deluxe Changer Permits Tracking at Ultra-Low Pres-sure-Offers Dazzling Reproduction

A superb-quality, complete multiplex FM-Phono system featuring components of the newest, most advanced design. Providing unusual flexibility of installation made possible by clever space-saving engineering, they fit beautifully into the most luxurious of settings. System includes: Knight KN-310A 40-Watt Stereo FM Receiver; Garrard Deluxe AT6 Automatic Turntable with Wood Base in walnut flnish; two Knight KN-2200 3-Way High-Compliance Speaker Systems; and choice of Knight KN-505X, Emplre 880, Pickering U38AT, or Shure M3D cartridges. Also included, are Allied's exclusive music-system extras: all necessary cables and plugs; pre-set stylus pressure; our own Discount Record and Tape Catalog; and more.
A trend-setting high-fidelity component of years-ahead design, the unique Knight KN-310A offers wonderful, transparently clear sound from its alltransistor amplifier section .... and amazing sensitivity from its transistorNuvistor FM tuner section, Garrard's 4-speed AT6 record Changer is equipped with a 6 -pound cast turntable and a professional-type pickup arm for record reproduction with spectacular fidelity you would never have believed possible. Handsomely styled in genuine oiled walnut hardwood veneer, the Knight KN-2200 speaker systems are truly a design classic-they cover the entire audio spectrum with sparkling clarity. Shpg. wt., 113 lbs .
22 HF 109-J. $\$ 18$ Monthly
ONLY 389.95

## KNIGHT Hi-Fi Systems . . . Exclusive at Allied-Tops in Value

The unmatched quality of Ailied's own Knight components plus the tremendous savings you recelve with Allied's System Discount Plan make Knight Hi-FI Systems your finest value. Whether you select our own matched component ensembles-or make up your own combination, you get much more for your money with Knight. There's advanced styling, superb engineering, rugged dependability and an unconditional one-year guarantee on all Knight high fidelity components. Whether you're shopping for an individual component or planning a system, you'll do better-save more with Knight.

## Value-Plus 55-Watt Stereo Hi-Fi Amplifier



FOUR 6L6GC output tubes delliver powerful performance-permit a wide dynamic range for utmost stereophonic realism!


## WIDE-RESPONSE

 is assured by massive output transformersenjoy full-throated bass and clean, clear treble response.
## Only sg9s

## \$5 monthly

- Husky Power Output-Wide-Range Response-Luxury Styling-Moderate Price
- Highest-Quality Output Transformers for Increased Low and High-Frequency Performance

Feature for feature, the fast-selling KN. 755 gives you more for your hi-fi dollar. This proven stereo amplifier boasts four husky 6L6GC output tubes operating into massive transformers to deliver extra-powerful bass and wonderfully clear mid-range and treble across the audible range-at any level. Includes deluxe preamp section, equipped with DC-operated tube filaments for hum-free stereo and monophonic listening.
The input selector chooses any desired audio source-tape head, magnetic phono, ceramic phono, tuner or auxiliary. A channel-reversing switch gives correct orientation for proper stereo effect. Also has: rumble filter; master volume control that converts to a contour loudness control at the flick of a switch; stereo-mono switch; convenient push-to-reset circuit breaker that ends fuse-changing forever; 2 convenience AC outlets; independent stereo tape recording outputs; and a pilot light.
Luxuriously styled, the KN. 755 is a fine match for the KN.137M tuner on the facing page-both in looks and performance. With metal case. $43 / 6 \times 153 / 4 \times 12^{4}$. Made in U.S. For 110-120 v., 50.60 cycle AC. Shpg. wt., 35 lbs. 95 DU 030-J. $\$ 5$ Monthly.

ONLY 99.95

## KN-755 SPECIFICATIONS

IHFM Music Power Output: 55 watts; $271 / 2$ watts per channel; continuous
sine wave power, $221 / 2$ watts per channel.
Frequency Response: $\pm 1 \mathrm{db}, 30-20,000 \mathrm{cps}$ at rated power.
Harmonic Distortion: Below $1 \%$ at full rated output.
Hum and Noise: Tuner, $-80 \mathrm{db} ;$ Mag Phono, -58 db .
Output: $4,8,16$ ohms per channel; plus 2 high-impedance for taping.


## Economy Stereo Multiplex FM-AM Tuner



## Automatic

 Stereo Indicator LightPanel light automatically flashes on whenever FM stereo is being received. You'll never Inadvertently dlal past a station that is transmitting a broadcast in stereol

## Bar-Type Tuning Eye

A beam of blue light that closes to show when you are precisely "on frequency." Assures maximum signal strength and lowest distortion.

Channel Separation Control

[^11]
## Only গ10995 <br> \$6 monthly

\author{

- Provides Panoramic Stereo Multiplex FM Reception, Plus
} Sparkling Monophonic FM and High-Quality AM
- FM Circuit has AFC for Absolute Freedom From Drift
- Built-In AM Antenna Plus External FM Antenna

Right up-to-the-minute in timely design, our bargain-priced KN-137M tuner gives you excellent reception of everything that radio broadcasting has to offer. Enjoy the experience of panoramic FM multiplex "stereocasts," highfidelity monophonic FM, and outstanding AM clarity. You'll like the simplified operation, too-advanced features and easy-to-use controls always assure peak reception of every broadcasting mode.
Convenience features include a selector for choosing AM, FM or FM stereo: smooth flywheel tuning; FM-AM tuning indicator that narrows to hairline width when you're "dead-center" on frequency; 300 -ohm input for FM antenna; highimpedance outputs that permit direct "off-the-air" recordings; easy-to-read, calibrated logging scale.
FM section has a tuned RF stage plus Foster-Seeley discriminator circuitry for clear reception of weak signals. Metal case has dark brown finish; polished brass panel and cast aluminum knobs. Includes built-in AM antenna; external indoor FM antenna; $2-36^{n \prime}$ audio cables. $43 / 8 \times 11 \frac{3}{4} \times 10 \frac{1}{4}{ }^{\prime \prime}$. Made in U.S. For 110-120 v., 50-60 cycle AC. Shpg. wt., 11 lbs.
95 DU $005-\mathrm{J} . \$ 6$ Monthly.
ONLY 109.95

## KN-137M SPECIFICATIONS

FM Sensitivity (Usable IHFM): 3 microvolts for 30 db of quieting.
AM Sensitivity: 10 microvolts for 20 db signal-to-noise ratio.
FM Bandwidth: 280 kc .
FM Response: $\pm 0.5 \mathrm{db}, 20 \cdot 20,000 \mathrm{cps}$.
Stereo FM Channel Separation: 30 db .
Outputs: 4 high-impedance; 2 each on FM and AM.

HI-FI TUNERS


## Our Best-Selling Stereo Multiplex FM Tuner

## Deluxe Features



Panel Lioht Flashes On to
Show hher oru Are Re-
ceiving Stereo

Only<br>$\$ 7995$<br>$\$ 5$ monthly

- Tried-and-True Built-In Multiplex Circuit
- Separate Outputs for Taping Stereo Broadcasts
- Accurate Tuning Indicator for Peak Reception
- Automatic Frequency Control for Top Stability

Introduce yourself to the thrill of stereo FM broadcasts with this economical tuner. Jam-packed with value, the $\mathrm{KN}-141 \mathrm{M}$ provides a wealth of features to give you outstanding FM at surprisingly low cost. Among its highlights: an indicator light that automatically flashes when a station is "stereocasting." And at your fingertips, is a channel separation control for adjusting from monophonic to full panoramic stereo-a great aid when speakers must be widely spaced. Also: AFC circuit for freedom from drift; cathode-ray tuning indicator for always-peak reception; smooth-action weighted tuning control; handy Mono-Stereo switch; and 300 -ohm antenna input. A grounded-grid RF amplifier and a precisely aligned ratio detector contribute to consistently high audio quallty. Metal case has dark brown textured finish; front panel is polished brass. With built-in antenna, 2- 3 -ft. audio cables. $43 / 8 \times 113 / 4101 /{ }^{\circ}$ deep-matches KN. 755 Amplifier on preceding page. Made in U.S. For 110-120 volts, $50-60$ cycle AC. Shpg. wt., 15 lbs .
95 DU 006 -J. $\$ 5$ Monthly.
ONLY 79.95

## SPECIFICATIONS

Sensitivity (Usable IHFM): 4 microvolts for 30 db of quieting.
Channel Separation: 30 db .
IF Bandwidth: 220 kc .
Hum and Noise: -40 db .
Outputs: 4 high-impedance.

## LOW-COST ULTRA-COMPACT HI-FI FM TUNER

This budget-priced tuner provides sparkling clear reception of FM programs. And no other compact FM tuner-anywhere near the KN-141C's modest price-glves you both automatic frequency control (AFC), plus a cathode-ray tuning indicator.
Features: RF stage; 2 extra outputs for recorder, and multiplex adapter; built-in antenna plus a 300 -ohm antenna input. Sensitivity, $4 \mu \mathrm{~V}$ for 30 db of quieting. Main output, approx. 0.5 v. With $3 \cdot \mathrm{ft}$. audio cable. $25 / 9 \times 93 / 4 \times 8^{\circ}$. With metal case; walnut case optional. Made in U.S. For $110-120$ v., $50-60$ cycle AC. $71 / 2 \mathrm{Ibs}$.
95 DU 014-J. $\$ 5$ Monthly. ONLY 49.95
WALNUT CASE. For above, 3 lbs. 95 DX 553-J. . . .......... ONLY 7.95


Lowest Prices-Best Quality-Satisfaction Guaranteed

## America's Finest Values in Ausio Components for Home Entertainment

## 5 BIG REASONS WHY KNIGHT IS YOUR BEST BUY

Exclusive Products of Allied, Knight components are sold to you DIRECT . . . you get highest quality at lowest prices!
Up-to-the-Minute audio technology gives you the benefit of newest developments . . . including sensational transistorized components that set the pace for future high-fidelity design.
Choose from a Full Line of matched tuners and amplifiers, speakers and enclosures, integrated speaker systems, record and tape-playing equipment, plus luxurious cabinetry.

* Money-Back Guarantee ... you must be satisfied with your Knight component, or your money will be refunded.
* Unconditional One-Year Guarantee, including both parts and labor, on all Knight hi-fi components. You simply can't go wrong.


## Multiplex Adapter for Magnificent Stereo FM



Channel Separation + Control Permits Easy Adjustment for Maximum Stereo Effect


Indicator Light Automatically Flashes On When You Are Recelving a Stereocast

$\$ 5$ monthly

It's here . . . a low-cost multiplex adapter for receiving thrilling stereo FM broadcasts through your present stereo system . . . and with every desirable feature, too. An ever-alert panel indicator lights up the moment you tune to a stereocast, or when the station to which you are already listening begins a stereo transmission. In addition, a channel separation control allows you to quickly adjust for best stereo effect. Connects to your FM tuner's multiplex output jack in moments: $3-36^{\prime \prime}$ plug-in cables are included. Has pilot light. Brown metal case is just $47 / 8 \times 5 \times 75 / 8$ deep. Polished brass panel. Made in U.S. For 110-120 v., 60 cycle AC. Shpg. wt., 6 lbs.
95 DX 065 -J. $\$ 5$ Monthly.
ONLY 39.95

## WHAT IS FM MULTIPLEX?

FM multiplex broadcasts consist of two channels of sound (stereo) transmitted over a single FM station. You can hear these broadcasts with a regular FM tuner-but to hear them with the striking illusion of being at the actual performance (which is provided by stereo), you must, . . add a multiplex adapter to the FM tuner in your stereo system . . or purchase a tuner with built-in multiplex. Either way, you enjoy the same hi-fi response, wide dynamic range and excellent channel separation you now experience with stereo records and tapes.


735


Balance Control adJusts channels for perfect stereo effect-even when speakers cannot be placed for optlmum performance.


Loudness Control (plus Contour swltch) maintains proper tonal bal-ance-even at moderate or low listening levels. A deluxe featurel
5-Position input selector Instantly chooses Auxillary, Tuner, Tape Head, or eisher Magnetic Phono or High-Level Phono inpuls.
tovomiss

## NO MONEY DOWN

You can own the Knight hi-fi components of your choice-or anything else in this catalog-for No Money Down. Our liberal Credit Fund Flan lets you take up to two years to pay. You enjoy up to $50 \%$ more buying power, too. So why put off enjoying your own music system? Just fill out the application form on the jack of any Allied order blank. For details. see page 456.

# Our "Big Buy" 40-Watt Stereo Amplifier 

# Only <br> $\$ 79^{95}$ 

$\$ 5$ monthly

- Plenty of Power to Drive Any Speaker System
- All the Inputs You'll Ever Need for Any Music Source
- Full Array of Controls for Top Flexibility-Both Stereo and Mono
- Two Tape Recorder Outputs Permit "Off the Air" Stereo Multiplex Recordings-Includes Tape Head Inputs

A first-rate amplifier offering full facilities for any stereo or monophonic music source and plenty of power for solid, impressive high-fidelity sound. The clean 40 -watt output of the KN- 735 drives any speaker system, even lowefficiency types, to room-filling volume levels. The versatile preamplifier circuit features the necessary controls for easy and precise audio regulation of all the components in your stereo music system. Unquestionably an outstanding buy for any economy music system.
Other highlights: separate bass and treble controls; Lo-Filter for reducing turntable rumble without loss of bass; Hi-Filter for reducing noise on worn records; panel switch for instant choice of stereo or full 40 -watt monophonic operation; and tape head inputs. Separate high-Z outputs permit professionalquality tapes of FM "stereocasts" and stereo records. Dark brown textured metal case. Panel is light, brushed brass. $4 \frac{3}{4} \times 133 / 4 \times 91^{\prime \prime}$. Made in U.S. For 110. 120 v.. $50-60$ cycle AC. Shpg. wt., 15 lbs.
95 DU 100-J. $\$ 5$ Monthly
ONLY 79.95

## KN-735 SPECIFICATIONS

IHFM Music Power Output: 40 watts; 20 watts per channel; continuous sine wave output, 14 watts per channel.
Frequency Response: $\pm 1 \mathrm{db}, 40-18,000 \mathrm{cps}$ at rated power.
Hum and Noise: Tuner, -75 db ; Mag Phono, -55 db .
Distortion: Harmonic, 1\% at rated output.
Inputs (5 pairs): Tape Head; Magnetic Phono; Ceramic (or Crystal) Phono; Tuner; Auxiliary.
Outputs : 4.8,16 ohms per channel: plus 2 high-impedance for recording.


## 40-Watt Stereo Phono System at $\$ 46.35$ Savings

## Special System Discount <br> LOOK HOW YOU SAVE OVER REGULAR CATALOG PRICES

Knight KN-375 Amplifier ...... $\$ 79.95$ Garrard AutosIlm Changer.... 39.50 Knight KN-505X Cartridge with Diamond Needle.. 39.95 (or choice of 3 others)
Two Knight KN-820 Speakers. 33.90
CATALOG PRICE . . . . . . . . $\$ 193.30$ SYSTEM PRICE . . . . . . . . 146.95 YOU SAVE $\quad \$ 46.35$


SYSTEM PRICE - Enjoy 40 Watts of Thrilling Stereo Power at Lowest Cost

## $146{ }^{35}$

$\$ 8$ monthly

- Top Installation Versatility-Simple Future Expansion
- New Knight Cartridge has Professional-Quality Features
- Changer Intermixes All Record Sizes in Any Sequence

You can't find better quality at a lower price than with this custom-selected stereo system. You get 40 watts of true high-fidelity power, impressive-looking components that are compact enough to fit nearly anywhere, and the greatest possible installation versatility. What's more, our tops-in-value KN-735 amplifier is fully equipped for easy system expansion-addition of tuner and tape recorder is "plug-in" simple.
This surprisingly low-cost array includes: Knighi KN-735 40-Watt Stereo Amplifier; Garrard Autoslim/P 4-Speed Changer; two Knight KN-820 12 ${ }^{\circ}$ DualCone Speakers; Knight KN-505X, Shure M3D, Empire 880, or Pickering U38-AT Stereo Cartridge (choice of one); and all necessary cables and plugs.
The Autoslim changer, with two-tone styling, is only $61 /{ }^{\circ}$ high for almost unlimited installation possibilities: The new $\mathrm{KN}-505 \mathrm{X}$ cartridge has a polished $.0006^{\circ}$ diamond needle that accurately tracks at a very low pressure for extralong record life. Its wide $15-30,000 \mathrm{cps}$ response gives stereo reproduction of amazing realism. Our KN-820 speakers match the superior performance of the other components in this system. Only $4^{\prime \prime}$ deep, they easily mount in walls or shallow enclosures. Shpg. wt., 38 Ibs.
22 HF 105-J. Specify Choice of Cartridge.
ONLY 146.95

## ABOVE WITH ENCLOSURES AND CHANGER BASE

Save $\$ 57.74$ I Includes all of the components of the system above, plus a pair of famous-for-value Knight KN- 1285 speaker enclosures, plus a wood base for the Garrard changer. Elegantly styled, the compact enclosures have an unobtrusive modern look that blends well with almost all surroundings. (Fully described elsewhere in this section.) Shpg. wt., 104 Ibs.
22 HF 106-J. Olled Walnut. $\$ 11$ Monthly.
ONLY 209.95
22 HF 113-J. Mahogany. \$11 Monthly.


## Deluxe 3-Way Shelf-Type Speaker System



Woofer: $12^{*}$ with $11 / 2-1 \mathrm{~b}$. ceramic magnet. Flux density, 12,000 gauss; $\mathbf{2 "}^{\text {² }}$ voice coil with cloth cone support. Response $25-800 \mathrm{cps}$.
MId-Range: $5^{\prime \prime}$ cone, with 6.8 oz . Alnico $\vee$ magnet. Flux density, 12,500 gauss. $3 / /^{2}$ voice coll-foam support. Response 800-5,000 cps.
Tweeter: $180^{\circ}$ dispersion horn, response to $20,000 \mathrm{cps} .3 .16 \mathrm{oz}$. Alnico $V$ magnet. 1 " voice coil.
Crossover: 800 and 5000 cps with level controis for each range.
Capacity: 30 watts.
Impedance: 8 ohms.

## NEW! A TRIUMPH IN AUDIO REPRODUCTION

- $12^{\prime \prime}$ Woofer For Magnificent, Life-Like Bass Response
- 5" Mid-Range Speaker For Outstanding Clarity
- High-Frequency Compression Tweeter For Sparkling Treble to Beyond the Audio Range
$\$ 5$ monthly - Wide-Range Response- 25 to $20,000 \mathrm{cps}$
Distinctive appearance and smooth performance characterize the new KN-2300 Deluxe 3-Way Speaker System. Solidly constructed of $3 / 4{ }^{" \prime}$ hardwood for remarkable durability and resonance-free tonal quality, it has expertly finished edges and crafted mitred corners. Handsome exterior features the finest genuine walnut furniture veneer-oil finished for lasting beauty.
The exclusive $12^{*}$ woofer incorporates a high-compliance cone that reproduces the lowest tones of orchestral passages and organs with such magnificent realism that it must be heard to be believed. The important mid-range frequencies are covered with a sparkling clarity that provides a true sense of "presence" in music reproduction. Mid-range and tweeter units reproduce frequencies beyond the audible limit, and disperse sound over a wide area.
Two level controls, front-mounted on a walnut panel, provide optimum convenience in setting "presence" and "brilliance" characteristics. Matching grille cloth is enhanced by a solid walnut frame and ribs that balance the styling. Each unit is precision assembled and individually tuned and tested. Size, $131 / 2 \times 243 / 4 \times 12^{\prime \prime}$. Made In U.S. Shpg. wt., 60 lbs
95 DZ 215-J. $\$ 5$ Monthly
ONLY 99.95




## Beauty And Fabulous Sound-At Lowest Cost

"SLENDER STYLE" 2-WAY SPEAKER SYSTEM
Only - 3 Speakers- $10^{\circ}$ Woofer and $2-31 / 2^{\circ}$ Direct-Radiator Tweeters
\$5 monthly

- Amazingly Slender-Only 61/2" Deep
- R-C Crossover With Level Control
- Bass Response Descends to 35 Cps

A brilliant new look in ultra-thin styling, designed to fit anywhere-this is the ingenious KN-281. Delivers superb reproduction of sound while using far less space. Uses a $10^{*}$ high-compliance woofer with 3/" cone excursion; two $31 / 2^{\prime \prime}$ direct-radiator tweeters with enclosed backs; acoustically transparent natural cane grille cloth; and a precision duct. The enclosure, inner components and duct are critically tuned, like a fine musical instrument, for lowest distortion and uniform response. Size, $13 \frac{1}{2} x$ $233 / 4 \times 61 / 2^{\prime \prime}$. Oiled walnut. Made in U.S. 24 Ibs.
95 DU 265-J. $\$ 5$ Monthly.
EACH, ONLY 49.95
SAVE $\$ 5.001$
TWO FOR ONLY 94.90
95 DU 266-J. Unilnished Model KN-281. In smooth-sanded, ready-to-finish $3 / 4$ gum hardwood. EACH, ONLY 44.95

## HIGH-COMPLIANCE 3-WAY SPEAKER SYSTEM

Only<br>${ }^{5} 79^{95}$

- 4 Speakers- $10^{\circ}$ Woofer, $2-31 / 2^{*}$ MidRange Radiators, UHF Tweeter
- Treble Extends to $17,000 \mathrm{Cps}$
- Requires Only a 10-Watt Input for \$5 monthly Room-Filling Sound
Designed to delight the critical hi-fi connoisseur, the KN-2200 achieves new goals in neat, space-saving design and rich sound . . . at modest costl Blue-ribbon components include: $10^{\circ}$ high-compliance woofer with $3 / /^{\circ}$ cone excursion; two $31 / 2^{\circ}$ special-design, mid-range radiators with enclosed backs; exclusive hemispherical ultra-high-frequency tweeter with dome construction for uniform distribution of highs. Enclosure is precisely tuned to match speakers. Size, $131 / 2 \times 233 / 4 \times 113 /{ }^{\prime \prime}$. Oiled walnut with natural cane grille cloth. Made in U.S. 38 Ibs. 95 DU 267-J. $\$ 5$ Monthly

EACH, ONLY 79.95 SAVE $\$ 10.001$.

TWO FOR ONLY 149.90
95 DU 268-J.Unfinished ModeIKN-2200. Insmooth-sanded, ready-to.finish $3 / 4$ " gum hardwood. .EACH, ONLY 69.95

## SPECIFICATIONS

Frequency Response: $35-15,000 \mathrm{cps}$.
Crossover: 2000 cps, R-C type; level control.
Capacity: 30 watts, program material.
Impedence: 8 ohms.
Woofer magnet: $1 / 2 \mathrm{Ib}$. Alnico V .

## SPECIFICATIONS

Frequency Response: $30-17,000 \mathrm{cps}$.
Crossover: $2 \mathrm{kc}, 10 \mathrm{kc}(\mathrm{L}-\mathrm{C})$; balance cont.
Capacity: 40 watts, program material.
Impedance: 8 ohms.
Woofer Magnet: 1 lb., Alnico V.

## - KNIGHT Our Own Supreme-Value Speaker. <br> HI-FI SPEAKERS

## COMPARE THESE FEATURES

Hign-Compllance $12^{*}$ wooler cone.
4.6-Ib. Ceramic Magnet for superior damping.

Whizzer Cone gives ex. tra-ciean mid-ranye.
Compreszicer Tweeter for extended highs.

# :amous for Smooth, Natural Sound <br> KNIGHT 

# KN-800A 12" 3-Way High-Fidelity Speaker Our Best Seller . . . Your Best Buy at This Price 

only $\$ 3^{95}$
$\$ 5$ monthly

## THRILL TO SUPERB HI-FI'FROM THIS UNIVERSAL FAVORITE

- Features a Reliable, Trled-and-Proven Design
- Precisely Balanced Bass, Mld-Range and Treble
- High Efficiency-Performs Beautlfully in Any Enclosure With Any Hi-Fi Amplifier
- Manufactured Under Stringent Quality Controls
- Rigid Cast Frame Maintains Structural Stability
- Smooth Response from 35 to 15,000 Cps


## SPECIFICATIONS

Free-Alr Resonance: 50 cycles per second.
Overall Frequency Response: 35 to $15,000 \mathrm{cps}$.
Magnet: Ceramic; $13 / 4$ pounds.
Rated Power Capacity: 25 watts of program material.
Impedance: 16 ohms.
Crossover Frequencies: 2000 and 3500 cps .

Recognized by audiophiles around the world for its high efficiency and excellent high-fidelity performancel The KN-800A's proven three-element design gives you sound that cannot be equaled by other speakers at its price, What's more, this speaker gives you outstanding reproduction in any enclosure-use it with horn, reflex or shelf types-and performs marvelously with any high fidelity amplifier, even low-power units.
The three sound-radiating elements of the KN-800A-a $12^{\circ}$ bass cone, axially mounted mid-range cone, and diffrac-tion-horn tweeter-have two crossovers for nearly distortionless audio. A mechanical crossover at 2000 cps separates bass and mid-range units, and a capacitor-type crossover at 3500 cps gives a smooth transition to the high frequencies. As a result, the sound you hear is an almostperfect blend without audio peaks or breaks.
The bass and mid-range cones are driven by a specialdesign ceramic magnet that develops a powerful, highly concentrated flux for solid, distinct bass. The tweeter has a separate horn and driver for wide dispersion of velvety "highs." A tweeter-level control on a 36 " cable permits adjusting treble response to any desired volume. Screwtype binding terminals afford easy connection of speaker wire. Speaker depth is $8^{\prime \prime}$. All specs are lab-verified. Made in U.S. Shpg. wt., 12 lbs.
95 DX 250-J. $\$ 5$ Monthly
ONLY 39.95



Rigid Die-Cast Frame Securely Holds All Moving Elements in Precise Alignment

13-Ounce Magnet is Ceramic Type for Higher Efficiency and Better Bass

Edgewise-Wound 2" Copper-Ribbon Voice Coll Assures Lowest Distortion

Compression-Type VHF Tweeter Has BullIn Electrical Crossover and a Level Control on a $36^{\circ}$ Cable

TRUE 3-WAY DESIGN 12 WOOFER CONE MID-RANGE CONE VHF TWEETER

## KN-830 SPECIFICATIONS

Free-Air Resonance: 60 cps .
Overall Frequency Response: 40 to $18,000 \mathrm{cps}$.

Power Capaclty: 20 watts. Magnet Weight: 13 oz .

Magnet Material: Ceramic.
Crossover Frequencies: Mechanical at 2000 cps ; electrical at 4000 cps .
Voice Coil: $2^{*}$, edgwise wound. Flux Density: 11,500 gauss. EIA Sensitivity: 47 db . Impedance: 8 ohms. Speaker Depth: 51/2".

- Never-Before Such Audio Quality at This Low a Price
- 3 Elements Provide Smooth Response From 40-18,000 Cps
- Built-In Crossovers-Comes WIth Tweeter Level Control
- Only $5 \frac{1}{2}$ " Deep for Convenient Custom Mounting

The all-new Knight KN-830 incorporates the latest developments in acoustic engineering to introduce a new level of performance to speakers in the popular price range. It includes many of the features of the most expensive 3 -way speakers, yet is offered to you at a price far below that of many 2 -way units. Genuine 3 -element construction, 2 built-in crossovers, and a high-efficiency ceramic magnet help to provide an authentic, low-distortion frequency response that extends all the way from 40 to $18,000 \mathrm{cps}$. Truly, the KN-830 is an enviable accomplishment in speaker design

A heavy die-cast frame and fiberglas coil form keep the edgewise-wound voice coil in precision alignment for years and years of faithful service. In addition, the long-throw coil design greatly reduces distortion, especially at high listen. ing levels-where low distortion figures are a mustl The $12^{\prime \prime}$ bass cone is carefully decoupled, by a mechanical crossover, from the mid-range cone so that each unit acts independently-there is no compromise in design-you enjoy nowerful bass reproduction, plus a crystal-clear mid-range for an exciting feeling of "presence".

The very-high frequency (VHF) driver gives a uniform distribution of highs for excellent treble reproduction in every part of the room-a vital characteristic for proper balance in stereo music systems. A high-frequency level controt permits adjusting tweeter volume level to suit room acoustics. Binding post terminals. Made in U.S. Shpg. wt., $91 / 4$ Ibs.
95 DX 204-J. $\$ 5$ Monthly
ONLY 26.95
dual-cone design ... for richer bass and extended-range treble

## Only

## 㭗 KNIGHT

HI-FI SPEAKERS

SHELF ENCLOSURE

CUSTOM WALL INSTALLATION


## LOOK WHAT YOU GET AT THIS LOW PRICE

Efficient Ceramic Magnet - Dual-Cone Design with Woofer for Maximum Bass and Smaller Cone for Clear Mid-Range and Treble - Die-Cast Frame - Edgewise-wound $2^{\prime}$ Copper-RIbbon Voice Coll - Built-In Mechanical Crossover - Extra-Shallow Depth for Custom Mounting

A real favorite among economy-conscious hi-fi enthusiasts, the KN-820 is priced so low that you can purchase two of them for less than you'd pay for a single speaker of comparable quality. Carefully manufactured to meet our own unyielding specifications, the KN-820 gives you more for your money in every way. Compare it any way you choose-it is unquestionably the finest highfidelity speaker value available in its price class.

Wide-range audio reproduction, without shrillness, is assured by its proven dual-cone design. The big $12^{\prime \prime}$ woofer delivers surprisingly solid bass, and the small mid-range cone efficiently handles the important mid-frequencies and the upper audio range. A mechanical crossover channels all frequencies above 4500 cps to the mid-range radiator. Another highlight is the extremely shallow frame design of the " 820 "-it's only 4 " deep-permits it to be easily custom-installed in walls, in "thin-line" enclosures, consoles, etc. Also an excellent unit for wall-baffle extension-speaker use.

Other "big features" are: edgewise-wound copper ribbon 2 " voice coil assembly; perfectly molded fiberglas coil form sealed against dust for outstanding durability; a ring-type $3 / 4$-pound ceramic magnet; and a rigid die-cast zinc frame for permanent centering of all sound-reproducing elements-maintains low distortion levels for the entire lifetime of the speaker. Has convenient binding post terminals for fast and simple connection to any amplifier. Made in U.S. Shpg. wt., 6 Ibs.
95 DX 203-J.

类 KNIGHT

HI-FI SPEAKERS

\section*{KN

\section*{1200

## 1200 <br> "Top Value" 12" Extended-Range Speaker

-SPECIFICATIONS<br>Overall Frequency Response: 40 to $14,000 \mathrm{cps}$.<br>Capacity: 30 watts of program material.<br>Flux Density: 10,000 gauss.<br>Free Air Resonance: 45 cps . Impedance: 16 ohms .<br>Speaker Depth: $7 \frac{112}{2}$.

YOU PAY LESS for Knight Speakers Because They Are Our Own Products and Are Sold to You DIRECT.
\$5 monthly

- 12" Woofer Cone With Cloth Suspension for Deep Bass
- Mid-Range Propagator Cone Develops Superb Highs
- Double-Power 1-Ib., 6-oz. Indox Ceramic Magnet
- Heavy Cast Frame Keeps Cone and Voice Coil Rigid
- Has 2" Aluminum-Ribbon Voice Coll-Fiberglas Form

Designed without compromise to give you the most for your money-to give you full, rich bass sound without distortion, and crisp, clean highs without annoying shrillness-this is the economy-priced KN-1200 speaker. It has many of the features and specifications of speakers costing up to twice its modest price: heavy cast frame to keep speaker cone and delicate voice coil in perfectly centered position; two cones to divide sound into best bass response and most efficient high-frequency propagation; heavy, ring-type Indox magnet for highest power at lowest distortion; edgewise-wound, $2^{\circ}$ aluminum-ribbon voice coil is precisely made and wound on fiberglas coil form into a rigid assembly-maintains its shape for the life of the speaker; no interaction of elements to cause distortion. Has standard-spaced holes for mounting studs, plus solderless binding posist for connections. Made in U.S. $131 / 2 \mathrm{lbs}$.
95 DX 205-J. $\$ 5$ Monthly.
ONLY 29.95

## KN-425 Tweeter, Crossover and L-Pad

$$
\begin{array}{cl}
\text { Only } & \text { - Mounts Inside VIrtualily Any Enclosure } \\
\$ 1795 & \text { - Level Control for Precise Adjustment } \\
& \text { - For Single-Cone or 2-Way Speakers }
\end{array}
$$

There's no finer, easier way to add brilliant "highs" to your present single-cone speaker or 2 -way speaker system than with the superb KN-425 tweeter package. It offers superior performance, backed up by specially designed, topnotch components. Includes: VHF tweeter, L-C type crossover network in sealed housing, and integral L-pad level control. Tweeter employs a flanged, cast exponential horn with diffraction principle to achieve wide dispersion of highs. Response: 3000 to $18,000 \mathrm{cps}$. Crossover: 3500 cps . Dispersion: $180^{\circ}$. Power Capacity: 25 watts (in conjunction with woofer). Impedance: $8-16$ ohms. Magnet: 6 oz. Alnico V. Made in U.S. Shpg. wt., 3 lbs. 95 DX 206-J.

ONLY 17.95


# jet More for Your Money With Knight Hi-Fi Speakers 

## NEW! Deluxe-Quality 8" Coax Speaker

Oniy<br>$24^{95}$<br>m5 monthly

- One-Lb. Magnet for DistortIon-Free Sound Reproduction
- Compression-Type Tweeter for Best Highs-Without Shrillness
- Safely Handles Up to 20 Watts of Program Power

New, superb $8^{\prime \prime}$ coax speaker reproduces full dynamic 'ange. Features electrically and acoustically independent woofer and tweeter. Woofer has $1-1 \mathrm{~b}$. ceramic magnet, $11 / 2$ voice coil for unusually powerful bass in any enclosure; -bore-fire compression-type iweeter produces sllky smooth highs without harshness. Response: 40 to $15,000 \mathrm{cps}$. Capacity: 20 watts. Resonance: 55 cps . Crossover: capaci-tor-type, 3000 cycles. Depth: $5 \%^{\circ}$. Impedance: 8 ohms. Binding post terminals. Made in U.S. 6 Ibs.
95 DX 253-J. $\$ 5$ Monthly.
ONLY 24.95

## Economy 8" Wide-Range Hi-Fi Speaker

Only - Great for Economy Music Systems or sg95 Extension Speaker Use

- Solid, Die-Cast Frame for Rigidity

Designed to give you fine sound at the lowest cost, the KN-809 provides mellow bass response and clear midrange plus surprisingly authentic highs. Has a $10-02$. ceramic magnet, die-cast frame, and soft-suspension, hyperbolic woofer cone. Use it for low-cost music systems; as an extension speaker; or as a high-quality mid-range speaker in two or three-way speaker systems, etc. Its small size, only $3^{4} / 18^{\circ}$ deep, makes it fine for use in a wide variety of space-saving enclosures. Excellent choice for background music systems with wall or ceiling installation. Response: 50 to $12,000 \mathrm{cps}$. Capacity: 15 watts of program material. Depth: $3 / 16^{\prime \prime}$. Impedance: 8 ohms. Binding post terminals. Made in U.S. Shpg. wt., 3 Ibs.
95 D $\times 251$-J.
ONLY 9.95

## Budget-Priced Popular 8" Coax Speaker

Only<br>\$1795

\author{

- Separate Woofer and Direct-Radlator Tweeter Cones
}
- Rated At 15 Watts Program Material
- Convenient Binding Post Terminals
- Capacitor-Type Crossover Network

Smooth, natural sound for pleasing music or voice reproduction highlights the famous KN-819 speaker. Has true coaxial design; 10-oz. ceramic magnet for rich bass; directradiator tweeter for mid-range and highs with full realism: sturdy, die-cast frame for perfect centering of speaker elements; binding post terminals. Response: 50 to $14,000 \mathrm{cps}$. Crossover: capacitor-type, 3000 cycles. Capacity: 15 watts of program material. Impedance: 16 ohms. Mounting Depth: $356^{\circ}$. Made in U.S. Shpg. wt., 4 lbs.
95 DX 252-J.
ONLY 17.95



## Low-Cost Shelf-Size Speaker Enclosures

## KN-1284 $8^{\prime \prime}$ COMPACT SPEAKER ENCLOSURE Only § 1995 <br> - Small Enough for Wall, Shelf or Floor <br> \$5 monthly <br> - Solid $3 / /^{\prime \prime}$ Paneling for Clear Bass

The best looking, best performing shelf-size enclosure available at this low price. It's a smart choice for lowestcost stereo, budget-priced monophonic systems, and for high-quallty extension-speaker use. Nicely finished on four sides, the KN-1284 is usable in highboy or lowboy positions ... and measuring just $10 \times 20 \times 9^{\circ}$, it unobtrusively nestles just about anywhere.
Heavy $\%$ all-wood paneling permits pleasing bass reproduction that puts a zestful "solid sound" into music. Internal design not only accommodates any $8^{\circ}$ speaker. but greatly adds to its performance. You enjoy audio quality that's unexpected at such low cost.
The expertly crafted KN-1284 sports a handsome oiled walnut finish and a matching beige grille cloth. Includes fiberglas acoustic lining, and terminal strip on back board. Made in U.S. Shpg. wt., 15 lbs.
95 DU 475-J. $\$ 5$ Monthly.
ONLY 19.95

## KN-1284/KN-829 PACKAGE

Save $\$ 4.95$ by purchasing these two components as a complete speaker system. Consists of the KN-1284 and Knight's new widerange $8^{\prime \prime}$ coaxial speaker, the KN829 (described earlier in this section). Frequency response, $45-15,000 \mathrm{cps}$. Shpg. wt., 20 lbs.
20DU360-2J. BOTH ONLY 39.95

KN-1286 12" VENTED-PORTSPEAKERENCLOSURE

- Vented-Port Design and $3 / 4$ Wood Paneling for Deep, Clean Bass
- Fiberglas Lining-Mitered Corners $\$ 5$ monthly
- Oiled Walnut Finish on Four Sides

An economical speaker enclosure offering a number of deluxe construction details, space-saving size, and a very pleasing appearance. Acoustically engineered for $12^{*}$ speakers, including most 2 and 3 -way types, the $\mathrm{KN}-1286$ is the inevitable choice for cost-conscious hi-fi fans desiring a compact enclosure, but still demanding first-rate audio reproduction.
The KN-1286 features a custom-fitted fiberglas acoustic lining, heavy $3 / 4^{\circ}$ paneling, and vented-port cabinet design for extended-range natural-sounding bass. Also has expertly crafted mitered corners, and a matched grille cloth that allows free passage of highs.
All four sides are beautifully finished in an olled walnut veneer. Back board has a wired terminal strip for really fast, easy hook-up. Only $143 / 4 \times 24 \times 12^{\prime \prime}$ deep. Made in U.S. Shpg. wt., 30 lbs.
95 DU 531-J. $\$ 5$ Monthly.
ONLY 29.95


## KN-1286/KN-830 PACKAGE

Save $\$ 6.95$ off catalog prices by purchasing the $K N-1286$ and Knight's KN-830 12" 3-way speaker together. This great team delivers amazing sound quality at a very moderate cost. Response, 40. $18,000 \mathrm{cps}$. (KN-830 listed earlier in this section). 40 lbs .
20DU361-2J. BOTH ONLY 49.95

Enjoy Stereo at Any Volume, in Full Privacy... Experlence unexcelled Channel Separation!


## MUSIC SYSTEM COMPONENTS

## Professional Components for Added Hi-Fi Enjoyment

## NEW KN-845 STEREO HI-FI HEADSET

## Only <br> $\$ 1995$

 \$5 monthly- $31 / 2^{* *}$ Cone-Type Dynamic Transducers Give Full-Range 25-16,000 Response
- Built for Comfort to the "Nth Degree"
- Works With Any Amplifier

The KN. 845 professional headset brings you fabulous stereo realism that simply can't be duplicated by regular speaker systems. Since each earcup is actually a precision, $31 / 2^{n}$ dynamic transducer in an acoustic chamber, you enjoy the absolute maximum in channel separation, perfect balance, freedom from external noise . . . and a crisp $25-16,000 \mathrm{cps}$ responsel You are surrounded by "living sound" that puts you in "front row center."
Lightweight design and soft, sponge-rubber-padded earcups and headband permit long periods of comfortable listening. Adjusts to fit anyone. Earcushions are removable for cleaning. Has beautiful medium-blue leatherette covering on earpieces and headband. With $8^{\prime}$ cord, phone plug, and phone jack mounted on "L" bracket for handy hook-up to any amplifier. Impedance, 4-16 ohms. Made in U.S.A Shpg. wt., $21 / 2 \mathrm{Ib}$ Ib.
95 DX $825-\mathrm{J} . \$ 5$ Monthly.
ONLY 19.95

## KN-846 REMOTE CONTROL UNIT FOR ABOVE

Chairside volume control for one or two KN-845s. Two controls independently adjust volume of two headsets. Listen with or without speakers. Less cables. $23 / 4 \times 2 \times 4^{\prime \prime}$. Made in U.S. $11 / 2$ lbs.
95 D 826-J.
ONLY 7.95
48 W 021 5-Conductor Cable For Above. Per Foot. . ONLY $31 / 2 \mathrm{c}$


Enjoy Handy Chair-side Control

## KN-702 REVERBERATION SYSTEM

\$5 monthly

- Adds New Depth and Beauty to All Recordings and FM-AM Broadcasts
- Lets You Control the Acoustlics

Much more than a novelty or a simple echo device, the KN-702 is an extremely valuable hi-fi accessory. It injects new beauty and depth into old lackluster records, imparts a vibrant, professional quality to recordings you've made at home and converts "dead" rooms into spacious, acoustically perfect music halls.
All this is achieved by electro-mechanically simulating the special sound-reflecting panels used in recording studios. Output control lets you adjust for just the amount of "reflection" necessary to give the acoustic effect you want. Fidelity is not affected.
Connects to output terminals of any stereo or monophonic amplifier. Requires separate 8 or 16 -ohm speaker (optional). Consists of a Hammond Type 4 Reverberator Unit and Amplifier Unit ( $25 / 9 \times 93 / 4 \times 8^{\text {" }}$.) For $110-120 \mathrm{v}$., $50-60$ cycle AC Made in U.S.A. 8 lbs.
95 DU 067-J. $\$ 5$ Monthly.
ONLY 49.95

## LINCOLN L-100 SPEAKER SYSTEM

Perfect for use with the KN-702 above. Ready to use, it's equipped with a $25^{\prime}$ extension cable and a level control. $8 \times 12 \times 6^{\prime \prime}$ enclosure houses a quality $5 \times 7^{*}$ speaker. Has cane grille cloth and simulated walnut finish. 8 ohms. 5 lbs .
$95 \mathrm{DX} 350-\mathrm{J} . \mathrm{C}$. ONLY 9.95


Ideal for Use With KN-702 Reverb Unit


## Custom-Crafted Contemporary Furniture Group

## COMPLETE 3-PC. MATCHED ENSEMBLE

## In Kit Form \$4995

\$8 monthly

Assembled

\$9 monthly

Beautiful Low-Cost Furniture for Your Hi-FI Components... Enhances Any Room or Setting . . . Kit or Assembled

KIT VERSION. A graceful and dignified grouping of slender-styled finefurniture cabinetry. Simple but elegant, the KN-1402K equipment cabinet in the center, houses your tuner, amplifler, changer or turntable, and recordings. A pair of trim, carefully matched KN-1267K enclosures accept any $12^{\circ}$ or $15^{\circ}$ speakers, and include adapter boards for accommodating tweeter components. All three furniture pieces are marvelously easy to assembie-you only need a screwdriverl All holes are pre-drilled, all parts are precision-cut and carefully pre-fitted; and all outer surfaces boast beautiful oiled walnut veneers, pre-finished by experts.
The KN-1402K offers carefully-fitted front-opening doors, and rear-panel ventilation to keep components cool (supplied less phono drawer; purchase of a sliding-drawer base specifically made for your turntable or changer is recommended). The KN-1267Ks have high-fashlon grille cloth, mitered, pre-assembled front moldings, and acoustic insulation. In oiled walnut only. Overall ensemble size: $311 / 2^{" h}$ high, $751 / 2^{\prime \prime}$ wide, and $19^{\circ}$ deep. Tops are cut from same piece of wood to assure matching grain. Shpg. wt., 159 lbs
95 DZ 411-3J. 3-Pc. Ensemble (KN-1402K,2-KN-1267K) ONLY 149.95 ASSEMBLED VERSION. identical to above, but factory assembied. 95 DZ 400-3J. $\$ 9$ Monthly

## -PURCHASED SEPARATELY

 EQUIPRAENT CABINET KIT

Compartment Slzes:

A-A mplifier-Tuner: $8 \times 35 \times 15^{\circ}$
B-Records, Etc.: $14 \times 153 / 4 \times 163 / 4$
C-Changer/T-table: $14 \times 183 / 4 \times 163 / 4{ }^{*}$
MODEL KN-1402K. Knight's lowestpriced equipment cabinet kit. Less phono drawer. Overall size: $311 / 2 \times 361 / 2 x$ $19^{\circ}$. Olled walnut only. 65 lbs.
95 DZ 414 -J. $\$ 5$ Monthly. ONLY 59.95
95 DZ 403 -J. Model KN-1402. As above, but assembled. . ONLY 74.95

## SPEAKER ENCLOSURE KIT

MODEL KN-1267K. Performs beautifuily with any $12^{\prime \prime}$ or $15^{\prime \prime}$ speaker. Has terminal strip instailed, inside leads, etc. $31 \frac{1}{2} \times 191 / 2 \times 19^{\circ} .47 \mathrm{lbs}$.
95 DZ 417 -J. $\$ 5$ Monthly. ONLY 46.95
$95 \mathrm{DZ} 408-\mathrm{J}$. Model KN-1267. As above, but assembled . . ONLY 54.95


## Tastefully Styled Danish-Modern Furniture Group

## COMPLETE 3-PC. MATCHED ENSEMBLE

In Kit Form $1944^{45}$

$\$ 10$ monthly

Assembled
'23995
$\$ 12$ monthly

All 3 pieces in this ensemble have tops cut from the samepiece of wood ... preserves the beauty of the matching grain.

KIT VERSION. A classic in furniture styles, Danish Modern cabinetry combines functional design with appealing beauty ... and our Knight ensemble typifies this style at its best. The handsome $\mathrm{KN}-1500 \mathrm{~K}$ equipment cabinet even has a rich walnut interior to highlight your com-ponents-il's tuner-amplifier section has an optional panel for custom mounting. The deluxe KN-1275K speaker enclosures accommodate any $12^{\prime \prime}$ or $15^{\prime \prime}$ speakers, and have $2 \frac{1}{2} \times 12^{\prime \prime}$ tweeter boards for 2 or 3 -way system components. All three pieces feature top panels cut from the same piece of wood to preserve the natural beauty of the matching wood grain!
A screwdriver and one evening's time is all you need to assemble one of these fine furniture cabinets. Outer surfaces are expertly pre-finished in oiled walnut, holes are pre-drilled, all parts are precision cut and pre-fitted. (KN-1500K is supplied less phono drawer; we recommend using a base made for the changer of your choice.) With easy instructions. In oiled walnut only. Overall ensemble size: $33^{\circ}$ high, $78^{\prime \prime}$ wide, and $201_{4}{ }^{\prime \prime}$ deep. Shpg. wt., 220 lbs.
95 DZ 429-3J. 3-PC. Ensemble (KN-1500K, 2-KN-1275K).ONLY 194.95
ASSEMBLED VERSION. Identical to above, but factory assembled. 95 DZ 426-3J. $\$ 12$ Monthly.

ONLY 239.95


## Popular-Priced Contemporary Furniture Group <br> UNITS SEPARATELY

\$8 monthly

- Beautifully Fits into Any Contemporary Decor
- Houses Amplifier, Tuner, Changer, Records or Accessories, Plus $12^{\prime \prime}$ or $8^{\prime \prime}$ Speakers
- Oiled Walnut Finish-Boucle-Weave Grille Cloths-Factory Assembled

Neatly styled and functionally designed
a wise choice for anyone desiring a low-cost ensemble that will complement any contemporary decor. All three pieces are carefully matched, and all are exactly $161 / 4^{\prime \prime}$ deep so that you can attractively group them directly together-or place the speaker enclosures on opposite sides of your room for increased channel separation. All units have fine-crafted oiled walnut veneers and tapering, brass-tipped legs.

The KN-1900 equipment cabinet features a handy "lift-top" recordchanger compartment that eliminates most stooping and bending while you're loading or unloading records. Tuner-amplifier compartment (sections A and C in diagram at right) has adjustable center shelf for accommodating components of any size-or removes altogether for extra storage space. Rear-panel ventilation keeps all components operating within a proper temperature range.
The KN-1901 speaker enclosures boast a ducted-port bass-reflex acoustical design for bringing out the utmost bass performance from all speakers, either $8^{\prime \prime}$ or $12^{\circ}$. Include screw-type terminal strips on back board for easy hook-up. Oiled walnut only. Overall ensemble size: $28 \frac{1}{2} \times 71 \frac{1}{2} \times 16 \frac{1}{4}$ deep. Made in U.S. Shpg. wt., 135 lbs . 95 DZ 500-3J. $\$ 8$ Monthly. KN-1900 and $2 \mathrm{KN}-1901 \mathrm{~s}$.
onLy 144.95

EQUIPMENT CABINET Inside Dimensions: A C- $213 / 4 \times 167 / 4 \times 151 / 4{ }^{\prime \prime}$ D. B- $16 \%$ "W: $141 / 3^{*} D$. D-Storage: $121 / 4 \times 167 / 2 \times 151 / 4^{\circ}$ Deep.

MODEL KN-1900. A splendid value in a low-cost equipment cabinet. Houses all components except speakers. Tuner-amplifier compartment has two adjustable shelves for maximum versatility. Has convenient lift-top changer section. $28 \frac{1}{2} \times 36 \times 16 \frac{1}{4}$ deep. Oiled wainut only. Wt., 65 lbs
95 DZ 501-J. $\$ 5$ month!y
69.95

## KN-1901 SPEAKER ENCLOSURE

Smartly styled, the KN-1901's ductedport bass-reflex design enhances the bass performance of all speakers. Takes any $12^{\circ}$ speaker, and has an adapter board for $8^{\prime \prime}$ units, if preferred. Rich-looking boucle-weavegrillecloth. $281 / 2 \times 173 / 4 \times 16 \frac{1}{4}$. deep. Oiled walnut only. 35 lbs.
95 DZ 502-J. $\$ 5$ monthly ...... 39.95

## FOR A BUDGET-PRICED ONTEMPORARY ENSEMBLE ...

. . . choose our new KN-2055 low-cost equipment consolette and a pair of slim-style KN-1285 speaker enclosures. Enjoy top convenience . . . modern styling too!


## Lowest-Cost Contemporary Hi.Fi Furniture

## KN-1285 SPEAKER ENCLOSURE


\$5 monthly

- Our Lowest-Cost Floor Enclosure
- Accommodates $8^{\circ}$ or $12^{\prime \prime}$ Speaker
- Rigid $5 / \mathbf{l}^{\circ}$ Plywood Construction
- Walnut or Mahogany Veneer

Strikingly styled speaker enclosure featuring genuine fine furniture veneers . . . and especially priced to please the thrifly hi-fi fan. Accommodates any $12^{\prime \prime}$ speaker, including coaxial or 3 -way types; includes an adapter board to permit using an $8^{\circ}$ speaker, if preferred.

Sturdily built of solid $5 / 8$ " plywood, the " 1285 " is noted for clean resonance-free performance. Acoustic lining also contributes to bass reproduction and helps prevent harshness in high-frequency range. Tops in looks too, this enclosure's compact dimensions make it fine for use in any room. The trim, graceful lines are enhanced by leg and frame treatment that captures the "light look" sought by today's top decorators. Attractively finished in rich, hardwood veneers.
Back board is equipped with a wired, screw-lype terminal strip-speaker hook-up is a snap. Mounting lugs make speaker-mounting equally simple. $30 \frac{1}{2} \times 193 / 8 \times 13 \frac{3}{6}$ deep. Made in U.S. Shpg. wt., 30 lbs .
95 DZ 526-J. Oiled Walnut 95 DZ 527-J. Mahogany

## NEW! KN-2055 EQUIPMENT CONSOLETTE



- Truly Functional Contemporary Styling-Oiled Walnut Veneer - Accommodates Tuner, Amplifier, Changer, Stores Records
\$5 monthly
- Front Door has Magnetic Latches

Group your hi-fi components into a striking custom array with this ultra-modern consolette. Priced remarkably low, it gives you the advantages of a console-type unit at minimum cost, space-sparing design, and eliminates the need for mounting of components-just set them into place inside their compartments.

Unusually compact, the KN-2055 houses tuner, amplifier, and record changer with room left over for storing more than 200 LP recordings, or accessories. Cabinet is sturdily supported by solid, extruded columns of brushed aluminum that are $3 / 18^{\circ}$ thick. Handy drop-front door is held snugly shut by magnetic "latches." $3 / 4$ " wood paneling boasts a veneer in popular oiled wainut.
Compact sizes (HWD): upper left, $10 \times 16 \frac{1}{2} \times 14^{3 / 4}$ " (center shelf is vertically adjustable); upper right, $10 \times 17 \frac{1}{2} \times 143 / 4{ }^{\prime \prime}$. Bottom shelf is $341 / 4 \times 121 / 2^{\prime \prime}$ deep; vertical clearance is $131 /{ }^{\prime \prime}$. Overall size, $301 / 2 \times 36 \times 163 /{ }^{\prime \prime}$. Shipped knocked downbottom panels and legs bolt together in just minutes. Made in U.S. Shpg. w., 60 lbs.
95 DZ 525-J. $\$ 5$ Monthly.
ONLY 69.95


## Our Lowest-Cost 2-Speed Portable Tape Recorder



MAKE OFF-THE-AIR TAPES
Has patch cord for taping direct from radio or TV. Record history-making programs . . . build up a library of musical selections recorded from FM stations. You'll marvel at the fine tone qualityl


## SPEECH AND RUSIC TRAINING

The wide response of the KN-4035 beautifully "mirrors" the voice as well as music. Soon pays for itself in everyday usefulness!

## Only s6995

new low price

- 50-10,000 Cps Response For Fine-Quality Sound
- Built-In 6-Watt Amplifier and $5^{\circ}$ Speaker
- Interlock Prevents Accidental Tape Erasure
- Accurate Neon-Light Recording Level Indicator
- Single Control for "Play-Idle-Record" Functions

The unbelievably low-prlced KN-4035 gives you top-flight circuitry, plus all the controls and important "extras" you need for astonishingly lifelike 2-track monophonic recordings. No other unit at this price can approach the quality that is built into this great recorder bargainl And it's really easy to operate this little beauty-its controls are designed and arranged to make it the height of simplicity and a genulne pleasure to use. Weighing just 19 lbs., you easily carry this beautiful Horizon Blue and gray portable everywhere you go.
Some outstanding features are: two fingertip-selected speeds of $71 / 2$ and $33 / 4$ ips; a husky 6 -watt audio amplifier coupled to a top-quality $5^{\circ}$ speaker for pleasing, natural sound; provision for recording from microphone, radio. TV or phonograph; plus an output jack for playback through a larger, external speaker. Has fast-forward and rewind controls with a handy lock-in position on rewind-uniform braking on both reels prevents tape stretch or breakage. Accepts reels to $7^{*}$ in diameter, and has a tape guide post to assure alwayscorrect alignment of tape.
Deck plate has a tape footage guide. Frequency Response: 50 to $10,000 \mathrm{cps}$ at $71 / 2 \mathrm{ips}$. Wow and Flutter: less than $0.3 \%$ at $71 / 2 \mathrm{ips}$. Signal-to-Noise Ratio: 40 db . Supplied complete with wide-range Knight crystal microphone, $7^{\circ}$ take-up reel, and a patch cord. Only $8 \times 195 / 3 \times 15^{\circ}$ deep. Made in U.S. For $110-120$ volts, 60 cycle AC. Shpg. wt., 24 lbs.
95 DU 600-J. $\$ 5$ Monthly.
ONLY 69.95


## Portable Tape Recorder With Stereo Playback

Only<br>\$5 monthly

- Records and Plays Monophonically at 2 Speeds
- Plays 4-Track Stereo Tapes Through Any Second Channel-or Through Optional KN-4160
- 6-Watt Amplifier and 2-Way Speaker System

\author{

- Tone Control-Neon Recording Level Indicator
}

Packing a wealth of deluxe features, the big-value KN-4110 gives you 2-track, 2 -speed monophonic recording and playback, plus a built-in stereo playback preamplifier. Use this economical portable as a tape deck to play high-fidelity 4-track stereo tapes through your stereo music system, or use the recorder itself as one channel of sound, and any monophonic hi-fi system, TV set or phono as the second-channel. Or, purchase the optional KN-4160 (at right) for a complete, beautifully matched stereo tape player.
The KN- 4110 includes a powerful 6 -watf amplifier and a built-In 2-way speaker system-boasts a $5^{\prime \prime}$ woofer, $4^{\prime \prime}$ tweeter and an electrical crossover for sound quality of remarkable fidelity. Tone control adjusts sound for crisp, clear speech or for pleasing, mellow music reproduction. One simple lever selects "Play-Idle-Record" functions. Safety interlock avoids accidental tape erasure. Has neon record-level indicator, fast-forward and lock-in rewind controls. Deck plate has counter numerals to show elapsed tape footage-aids in cuing and editing of your recordings.
Has three outputs: high.Z Channel A; high-Z Channel B; one for an external speaker system. Response: $50-10,000 \mathrm{cps}$ at $71 / 2 \mathrm{ips}$. Wow and Flutter: below $0.3 \%$ at $71 / 2$ ips. Speeds: $71 / 2$ and $33 / 4 \mathrm{ips}$. Signal-to-Noise Ratio: 40 db . With Knight crystal mike, 7" reel of Knight KN-12 "Special Formula" tape, 7 " take-up reel, patch cord, output cable for 2 nd-channel amplifier. $8 \times 11 \% \times 15^{\circ}$. Made in U.S. For 110.120 v., 60 cycle AC. Shpg. wt., 26 los.
95 DU 601-J. $\$ 5$ Monthly.
ONLY 99.95


## AMPLIFIER-SPEAKER for STEREO PLAYBACK WITH THE KN-4110

MODEL KN-4160. Acoustically and electrically matches the amplifier and speakers in the KN-4110-perfect styling match tool Provides a low-cost second-channel of sound for playback of stereo tapes. Has: volume, tone controls; 6 .watt power amplifier; $5^{\circ}$ woofer; $4^{*}$ tweeter; electrical crossover. With $8^{\prime}$ audio cable, AC power cord. Blue and gray. $53 / 4 \times 113 / 4 \times 61 / 4$. Shpg. wt., 6 lbs.
95 DU 602-J.
ONLY 24.95



Our Finest Stereo Tape Recorder

$\$ 13$ monthly

- Records and Plays Both 2 and 4-Track Stereo
- Two Bullt-In 8-Watt Push-Pull Hi-Fi Amplifiers
- Plays at All 3 Speeds-Has Automatic Shutoff
- Two Built-In $6^{\circ}$ High-Fidelity Speakers

Produce your own protessional stereo tapes with our precision KN-4310A. The finest portable recorder ever offered at this price, it's light enough to take anywhere to make "on location" tapes with clarity, dynamic range and astonishing stereo realism. And the beautiful case houses a powerful 16 -watt push-pull stereo amplifier and twin wide-range $6^{* *}$ speakers for superb stereo or monophonic playback! Wonderfully versatile, the KN-4310A may also be used as a deluxe tape deck in any stereo music system. Provides 2 and 4 -track stereo recording and playback, plus 2 -track monophonic recording and playback at 3 speeds $-17 / 3,33 / 4$ and $71 / 2 \mathrm{ips}$.
Simplified push-button controls and professional-type VU meters assure "first try" recordings of magnificent quality. Fingertip speed selector automatically provides proper equalization for balanced sound. Also has: digital tape counter for fast editing and cuing; solenoid-operated automatic shutoff to stop tape at end of reel; jacks for external speakers; plus high-level inputs and outputs for use with an external amplifier.
Response (record-play cycle): $\pm 3 \mathrm{db}, 50-15,000 \mathrm{cps}$ at $71 / 2 \mathrm{ips} ; \pm 3 \mathrm{db}, 50-10,000$ cps at $33 / 4 \mathrm{ips}$. Wow and Flutter: less than $0.3 \%$ at $7 \frac{1}{2} \mathrm{ips}$. Signal-to-noise ratio: 45 db . Distortion: below $1 \%$ at normal output level. With 2 full-range mikes; 2 patch cords for taping directly from TV, radios, etc.; 1200-ft. of KN-15 tape; take-up reel. $95 / 1 \times 18 \times 141 /{ }^{2}$ Made in U.S. For $110-125 \mathrm{v}$., 60 cycle AC. Carrying wt., 30 lbs. Shpg. wth, 37 lbs.
95 DU 604-J. $\$ 13$ Monthly........................................... ONLY 249.95
Knight Recorders Give You More =- Cost Less


Six Pushbuttons Give You Instant Command of Stop, Record, Rewind, Wind, Play, and Pause Functions


Records FM Multiplex Stereo



## Deluxe Record/Play Tape Transport

Only<br>$129^{95}$

\$7 monthly

- Permits Echo Effects, Sound-on-Sound, Add-aTrack, Musical Accompaniment, and More - Dual-Speed Operation-3 $3 / 4$ and $71 / 2$ ips
- 30-16,000 Cps Response at $71 / 2 \mathrm{ips}$
- Positive DC Dynamic Braking-No Tape Damage

For genuine high-fidelity performance . . . for a wealth of professional features . . . for deluxe-quality construction to reliably serve you for many years . . . choose the KN-4000. There is no finer tape transport at anywhere near this pricel Permits dazzling reproduction of pre-recorded stereo hi-fi tapes. Wher used with the KN-4002 preamp on the facing page, you can play as well as record any type of 4-track stereo or monophonic tape, and thrill to all sorts of special effects that you create yourself-"echos," selfaccompaniment during musical selections with the multiple sound-onsound recording technique, and much more.
Three heavy-duty 4-pole motors-two direct-drive spooling motors and a capstan motor-precisely control your tapes. Another deluxe feature, DC dynamic braking, permits instant tape stoppage without spillage-even thin-base tapes are completely protected against stretch and breakage. Also featured, professional-type heads for the best possible sound quality. The 3 -head arrangement allows monitoring from playback head while recording. Also: accurate digital tape-footage counter, and automatic shutoff when tape runs out.
Seven handy pushbuttons control all functions: Speed Selector ( $33 / 4$ and $71 / 2 \mathrm{ips}$ ); Off-On; Run; Fast Forward; Reverse; Standby. Standby control disengages idler from capstan while capstan is left running. Response: $\pm 3$ $\mathrm{db}, 30-16.000 \mathrm{cps}$ at $71 / 2 \mathrm{ips}$. Flutter and Wow: $0.25 \%$ at $71 / 2 \mathrm{ips}$. Signal. to-Noise Ratio: 55 db . In Desert Beige and Sand Gold. $131 / 2 \times 15 \frac{1}{4} \times 7^{n}$. Made in U.S. For $110-120$ v., 60 cycle AC. Shpg. wt., 23 lbs.
95 DU 650-J. $\$ 7$ Monthly.
ONLY 129.95


## CUSTOM CONSTRUCTION

All parts are readlly accessible. There are no belts, pulleys or levers. Entire unit is engineered for simplest installation, operatlon and maintenance.


Make tape recordings away from homecarry your Knight Tape Transport and Preamplifier, plus mikes, mike cables, tape, and other accessories in this roomy portable case. Has impressive-looking cream and beige styling to match trans. port and preamp. Outer covering is scuffproof. Has positive snap-locks. $20 \times 161 / 2 x$ $111_{2}{ }^{\prime \prime}$. Shpg. wt., 15 lbs.
95 DU 575-J. $\$ 5$ Monthly..
ONLY 24.95

FOR CUSTOM TAPING AND UNMATCHED STEREO HI-FI SOUND ...
. . . make our Knight KN-4000 Tape Transport and KN-4002 Tape Preamp units part of your stereo music system. They're made for each otherl


Aecomo level



## Hang

## NEW! Professional Stereo Tape Record/Play Preamp



TWIN INDICATORS show the re-cording-level on each channel-indicate when you are "peaking" at correct level for perfect tapes. Red "Record" safety-beacon shows when preamp is in recording function.


OUAL, CONCENTRIC-TYPE play-back-level and record-level controls on each channel give you complete operating flexibillty-let you adjust levels independently or simultaneously.


MULTIPLERECORDINGS and other special effects are easy with the KN4002 and KN-4000 transport.


ECHO EFFECTS enhance your tapes and it's so easy-no special equipment needed.

## Only s $99^{95}$

- Custom Engineered to Match the KN-4000 Transport
- Lets You Make Flawless Stereo or Monophonic Tapes
- Separate Dual-Channel Record and Playback Preamps
- Equipped for All Types of Professional Effects
\$5 monthly
- Tape-Source Switch-DC Filaments on Input Stages

Newly designed to perfectly match the KN-4000 Transport electrically as well as style-wise, this great preamplifier gives you all the controls and features required for stereo or monophonic tape recordings of superlative fidelity . . . plus countless studio-quality special audio effects. Use it with the 3 -head KN. 4000 for multiple sound-on-sound recordings, professional "echo chamber" effects, etc. Built for outstanding flexibility in recording and playback, it features concentric controls for adjusting both record and playback levels on each channel individually or simultaneously, and separate equalization for $71 / 2$ and $33 / 4 \mathrm{ips}$. Also-red-fight safety indicator to show when unit is on record function: DC-operated tube filaments on input stages for extremely low hum.

A handy panel switch permits instant comparison of source and tape audioquality. Individual adjustment for recording bias is provided on each channel. Bias frequency is pre-set to 65 kc . Has green pilot light. Panel is in Desert Beige and Sand Gold with control markings in white and black. With six audio cables. $41 / 8 \times 15 \frac{1}{3} \times 814^{\circ}$ deep. Less case, below. Made in U.S. For $110.125 \mathrm{v} ., 60$ cycle AC. Shpg. wit., 15 lbs.
95 DU 651-J. $\$ 5$ Monthly.
ONLY 99.95
95 DX 652-J. Metal Case for Above. Cordovan Gray. 5 Ibs.
ONLY 5.95

## KN-4002 SPECIFICATIONS

Response (Record-Play Cycle): $\pm 3 \mathrm{db}, 30 \cdot 16,000 \mathrm{cps}$ at $71 / 2 \mathrm{ips} ; \pm 3 \mathrm{db}, 30-12.000$ cps at $33 / 4$ ips.
Hum and Noise: -50 db , minimum, on playback.
Input Impedance: Mike, 3.3 megohms; Aux, 100,000 ohms.
Record Sensitivity: Mike, 2 mv for MAX level at 1 kc ; Aux, 200 mv .
Output Impedance: Approximately $10,000 \mathrm{ohms}$.


Save $\$ 19.97$ on the cost of components purchased separately. Everything you need to make superior 4 -track stereo recordings. Plays back through your stereo music system. Affords a full range of special effects--sound-on-sound, echo effect, add-a-track.
System includes: Knight KN-4000 Tape Transport, Knight KN-4002 Stereo Record/Play Preamp (less case), "Brush" Model BA-206B Stereo Headset, 2 Knight Model KN-4500 Microphones, 3-1200-ft. reels of Knight KN-15 Recording Tape and Tape Accessory Kit (tape splicer, cleaning cloth, 12 tape clips, 30 adhesive labels, tape head cleaner, book on tape editing, $100^{\circ}$ roll of splicing tape and tape threader).
The KN- 4000 operates at $33 / 6$ and $7 \frac{1}{2} \mathrm{ips}$. It has three separate heads and three heavy-duty, 4 -pole motors. The KN. 4002 has dual, concentric-type playback-level and record-level controls on each channel. (See individual listings elsewhere in the catalog for full descriptions of each system component.) Shpg. wt., 48 lbs

## 22 HF $114-\mathrm{J}$.

ONLY 299.95
95 DX 652-J. Metal Case for KN-4002. 5 lbs... . . NET 5.95
95 DU 575-J. Carrying Case for KN-4000 and KN-4002. (See preceding page.) $20 \times 16 \frac{1}{2} \times 111 / 2^{*}$. 15 Ibs. . . NET 24.95

Save $\$ 19.97$ on the cost of components purchased separately. Use this outstanding 4 -track tape system to make both stereo and monophonic recordings; play them back through your stereo music system. Full provision for special audio effects. Desert Beige and Sand Gold styling. System includes: Knight KN-4000 Tape Transport, KnightKit KP- 70 Stereo Record/Play Preamp in Kit Form (Less case), "Brush" Model BA-206B Stereo Headset, 2 Knight KN- 4500 Microphones, $3-1200$-tt. reels of Knight KN-15 Recording Tape and Tape Accessory Kit, IIsted in system at left.
The KN- 4000 operates at $33 / 6$ and $71 / 2 \mathrm{ips}$. It has 3 heads and 3 heavy-duty, 4-pole motors, and incorporates positive DC dynamic braking. The KP-70 has calibrated twin VU meters. (See individual listings elsewhere in the catalog tor full descriptions of each system component-KP-70 is listed in Knight-Kit section.) 49 lbs.

## 22 HF 115-J.

ONLY 289.95
22 HF 116-J. Complete System as Above, but with Fac-tory-Assembled Preamp. Save $\$ 25.42$

ONLY 334.50
$83 \mathrm{~V} \times 936$-J. Metal Case for KP-70. 5 Ibs .
NET 4.95
95 DU 575-J. Carrying Case for KN-4000 and KP-70 (See preceding page.) $20 \times 16 \frac{1}{2} \times 11 \frac{1}{2}{ }^{\prime \prime} .15 \mathrm{lbs} . .$. NET 24.95

## for Outstanding Performance

$\stackrel{*}{*}$ KNIGHT
DELUXE TAPE EQUIPMENT


KN

Optional: Scuff-proot Carrying Case for KN-4440 Deck

## $\left\{79^{95}\right.$

$\$ 9$ monthly

## Professional-Quality Stereo Tape Deck

- Built-In Record/Play Preamplifiers
- Precislon Digital Tape Counter
- 50-15,000 Cps Response at $7 \frac{1}{2}$ ips
- Extremely Compact-Only $13 \times 13 \times 61 / 4^{\text {" }}$

Add this magnificent new 2-speed tape deck to your stereo music system-it's priced far below units of comparable quality. Compact and precision-built, it provides you with complete 4 -track stereo and monophonic tape facilities. Includes deluxe laminated 4-track record/play head and a double-gap erase head. Built-in stereo record/play preamplifier includes dual VU meters for precise recording level adjustment. Deck is attractively styled in matte beige.
Single sliding lever selects Rewind, Stop, Record/Play, or Fast Forward. Change from $71 / 2$ to $33 / 4 \mathrm{ips}$ at the touch of a button. Digital tape counter for accurate cuing and editing. Controls include Record-Play-Off, Volume 1 and Volume 2 (record and play), Stereo-Mono, Mike-Tape Head. Inputs are mike/tape head 1 and 2, and high-level 1 and 2 (on rear of deck).
Specifications. Speed: $71 / 2$ and $33 / 4$ ips. Frequency Response: $\pm 3 \mathrm{db}, 50 \cdot 15,000$ cps at $71 / 2 \mathrm{ips} ; \pm 3.5 \mathrm{db}, 50-10,000 \mathrm{cps}$ at $33 / 4 \mathrm{ips}$. Signal-to-Noise Ratio: better than 40 db . Flutter and Wow: less than $0.2 \% \mathrm{rms}$. Hum and Noise: 50 db below peak recording level. Bias Oscillator Freq.: 80 kc . Max. Reel Size: $7^{\prime \prime}$.
Deck is perfect for custom installations; can be mounted vertically or horizontally. Size, $13 \times 13 \times 6 \frac{1}{4}$. Requires a $12 \frac{1}{2} /{ }^{\prime \prime}$ square cutout. For operation from $110-$ 120 v., 60 -cycle AC. Made in U.S. Shpg. wt., 28 Ibs.

## 95 DU 677-J.

ONLY 179.95
95 DU 579-J. Carrying Case for KN-4400. Cream and beige. Scuff-proof outer covering. Size $16 \times 14 \times 8^{\prime \prime}$. Shpg. wt., 15 Ibs.

## PACKED WITH FEATURES



Precision VU meters allow proper setting of recording level.


Convenient slid-er-type function selector.


A bargain package that saves you $\$ 42.85$ off our catalog prices and offers performance on a par with broadcaststudio turntables. Comprised entirely of professional. quality components, this system is capable of reproducing the full range of sound from your stereophonic records -without discernible distortion. Includes: Knight KN. $1015331 / 3-r p m$ Turntable with Oiled Wainut Base; Knight KN-1020 Pickup Arm; choice of Knight KN-505X, Empire 880, Pickering U38AT, or Shure M3D Cartridge.

| KN-1015 | $1 / 5$ RP開 |
| :---: | :---: |
| Only | - Studio-Quality Specification |
| 5995 | - $12^{*}$ Solld Cast-Aluminum Table |
| \$5 monthly | Drive Des |

Compares with the costliest of record-playing equipment. Ultra-reliable hysteresis-synchronous motor drives turntable precisely at $331 / 3 \mathrm{rpm}$ regardless of fluctuations in line-voltage. Has hermetically sealed lifetime-lubricated motor bearings. Belt drive, adjustable for optimum tension and minimum noise, and a solid, cast-aluminum lathe-turned $12^{* *}$ table give you reproduction free of rumble and distortion. Turntable shaft is supported by a ball-bearing system allowing almost friction-free motion. Other features include a ribbed rubber mat to protect your records, and a built-in speed-checking strobe, Noise: 57 db below average recording level. Wow \& Flutter: less than $0.15 \%$. Less base (below) and arm (right).

The turntable features a hysteresis-synchronous motor that is unaffected by line-voltage variations. Deluxe arm guarantees precise, balanced tracking, and the KN-505X boasts a $15-30,000 \mathrm{cps}$ response and more than 25 db of channel separation. Wood base is pre-drilled for arm. Cartridge comes pre-installed in plug-in head. With audio cables and solder-lug terminal strip. $8 \frac{1}{2} \times 21 \times 13^{\circ}$. For 110 . 120 v., 60 cycle AC. 28 Ibs.
22 HF 117-3J. $\$ 5$ Monthly.
ONLY 89.95


Requires $411^{*}$ below base plate. $5 \frac{1}{2} \times 17 \times 121 / 2^{\prime \prime}$. For 110.120 v., 60 cycle AC. Made in U.S. Shpg. wt., 16 Ibs.

95 DX 835-J. $\$ 5$ Monthly
ONLY 59.95
OILED WALNUT BASE. For above. Solid $3 / 4$ wood. $4 \frac{1}{2} \times 21 \times 13^{*}$. Shpg. wt., 8 lbs.
95 DX 552.J.
ONLY 12.95


## Deluxe Record-Playing Components...that Cost You Less

KN-1020 DYNAMIC-BALANCE PICKUP ARM<br>Only - Calibrated, Sliding Pressure-Gauge<br>$\$ 1995$<br>- Tracks at A nywhere From 1-4 Grams<br>- Precision Gimbal Suspension \$5 monthly • Easily Adjustable Counterweight

Packed with unique design features for superior sound. yet costs about $30 \%$ less than most standard pickup arms! Use this precision unit with our Knight KN-1015 turntable at the left, or with any other high-performance turntable for professional-quality reproduction.
Dynamic balance, achieved through the use of a sliding counterweight, permits using any cartridge in the KN1020's plug-in head. After the cartridge is installed, it takes just 10 seconds to altain perfect balance. Simply set the counterweight to the position that perfectly balances the arm in a horizontal position, then set the calibrated sliding-ring to the desired tracking pressure. The arm is so precisely balanced that it will actually track properly at a $45^{\circ}$ angle-there's no need to level the turntable. Gimbal suspension, as used in precision navigation

- instruments, allows free arm-movement in all directionswithout binding. Exclusive lateral compensation permits stylus to ride evenly on both sides of record grooves. Chrome plated. $11^{1}$ long. With terminal strip; less audio cables. From Denmark. 2 lbs.
95 DX 851-J. $\$ 5$ Monthly
ONLY 19.95
95 R 852-J. Extra Plug-In Shell. 3 oz.
ONLY 2.95

| Stock No. | Stylus Tip | Replacement For | O2. | ONLY |
| :---: | :---: | :---: | :---: | :---: |
| 95 RC 802-J | . $0007^{*}$ | KN-500 | 2 | 5.95 |
| 95 RC 805-J | . $00005^{\prime \prime}$ | KN.500X | 2 | 6.95 |
| 95 RC 808-J | .0006* | KN-505X | 2 | 8.95 |

## NEW KN-505X DELUXE STEREO CARTRIDGE

Only - Finest Stereo Cartridge Anywhere
$\$ 2095$ - $15-30,000 \mathrm{Cps}$ Frequency Response

- Over 25 Db of Channel Separation
$\$ 5$ monthly - 0.6 Mil Polished Diamond Stylus


## TRADE-IN DEAL-SAVE $50 \%$

Get a KN-505X at $50 \%$ savings-by trading in ANY type of old cartridge. Order at our trade-ln price-we'll ship your KN-505X and explain how to send your trade-In.

The finest stereo cartridge yet developed. Patterned after our nationally acclaimed KN-500X, the "Golden Tone" KN-505X incorporates improvements that give it specifications exceeding the demands of any music lover. Remarkably low tracking pressure and a new, $.0006^{*}$ diamond stylus guarantee greatly prolonged, record-life, as well as absolute minimum high-frequency distortion. In jewelry-type case. With easy mounting instructions. For $1 / 2^{2}$ or $1 / 10^{\prime \prime} \mathrm{mtg}$. centers. 4 terminals. Shpg. wt., 302. 95 RC 806-J. $\$ 5$ Monthly

ONLY 39.95
95 RC $806-\mathrm{J}$. With Trade-In.
ONLY 19.97

## KN-505X SPECIFICATIONS

[^12]PROFESSIONAL RECORDING TAPE

Controlled quality. Made in the most modern U.S. factorles; rigidly controlled in each phase of manufacture.

Double inspected . . . to meet Allied's high standards-assures absolute unlformity.

Guaranteed splice-free. Knight tapes are not patchwork pieces-every reel is one continuous length.

Finest materials. Tape coating Is a special oxide that won't rub off on tape heads.

## Highest-Quality Recording Tape

## KN- 50 DELUXE PLUS-PLAY 1-MIL "MYLAR TAPE"

First choice of the professionals for full-range response and extra playing time. Outperforms tapes costing twice as much, and runs $50 \%$ longer than standard tape. Tough "Mylar" base is moisture and heat-resistant. Deep-lubrication protects heads; treated surface gives top sensitivity. Tensile strength meets government specs. Cellophane-sealed hinged box. Made in U.S.

| Sioch No. | Foolage | Roel Size | Lbs. | $1-4$, EACH | $5-$ Up, EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 95 R $754-\mathrm{J}$ | $900^{\circ}$ | $5^{\prime \prime}$ | $3 / 1$ | 1.75 | 1.61 |
| 95 R $755-\mathrm{J}$ | $1800^{\prime}$ | $7^{\prime \prime}$ | $11 / 2$ | 3.14 | 2.90 |

## NEW: KN-60 ½-MIL TENSILIZED "MYLAR"

If you require the very best sound quality, plus maximum playing time and supreme strength and durability . . . choose new KN-60. Features unique polishing process that remowes any microscopic irregularities from tape for unmatched treble response and reduced head wear. Boasts a rugged "Mylar" base that is "Tensilized" for even greater strength-highly resistant to stretching, breakage, moisture and humidity. In $7^{\prime 2} 2400-\mathrm{ft}$. reels only. Cellophane sealed. Made in U.S. $1 \frac{1}{2}$ Ibs.
95 R 756-J.
5-Up, EACH 4.95
1-4, EACH 5.35

## KN-10 DOUBLE-STRENGTH $1 / 2-$ MIL "MYLAR"

Enjoy double the playing time of standard $3^{\prime \prime}$ reels. At $33 / 4 \mathrm{ips}$ you get a full half-hour of running time. Each $3^{*}$ reel contains $300 \cdot \mathrm{ft}$. of $1 / 2 \cdot$ mil, "stretchproof" tempered "Mylar" tape. Perfect for dictation and "living letters," each reel comes in easy-to-address self-mailing carton. Made in U.S. 8 oz . 95 R 757-J.

EACH, ONLY 72c
SPECIAL 10-PACK. Save 72c. Individually boxed. 5 lbs .
95 R 757-J.
10 REELS, ONLY 6.48

MONEY-SAVING OFFERS ON KNIGHT TAPES AND CARRYING CHEST


PACKAGE of 10 TAPES Plus CHEST


Stock up on tape and get this 10 -reel cartying case, too-order now for Big Savings.

## SAVE \$2.95-10 REELS OF KN-12 AND CHEST

Ten 7" reels of Knight's Special Formula KN-12 $1 \frac{1}{2} \cdot$ mil "Mylar" tape (described on following pages) in a blue and white carrying case. Shpg. wt., 11 lbs.
95 RX 760-J.
COMBINATION, ONLY 17.90

## SAVE $\$ 3.25-10$ REELS OF KN- 20 AND CHEST

Enjoy a real bargain on ten $7^{\circ}$ reels of KN-20 1-mil "Mylar" tape ( $18,000 \mathrm{ft}$.) and a leatherette-covered case that neatly holds all 10 reels. (KN. 20 described on following pages.) 11 lbs 95 RX 761 -J. $\$ 5$ MOnthly ......COMBINATION, ONLY 22.50

## SAVE $\$ 5.00-10$ REELS OF KN-50 AND CHEST

$18,000 \mathrm{ft}$. of deluxe-quality 1 -mil "Mylar" Plus-Play KN-50 in a durable wood carrying case. $K N-50$ is a top value at its regular price-take advantage of this great bargain. 11 lbs.
95 RX 762-J. $\$ 5$ MOnthly. COMBINATION ONLY 32.35
95 R 577-J. Chest Only. Holds ten $7^{\prime \prime}$ reels. Wood with blue and white leatherette covering. $8 \times 8 \times 8^{\prime \prime} .3 \mathrm{lbs}$.

ONLY 5.95

JUTSTANDING TAPE VALUES. 'ou may not be able to see the unex:elled quality of these recording apes, but it's there! Manufactured to :onform to rigid government specifiations and double-tested, Knight apes are universally accepted by tudios, schools, and tape recording enthusiasts.

| Tape <br> Thickness | Roel <br> Slze. | Tape Footage | M-TRACK (2-Track Mono. <br> 4. Track Sterea)-Total Time foth Tracks SPEED (INCHES PER SECOND) |  |  | QUARTER-TRACK <br> 4 Track Mone-Total Time 4 Tracks SPEED (IMCHES PER SECOND) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1\% | 33/4 | 7 K | 1/3 | 3\% | 74 |
| Standard 1/2-Mil | $3{ }^{\circ}$ | 150 | \%hr. | 15 min . | 7 K min . | 1 hr | K mr | 15 mm . |
|  | $4{ }^{\prime}$ | 300 | 1 hr . | \% hr. | 15 min. | 2 hrs . | 1 hr | \% Mr . |
|  | 7 | 600 | 2 hrs . | 1 hr . | 1/2 mr . | 4 hrs . | 2 hrs | 1 hr . |
|  | 7 | 1200 | 4 hrs. | 2 hrs . | 1 hr . | 8 hrs . | 4 his. | 2 hrs . |
|  | 5 | 900 | 3 hrs. | 1/1/2 hrs. | 45 mm . |  | 3 hrs . | 16 hrs. |
| 1.Mil | 7 | 1800 | 6 hrs . | 3 hrs . | ith hrs. | 12 hrs . | 6 hrs . | $3 \mathrm{hrs} .$ |
| $\begin{gathered} \text { Extra-Play } \\ Y-N \\| l \end{gathered}$ | $3^{\circ}$ | 300 | 1 hr | K hr. | 15 min . | 2 hrs . | 1 hr . | $4{ }^{4} \mathrm{hr}$. |
|  | 5 | 1200 | 4 hrs . | 2 hrs . | 1 hr . | 8 hrs. | 4 his. | 2 hrs. |
|  | 7 | 2400 | 8 hes. | 4 his. | 2 ms . | 16 hrs. | 8 hrs. | 4 hrs . |

## Exclusively Available at Allied

## KN. 15 STANDARD $11 / 2$-MIL ACETATE TAPE

The same type of magnetic tape used by most major recording labels for their pre-recorded high-fidelity tapes . . and it's yours at a low, low price. A real buy, our $\mathrm{KN}-15$ tape compares with any brand of $1 \frac{1}{2} \cdot \mathrm{mil}$ acetate-base tape, regardless of how much more it may cost. Quality protected, this tape gives outstanding results in professional as well as all home recording applications. Employs purest red oxide surface, precision applied and deepubricated, to assure excellent audio response, noiseless reproduction and absolutely uniform output level. Guaranteed splice-free for smoothest service. Sealed in cellophane in hinged box. Made in U.S.

| Srock No. | Footage | Reel Size | Lbs. | 1-4, EACH | 5-UP, EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 95 R 750.J | $600^{\prime}$ | 5 | 1/2 | 1.09 | 1.03 |
| 95 R $751 . J$ | $1200^{\prime}$ | 7" | 1 | 1.71 | 1.57 |

## KN-30 PLUS.PLAY i-MIL ACETATE TAPE

KN-30 is one of the most popular recording tapes available today ... and with good reasont It offers vastly superior quality, halfagain as much running time (in fact, it's possible to pack as much as 12 hours of material on a single $7^{\prime \prime}$ reel), plus excellent savings. The additional length provided by Plus-Play tape lets you make uninterrupted recordings of entire concerts, conferences, broadcasts, sports events and many other events you may wish to capture forever on magnetic tape. KN-30 features a thinner base and special coating of oxide for superb audio response. Supplied in a hinged box sealed in cellophane. Made in U.S.

| Stock No. | Foolage | Reel Size | Lbs. | 1-4. EACH | 5.UP, EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 95 P 752-J | $900^{\prime}$ | 5 | 1/4 | 1.29 | 1.13 |
| 95 R 753-J | $1800^{\prime}$ | 7" | $11 / 4$ | 2.32 | 2.12 |



## KNIGHT ACCESSORY PACKAGES FOR HIGHEST-QUALITY TAPES

## SAVE \$1.99-LOW-COST PACKAGE

A "must" for the serious tape fan. Items bought separately would cost $\$ 11.94$. You get: 3-7 $7^{\text {n }}$ reels of KN. $121 \frac{1}{2} \cdot$ mil "Mylar" tape; 150 ' of leader tape; tape splicer and $150^{\circ}$ of splicing tape; 24-page booklet on "Tape Editing and Splicing"; tape threader; 2 oz . bottle of head cleaner; 30 ad hesive tape-identification labels; 12 tape clips to keep reels from unwinding. 6 lbs .
95 RX 701 -J.
ONLY 9.95

SAVE \$4.10-PROFESSIONAL PACKAGE
As above, but you get 5 reels of $K N-12$, plus head demagnetizer that maintains "like new" performance from recorder; bottle of tape and head lubricant; and tape-cleaning cloth that stops squeal and chatter. Shpg. wt., 8 lbs .
20 RX 367-2J. $\$ 5$ Monthly.
ONLY 18.95


# KNIGHT 

BEST VALUE<br>RECORDING TAPE

GREATEST TAPE VALUE IN THE WORLD . . . exclusivel available at Allied. Knight's Special Formula tape is actuall made to far higher standards than most costly audio tapesyour assurance of phenomenal quality at a fantastically low price. Each reel is uniformly wound and precisely slit, anc guaranteed sptice-free. Moisture-resistant, too . . . no curling or twisting either. Compare quality-then compare price. Nc matter how much you use, or what you use it for, you can't beat Knight Special Formula tape.


## SPECIAL FORMULA Magnetic Tape

## KN-12 SPECIAL FORMULA $11 / 2$-MIL "MYLAR"

Here's 1200 feet of super-quality magnetic tape at rock-bottom cost. Our strongest Special Formula tape, $1 \frac{1}{2}$-mil KN-12 has a tough, durable "Mylar" polyester base that withstands very severe handling. A special, patented oxide formula assures you of superior fidelity and performance. Deep-lubrication minimizes tape-head wear for even greater operating economies. Guaranteed splice-free for consistent quality throughout each reel. $7^{*}$ reel. Made in U.S. Shpg. wt., 1 Ib . 95 R 758-J.

5-Up, EACH 1.39 EACH, ONLY 1.49

## KN-20 SPECIAL FORMULA 1-MIL "MYLAR"

You could pay triple this price and still not get tape of comparable quality. Plus-Play KN-20 gives you $50 \%$ more running time than standard $11 / 2$-mil tape, too. Use it for any application that requires top audio quality, plus extended-length recording sessions without interruptions. "Mylar" polyester base resists breakage, stretching, heat and humidity-ideal for outdoor recording. Deep-lubricated for lower head-wear. Guaranteed splice-free. $7^{*}$ reel- 1800 -ft. Made in U.S. Shpg. wt., $11 / 2 \mathrm{ibs}$. 95 R 759-J.

5-Up, EACH 1.85 EACH, ONLY 1.98

## KN-70 SPECIAL FORMULA $11 / 2$-MIL ACETATE

KN-70 is our lowest-priced recording tape. A fabulous buy, it's your best choice for general-purpose teping at minimum expense. Its low price slashes your recording costs to a fraction of what you'd normally expect to pay-yet you still enjoy superior response and lowest noise levels, plus deep-lubrication for longer head-life. Also has precision-applied oxide surface and uniform output level. Guaranteed splice-free. In 1200 -ft., $7^{\prime \prime}$ plastic reel. Made in U.S. Shpg: wt., 1 tb.
95 R 766-J.
5-Up. EACH 1.15 EACH, ONLY 1.25

## SAVE UP TO \$1.44 ON TAPE AND CARRYING CASE OFFERS



PACKAGE
of 5 TAPES

Plus TAPE CHEST


Handy hinge-fop case in attractive brown and white.

## SAVE \$1.29-5 REELS OF KN-12 AND CHEST

A special offer at an unbeatable price. Ten $7^{*}$ reels of Special Formula $1 \frac{1}{2}$-mil "Mylar" tape in a handy carrying chest. Get 6000 feet of quality tape, plus the chest, for an unbelievably low price Shpg. wt., $6 \frac{1}{2}$ Ibs. 95 R 763-J.

COMBINATION, ONLY 7.65

## SAVE $\$ 1.44-5$ REELS OF KN- 20 AND CHEST

Same as above, except you get 9000 feet of Plus. Play 1 -mil "Mylar" $\mathrm{KN}-20$, plus the chest, at an unbeatable price. 9 lbs.
95 R 764-J.
COMBINATION, ONLY 9.95

## SAVE \$1.29-5 REELS OF KN-70 AND CHEST

For quality taping at a sensationally low price, take advantage of this bonus buy. You get 6000 feet of superior-quality 1 -mil acetate-base tape plus a carrying case-for less than what you'd pay elsewhere for the tape alone. Shpg. wi., $61 / 2 \mathrm{lbs}$.
95 R 768-J.
COMBINATION, ONLY 6.45
95 R 703-J. Carrying Case Only. 1 lb .
ONLY 1.49

# istinguished Stereo Components by MSCOTT <br> H. H. Scott equipment is noted for uncompromis- 

 ing standards of performance-the Scott name on components is synonymous with the ultimate in listening pleasure. Easily custom-mounted or may be installed in optional cases listed below units.222-C 48-WATT STEREO AMPLIFIER

Not - Extreme Versatility ${ }^{5} 169^{95}$<br>- Massive Transformers<br>- Full Array of Controls<br>Less Cose - Brushed-Brass Panel

Providing unusual performance and flexibility at a modest price, dellvers 24 watts per channel for a full 48 watts of stereo or monophonic sound. Employs oversize-output transformers for outstanding bass response and virtually unmeasurable distortion. Tape-monitor switch permits monitoring of recordings as they are made (when used with tape recorder with separate record and playback heads). Has extra high-level input, in addition to others, for feeding TV sound through the $222 \cdot \mathrm{C}$ or for adding any other high level program source to your music system.

Other features include stereo headphone Jack; separate bass and treble controls for each channel; balance control. IHFM Music Power Outout: 48 watts (both channels). Response: flat from 20 to $30,000 \mathrm{cps}$. Hum \& Noise: -80 db . Distortion: Harmonic. $0.8 \%$ at full rated power; IM, $0.3 \%$. Controls: Input Selector (Phono or Tape Head. Tuner, Extra); Function Selector (Balance Channel A; Balance Channel B; Monophonic Records; Stereo; Stereo Roverse: Channel A Mono: Channel B Mono; 2-Bass; 2-Treble; Stereo Balance: Loudness; Off/On; Volume/Loudness; Scratch Filter; Loudness Compensation Switch. Uses 4- 7189 audio output tubes; D3 on preamp filaments. $4 \frac{5}{0} \times 151 / 4 x$ $121 / 2$. Less case, below. For $105 \cdot 125 \mathrm{v}, 50.60$ cycle AC. Shpp.
wt., 25 lbs
72 SU 021-J. $\$ 9$ Monthly.
72 SX 001. Metal Case. Simulated leather. $1 \frac{1}{2}$ lbs.... NET 13.95 $72 \mathbf{S X} 002 \mathrm{C}$. Wood Case. Specify mahog. or walnut. 5 Ibs. . 22.50

NET 169.95

##  <br>  <br> 

 Renowned Hi-Fi Component.Net<br>$219^{95}$<br>Less Case

H. H. Scott high-t delity component have an outstandin record of enginee ing leadership an reliability. Th equipment liste here offers uncom promising standard of performance, anc is exquisitely styler for use in home mu sic systems.

## NEW MODEL 350-B STEREO MULTIPLEX FM TUNER

## SPECIFICATIONS

IHFM Sensltivity: $\mathbf{2 . 5} \mathbf{\mu v}$ for $-\mathbf{3 0} \mathrm{db}$ hum, noise and distortion. $1 \mu v$ for 20 db of quieting using a balanced 72 ohm antenna.

Frequency Response: Virtuatly flat out to $75,000 \mathrm{cDs}$ for true wide-band reception.

FM Detector Bandwidth: 2 mc .
Main FM Carrier Circuit: 150 kc IF bandpass.

Vernier Tuning: Illuminated dial.

Newly improved version of the popular Model 350, the moderately.priced 350-B offers a multitude of outstanding features. Has built-in multiplex circuit for flawless stereo FM reception, receives monophonic FM proprams, too.
Incorporates Scott's exclusive "Sonic Monitor" that helps you quickly locate stations that are broadcasting stereo programs. You merely "tune to the tone."
The wideband design of the $350-8$ gives unparalleled frequency response and dy. namic range with amazingly low distortion and noise, even on weak signals. New balanced detector circuit provides vir. tually flat response. Absolutely drift-free, requires no AFC. Silver-plated "front-end" provides excellent sensitivity. Subcarrier
noise filter provides effective quieting without affecting frequency response o channel separation.
Signal. 10 - Noise Ratio: 60 db . Controls: Se lector (Ofi, Mono FM, Stereo FM with Fil ter): Stereo Noise Filter: AGC (Mono, Mul tiplex); Level; Sonic Monitor; Tuning $51 / 4 \times 151 / 2 \times 131 / 4$. Less case, below. For 105 . 125 v. $50-60$ cycle AC. 13 lbs.
72 SU 025-J. $\$ 11$ Monthly... NET 219.95
MODEL 333. As above, but includes AM section also. Shpg. wt. 17 lbs. 72 SU 039-J.

NET 259.95
72 SX001. Type C Metal Case. Simulated leather. Shpg. wt., $11 / 2$ lbs...... NET 13.95

72 SX002C. Type CW Wood Case, Specilymahoganyor walnut. 5 lbs NET 24.50


Center-Channel Output


Clean Power to Drive Any Speaker


Tape Monitoring Output

## H. H. SCOTT

 TUNERFEATURES- Wideband FM Design
- Stereo FM Multiplex
- Planetary Tuning Mechanism, Illuminated Dial
- Tuning Indicator
- Tape Recorder Outputs
- Output Level Controls


## H. H. SCOTT

## AMPLIFIER FEATURES

- Advanced Hi-Fi Engineering
- DC on Preamplifier Tubes
- Center-Channel Output
- Signal Lights to Indicate Mode of Operation
- Scratch, Rumble Fliters
- Handsome, Custom Styling


## MODEL 299-C 80-WATT STEREO AMPLIFIER

A suoerb amplifier-designed to accommodate every existing signal source-for beautifully realistic stereophonic high-fidellity reproduction. Has separate bass and treble controls for each channel; master volume control with loudness-volume switch; phase reversal switch; and tape monitor provision. Also features: scratch and rumble filters; two low-level magnetic inputs that allow you to connect a stereo tape deck to the 299-C as well as stereo cartridges. Controls: Selector (Balance A, Balance B, Stereo, Reverse Stereo, Monophonic Records, Channel A. Channel B); Bass and Treble; Balance; Loudness; Tape Monitor switch; Rumble Filter; Loudness-Volume; Scratch Filter; Channel A and B Magnetic Inputs 1 and 2; Power Off-Orr. Phase Reverse; Input Selector (Eur 78 ,
NAB Tape, Ortho RIAA. Tuner, Extra). Response: flat from 20 to $30,000 \mathrm{cps}$. Output: 40 watts per channel. Hum: $80 \mathrm{db} .4 \frac{5}{6} \times 15 \frac{1}{4} \times 12 \frac{1}{2}$. Less case. For operation from $105-$ $125 \mathrm{v}, 50-60$ cycle AC. Wt., 25 lbs.
72 SU 026-J. $\$ 12$ Monthly.
NET 229.95
72 SX 001. Type C Metal Case. Simulated leather finish. 3 Ibs
72 SX002C. Type CW Wood Case. Specify mahogany or oiled walnut. 5 Ibs.NET 24.50

## veluxe <br> " 4000 " Series

## NEW MODEL 4100 STEREO PREAMPLIFIER

esloned for the discriminating listener, the 4100 provides the Itimate in flexibility and performance. Offers every desirable perating feature-separate bass and treble controls, dynaural oise and rumble suppressors, input level controls. Also frontanel stereo tape inputs and outputs, separate on-off control, enter channel level control, plus exclusive Scott stereo bal ncing system.
lesponse: Flat, 20-20,000 CDS. Harmonic Distortion: Under 0.2\% t 1 kc . Input Sensitivity: 1.5 mv on tape head, 3.0 mv on phono. )utput: 2.5 v . Size, $171 / 2 \times 61 / 1 \times 163 / 4$. Less case, listed below. For peration from 110.120 v ., 50.60 cycle AC. Shpg. wt., 25 lbs

## 2 SU 027-J. $\$ 17$ Monthly

2 SX 006. Metal Case. Simulated leather. $11 / 2$ Ibs. ...NET 17.95 2 SX 007 C . Wood Case. Specily mahog. or walnut. 5 ibs. . 29.95

## NEW MODEL 4120 STEREO EASIC AMPLIFIER

A truly deluxe component that's a perfect companion to the 4100 preamplifier, above. Provides 60 watts per channel IHFM Music Power Output for a full 120 watts of flawless sound. You also get a personal brochure that shows you the exact measured laboratory speclifications of your own "4120." Specifications. Response: $\pm 1 \mathrm{db}, 4-65,000 \mathrm{cps}$ at rated output. Distortion: Harmonic, under $0.2 \%$ at 1 kc ; 1 M . below $0.5 \%$ at 60 watts. Hum \& Noise: 90 db down. Size, $8 \times 16 \times 13^{\prime \prime}$. For operation from 110.120 v. $50-60$ cycle AC. Shpe. wt., 72 lbs.
72 5U 028-S. $\$ 20$ Monthly.
NET 450.00

## NEW MODEL 4310 STEREO MULTIPLEX FM TUNER

Every concelvable feature including built-in multiplex circuit. Automatically selects stereo or monophonic reception. Has interstation noise suppressor, two VU meters and level controts, master-level control, separation control. Sensitivity: $1.9 \mu \vee$ IHFM. Response: $\pm 1 \mathrm{db}, 30-15,000 \mathrm{cps}$. Selectivity; better than 50 db . Image Rejection: $85 \mathrm{db} .51 / 4 \times 15 \frac{1}{2} \times 131 / 4$. Less case, below. For $110-120$ v., $50-60$ cycle AC. Shpg. Wt., 25 lbs. 72 SU 031-J. $\$ 20$ Monthly

NET 475.00 72 SX 006 . Metal Case. Simulated leather. $11 / 2 \mathrm{lbs} \ldots$... NET 17.95 72 SX 007 C . Wood Case. Specify mahog. or walnut. 5 lbs. 29.95


## OUTSTANDING FEATURES-

- Recelves Stereo and Mono FM
- "Sonic Monitor" Stereo Indicator
- Otfers $3.5 \mu$ Useabie IHFM Sensitivity
- Stereo Recorder and Amplifier Outputs
- Output Level Controls for Each Channel
- Vernler Tuning; Illuminated Dlal
- Accurate lliuminated Tuning Meter
- No-Drift Circuitry-Requires No AFC
- Beautiful Brushed-Brass Front Panel
- Optional Metal or Wood Cases


## NEW MODEL 370 STEREO MULTIPLEXFM TUNER

Alt new, moderately-priced wideband stereo multiplex FM funer that outperforms many units selling for much more. Gives outstanding reception of both FM and stereo multiplex FM broad. casts-reproduces the realism of stereophonic sound with professional quality in your home. Lets you enjoy the world's finest music in lis fullest dimensions-includes many features that enable it to meet the many demands imposed on music systems by stereo multiplex FM.

Silver-plated "front-end" provides excellent sensitivity, Planetary dial mechanism and accurate tuning indicator combined with no.drift circuitry assure effortless "stay put" tuning. Also has illuminated lucite dial, smooth vernier tuning. Scott's exclusive "Sonic Monitor" quickly finds stations broadcasting a multiplex signal. Just flip a switch; tone sounds when station is transmit-
ting stereo. Separate level controls permit perfect matching of both channels when receiving stereo broadcasts.

Useable Sensitivily: $3.5 \mu \mathrm{H}$ IHFM. Frequency Response: $\pm 1 \mathrm{db}$. 50 to $15,000 \mathrm{cps}$. Signal-to-Noise Ratio: 60 db below $100 \%$ moduIation. Total Harmonic Distortion: $0.7 \%$. Capture Ratio: 7db. Hum and Noise: 70 db down. Outputs: Channels $A$ and $B$ to tape recorder, Channels A and B to amplifier. Traditional Scott brushedbrass panel styling. $45 / 9 \times 151 / 4 \times 121 / 2^{*}$. Less case, below. For 105 120 v., $50-60$ cycle AC. Wt., 25 lbs.
72 SU 038-J. 89 Monthly
NET 169.95
72 SX 001. Metal Case. Simulated leather. 3 Ibs...... NET 13.95
72 SX002C. Wood Case. Specily mahog. or walnut. $5 \mathrm{lbs} . . .24 .50$

## SCOTT: Renowned Custom Stereo Component.



## SIMPLIFIED KIT BUILDING

Carefully engineered H . H. Scott kits ir corporate handy techniques to add to th ease of building: "Kit-Pak" Containe opens to become a work area... All wire are pre-cut to assure correct lead lengt

Mechanical parts are pre-riveted t the chassis ... All parts are mounted o "Part-Charts" in order of use-simpll fies construction, eliminates chance o error .. Instruction books printed in ful color for easler parts identification. . Tuner kits use "Ez-A-Line" alignmen system-no special tools needed. Thi hard work is done-the fun's left for you

MODEL LK-72 80-WATT STEREO AMPLIFIER KIT

## Net S159s

Less Case

- Superior Desion-Incordorates Every Desirable Control - Every Conceivable Inout Facillty
- Plenty of Power for Unexcelled Purlty of Sound
- Center-Channel Output with Separate Level Control
- Indivldual Bass and Treble Controls for Each Channel
- Styled in Contrasting Brown Leather on Gold Panel

Enjoy all the advantages of renowned Scott quality and precision design at lowest cost, by assembling this outstanding stereo amplifier kit yourself. Delivers plenty of power for reproducing deepest low tones to cleanest highs-and a full array of controls glves you complete command over audio reproduction. Furthermore, the LK- 72 has inputs for accommodating any music source including tape decks. It's an unexcelled value at a truly economical price!
includes: DC-operated preamplifler filaments for minimum hum; level controt for optional center channel; and tape monitoring provisions. The LK-72 also features conservatively rated components-such as oversized transformers weighing 12 lbs .-for long-life and trouble-free operation. Controls: Input Selector; Equalization; Stereo Selector; separate Bass and Treble for each channel; Stereo Balance; Loudness; Scratch Filter; Loudness Compensation.

Power Output: 40 watts per channel, IHFM. Frequency Response: $\pm 1 \mathrm{db}, 20-20,000 \mathrm{cps}$. M Distortion: 0.3\%. Harmonic Distortion: 0.8\%. Hum and Noise: - 80 db . Size, $45 / \mathrm{x} \times 151 / 4 \mathrm{x}$ $121 / 2$-just right for custom installations. Less case, listed below. For operation from 105.125 volts, $50-60$ cycle AC. Shpg. wt., 23 lbs .

72 SZ 000-J. 88 Monthly.
NET 159.95
72 SX 001. Type C Metai Case. For above. Shpg. wt., $11 / 2$ lbs.
NET 13.95
$72 \mathbf{5 X} 002-\mathrm{C}$. Type CW Wood Case. Specify mahogany or ofled walnut. 5 Ibs. NET $\mathbf{2 4 . 5 0}$


## MODEL LC-21 PREAMP KIT

Deluxe control center with facilities for every mode of monophonic and stereo operation. Features unique shlelding of power supply stage, non-magnetlc electrolytic aluminum chassis and DC-heated lubes for extremely low hum and noise. Response: $\pm 1 \mathrm{db}, 8-50,000 \mathrm{cps}$. Distortion: $0.1 \%$ at 2.5 volts output. Matches Input sensitivity of LK-150, next page. Attractive dark-brown panel, polished gold edge. $51 / \times 151 / 2 \times 131 / 2$. . Less case. For $105-125 \mathrm{v}$., $50-60$ cycle AC. Wt., 10 lbs .
72 SU 003-J. \$6 Monthly. . NET 99.95
72 SX 001. Metal Case. $1 / 2 \mathrm{l}$ lbs. NET 13.95
72 SX002-C. Wood Case. Specify mahogany or oiled walnut. Wt., 5 lbs .NET 24.50

## H. H. SCOTT'S OUTSTANDING "STEREOMASTER" ENSEMBLE



118 AILIED

## MODEL 355 AM-FM MULTIPLEX TUNER-PREAMPLIFIER

A unlque idea-on a single "Stereomaster" chassis you get a wideband FM multiplex tuner, wide-range $A M$ tuner, and professional-quality stereo control preamplifierwith clamp-on facilities for attaching the optional stereo basic amplifier described belowl When combined with the 208 basic amplifier, the 355 becomes a complete stereo receiver. The FM multiplex section features the same outstanding circuit found in Scott's Model 3508 broadcast-quality tuner. Stereo preamp section has full array of controls for adjusting sound with ease. Other features include: illuminated dial for FM and AM; stereo station tuning indicator; tape recorder outputs; output level controls; etc. Tuner response to $75,000 \mathrm{cDs}$ for true wideband receptlon. Preamp response, $20-30,000 \mathrm{cDs}$. $51 / 2 \times 17 \times 13^{\circ}$. Less case and amplifier. For $105-125 \mathrm{v}$., $50-60 \mathrm{AC}$. 19 lbs 72 SX 005-J. $\$ 16$ Monthly

## NET 334.95

72 SX 006. Type G Metal Case. For above. Shog. wt., 19 Ibs.
NET 17.95
72 SX 007-C. Type GW Wood Case. Specify mahogany or oiled walnut. 19 Ibs.NET 29.95

## MODEL 208 80-WATT STEREO BASIC AMPLIFIER

"Clamp-on" 80 -watt basic stereo amplifier module-matched in quallity and designed for use with the Scott 355 tuner-preamplifier, described above. At 40 -watts per channel, this dual.channel amplifier offers plenty of reserve power to drive any stereo speaker system. Features a superb low frequency response down to 19 cps , to please the most critical music lover. Distortion: less than $0.5 \%$ at full power. Hum and Noise: -90 db . Inout Sensitivity: 1.5 and 2.5 v . to permit use of any preamp. Size, $5 \times 16 \times 7$. For $105-125$ volts, $50-60$ cycle AC. Shpg. wt., 28 lbs. 72 SU 008-J. $\$ 7$ Monthiv.

NET 134.95
Choose Your Own Scott Music System-Write for Allied's Price

## I Popular Easy-to-Build Kit Form




## LK-150 AMPLIFIER KIT

Deluxe stereo basic amplifier kit for use in the finest music systems. Delivers 65 -watt-per-channel IHFM power output for total of 130 watts. Features $15-\mathrm{lb}$. output transformers for virtually flawless low.frequency response; and non-magnetic electrolytic aluminum chassis for rapid heat dissipation; bullt-in bias meter. Power Bandwidth: from below 19 cps to above $25,000 \mathrm{cps}$. Hum: -90 db . Harmonic Distortion: less than $0.5 \%$. Matches LC21 stereo preamp kit, previous page. $71 / \mathrm{xx}$ $151 / 4 \times 111 /{ }^{\circ}$. Less case. For $105-125 \mathrm{v} ., 50-60$ cycle AC. 52 lbs.
72 SZ cos-2J. \$.9 Monthly. . NET 169.95 72 SX 020. Case. For above. 5 ibs. . . 19.95

## MODEL LK-48 48-WATT STEREO AMPLIFIER KIT

Moderately priced stereo amplifier-control center that delivers 24 watts per channel for a total 48 -watt output (IHFM). Includes facilities for every stereo or monophonic music source, as well as a complete complement of controls. Uses DC-heated preamplifier fitaments for low hum and noise. Response: $\pm 1 \mathrm{db}, 20-20,000 \mathrm{cps}$. Harmonic Distortion: $0.8 \%$ at full output. Hum and Noise: -80 db . Styled in contrasting dark brown and polished gold. $43 / 6 \times 151 / 2 \times 121 / 2{ }^{\prime \prime}$. Less case. For $105-125 \mathrm{v}$., $50-60$ cycle AC. Wt., 19 lbs. 72 SZ 010-J. $\$ 6$ Monthly.

NET 124.95
$72 \mathbf{s x} 001$. Type C Metal Case. Shpg. wt. $11 / 2$ tbs.
NET 13.95
72 SX002-C. Wood Case. Specify mahogany or oiled walnut. Wt. $5 \mathrm{Ibs} .$, .
NET 24.50

## MODEL LT-110 STEREO FM MULTIPLEX TUNER KIT

Remarkable FM tuner kit complete with built-in multiplex circult for superb reception of stereo FM broadcasts. Employs the same outstanding silver-plated front-end and wideband circuitry used in factory-assembled Scolt tuners. Front-end and multiplex section are pre-mounted, pre-wired, and pre-allgned at factory to assure perfect results-lets you enfoy FM programming as soon as kit is completed - no further testing or alignment required. Includes illuminated tuning meter. Circuit features 3 stages of IF and 2 full limiting stages with $2-\mathrm{mc}$ detector bandwidth. Sensitivity: $2.2 \mu \mathrm{I}$ IHFM. Has 10 tubes and 11 diodes. Styled to match LK-48 ampliffer, listed above. $4 \frac{5}{3} \times 151 / 4 \times 121 / 2^{\circ}$. Less case. For 105-125 volts. $50-60$ cycle AC. Shpg. wt., 15 lbs. 72 SZ 011-J. \$8 Monthly

NET 159.95
72 SX 001. Type C Metal Case. Shpg. wt., $1 / 1 / 2 \mathrm{lbs}$.
NET 13.95
72 S×002-C. Wood Case. Specify choice of mahogany or olled walnut finish. Shpg. wt., 5 lbs.

## SELECTED H. H. SCOTT STEREO AND MONOPHONIC H-FI COMPONENTS

MODEL 296 96-WATT STEREO AMPLIFIER. Every desirable control and inout-even has front-panel headphone lack. IHFM Power Output: 48 watts per channel. $\pm 1 \mathrm{db}, 20-20,000 \mathrm{cDs}$. $5 \frac{1}{2} \times 17 \times 151 / 2^{\prime \prime}$. Less case (Type G listed under Model 355, previous page). For 105-125 v., 50-60 cycle AC. 50 lbs. 72 SZ 013-J. $\$ 15$ Monthly.

NET 299.95
MODEL 99D 22-WATT MONOPHONIC AMPLIFIER. Complete array of controls. $20 \cdot 20,000$ cos. Harmonic Distortion: less than $0.8 \% .43 / 6 \times 15 \times 12^{2}$. Less case (Type C listed under Model LT-110. above). For $105.125 \mathrm{v} ., 50-60$ cycle AC. 20 lbs .
72 SU 014-J. $\$ 6$ Monthly.
NET 124.95
MODEL 314 FM TUNER. Wideband circuitry provides noise-free reception. Sensitivity: $2 \mu \mathrm{~V}$ HFM. $45 / 8 \times 51 / 4 \times 121 / 2^{*}$. Less case. For 105-125 v. 50-60 cycle AC. Wt., 10 lbs.
72 SU 015-J. \$10 Monthly.
NET 124.95
72 SX 001. Type C Metal Case. Shpg. wt., $11 / 2 \mathrm{lbs} .$. . NET 13.95
72 SX 002-C. Wood Case. Specify mahcg. of walnut. 5 Ibs. 24.50
MODEL 335 MULTIPLEX ADAPTER. For Scott FM tuners. $5 \frac{1}{4} \times 71 / 4 \times 13^{\prime \prime}$ Less case. For $105-125$ v.. $50-60$ cycle AC. 8 lbs. 72 SU 016-J. $\$ 6$ Monthiy

NET 109.95
72 SX 017. Model LM-35 Kit. As above, in kit form .. NET 79.95 72 SU 018. Metal Case. For 335 or LM.35. Wt., 2 lbs.. NET 9.95 72 SU 019. Walnut Case. For 335 or LM-35. 4 lbs.

NET 14.95


No Money Down on Allied's Credit Fund Plan


500-B 65-WATT STEREO PULTIPLEX FM RECEIVER

## Net <br> ;35950 <br> Less Case

- Amplifier and FM Tuner On One Chassis - Receives Stereo Multiplex Broadcasts
- Exclusive "Stereo Beam" Indicator Light
- Controls and Inputs for Every Source

In a single deluxe unit, you get a highly sensitive FM tuner with latest stereo multiplex FM circuit, plus a stereo amplifier that gives you 65 watts of music powerl Tuner circuit employs phaselinear, wide-band design for lowest distortlon and highest stereo separation throughout the entire audio band. Has speclal noise filter to reduce hiss and background noise during reception of stereo multiplex FM programs, without affecting frequency response. Also has four If stages for increased dynamic range, high selectlvity and better signal-to-nolse ratio. "Stereo Beam" tuning eye tells you whether the FM station you're tuned In on is broadcasting monophonically or stereophonically. IHFM Sensitivity; 2.2 microvolts.
Ampllfier Section. IHFM Music Power Output: 65 watts. Response: overall, 25 to $25,000 \mathrm{cps}$; amplifier, $\pm 11 / 2 \mathrm{db}, 5 \cdot 45,000 \mathrm{cps}$. Hum \& Noise:- 85 db . Harmonic Distortion: $0.5 \%$ at rated power. Front panel has 7 controls and 6 switches; 17 inputs and output jacks on rear panel to accommodate every conceivable stereo and monophonic program source. Size, $53 / 4 \times 17 \frac{1}{2} \times 131 / 4$. Less case, below. For 105.120 v. 50.60 cycle AC. Wt. 31 lbs.
72 SU 052-J. $\$ 17$ monthly.
NET 359.50
72 SX055-C. Model 30-U Wood Case. For use with the Model $500 \cdot$ B. Specify choice of mahogany or oiled walnut veneer. Shpg. wt. 9 lbs.

NET 24.95


## STEREO FM-PHONO SYSTEN FEATURING 500-B

Selected by Allied's audio staff to provide the ultimate in stere listening, this deluxe custom component array is a rare value You save $\$ 143.55$ over the cost of individual components pui chased separately. System includes: Fisher 500-B Stere Multiplex FM Receiver described fully at left; Garrard Type "A Automatic Turntable; Empire 880 Stereo Cartridge with Dla mond Needle; 2-Jensen H-222 $12^{\circ}$ Coaxial Speakers; plus al all connecting cables for fast easy hook-up.
Type "A" Changer plays all 4 speeds, pampers your records Empire 880 cartridge tracks flawlessly. Install the Jensen speakeri in your own cabinets or "in-the-wall." Have $13 / 4-1 \mathrm{~b}$. magnet fo marvelous bass response. Receiver comes less case, see Mode 30. U wood Case, listed at left. Wt., 74 lbs.

21 HF 106-J. $\$ 20$ monthly
ONLY 462.9?
21 HF 105-J. Above system, with Fisher $800 \cdot 865$-watt Sterec Multiplex FM.AM Receiver, described fully below, in place of 500-B. Shpg. wt. 76 Ibs. Save $\$ 157.55 . . . . . . . . .$. ONLY 518.95
73 RX056-C. Wood Changer Base for Type "A". Specify mahogany, limed oak, or walnut finish. Shpg. wt., 4 lbs.. NET 4.49 73 RX 059. Unfinished Changer Mounting Board. For custominstalling Type "A" Changer. Shpg. wt., $11 / 2$ los....... NET 1.50

## Famous Fisher 800-B 65-Watt Stereo Multiplex FM-AM Receiver

## $1=1$

##  <br> Q) 0 <br> * <br> 

## Net '42950

Less Case

- Three Units On A Single Chassis
- Poweriul 65-Watt Stereo Amplifier
- Receives AM, FM and FM Stereo
- Exclusive "Stereo Beam" Indicator
- Full Array of Controls and Inputs
- Handsome Brushed Brass Panel

A convincing example of precision engineering, the 800-8 offers: flawless stereo multiplex reception. monophonlc FM reception and $A M$ reception; complete audio control; input facilities for every conceivable stereophonic and monophonic program input; and a husky 65 watts of power. Incorporates every deslrable feature for clean FM reception. either monophonic or stereophonic -phase-linear, wide-band circuitry; three If stages; front-panel noise filter to reduce hiss and beckoround noise during stereo multiplex broadcasts; tuning eye to indicate "on-station" tuning during regular FM broadcasts plus "Stereo Beam" to tell you when the station of your choice is broadcasting stereophonically. Sensitive AM section of the tuner has separate tuning eye. IHFM Sensilivity: FM, $2.5 \mu v ; A M, 5 \mu \mathrm{f}$ for 2 -watt output.
Amplifier Section. IHFM Music Power Output: 65 watts. Res.oonse: $11 / 2 \mathrm{db}, 25-25,000 \mathrm{cps}$. Hum $\&$ Noise: -85 db below rated power output. Harmonic Distortion (at rated power output): $0.5 \%$. Output Impedances: 4.8 and 16 ohms. The 800.8 has a total of 15 front panel controls and switches: 17 inputs and outputs jacks on rear panel. Size, $53 / 1 \times 171 / 2 \times 131 / 4$. Less case, below. For operation from 105-120 v. 50-60 cycle AC. Shpg. wh. 33 Ibs.
72 S2 053-J. $\$ 19$ monthly
NET 429.50
72 Sx 055C. Model 30-U Wood Case, For above. Specify mahog. any or oiled walnut veneer. Shpg. wt., 9 lbs..... NET EACH 24.95

## in Superb Hi-Fi Component Design

X-100.B 50-WATT STEREO AMPLIFIER

The new, higher-power version of the famous "X-100", now offers you 50 watts of flawless sound. Has 17 front-panel controls and switches, 14 input jacks ( 7 pairs) to accommodate every known signal source. Includes center-channel output; independent, concentric bass and treble controls; scratch and rumble filters. IHFM Music Power Output: 25 watts per channel Response: $\pm 1 \mathrm{db}, 20 \cdot 20,000 \mathrm{cps}$. Hum \& Noise: -65 db minimum below rated output Output impedances: 4, 8 and 16 ohms. Brushed brass panel. Size, $413 / 6 \times 151 / 6 \times 121 / 2^{*}$. Less case, betow. For $105-120$ v., $50-60$ cycle AC. 25 lbs.

72 SU 058-J. \$9 Monthly
NET 169.50
72 SX 072. MC-2 Metal Case. Simulated leather, $7 \mathrm{lbs} . . . .15 .95$
72 SX 074C. $10-U$ Wood Case. Specify choice of mahogany of walnut finish. Shpg. wt., 6 lbs.

NET 24.95

## FM-50-B STEREO MULTIPLEX FM TUNER

Offering excellent sensitivity and wide-band circuit desion, the FM-50-B provides outstanding reception of FM and stereo FM broadcasts. Employs triode RF stage and 4 IF stages for extremely high-sensitivity and selectivity with minimum distortion. Also has wide-band ratio detector, three fast-acting limiters, AGC and AFC, and local-distant sensitivity switch. Useable (IHFM) Sensitivity: 2.2 microvolts for 20 db quieting. Outputs: 2-Amplifier; 2-Tape Recorder. Brass-finished control panel. Size, $413 / 6 \times 151 / 0 \mathrm{x}$ $11 /{ }^{/ \prime}$. Less case, below. For operation from $105-120 \mathrm{v}$., 50.60 cycle AC. Shpg. wt., 14 lbs
72 SU 063 . \$10 Monthly
NET 199.50
72 SX 072. MC-2 Metal Case. Simulated leather. $7 \mathrm{lbs} . \ldots . .15 .95$
72 SX074C. $10-\mathrm{U}$ Wood Case. Specify choice of mahogany or walnut finish. Shpg. wt., 6 lbs..

NET 24.95


## Brilliant "StrataKit" Stereo High-Fidelity Kits from Fisher

- Unlque, Time-Saving Approach to Kit Design
- Assembly by Easy, Error-Proof Stages
- Separate Transparent "Parts Pachet" for Each Stage
- Major Components Already Mounted on Chassis
- Wires Pre-Cut to Size for Every Stage
- Pertormance Fulfills Fisher's High Lab Standards
$K X-100$ Amplifier Kit


KM-60 FM Tuner Kit

## KX-100 50-WATT STEREO AMPLIFIER KIT

Combines precise design and top-quality engineering in a ktt that's easy to construct. Perfectly matches the KM-60 tuner kit, below. Provides IHFM music power of 25 watts per channel. Offers 14 inputs ( 7 pairs) and 17 front panel controls and switches. Has rumble and scratch filters, independent concentric bass and treble controls for each channet, stereo headphone jack. Response: $\pm 1 \mathrm{db}, 20 \cdot 20,000 \mathrm{cps}$. Hum \& Noise: -65 db minimum. Outout Impedances: $4, B$ and 16 ohms. Brass finish
 $50-60$ cycle AC. Shpg. wt., 25 lbs.
72 SU 065-J. $\$ 7$ Monthly.
NET 129.50

## KX-200 80-W ATT STEREO AMPLIFIER KIT

Not illus. Provides IHFM music power output of 40 watts per channel for tremendous stereo reproduction; 3-channel output; full array of controls and inputs. Matches KM.60, below. Less case. For $105.120 \mathrm{v}, 50.60$ cycle AC. Wt., 26 lbs. 72 SU 066-J. \$9 Monthly..

NET 169.50

## KM-60 STEREO MULTIPLEX FM TUNER KIT

Tuning and multiplex sections are factory-aligned. Features Golden Cascode front-end, 4 IF stages and two limiters for superb reception; unique nolse filter; precision d"Arsonval funing meter (used during assembly for non-critical alignment); output level control on each channel for balanced reception of stereo broadcasts, $413 / 15 \times 15 \% \times 13^{\circ}$. Less case, below. For $105-120 \mathrm{~V}$. , $50-60$ cycle AC. Shpg. wt., 21 lbs.
72 SU 070-3. $\$ 9$ Monthly..
.NET 169.50
72 SU 071-J. KM-61 Tuner. Above, wired. Less case.NET 219.50
CASES FOR ABOVE "STRATAKITS"
MC-2 METAL CASE. In simulated leather. Wt., 7 -lbs. 72 SX 072.

NET $\$ 5.95$
10-U WOOD CASE. In mahogany or walnut finish. 6 Ibs.
72 SX 074C. Specify finish. $\$ 5$ Monthly.
NET 24.95


## FM-1000 STEREO MULTIPLEX FM TUNER

For superb monophonic or stereo FM reception. Offers: $1 \mu \mathrm{~V}$. IHFM sensitivity; "Golden-Cascode" front end; 5 IF stages; 4 limiters; "MicroTune" automatic AFC defeat. Has interstation noise sup. pressor, antenna selector, range switch; signal, VU meters. Stereo Beacon lights and switches tuner to stereo when multiplex program is received. $4^{13} / 10 \times 15 \frac{1}{3} \times 123 / 4$. Less case, below. For 1050 120 v. $50-60$ cycle AC. 20 lbs.
72 SU 092-J. $\$ 15$ Monthly
NET 429.50
72 SX 093C. Wood Case. Specify mahog. or walnut. 6 lbs... 24.95

## FM-100B STEREO MULTIPLEX FM TUNER

For the discriminating listener. Incorporates complete multiplex circuit plus superior wide-band design. Features cascode frontend for $0.6 \mu \mathrm{~V}$ sensitivity ( $1.8 \mu \mathrm{~V}$ IHFM). Has 5 wide-band If stages, 4 limiters. "Stereo-Beam" lights to indicate stations transmitting stereo programs. Local-distant switch, amplifier and recorder outputs. $413 / 16 \times 15 \% \times 13^{*}$. Less case. For $105-120$ v., $50-60$ cycle AC. Shpg. wt., 20 lbs .
72 SU 081-d. $\$ 13$ Monthly
NET 249.50
72 SX 072. MC-2 Metal Case. Wt., 7 Ibs. $\qquad$ . NET 15.95

72 SX 074C. Wood Case. Specily mahog. or walnut. 6 lbs.... 24.95

## 400-CX STEREO PREAMPLIFIER

Offers 28 controls and 9 pairs of stereo inputs. "Sonic-Null" stereo balance control, "Stereo-Dlmension" blend control, record-monitor facilities, pushbutton selectors, indicator llghis, etc. $\pm 1 \mathrm{db}, 10-25,000 \mathrm{cps}$. Distortion: less than $.004 \% .413 / 16 \times 151 / 8 \mathrm{x}$ 12". Less case. For $105-120$ v., $50-60$ cycle AC. 20 lbs.
72 SU 083-J. $\$ 10$ Monthly.
NET 199.50
72 SX074C. Wood Case. Specify mahog, or walnut. 8 lbs.... 24.95
SA-300B 90-WATT STEREO BASIC AMPLIFIER. Response: $\pm 1 / 2 \mathrm{db}, 20-20,000 \mathrm{cps} .4$ - EL 34 output tubes. With cover. $61 / 3 x$ $16 \% \times 71 / 4^{\prime \prime}$. For $105 \cdot 120$ v., 50-60 cycle AC. Wt., 36 lbs .
72 SU 086-d. $\$ 10$ Monthly
NET 199.50


## X-202B 80-WATT STEREO AMPLIFIER

| Nat | - Unique Tape-Monitoring Feature |
| :---: | :--- |
| $\$ 24950$ | - Controlled Center-Channel Output |
| - Separate Bass and Treble Controls for |  |
| Each Channel |  |

The X-202B stereo amplifier gives you a remarkable array of controls, together with a music power output of 40 watts per channel. Includes unique tape monitoring feature-lets you monltor while recording and vary controls during tape playback without changing cable connections. "Stereo-Dimension" control blends the two stereo channels to any desired degree. Center channel output has volume control and on-off switch. Offers 22 controls, 16 inputs, 7 outputs for associated components; and 3 speaker outputs. IHFM Output: 80 watts. Response: $\pm 1 \mathrm{db}$, $20-20,000 \mathrm{cps}$. Distortion: harmonic, $0.5 \%$ i $\mathrm{M}, 1.0 \%$. Hum 8 Noise? -90 db . $411 / \mathrm{kc} \times 151 / 3 \times 121 / 2^{*}$. Less case. For $105-120 \mathrm{v},. 60-50 \mathrm{cycle}$ AC. Shpg. wt., 27 Ibs.
| 72 SU 089-J. $\$ 13$ Monthly
NET 249.50
72 SX 072. MC-2 Metal Case. Simulated leather. 7 lbs..... 15.95
$72 \mathbf{5 X} 074 \mathrm{C}$. Wood Case. Specify mahog. or walnut. 8 Ibs.... 24.95

## FM-200B STEREO MULTIPLEX FM TUNER

\author{

- Sensitive "Golden Cascode" Front End <br> - Exclusive Stereo Beacon Indicator <br> 529950 <br> Less Case <br> - Exclusive "MicroTune" Feature <br> - Interstation Noise Suppressor
}

Satisfles the most critical FM listener. Superb monophonic or stereo multiplex FM reception. Offers: 1 -microvolt IHFM sensitivity: "Golden Cascode" front end; five IF stages; four limiter stages. Exclusive "MicroTune" feature disconnects AFC when luning knob is touched, restores AFC when knob is released. Interstation noise suppressor "hushes" noise when tuning between stations. Antenna selector; distant-local range switch; signal meter for "rloht-on" tuning; plus "Stereo Beacon" that lights when station is transmitting stereo and automatically switches the tuner from monophonic to stereo operation. $413 / 6 \mathrm{sx}$ $15 \% / 6123 / 4$. Less case, below. For operation from $105-120 \mathrm{v}$. 50.60 cycle AC. Wt., 20 lbs.

72 SU 091-J. $\$ 15$ Monthly.
NET 299.50
72 SX 072. MC-2 Metal Case. Simulated leather, 7 lbs..... 15.95
72 SX 074C. Wood Case. Specify mahog, or walnut. 8 lbs.... 24.95


## R-200 STEREO FM-AM TUNER

- Built-in Multiplex Circultry
- $1.8 \mu \mathrm{~V}$ IHFM FM Sensitivity
- Exclusive Stereo Beacon

Sensltive cascode "front end" incorporates tuned RF stage. Wideband IF section has 5 stages, 4 limiters. "Stereo Beacon" lights an indicator when stereo is being transmitted and automatically switches the tuner from monophonic to stereo operation; interstage nolse suppressor; 3 indicator llahts; tuning meter; Distant/Local FM Sensitivity switch. Size, $4^{13 / 10 \times 15} 1 / 9 \times 123 / 2^{n}$. Less case (listed below). For operation from $105 \cdot 120 \mathrm{v} .0$, $50-60$ cycle AC. Shpg. wt., 30 lbs.
72 SU 047-J. $\$ 5$ Monthly, NET 299.50
72 SX 074C. Wood Case. Specify mahogany or walnut. Wt., 8 lbs.


MPX-200 MULTIPLEX ADAPTER

- Place It Anywhere-Set Controls Once, Operates Automatically - High Channel Separation, Low Distortion

For concealed installation. For any tuner with multiplex adapter jack. Self-powered. Automatically switches to stereo when multiplex is received. $4 \times 12 \times 3 \frac{1}{2}$. For 105 120 v. $50-60$ cycle AC. 4 lbs. 72 SU 098-J. $\$ 5$ Monthly.... NET 79.50

## PR-6 PREAMPLIFIER

Use with cartridge, tape head or mikedrives power amplifier. Equalization: phono, RIAA: tape, NARTB. Response: $\pm 2 \mathrm{db}, 20-30,000 \mathrm{cps}$. Hum: 60 db down. For operation from 105-120 v., 50-60 cycle AC. Shpg. wt., $11 / 2$ Ibs. 72 S 049-J.

NET 12.95

## MPX-100 MULTIPLEX ADAPTER

- Switches Itself to Stereo When Multiplex Broadcast is Being Received
- Convenient Stereo Dimension Control

For any tuner with multiplex adapter jack. "Stereo Beacon", stereo dimension control. $41 / 8 \times 47 / 8 \times 12^{2}$. Less case, below. For 105-120 v. $50-60$ cycle AC. 9 lbs. 72 SU 095-J. $\$ 6$ Monthly. . NET 119.50

72 SX 096 C . Wood Case. Soecily mahogany or olled walnut. Wt., 2 lbs... NET 14.95

## K-10 "SPACEXPANDER"

Not illus. Simulates concert hall reverberation. Use with any stereo or mono music system having separate preampliflers or tape monitoring facilities. Delay: 33 msec . Requires 0.2 v . input. 7 lbs . 72 SX 097-J. $\$ 5$ Month/v... NET 69,50

## harman kardon <br> The World-Famous Citation Line



Complete stereo control center for your hi-fl system. Ideal mate for the Citation II. Offers ease of assembly, separate, step-type tone controls for each channel. DC filaments, low-noise resistors, 18 stages ( 9 dual triodes). Response: +0 , $-0.5 \mathrm{db}, 5-80,000 \mathrm{cps}$. Distortion: under $0.05 \%$ at 2 v . Controls: Function (Aux, Tape, Tuner, Phono 1, Phono 2, Tape Head); Mode Selector; Blend (also adjusts third channel output), Equaliza. tion (2), Tone (4), Batance, Phase, Reverse, Contour, Tape Monitor, Power. $6 \times 14 \% \times 12 \%$. Less case, below. For 110 120 v., $50-60$ cycle AC. 31 lbs .
72 SU 100-J. $\$ 8$ Monthly.. NET 159.95
72 SU 101-J. Above, wired. NET 249.95
72 SX115. WC-1 Case. Walnut veneer. $73 / 4 \times 163 / 16 \times 12 / \%^{*} .3$ lbs.

NET 29.95

## CITATION I DELUXE STEREO PREAMPLIFIER KIT

## CITATION II STEREO BASIC AMPLIFIER KIT

Delivers 60 -watts per channel for 120 watts of transparently-smooth sound. Multiple feedback loops provide low distortion, high stability. Uses 4-KT88 audlo output tubes. Power supply uses 4 sllicon diode rectifiers, filter choke. heavy-duty electrolytics and potted pow. er transformers. Response: $+0,-1 \mathrm{db}$, 20-20,000 cps. Harmonic Distortion: less than $0.5 \%$ at full power $(20 \cdot 20,000 \mathrm{cps})$. IM Distortion: less than $0.5 \%$ at full pow. er. Hum and Noise: better than 90 dB below 60 watts. Bias meter. Gold and charcoal brown. $9 \times 16^{3 / 6} \times 11^{1 / 2 \pi}$. Less case, below. For 110.120 v. $50-60$ cycle AC. Wt., 71 lbs.
72 SU 102-2J. \$8 Monthly. . . 159.95 72 SU 103-J. Above, wired. NET 229.95 AC II METAL CASE. For above. 2 lbs. 72 S× 117


## NEW CITATION IIX STEREO FM TUNER KIT

Provides outstanding FM and stereo FM reception. Offers sensitive Nuvistor front end, 3 wide-band IF stages, preallgned RF and multiplex sub-assemblies. Tun. ing and signal strength meters. Sensitivity: $0.65 \mu \mathrm{v}$ for 20 db of quieting. Response: $\pm 0.5 \mathrm{db}, 1.52,000 \mathrm{cps}$. Gold and brown. $6 \times 14 \frac{1}{6} \times 121 / 6^{\prime \prime}$. Less case. For 110 . 120 v., $50-60$ cycle AC. 40 lbs .
72 SU 104-J.
NET 219.95 72 SU 105-J. Above, wired. NET 299.95 CITATIONIII FM TUNER KIT. As above, less multiplex circuit. 32 los. 72 SU 106-J

NET 149.95 72 SU 107-J. Above, wired. NET 229.95
WC-1 WOOD CASE. For above units. Walnut veneer. 3 ibs.
72 SX 115
NET 29.95
72 SU 108-J. Citation IIIMA Multiplex Adapter. Plugs into Citation lii. above. Wt, 8lbs. Factory Wired NET 79.95

## CITATION IV STEREO PREAMPLIFIER KIT

Offers many of the features of the Citation I, above. Includes separate bass and treble controls for each channel, DC on filaments, low-noise resistors. Continuously variable blend control. Response: $+0,-0.5 \mathrm{db}, 5-80,000 \mathrm{cps}$. Distortion: less than $.05 \%$ at 2 v . Brown and gold. $5 \mathrm{5} / 8 \times 14 \mathrm{~T} \times 11^{\circ}$. Less case, below. For $110-120$ v., $50-60$ cycle AC. 25 lbs .

72 SU 111-J. $\$ 6$ Monthly.
72 SU 112-J, Above, wired. $\$ 10$ Monthly.
72 SX115. Wood Case. Walnut veneer. 3 ibs

## CITATION V STEREO BASIC AMPLIFIER KIT

An ideal mate to the Citation IV, above, delivers 40 watts per channel for full 80 watts of superior stereo or monophonic output. $4-7581$ output tubes. Resp: $+0,-1 \mathrm{db}, 2-80,000 \mathrm{cps}$ at 1 watt IM distortion: less thian $0.5 \%$ at 80 watts. Hum and noise: better than 85 db below 40 watts. Has bias meter. Goid and charcoal brown. $5 \frac{1}{2} \times 131 / 8 \times 11 \frac{1}{4}$. Less case, below. For $110-120$ v.0 $50-60$ cycle AC. 40 lbs
72 SU 113-2J. $\$ 6$ Monthly
72 SU 114-J. Above, wired. $\$ 9$ Monthly
72 Sx 117. AC $V$ Metal Case. For above. 2 lbs .

NET 119.95
NET 119.95
NET 189.95
NET 29.95

NET 179.95 NET 7.95

## CITATION "A" TRANSISTOR STEREO PREAMP KIT

- Uses 35 Transistors, Regulated Power Supply
- Unmeasurable Distortion, Flat Response

Meets the requirements of the most demanding audio perfectionist. Pushbutton selector switches; accommodates every conCeivable source of sound. Response: $+0,-1 / 4 \mathrm{db}, 1 \mathrm{cps}$ to 1 mc . Harmonic Distortion: unmeasurable at 2 -volts output. Hum and Noise: 70 db below rated output with 5 mv input. Military-type terminal board construction. Brown and gold panel; less case. $147 / \times 55 / 87^{7}$. For $110-120$ v., $50-60$ cycle AC. 30 ibs. 72 SU 109-J. $\$ 13$ Monthly.

NET 249.95 72 SU 110-J. Above, wired. $\$ 17$ Monthly............. NET 349.95 72 SU 201. WCA Wainut Case. Wt., 3 Ibs.

## All-New "Award" Series Kits by



## A-30K 30-WATT STEREO AMPLIFIER KIT

Low cost, excellent quality stereo amplifier in easy-to-build kit form. Provides IHFM music power output of 15 watts per channel for a full 30 watts of stereo or monophonic sound. Offers a full array of controls and inputs to accommodate ev. ery stereo or monophonic music source Zero-to-Infinity balance control lets you adjust for optimum stereo effect. Continu ously variable Blend control eliminates "hole-in-middle" effect. Ganged bass and treble controls cut or boost both channels simultaneously. Pushbutton switch lets you turn unit on and off without upsetting controls. Response: $\pm 1 \mathrm{db}, 15-70,000 \mathrm{cps}$ at 1 watt. Disfortion: less than $1 \%$ at rated
output. Front Panel Controls: Function (Phono-Lo/Tape-Lo, Phono-HI, Tuner, Aux/Tape-Hi); Loudness; Blend; Bass; Treble; Balance; Rumble Filter; Contour; Stereo Reverse: Equalization (RIAA, NARTB). Tubes: 4-7408; 4-12AX7; 112AU7; plus two silicon rectifiers. Handy $A C$ outlet. Size: $51 / 10 \times 151 / 4 \times 111 / 2{ }^{\prime \prime}$. Less case, below. For $110-120$ v., $50-60$ cycle AC. 25 lbs .
72 SU 118 -J. $\$ 5$ Monthly..... NET 79.95
72 SX 126. CX-50 Gray Metal Case. For above. Shpg. wt., 2 lbs NET 12.55

## 72 sx127. WW50 Wood Case. Walnut

 veneer. Shpg. wt., 3 lbs
## REMARKABLE "AWARD"KITS



Unique Assembly with:

- Continulty Test Probe
- "Tool-Box" Packaging
- "Read-and-See" Instruction Book

Enjoy the gratifying experience of building a superb high-fidelity instrument with your Own hands. New "Award" series kits offer advanced kit-building techniques to insure that your finished kit will be iden. tical to a factory-assembled instrument.
Modular construction techniques simplify assembly. Battery operated continulty probe permits stage-by-stage checking as the kit is under construction.
"Tool Box" packaging with pull-out trays simplifies handling and identification of parts. Permits simple storage at any stage of construction.
"Read and See" Instruction book includes easy-to-follow text as well as diagrams plus interesting basic explanations of how the instrument works.

## A-50K 50-WATT STEREO AMPLIFIER KIT

Professional features at moderate cost in an easy-to-build amplifier kit. Provides IHFM music power output of 25 watts per channel. Perfectly mates with the F-50XK Stereo Multiplex FM Tuner Kit, below. Features massive output transformers of special design for flawless response. Unique blend light indicates degree of channel separation-works with stereo blend trol. Jack on front panel disengages speakers when headphones are plugged in. Also has separate bass and treble controls for each channel; pushbutton on-off switch.
Response: $\pm 1 \mathrm{db}, 12 \cdot 35,000 \mathrm{cps}$ at 1 watt. Distortion: less than $0.5 \%$ at rated output. Controls: Speaker Reverse; Tape Monitor; Hi-Cut; Lo-Cut; Contour; Stereo Reverse; Ambiance; 2-Bass: 2-Treble; Balance; Blend; Loudness; Function Selector. Tubes: 4-7355; 1-12AU7; 4-12AX7/ECC83. Size, $57 / 6 \times 15 \frac{1}{4} \times 12^{\prime \prime}$ (excluding knobs). Less case, uses elther CX-50 Metal Case or WW50 wood Case. listed under F.50XX, below. For 110-120 v. 50.60 cycle AC. Wt., 32 lbs .

72 SU 120-J. \$6 Monthly.
NET 119.95

## F-50XK STEREO MULTIPLEX FM TUNER KIT

Sensltive, distortion-free FM tuner that's the ideal mate to the A. 50 K Amplifier, above. Includes built-in mutiplex circuit for reception of dazzling stereo FM broadcasts. Among its many leatures: wide-band discriminator clrcuit; AFC for "lock-in" tuning-with defeat provision; and indicator lights that show mode of operation $x$-standard FM or Multiplex. Sensitivity: 0.85 $\mu \vee$ for 20 db quieting; $3 \mu \mathrm{~V}$ IHFM. Frequency Response: $\pm 1 \mathrm{db}$, $10-52,000 \mathrm{cps}$. Distortion: less than $0.1 \%$ at $100 \%$ modulation. Controls: On-Off; FM-Multiplex; Interchannel Muting; AFC; Tuning. Attractive brushed gold panel. Size, $5^{1 / 10 \times 15} 1 / 4 \times 12^{-2}$. Less case. below. For $110-120$ volts, 50.60 cycle AC. Shpg. wt., 24 lbs .
72 SU 121-J. $\$ 7$ Monthly.
NET 129.95
72 SX 126. CX-50 Gray Metal Case. For use with A.60K and F-50Xk, above. Shpg. wt.. 2 lbs.......................... NET 12.95 72 SX127. WW50 Wood Case. For A.60K and F.50XK, above. Walnut veneer. Shpg. wt., 2 lbs.

NET 29.95


## harman kardon

## Superbly Engineered and Styled



Strikingly attractive brushed gold styling, complete control facilities and stable performance keynote this outstanding, low cost stereo amplifler. Delivers IHFM power output of 15 watts per channel; a perfect mate for the T.300X, below. Accommodates every stereo or monophonic signal source. Offers balance and blend controls for optimum stereo; convenient illuminated push. button on;off switch; and ganged bass and treble controls.
Frequency response: $\pm 1 \mathrm{db}, 15-70,000 \mathrm{cps}$ at 1 watt. Distortion: less than $1 \%$ at rated output. Controls: Function (Phono-Lo/TapeLo, Phono-Hi, Tuner. Aux/Tape Hi)i Loudness; Blend; Bass: Treble; Balance; Rumble Filter; Contour; Stereo Reverse; Equall. zation (RIAA, NARTB). Tubes: 4-7408; 4-12AX7; 1-12AU7; plus 2 silicon rectifiers. Also has handy AC convenience outiet. Size, $5 \% / 1 \times 151 / 6 \times 111 /{ }^{\prime \prime}$. Less case, below. For $110-120 \mathrm{v} ., 50-60 \mathrm{cycle}$ AC. Shpg. wt. 25 lbs.
72 SU 136-J. 55 Monthly.
.net 99.95
72 SX 126. CX-50 Gray Metal Case. 2 Ibs.
. NET 12.95

## SAVE $\$ 92.59$ <br> Complete System ${ }^{5} 252^{95}$ <br> $\$ 13$ monthly

## MODEL A-300 30-WATT STEREO AMPLIFIER

## Nef <br> - Thrililing Sound at a Budget Price

sgg95
ontro

- Extremely Wide Frequency Response
$\$ 5$ monthly
- Beautiful Brushed Gold Panel

72 SX 127. WW-50 Wood Case. Walnut Veneer. 3 Ibs. NET 29.95

## STEREO PHONO SYSTEM FEATURING Ā-300

Dazzling stereo, full flexibility and outstanding economy make this a winning custom componenl combination i System Includes: Harman-Kardon A-300 30-Watt Stereo Amplifier; Garrard Type "A" 4-Speed Record Changer and Wood Base; Shure M3D Stereo Cartrldge with .0007 Dlamond Needle; and 2University S-80 2-Way Speaker Systems. In addition, you receive all connecting cables.
Garrard Type " $A$ " Changer and Shure Cartridge get the most out of your records. University Speaker Systems have $8^{\prime \prime}$ woofer. $31 / 2{ }^{\prime \prime}$ direct-radiator tweeter; employ ported phase-inverter principle for wide response. Base and speaker systems in mahogany or walnut finish. Less amplifier case. 75 lbs.
21 HF 102C-J. Specify, Finish. $\$ 13$ Monthly
only 252.95
STEREO FM-AM-PHONO SYSTEM. Save \$130.54. Same as stereo system above but with Harman-Kardon TA-3000X Stereo Multiplex Receiver described below in place of A-300 Stereo Amplifier. Less amplifier case. 92 Ibs.
21 HF 103C-d. Specify Finish. $\$ 17$ Monthly.
ONLY 367.95


## T-300X STEREO MULTIPLEX

 FRA-AR TUNER- Buitt-In Stereo FM Multiplex Circuit
- $0.95 \mu \mathrm{r}$ Sensitivity on FM
- AFC "Locks-In" FM Stations
- Attractive Brushed Gold Stylling

A superb choice for low-cost systems. Combines sensitive $F M$ and $A M$ tuners. FM section has built-in multiplex circuit that provides excellent separation, wideband discriminator, 4 IF stages. Sensitivity $0.95 \mu \mathrm{~V}$ for 20 db quieting; $3.2 \mu \mathrm{~V}$ IHFM. Response: $\pm 1 \mathrm{db}$., $10 \cdot 35,000 \mathrm{cps}$. AM section has high selectivity and image rejection; ferrite loop antenna. Controls: Tuning; On-Off; AFC; Multiplex Off-On: Selector (AM-FM); FM Stereo Noise Filter. AC outlet. Size, $51 / 16 \times 15 \frac{1}{4} \times 111 /{ }^{\circ}$. Less case, below. For 110.120 v ., 50.60 cycle AC. Wt. 25 lbs.
72 SU 137-J. $\$ 8$ Monthly... NET 149.95
CX-50 GRAY METAL CASE. 2 Ibs.
72 SX 126
. NET 12.95
WW-50 WOOD CASE. Wainut veneer. Shpg. wt., 3 lbs.
72 SX 127
NET 29.95

## TA-3000X STEREO RECEIVER

- All-in-1 Stereo Tuner-Amplifier
- High Sensitivity-Plenty of Power
- Attractive Brushed Gold Styling

For professional performance at a moderate price, combines stereo multiplex FM and AM tuner, 30 -watt stereo amplifier, and full array of controls. FM tuner section has multiplex circult, 3 If stages.
Sensitivity: $3.2 \mu \mathrm{~V}$ IHFM. AM section has high selectivity. Amplifier section delivers IHFM music power of 15 watts per channel. Response: $\pm 1 \mathrm{db}, 15 \cdot 70,000 \mathrm{cps}$ at normal listening levels. Controls: Function: Loudness; Blend; Balance; Bass; Treble; Stereo Reverse; Phono-Tape; Contour; LoCut; Hi-Cut; On-Off. AC outlet. $51 / a x 151 / 4 x$ $111 / 2^{*}$. For operation from $110 \cdot 120 \mathrm{v}$., $50-60$ cycle AC. Shpg. wt., 37 lbs .
-72 SU 141-J. $\$ 13$ Monthly.. NET 244.95
CX-80 GRAY METAL CASE. For above. Shpg. wt., 2 lbs .
72 SX 160
NET 12.95
WW-80 WOOD CASE. Walnut veneer. Shpg. wt., 3 lbs.
72 SX 169
NET 29.95

## "Award Series" Stereo Components



## A-500 50-WATT STEREO AMPLIFIER

- Separate Bass and Treble Controls for Each Channel
- Unique Blend Indicator Light, Stereo Headphone Jack

Loaded with features for pleasurable Ilstening, offers a full array of controls and inputs. Blend lights indicate channel separation. Ambiance control acts as center channel gain control. Response. $\pm 1 / 2 \mathrm{db}, 12-35,000 \mathrm{cDs}$ at 1 watt. Output: 25 watts per channel IHFM. Distortion: less than $0.5 \%$ at 1 watt. Pushbutton on-off switch. $57 / 16 \times 151 / 4 \times 12^{2 \prime}$ (excluding knobs). Less case, below. For $110-$ $120 \mathrm{v},$.50.60 cycle AC. 32 lbs .
72 SU 152-J. $\$ 8$ Monthly.
NET 159.95
72 SX 126. CX-50 Gray Metal Case. 2 lbs.
NET 12.95
72 SX 127. WW-50 Wood Case. Walnut veneer. $3 \mathrm{lbs} . . . .29 .95$


## F-500X STEREO MULTIPLEX FM TUNER

- Interchannel Muting Switch; Distant-Local Range Switch
- Illuminated Tuning Meter; On-Off Pushbutton Switch

Highly sensitive and distortion-free, offers everything the discriminating listener deslres. Has bull-in multiplex, twin tuning gangs, Image-rejecting RF stages, wide-band discriminator. Indicator lights show mode of operation-FM or Muitiplex. Brushed oold panel. Sensitivity: $3 \mu \mathrm{~V}$ IHFM. Response: $\pm 1 \mathrm{db}$, $10-52,000 \mathrm{cps}$. Distortion: Less than $0.1 \%$ © $100 \%$ modulation. Front Panel Controls: On-Off; FM Multiplex; Interchannel Muting Defeat; AFC Defeat; Tuning. Size, $5^{1 / 14 \times 15} 1 / \times 12^{\prime \prime}$. Less case, use with either CX-50 Metal Case or WW-50 Wood Case, at left. For $110-120$ y., $50-60$ cycle AC. Shpo. wt., 24 Ibs. 72 SU 157-J. \$9 Monthly

NET 169.90

## TA-5000X DELUXE 50-WATT STEREO MULTIPLEX RECEIVER

A complete stereophonic home music center on a single chassis, the TA5000X combines a sensitive FM.AM tuner with a powerful 50 -watt stereo amplifier and a complete array of controls and inputs. FM section has multiplex clicuit, wide-band discriminator, gated-beam limiter, illuminated tuning meter. Sensitivity: $3.2 \mu \mathrm{~V}$ IHFM. AM section has high-gain RF amplifier. 10 kc bandwidth. Amplifier section provides 25 watts per channel IHFM music power. Response: $\pm 1 \mathrm{db}, 12 \cdot 70,000 \mathrm{cps}$ at

1 watt. Has separate bass and treble controls for each channel; also, blend and contour controls, front-panel stereo headphone jack. Brushed gold panel. Size, 61/4 $\times 16 \times 13 \frac{1 / 2}{2}$ (excluding knobs). For 110.120 v., 50-60 cycle AC. 40 lbs.

72 SU 159-J. \$15 Monthly. NET 299.95 72 SX 160. CX-80 Gray Metal Case. For above. Shpg. Wi., 2 lbs.

NET 12.95 72 SX 169. WW-80 Wood Case. Fop above. Wainut vencer. Wt. 3 Ibs. NET 29.95

## New All-Transistor Stereo Components

## A-1000T ALL-TRANSISTOR SO-WATT STEREO AMPLIFIER

Offers superb, transparently smooth sound. Uses 29 transistors and 4 diodes. Audio transformers are eliminated to achieve flawless reproduction. Has 6 pairs of inputs, center-channel and headphone ouiputs. Controls grouped for cortvenience. Response: $\pm 1 / 2 \mathrm{db}, 1-250,000$ cps. Distortion: below $0.5 \%$. Hum \& Noise: 90 db down. $3 \% \times 14^{1 / 10} \times 8 \frac{3}{2}$. Less case For 110.120 v., $50-60$ cycle AC. 20 lbs.
72 SU 185-J. $\$ 13$ MOnthly. . NET 249.95 72 SU 200. Wood Case For Above. Walnut finish. Shpg. wt.. 3 lbs..... NET 19.95

## F. 1000 T ALL-TRANSISTOR STEREO MULTIPLEX FM TUNER

Provides superb FM and stereo FM recep. tion. Uses 17 transistors and 13 diodes. Has stereo indicator light, automatically switches to stereo reception. Also: tuning meter, range switch, AFC. Sensitivily: 2.8 ${ }_{\mu \mathrm{V}} \mathrm{IHFM}$. Response: $\pm 3 / 4 \mathrm{db}, 5-75,000 \mathrm{cps}$. Signal-to-Noise Ratio: 80 db . Distortion: below $0.1 \%$. Size, $35 \times 14^{1 / 6 \times 83} \%^{\circ}$. For 110.120 $v ., 50-60$ cycle AC. Wt., 12 lbs.
72 SU199-J. $\$ 11$ Month/y. NET 209.95
72 SU 200. Wood Case. In walnut finish. Shpg. wt., 3 lbs.

NET 19.95

## Multiplex Adapters for Harman Kardon FM Tuners

## MX. 700 MULTIPLEX ADAPTER

 Self-powered, operates with older Har. man Kardon FM and FM-AM tuners equipped with multiplex output jack. 3. connections with cables supplied. $9 \times 21 / 2 \times$ $4^{*}$. For $110-120$ v. $50-60$ cycle AC. 5 lbs .72 SU 146-J. $\$ 5$ Monthly..... NET 59.95
72 SX 147. CX-70 Metal Case: For above. ShDg. wt., 2 lbs.

MX-600 ADAPTER. Not illus. For TA-230, TA-224, TA-260 tuners. Plugs into chassis. Takes power from tuner. 2 lbs.
72 SU 148-J. $\$ 5$ Monthly..... NET 49.95

MX-500 ADAPTER. As above, for F-500, ST. 350, ST. 360 , ST.360A tuners. 5 lbs. 72 SU 149. $\$ 5$ Monthly.

NET 39.95


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A-1000 T
$$



# Illlntorosh <br> Professional Quality Hi-Fi Components 



NEW MXIIO STEREO TUNER-PREAMP
\$37450

- Has Front Panel Stereo Indicator
- Incorporates Cascode RF Stage, 3 IF

Less Cabinet Amplifier Stages, 2 Limiter Stages

Masterfully engineered to satisfy the requirements of the most critical audio connoisseur, this superb tuner-preamplifier provides the ultimate in quality FM and FM multiplex reception. Features full array of controls-employs 15 tubes; EM84A tuning indicator; 13 dlodes; 4 rectifiers. Tuner sensitivity is better than $2.5 \mu \mathrm{~V}$ at $100 \%$ modulation. Supersonic multiplex frequencies are efficiently suppressed for heterodyne-free tape recording. Response: $\pm 1 \mathrm{db}, 20-20,000 \mathrm{cps}$. Distortion: less than $0.6 \%$ at $100 \%$ modulation. Anodized gold and black front panel. $5 \frac{1}{6} \times 151 / 2$ $\times 12 \%^{\prime \prime}$. Less cabinet. For operation from $110-120 \mathrm{v} ., 50-60$ cycle AC. Shpo. wt. 30 lbs .
72 SU 303-J. \$18 Monthly
NET 374.50
72 SX 304. Olled Walnut Cabinet. 5 lbs .
.NET 25.00


## C20 STEREO PREAMPLIFIER

s26900

- Meets the Highest Professional Standards
- 15 Pairs of Inputs and a Full Set of Controls Less Cabinet Handle Any Program Source
This highly flexible preamp provides complete command over all stereo or monophonic material-comparable to the control provided by professional recording and broadcast installations. Controls: Input Selector (Aux., Tape, Tuner 1 and 2 Stereo or Mono, Phono 1 and 2 Stereo or Mono, Tape Head 1 and 2); Function Selector (Stereo Normal or Reverse, Left Channel only, Right Channel only, M-Left, M-Right-left or right channels to both speakers); Bass and Treble; Bass and Treble compensators, including RIAA, LP, Tape Head, flat position; Balance; Phase; Loudness; High-Frequency Filter; Rumble Filter; Tape Jack switch; Volume/On-Off, Low-Frequency Trim. Response: $\pm 1 / 2 \mathrm{db}$, $20-20,000 \mathrm{cps} .51 / 6 \times 15 \frac{5}{6} \times 1211 / 6^{*}$. Less cabinet, listed below MX110, at left. For $110-120$ v., $50-60$ cycle AC. Shpg. wt., 29 lbs. 72 SU 301-J. $\$ 12$ Monthly

NET 269.00

008068


## C11 STEREO PREAMPLIFIER

- For Deluxe Systems


## $\$ 22950$

Less Cabinet * Superior Response

- 9 Pairs of Inputs

An excellent choice for deluxe home music systems, the C11 stereo preamp control center provides complete command of all audio reproduction. Assures smooth, pleasing sound from any highquality source and permits precise tonal adjustment to suit room acoustics and personal taste.
Controls: Input Selector (Aux., Tape, Tuner 1, Tuner 2, Phono 1, Phono 2, Mic., Tape Head); Mode Selector ( $L$ to $L$ and $R$, R to L and R, Stereo Rev., Stereo, Mono $L+R, L+R$ to $L, L+R$ to $R$ ); Left and Right Bass and Treble; Balance; Compensator; Tape; Phase; Power On.Off; Rumble Filter and High-Frequency Filter switches; Loudness; Volume; and Output Level $\pm 1 / 2 \mathrm{db}$. $20-20,000 \mathrm{cps} .51 / 8 \times 15 \frac{3}{4} \times 10^{\circ}$. Less cabinet, listed below MX110, above. For 110-120 y. 50-60 cycle AC. 25 Ibs.
72 SU 302-J. \$12 Monthly. . NET 229.50

## MR65B STEREO FM TUNERT

Precision-engineered and highly sensitive, this outstanding tuner provides superlative FM and FM multiplex reception. Features a 6DS4 high-gain Nuvistor as the first stage of a two-tube RF amplifier. Circuit offers extremely high sensitivity. yet still retains excellent selectivityenormously reduces possibility of interference from other stations. Usable sensitivity: $2.5 \mu v$ at $100 \%$ modulation. Hum: more than 70 db below $100 \%$ modulation. With multiplex indicator light. $51 / 2 \times 155 / 3 \times 12^{2 / 1 s^{\prime \prime}}$. Less cabinet. For $110-120$ v., $50-60$ cycle AC. Shpg. wt., 31 lbs.
72 SU $\mathbf{3 0 0 - J .} \$ 16$ Monthly. NET $\mathbf{3 2 9 . 0 0}$ $725 \times 304$. Olled Walnut Cabinet. $61 / 3 x$ $121 / \times 161 / 2 *$. Shpg. wt., 5 lbs. . . . NET 25.00

## MC225 50-WATT STEREO BASIC

A magnificent basic amplifier for use with any of the preamps on this page. 18-60,000 cps. IM and harmonic distortion: less than $0.5 \%$ at fuil output. $/ \mathrm{mp} .: 4,8,16,150,200$ ohms. $91 / 6 \times 6^{15} / 10 \times 14 \frac{1}{2}$. For $110-120 \mathrm{v}$., $50-$ 60 cycle AC. 39 lbs.
72 SZ 290-J. $\$ 10$ Monthly. NET 198.00

MC240 80-WATT STEREO BASIC
Meets the highest professional standards -ideal for the MX110 or C20. Output: 80 watts (40 watts per channel). Response: $\pm 1.0 \mathrm{db}, 15-60,000 \mathrm{cps}$, full power. Harmonic and $\mathbb{M}$ Distortion: less than $0.5 \%$. /mo.: 4, 8, 16 ohms. For 105-130 v., 50-60 cycle AC. $10 \frac{1}{2} \times 7 \frac{1}{1} \times 16 \%$. 60 lbs 72 Sz 291-J. \$15 Monthly. NET 288.00

MC75 75-WATT BASIC AMPLIFIER Ideal for use in monophonic systems, or in pairs in ultra-deluxe stereo systems. Same electrical specs as MC225, at left. $81 / \times 81 / \times 16 \frac{1}{4}$. For $117-125 \mathrm{v} ., 50-60$ cycle AC. Shpg. wt., 48 lbs .
72 SZ 285-J. \$12 Monthly. NET 229.50

## MC40 40.WATT BASIC AMPLIFIER

 Carefully engineered monophonic basic amplifier. Response: $+0,-1 / 2 \mathrm{db}, 16-60,000$ cps at rated output. Hum and noise: more than 90 db below rated output. Impedance: $4,8,16,125,150,600$ ohms. $71 / 8 \times 81 / 8 \times 131 / 4$. For operation from 110.120 v., 50.60 cycle AC. Shpg. wt., 35 lbs .72 SU 281-J. $\$ 8$ Monthly. . NET 159.00

## IODEL 2425S1 30-WATT FM-AM STEREO RECEIVER

implete tuner-amplifier combination for outstanding reception AM, FM and FM multiplex broadcasts-just connect it to a pair good speaker systems and you have a top-notch FM-AM music stem. "Stereo Sentry" automatically switches FM section to ultiplex during "stereocasts." FM section sensitivity, $1.5 \mu \mathrm{~V}$ im and noise level, -52 db ; response, $20-20,000 \mathrm{cps}, \pm 1 \mathrm{db}$. $M$ section sensitivity, $6 \mu$ for $20 \mathrm{db} \mathrm{s} / \mathrm{n}$ ratio. Output, 30 watts 5 watts per channel). Outputs: 8, 16 ohms and 2 high-imped. ice. $57 / 6 \times 17 \frac{1}{6} \times 131 / 4$. For $110.120 \mathrm{v} . \mathrm{s} 50-60$ cycle AC. With alnut-finished, metal cabinet. 30 lbs.
!SU 214-J. \$12 Monthly
.NET 259.95

## MODEL 2445S1 44-WATT STEREO FPA-AM RECEIVER

tot illus.) Deluxe tuner-amplifier for exceptional AM. FM and M stereo multiplex receptlon. FM tuner has sensitivity of 1.2 $v_{i} 3$ wide-band IFs; "Stereo Sentry" which automatically witches to multiplex. Output, 44 watts ( 22 per channel); hum, 6 db down. Response, $20-20,000 \mathrm{cps}, \pm 1 \mathrm{db}$. Oufputs: 4, 8, 16 hms: 2 high-impedance for tape recorder. $5 \% / \pi \times 173 / 6 \times 133 / 4 \mathrm{~m}$. vith walnut-finished, metal cabinet. For $110-120$ v., 60 cycle AC. 6 lbs .
-2 SU 202-J. $\$ 15$ Monthly.


## MODEL 242034 -WATT STEREO AMPLIFIER

vatching the appearance and performance of the tuners on this jage, thls versatile stereo amplifier serves as the ideal "heart" for a quality home music system. Provides output of 34 watts ( 17 watts per channel). Response: $\pm 1 \mathrm{db}, 20-20,000 \mathrm{cps}$. Hum and noise: 72 db below 17 watts. Features: 2 pairs of phono inputs so 2 record-playing sources can be permanently connected; 2 palrs of tape head as well as tape amplifier inputs; indlvidual bass and treble controls for each channel. Two filters "erase" scratch and rumble without cutting response. Loudness compensation switch boosts bass at low volume settings. Outputs: 4, 8, 16 ohms; 2 high-impedance. $57 / 4 \times 173 / 16 \times 105 /{ }^{*}$. With walnut-finished, metal cabinet. For $110-120 \mathrm{v}$., 60 cycle AC. 22 lbs. 72 SU 203-J. $\$ 7$ Monthly.

NET 129.95

## MODEL 2440 44-WATT STEREO AMPLIFIER

Deluxe stereo amplifler with all the features you need for reproducing fine music in your home. Provides music power output of 44 watts ( 22 per channel). Response: $\pm 1 \mathrm{db}, 20 \cdot 20,000 \mathrm{cps}$. Hum and noise: 76 db below 44 watts. Has 2 pairs of phono inputs; tape head inputs plus tape amplifier inputs; separate sillcon DC filament and bias supply for added stability; etc. Outputs: 4, 8, 16 ohms; 2 high-imped. $57 / 16 \times 17^{3} / 6 \times 105 / 6^{\circ}$. With walnut finished, metal cabinet. For $110-120 \mathrm{v} ., 60$ cycle AC. 28 lbs. 72 SU 204-J. $\$ 8$ Monthly.

NET 159.95

## MODEL 2419 STEREO FM MULTIPLEX TUNER

incorporating many exceptional design and performance features, this fine stereo tuner provides perfect reception of either regular FM or stereo multiplex FM broadcasts. High sensitivity of $1.7 \mu \mathrm{v}$ for 20 db signat to noise ratio insures better FM stereo reception; channel separation is 30 db . "Stereo Sentry" automatically switches circuit to stereo when multiplex signal is recelved. Also: adjustable AFC; bullt-in filters for pertect, whistlefree stereo tape recording. $57 / \mathrm{h} \times 141 / 4 \times 10 \%$. With walnut-finished, metal cabinet. For $110.120 \mathrm{v} ., 60$ cycle AC. 12 lbs.
72 SU 207-J. $\$ 8$ Monthly.
NET 149.95

## MODEL 2421 SI AM-FM MULTIPLEX TUNER

(Not Illus.) Economy-priced stereo tuner with all the basic fea. tures you need to enjoy top-notch AM FM or FM stereo multiplex reception. FM sensitivity: $1.5 \mu v$ for 20 db quieting; stereochannel separation: $30 \mathrm{db} .5 \% / \mathrm{m} \times 17 \% \times 10 \%$ ". Whth walnut-finished, metal cabinet. For $110-120 \mathrm{v}, 60 \mathrm{cycle} \mathrm{AC} .18 \mathrm{Ibs}$. 72 SU 206-J. $\$ 8$ Monthly.
.NET 159.95

## MODEL 2441SI AM-FM STEREO MULTIPLEX TUNER

Deluxe tuner with a host of features. FM section with sensitivity of $1.2 \mu \mathrm{v}$ pulls in the weakest stations with low distortion. AM section's $4 \mu v$ sensitivity, wideband response and $10-\mathrm{kc}$ whistle filter provides quality AM reception. Channel separation of 30 db for thrilling stereo IIstening. $57 / 6 \times 17 \% / 16 \times 10 \%$. With walnutfinished, metal cabinet. For $110-120 \mathrm{v} ., 60$ cycle AC. 18 lbs. 72 SU 205-J. $\$ 10$ Monthly

NET 189.95


## EICD; Designed for Impressive Sound Quality

 clutch-type level, bass and treble controls for each channel; balance control; balance check switch; tape monltor switch: rumble and scratch filters; volume/loudness switch. inputs for tape recorder, tape head, phono (2), FM-AM, AM-AM, and FM. Multiplex. Output for 3 rd channel. Response: $\pm 1 \mathrm{db}, 12 \cdot 25,000 \mathrm{cps}$. Distortion: $1 \mathrm{M}, 1 \%$ at 40 watts; Harmonic, $1 / 2 \%$ at 40 watts. 4- 7591 output tubes. Impedance, $4,8,16$ ohms. $5 \times 15 \% / 3^{\prime \prime}$. With metal case. For $110 \cdot 120$ v., $50 \cdot 60$ cycle AC. 35 lbs .
72 SU 305-J. $\$ 5$ Monthly
NET 79.95 72 SU 306-J. Model ST-40. Above, wired.
.NET 129.95

## ST-70K 70-WATT STEREO AMPLIFIER KIT

Not illus. Full array of controls and inputs. Response: $\pm 1 \mathrm{db}$, $9-60,000 \mathrm{cps}$. Distortion: IM, $1 \%$ at 70 watts; Marmonic, $1 / 2 \%$ at 70 watts. $5 \times 15 \% \times 16^{\circ}$. For $110-120$ v., 50.60 cycle AC. 44 lbs.
72 SU 307-J. $\$ 5$ Monthly.
NET 99.95
72 SU 308-J. Model ST-70. Above, wired
NET 149.95

Get dazzling stereo, full flexibility-and save $\$ 67.21$ off the cost of the components purchased separately. System includes: Eico Model ST-40K 40-Watt Stereo Amplifier Kit (described fully at left); Garrard Type "A" 4-Speed Record Changer and Wood Base; New Pickering U-38AT Stereo Cartridge with $.0007^{\circ}$ Diamond Needle; and 2-Electro-Volce LT-12 $12^{\prime \prime} 3$-Way High Fidellty Speakers.

Garrard Type " A " Changer and Plckering Cartridge bring out the best in your records. Electro.Voice LT. 12 Speakers have $12^{\circ}$ woofer cone, exclusive "Radax" midrange, and" Sonophase" VHF driver for response that extends from 40 to $18,000 \mathrm{cDs}$. You also get all connecting cables to simpllify hookup of your system. Changer base in choice of mahogany, limed oak or walnut finish. Shpg. wt., 99 Ibs.
21 HF 104C-J. Specify Finish. $\$ 11$ Monthly. . . . . ONL. Y 205.95


MODEL ST-97K STEREO MULTIPLEX FM TUNER KIT
Deluxe tuner that provides excellent-quality reception of both conventional FM and stereo multiplex FM broadcasts. Employs factory prealigned frontend, if strip and wide-band ratio-detector on a pre-wired circuit board. Multiplex circuitry gives optimum channel separation for best stereo effect. Has bult-in $15-\mathrm{kc}$ sub-channel carrier interference filters at each output. Stereo indicator light shows you when station you are tuned to is broadcasting in stereo. Offers AFC that "locks-in" stations, defeat switch to ease tuning. Also has Tuning, Channel Separation, Stereo/Mono, and Power On/Off Controls. Frequency Response: $\pm 1 \mathrm{db}$, $20 \cdot 15,000 \mathrm{cps}$. Sensitivity: $3 \mathrm{\mu V}$ IHFM ( 1.5 . $\mu \mathrm{V}$ for 20 db quiating). Signal-to-Noise Ratio: - 55 db IHFM. Harmonic Distortion: $0.6 \%$ IHFM, IM Distor. tion: $0.2 \%$ IHFM. Has paired cathode-follower stereo outputs. $51 / 3 \times 15 \%$ x $11 \%$. With all parts and instructions, metal case. For $110-120$ v., $50-60$ cycle AC. 17 Ibs.
72 SU 309-J. $\$ 5$ Monthly.
NET 99.95
72 SU 310-J. Model ST-97. Above, wired
NET 149.95


## MODEL ST-96K FM-AM TUNER KIT

Low-cost tuner with separate FM and AM sections. Ideally matched to MX. 99 Multiplex Adapter, below. Features "Eye-tronic" tuning eye indicators. RF, IF stages and "Eye-tronics" are pre-wired. FM section has shielded front end, AFC with defeat, broadband ratio detector. Sensitivity: $11 / 2 \mu \mathrm{~V}$ for 20 db quieting. Size, $5 \times 15 \frac{1}{1 / \times 14^{\circ} .12}$ tubes, dlode and rectlfier. Metal case, instructions. For \$10.120 v., 50-60 cycle AC. 24 Ibs.
72 SU 311 -J. $\$ 5$ Monthly. NET 89.95
72 SU 320-J, Model ST-96. Äbove, wired.... NET 129.95

## MODEL MX-99 MULTIPLEX ADAPTER KIT

Plugs into any Eico FM tuner with a multiplex output jack. Lets you receive stereo multiplex FM broadcasts. $91 / 3 \times 63 / 6 \times$ 23 \%/ Less case, below. For 115 v. AC. 7 lbs.

## 72 SX 321 -J. $\$ 5$ Monthly

72 SX 322. Metal Case. For above 2 ibs.
NET 39.95
NET 2.95

# .ow Cost, Top Performing Hi-Fi Kits 



## HF-81K AMPLIFIER KIT

Low cost, 28 -watt stereo amplifier kit accommodates any stereo or monophonic signal source. Provides 14 watts per channel for stereo-at the flick of a switch becomes a 28 -watt monophonic amplifier. Low-level inputs in each channel for magnetic phono, tape head and mike. High level inputs for AM tuner. FM tuner and stereo multiplex FM tuner or adapter. Respanse: $\pm 0.5 \mathrm{db} .10-100,000 \mathrm{cDS}$ at 2 watts. Distortion: Harmonic, below $1 \%$ $30 \cdot 10,000 \mathrm{cDS}$ at 16 watts; $1 \mathrm{M}, 0.5 \%$ at 10 watts (stereo). Controls: Input Selector: Function Selector; ganged Level, ganged Bass; ganged Treble; Blend. 10 tubes, 2 rectifiers. $43 / 4 \times 15 \times 10 \frac{1 / 2}{2}$. Metal case. For $110-120 \mathrm{v}$., 50.60 cycle AC. 24 los.
72 SU 323 -J. $\$ 5$ Monthly.. . . . NET 69.95
MODEL. HF-81. Above, wired.
72 SU 324-J. $\$ 6$ Monthly... . . . NET 109.95
WOOD CASE. Wainut. 4 lbs. $72 \mathbf{S X} 325$.

NET 13.95

## ST-84K STEREO PREAMPLIFIER

Moderately-priced, offers full controls and inputs. Employs concentric tone and level controls, tape equalization, rumble and scratch filters, tape monitor feature. Res,0onse: $\pm 0.3 \mathrm{db}, 5-25,000 \mathrm{cos}$. Distortion. Harmonic, $0.06 \%$ : IM. $0.04 \%$. Hum and Noise: -65 db minimum. Metal case, $51 / 2 \mathrm{x}$ $15 \% \times 83 / 4$. For $110-120$ v., $50-60$ cycle AC. Shpg. wt., $81 / 2 \mathrm{lbs}$.
72 SX 364-J. $\$ 5$ Monthly ..... NET 59.95
MODEL ST-84. Wired.
72 5× 375-J. $\$ 5$ Monthly.
NET 89.95

## HF-85K STEREO PREAMPLIFIER

Low-priced, offers virtually every control and switching facility. Features exceptionally low distortion, tape head and mike inputs, lape and phono equalization. Clutch tone and level controls. Response: $\pm 0.3 \mathrm{db}, 5-25.000 \mathrm{cps}$. Distortion: Harmonic, $0.1 \%$ at 3 v . out: $I \mathrm{M}, 0.2 \%$ at 0.5 v .-out. IM, $0.07 \%$. Hum and Noise: -60 db minimum. Metal case, $35 / 8 \times 12 \times 81 / 4^{\prime \prime}$. For $110-120$ v., $50-60$ cycle AC. 8 lbs
72 SX376-J. $\$ 5$ Monthly..... NET 39.95
MODEL HF-85. Wired.
72 SX 377-J. $\$ 5$ Monthly... . . . . NET 64.95
WOOD CASE. For HF-85 and HF-85K. In walnut. Shpg. wt., 4 lbs.
72 SX 350 .
NET 12.50

## HFT-92K FM-AM TUNER KIT

An excellent value, features temperature compensated components; pre-wired, prealigned front end for easy assembly. "Eyetronic" tuning eye, multiplex jack (see MX-99 Adapter). FM Sensitivity: $11 / 2 \mu \mathrm{~V}$ for 20 db . Hum: $-60 \mathrm{db} .35 \times 12 \times 81 / \mathrm{a}^{\prime \prime}$. Metal case. For 115 v. AC. 12 lbs. 72 SX 335-J. $\$ 5$ Monthly..... NET 59.95 MODEL HFT-92. Above, wired. 72 SU 336-J. $\$ 5$ Monthly... . . . . NET 94.95 WOOD CASE. Oiled walnut. 4 Ibs. 72 SX 350.

NET 12.50

## HFT-94K AES TUNER KIT

Offers wide and narrow bandpass, tuned RF stage, "Eye-tronic" tuning indicator. ferrite-loop antenna, whistle fllter. 4 tubes, tuning eye, rect. $35 / 8 \times 12 \times 81 / 4{ }^{\frac{1}{4} \text {. Metal case. }}$ For 115 v. AC. 12 lbs.
72 SU 351-J. $\$ 5$ Month/y..... NET 39.95 72 SU 360-J. Above, wired. . . .NET 65.95 72 5X 350. Walnut Case. 4 lbs.. .... 12.50

## HF-89K 100-WATT AMPLIFIER KIT

Stereo basic amplifier. 4-EL. 34 ouput tubes, sllicon rectlfiers, massive output transformers. Response: $\pm 0.5 \mathrm{db}, 5-100,000$ cps. /M Distortion: $0.5 \%$ at 100 watts. Hum: $-90 \mathrm{db} .6 \times 11 \times 15^{\circ}$. Less case, below. For $110 \cdot 120$ v. $50-60$ cycle AC. 37 ibs.
72 SU 378-J. $\$ 5$ Monthly...... NET 99.50 72 SU 379-J. HF-89. Wired... NET 139.50

## HF-87K 70-WATT AMPLIFIER KIT

Stereo basic amp, provides 70 -watts of stereo or monophonic sound. 4-EL.34 output tubes. Same specifications as above, but IM distortion is $1 \%$ at 70 watts. $6 \times 15 \times 11^{\prime \prime}$. Less case, below. For $110-120 \mathrm{v}$. , $50-60$ cycle AC. 32 lbs.
72 SU 380-J. $\$ 5$ Monthly...... NET 74.95 72 SU 390.J. HF-87. Wired ........ 114.95 METAL CASE. For HF. 87 and 89.4 Ibs. 72 SX 391.

NET 4.50

## HF-86K 28-WATT AMPLIFIER KIT

Not illus. Stereo basic amplifier provides 28 watts of stereo or monophonic sound. Employs Williamson-type circuit with push-pull El-84 output tubes. Response: $\pm 0.5 \mathrm{db}, 10-100,000 \mathrm{cps}$. Hum: -90 db $5 \times 131 / 2 \times 9^{\circ}$. For $110-120 \mathrm{v} ., 50-60$ cycle AC. Wt., 16 lbs.
72 Sx 392-J. $\$ 5$ Monthly..... NET 43.95 72 SX 393-J. HF-86. Wired... NET 74.95 METAL CASE. For HF-86. 3 lbs 72 SX 498.

NET 3.95

## HFT-90K FM TUNER KIT

Unusually low in cost, the HFT.90K features factory pre-wired, pre-aligned front end. Has "Eye-tronic" tuning indicator that contracts into an exclamation point when station is perfectly tuned. Offers temperature-compensated components that provide fine sensitivity and stable, drift-free performance. Has volume and tuning controls.

Has jack for addition of multiplex adapter (see MX-99 Adapter on preceding page) Sensitivity: $1 \frac{1 / 2 \mu \mathrm{~V}}{}$ for 20 db quieting. Uses 6 tubes, tuning indicator and rectifier Size, $3 \% \times 12 \times 8 \frac{1 / 4}{4}$. Less case, below. For operation from 110.120 v., 50.60 cycle AC. WI., 10 lbs.
72 SX 361-J. $\$ 5$ Monthly..... NET 39.95 MODEL HFT-90, Wired. Less case 72 SU 362-J. $\$ 5$ Monthly... . . . . NET 65.95 E3 METAL. CASE. For above, 3 lbs. 72 SX 363.

NET 3.95


Allied Guarantees Your Satisfaction
AllIED


## PAS-2 STEREO PREA MPLIFIER KIT

Performance-acclaimed stereo preamp with complete control facilities, Ideal for use with top-quality basic amplifier. Some of its many features include: "Dyna Blend" control for variable channel separation, DC-heated tube fllaments and four AC convenience outlets. Has excellent transient performance.
All critical circuit phases are pre-assembled on two printedcircuit boards-assembly time is reduced to about 8 hours. Response: $\pm 1 / 2 \mathrm{db}, 10-40,000 \mathrm{cps}$. IM Distortion: less than $.05 \%$ at 2 -volt output. Noise: less than $3 \mu \mathrm{~V}$ equivatent noise input on RIAA. Controls: Selector, volume, Balance, Blend, separate Bass and Treble for each channel. Tape Monitor switch, On/Off, Loudness, Scratch Filter. Inputs: 3 stereo low-level-RIAA Phono, NARTB Tape Head, Speclal (for 2nd phono, lape head, mike); 4 stereo high-level--FM Multiplex, FM.AM, Aux., Tape Outputs: Audio, Tape Recorder. 4-12AX7/ECC83, plus rectifiers. With charcoal brown textured vinyl case. $4 \times 13 \times 8^{\prime \prime}$. For $110-120 \mathrm{v}$., $50-60$ cycle AC. Shpg. wt., 11 lbs .
72 Sx 235 -J. $\$ 5$ Monthly............................... NET 59.95 72 SX 236-J. Above, factory wired

NET 99.95

# Quality Hi:Fi Component Kit 

## "STEREO 70" 70-WATT BASIC AMPLIFIER KIT

Make this high-performance basic amplifier the "heart" of your stereo music system. The "Stereo 70" dellvers 35 watts per channel, for a full 70 -watts of stereo outout. Peak power is 80 watts per channel. Provides outstanding hi-ff sound-firm, perfectly defined bass and smooth, natural highs. Use of printed circuitry. detailed step-by-step instructions with pictorial diagrams cuts assembly time to about 5 hours.
Designed for utmost reliability-output tubes are operated at only $65 \%$ of capacity; filter capacitors less than $85 \%$ of rated voltage. Features include: matched output tubes, stereo-mono switch. provision for powering two separate preamps.
Resconse: $\pm 0.5 \mathrm{db}$ from 10 to $40,000 \mathrm{cps}$. IM Distortion: less than $1 \%$ at 70 watts. Hum and Noise: better than 90 db below rated output. Nickel-finished chassis; vinyl-coated charcoal brown cover. 4-EL-34's, 2-7199's, GZ-34, plus selenium rectifier. Size (HWD), $61 / 2 \times 91 / 2 \times 13^{\prime}$. For operation from $110-120 \mathrm{v}$., $50-60$ cycle AC. Shpg. Wha, 32 lbs.
72 SU 237 -J. $\$ 5$ Monthly.
NET 99.95
72 SU 238-J. Above, factory wired $\qquad$
NET 129.95


## Net <br> ${ }^{5} 79^{95}$

With Case

## DYNAKIT FM-1 DYNATUNER

An outstanding, top-performance hi-fi component-avallable in kit, "semi-kit," or factory-wired form. Now, also available whth FMX-3 SK multiplex adapter instalted in fac-tory-wired Dynatuner. Renowned for stable, sensitive FM reception, free from distortion.

## Superior-Quality DYNATUNER FM Tuner Kits

MODEL FM-1. Endineered to the most exacting standards, the "Dynatuner" includes all of the most important performance characteristics-high sensitivity for fringe-area use; low noise and distortion; and non-critical, drift-free tuning. Printed-circuit design and accessible, functional layout permit construction in 6 hours. EM-84 tuning eye is used to peak If stages-no external test equipment required-all coils are pre-aligned. Planetary-drive tuning system eliminates dial-cord stringing-gives smooth, accurate tuning without backlash. Additional features include the use of minimum phase shift IF's, wide-band detection and ilnear design. Sensitivity: $4 \mu$ IHFM. Provision for multiplex, at right. With case, $4 \times 13 \times 8^{\circ}$. For 110.120 v., $50-60$ cycle AC. 12 lbs.
72 Sx 240-J. $\$ 5$ Monthly.
NET 79.95
72 SU 239-J. Above, factory wired.
NET 119.95
72 Sx 242-J. Factory-Wired FM-1 Tuner With FMX-3. Multiplex
adapter (right) installed. Wt., 13 Ibs. ............... NET 169.95

MODEL FM-1 SK DYNA TUNER "SEMI-KIT." Same as FM-1, but printed-circuit sections and other major parts soldered and mounted. Power supply, tuning eye unwired. 12 lbs.
72 Sx 241-J. $\$ 5$ Monthly. $\qquad$ NET 99.95
72 SX 243-J. Model FMA-2 10-Watt Monophonic Amplifier Kit. Fits inside FM-1 instead of multiplexer. Converts FM-1 to receiver. 12.35,000 cps, $\pm 1 \mathrm{db} .4 \mathrm{lbs} . . .$. ......................... NET 29.95

MODEL FMX-3 MULTIPLEX ADAPTER KIT. Fits inside "Dyna. tuners." Automatically switches to stereo when multiplex is tuned in. 3 hour assembly time. Shpg. wt., $21 / 2 \mathrm{lbs}$. 72 SX 244-d, $\$ 5$ Monthly.

NET 29.95
72 SX 245-J. Model FMX-3 SK "Semi-Kit." Partially wired. 39.95

## for the Audio Perfectionist



## PAM-1 MONOPHONIC PREAMPLIFIER KIT

Full-flexibility preamo for use with any basic amplifier. Printedcircuit board cuts building time to approximately 6 hours. Response: $\pm 0.5 \mathrm{db}, 10$ to $40,000 \mathrm{cps}$. Complete array of controls for all functions. Inputs for all music system components. Distortion: less than $0.05 \% \mathrm{IM}$, at 2 v.: Harmonic, unmeasurable. Requires PS. 1 (below), when used with other than Dynakit amplifiers. Requires $200-400 \mathrm{v}$. DC at $3-4 \mathrm{ma} ., 6 \mathrm{v}$. AC at $3 / 4 \mathrm{amp}$. Charcoal brown vinyl case. $2 \frac{3}{6} \times 12 \times 6$. Wt., 7 lbs. 72 Sx 246-J. $\$ 5$ Monthly.

NET 34.95 72 SU 247-J. Above, factory wired NET 59.95 72 S 248. PS-1 Power Supply Kit. Powers one or two PAM-1's. $2 x$ $5 \times 5^{\circ}$. For $110-120$ v., $50-60$ cycle AC. Wt., $2 \% / 4$ Ibs.

NET 8.95
72 S 259 . Above, factory wired
NET 14.95

MARK IV 40-W MONO BASIC AMPLIFIER KIT
Economically-priced-perfect match for PAM-1 or PAS-2 preamps. Printed-circuit board cuts assembly time to less than 3 hours. Response: $\pm 0.5 \mathrm{db}, 10$ to $40,000 \mathrm{cps}$. IM Distortion: less than $1 \%$ at full output. Hum and Noise: -90 db . With case, $6 \frac{1}{2} \times 14$ $x 5^{\circ}$. For $110-120$ v., $50-60$ cycle AC. Wt., 20 lbs.
72 SU 265-J. \$5 Monthly.
NET 59.95
72 SU 266-J. Above, factory wired
. NET 79.95
72 SU 267-J. MARK III 60-Watt Monophonic Basic Amplitier Kit. Response: $\pm 0.5 \mathrm{db}, 6$ to $60,000 \mathrm{cps}$. M Distortion: less than $1 \%$ at 60 watts. Hum and Noise: -90 db . Case, $6 \% \times 9 \times 9^{\circ}$. For 110. 120 v., 50.60 cycle AC. Wt., 28 lbs. NET 79.95 72 SU 268-J. Above, factory-wired NET 99.95

## DELUXE AUDIO COMPONENTS



## MODEL 7 STEREO CONSOLE PREAMPLIFIER

Self-powered stereo preamplifier of the highest quality. Features unsurpassed control versatility, ease of operation and finest professional workmanshio. Front Panel Controls: 8-pos. Selector. 5.pos. Mode, Volume, Balance, 2-Treble, 2-Bass, Phono Equal. izer-settings for RIAA, old COL LP, early 78, Tape Playback or Monitor, High Filter, 'Rumble Filter, and Off-On switch. A deluxe instrument suitable for use in the finest systems. Rear Panel: output level adjustments, 3 pairs of outputs, tape-head equalizer adjustments, 6 AC outlets, 9 pairs of inputs, system ground. Response: $\pm 0.5 \mathrm{db}, 20-20,000 \mathrm{cps}$. IM Distortion: $0.02 \%$. Noise: -80 db . Less cabinet, below. $5 \frac{1}{6} \times 151 / 3 \times 81 / 2^{\prime \prime}$. For 110.120 v., $50-60$ cycle AC. Shpg. wt., 16 lbs .
72 SU 269-J. \$14 Monthly.
NET 264.00
72 5× 270. Wood Cabinet. For above. Beautifully finished oiled walnut. $63 / 4 \times 173 / 4 \times 101 / 4$ ". Shpg. wt., 4 lbs.

NET 24.00

MODEL 8B 70-WATT STEREO BASIC AMPLIFIER
Traditional Marantz superiority is demonstrated by this remarkable amplifier. Each channel delivers 35 watts ( 70 -watts peak). Changing two connections allows 18 -watt triode operation of each channel for unexcelled stereo. Built-in bias meter assures optimum operation at all times. Response: $\pm 0.1 \mathrm{db}, 20$ to 20,000 cps at rated output. IM and Harmonic Distortion: less than $0.5 \%$. 4-EL34 output tubes. Compact size, $71 / 4 \times 131 / 2 \times 101 / 2^{\circ}$. For $105 \cdot 125$ v. $50-60$ cycle AC. Shpo. wt., 55 lbs.

72 SZ 275-J. $\$ 14$ Monthly.
NET 264.00
72 SX 276. Gold-Finlshed Perforated Grille. 1 ib.
NET 9.00 MODEL 9 70-WATT MONOPHONIC BASIC. (Not illus.) Outstanding amplifier for exceptionally low distortion and high stability. Built-in self-testing arrangement. $\pm 0.5 \mathrm{db}, 20-20,000 \mathrm{cps}$. $81 / 4 \times 153 / 1 \times 10 \frac{1}{2}$. For $105 \cdot 125$ v., $50-60$ cycle AC. 63 Ibs.
72 52 277-J. $\$ 16$ Monthly.
NET 324.00

## NEW MODEL 10 STEREO MULTIPLEX FM TUNER

The aristocrat of stereo tuners, the Model 10 delivers the finest possible stereo FM reception. Its features and advanced standards of performance make it the ideal tuner for the audio perfectionist. Boasts an exceptionally high order of quieting and multipath ('ghost') rejection for cleaner reception with any antenna. An oscilloscope funing indicator provides accurate station setting plus a visual display of field strength, deviation and antennasetting. Sensitivity: $2 \mu v$, for better than 40 db quieting.
Also features: 6 IF stages - no alignment ever noeded; 5 dynamic limiters; extra wideband detector; 4 -section tuning gang; builtin multiplex section with automatic stereo switchover and indicator light. Less cabinet. $51 / 6 \times 14 \frac{1}{2} \times 15^{\circ}$. For $110-120$ v., $50-60$ cycle AC. Shpg. wt., 40 lbs.
72 SU 278... $\$ 24$ Monthly.
NET 555.00
72 Sx 279. Wood Cabinet. For above. Beautifully finished oiled walnut. $6 \frac{3}{4} \times 17 \frac{3}{4} \times 171 / 4^{4}$. Shpg. wt., $5 \mathrm{lbs} . . . . . . . . . .$. . . . NET 33.00

## SHERWOOD

## Superior High Fidelity Component.



New S-5500-11


#### Abstract

YOU GET ALL THIS: 64-Watt IHFM Stereo Outpr Full Array of Stereo Inputs Accommodates Any Sourc Dual Tone Controls Ganged Volume Controls All-Mode Function Switch Function Indicator Lights Scratch and Rumble Filters Stereo Reverse Swltch Outputs to Stereo Recorder Attractively Styled Panel


## SPECIFICATIONS

Rated Output: 32 watts IHFM music power each channel ( 64 watts stereo).
Response: $\pm 1 \mathrm{db}, 20-20,000 \mathrm{cps}$.
Hum \& N oise: 60 db down (phono input).
Distortion: IM, 11/2\%; Harmonic, $1 / 2 \%$ at rated output.

Outputs: 4, 8, and 16 ohms per channel; pair of cathode follower outputs for stereo tape recording.

Tubes: 4-7868, 5-12AX7, 4-silicon rectifiers.

## NEW S-5500-1I 64-WATT STEREO AMPLIFIER

A triumph of englneering skill, the Model S-5500-II 64 -watt stereo amplifier represents a notable achievement in the dis. tinguished line of Sherwood high-fidelity components. Some of its superior features include: 12 db/octave scratch and rumble filters; eight high-level and four low-level inputs that accommodate virtually every sound source; damping factor of 5 to deliver optimum performance with compact high and low-efficiency speaker systems; phono sensitivity of 1.8 mv .; two cathode follower recorder outputs; fric-tion-locked bass and treble controls for adjusting each channel separately or both
simultaneously; instant mode selection by a function switch which activates indicator lights. Controls Include: Phono Level, Rumble Filter, Scratch Filter, Selector (Tape, Phono, FM MX, AM-TV, Aux): Balance; concentric Bass, concentric Treble; Loudness: Function Selector (Power OffOn, Stereo Normal, Stereo Reverse, Mono S1, Mono S1 \& 2). Less case. For $110-120 \mathrm{v}$., $50-60$ cycle AC. 25 lbs.
72 SU 400-J. $\$ 9$ Monthly
NET 164.50
METAL CASES. Shpg. wt., 3 lbs .
72 SX 516. Walnut leatherette. . NET 7.50 72 SX 476. Black flextone.......NET 7.50

## MODEL S-5000-II 80-WATT STEREO AMPLIFIER

Skillfully designed, offers full controls and inputs. Function switch selects five modes of operation-also operates corresponding group of indicator lights. Friction-locked bass and treble controls let you adjust one channel or both channels simultaneously. Six pairs of stereo inputs; two cathode follower recorder outputs, scratch and rumble filters.
Outout: 40 watts-per-channel IHFM ( 80 watts stereo). Resoonse: $\pm 1 / 2 \mathrm{db}, 20-20,000 \mathrm{cps}$. Distortion: Harmonic, $1 / 2 \%$ : $1 \mathrm{M}, 11 / 2 \%$ at full output. Controls: Phono Level, Rumble Filter, Scratch Fiter and Presence; Selector (Tape, Phono, FM. AM, FM-MX, Aux); Balance; dual-concentric Bass; dual-concentric Treble; Loudness; Power Off-On; Function Selector (Stereo, Stereo Reverse, Mono Ch. 1, Mono Ch. 2, Mono Ch. 1 and 2); Tape Monitor; Loudness/In Out. Uses four 7868 output tubes, six 12AX7; four silicon diode rectifiers. Outputs, 4,8 and 16 ohms. $4 \times 14 \frac{1}{2} \times 13 \frac{1}{2} 2^{\circ}$. Less case. For $110-120$ v. $50-60$ cycle AC. 30 lbs.
72 SU 402-J. $\$ 10$ Monthly.
NET 199.50
meTAL CASES. Shpg. wt., 3 ros.
72 SX 516. Walnut leatherette
NET 7.50
72 SX 476. Black flextone
NET 7.50

## S-2100 STEREO MULTIPLEX FM-AM TUNER

Newly designed tuner provides outstanding FM, stereo multiplex FM, and AM reception. Offers built-in multiplex circuitry, indjcator eye that tells you when you are receiving stereo multiplex program. Tuning eye shows you when you're "on station." AFC eliminates annoying drift. AM section has 2 tuned RF circuits, double-tuned if stage, delayed AVC, 10 kc whistle filter, widenarrow selectivity switch.
FM Sensilivity: $1.8 \mu \mathrm{~V}$ IHFM. Response: $\pm 1 / 2 \mathrm{db}, 20-75,000 \mathrm{cps}$. Selectivity: 220 kc at 3 db down. Hum \& Noise: 60 db below $100 \%$ modulation. Outputs: Channel A and B to stereo amp or recorder. 14 tubes, includes tuning eye, plus rectifier. Less case, below. $4 x$ $14 \frac{1}{2} \times 12^{2}$. For $110-120 \mathrm{v}$., 60 cycle AC. 25 lbs.
72 SU 403-J. $\$ 10$ Monthly
NET 199.50
METAL CASE. Shpg. wt., 3 Ibs.
72 SX 516. Walnut leatherette.
NET 7.50
72 SX 476. Black flextone NET 7.50
72 SU 445-J. Model S-2000-II. Similar to above, less multiplex. Has separate AM and FM tuning, pushbutton function selector. Multiplex output jack permits use with multiplex adapters. $4 \times 141 / 2$ $\times 12^{\prime \prime}$. Less case (see cases listed with S. 3000 .IV). For $110-120$ v., $50-60$ cycle AC. 17 los . $\$ 8$ Monthly

NET 150.50

## or Thrilling Music Reproduction



## NEW MODEL S-8000-II STEREO MULTIPLEX FM RECEIVER

Z.mbination 64 watt stereo amplifier and stereo multiplex FM tuner, loaded with deuxe features. Up-dated version of the popular S-8000, now features "StereoLite" indicator that shows when you're tuned to a stereo multiplex FM broadcast; plus added power for even better stereo reproduction. A completely integrated unit, combines a sensitive FM tuner, two 32 -watt amplifiers, dual preamps for phono and tape, plus wired-in multiplex circuitry. Requires only the addition of speakers to complete an outstanding system for enjoyment of stereo FM broad. casts. FM section offers interchannel
hush, AFC, tuning eye, flywheel tuning. Amplifier section has input selector switch that operates indicator lights. Ganged bass, treble and loudness controls: phono level, stereo balance controls; function selector; scratch and rumble filters. Inputs for tape, tape monitor, phono, AM tuner, aux. $41 / 2 \times 161 / 4 \times 14^{\pi}$. Less case, below. For 110-120 v., 50-60 cycle AC. Shpg. wt., 34 Ibs.
72 SU 416 -J. $\$ 15$ Monthly. NET 309.50
METAL CASE. For use with above receiver. Shog. wt., 3 lbs.
72 SU 475. Brown leatherette. . NET 7.50

## SPECIFICATIONS

Rated Output: 32 watts IHFM music power each channel (64 watts stereo.)
Response: $\pm 1 \mathrm{db}, 20-20,000 \mathrm{cps}$.
Noise: 60 db below 30 watts (phono).
Sensitivity: $1.8 \mu \mathrm{~V}$ IHFM
Distortion. $\mathrm{FM}, \mathbf{3 3 \%}$ (G, 100\% modulation; Overall, $1.5 \%$ \& 32 watts
Outputs: 4,8 , and 16 ohms per channel to stereo speakers.

Tubes: 21 plus 4 sllicon rectifiers and tuning eye.


## S-3000-IV STEREO MULTIPLEX FM TUNER

Has built-in multiplex for outstanding stereo FM; "Interchannel Hush" that quiets tuner while you tune; tuning eye for pin-point tuning; deteatable AFC; cascode RF amplifier; AGC; 2 IF ampliflers; 2 limiters. Sensitivity: 1.8 uv IHFM. Response: $\pm 1 / 2 \mathrm{db}, 20$. $20,000 \mathrm{cps}$. IM Distortion: below $1 / 3 \%$ (a) $100 \%$ mod. 11 tubes, tuning eye, silicon rectifier. Less case, below. $4 \times 14 \times 10 \frac{1}{2}$ ". For $110-$ 120 v.r $50-60$ cycle AC. 16 lbs.

NET 160.00
72 SU 417 -J. $\$ 8$ Monthly
72 SU $418-\mathrm{J}$. S-3000-111. Above, less multiplex. Has multiplex output jack. Use with S3MX Adapter, below. 15 lbs ... NET 110.50
72 SU 401. Metal Case-Walnut Leatherette. 3 lbs .
NET 7.50 72 SX 511. Metal Case-Black Flextone. 3 lbs.

NET 7.50


MODEL A3MX MULTIPLEX ADAPTER. For S-3000-111 and S-2200. Plug in; requires no external power. $41 / 4 \times 43 / 4 \times 31 / 2^{\prime \prime}$. Wt., 2 lbs.
72 SU 450 . $\$ 5$ Monthly
NET 49.50 MODEL S3MX MULTIPLEX ADAPTER. (Not illus.) For any Sherwood tuner with multiplex output. $4 \% \times 47 / 6 \times 12^{\prime \prime}$. For $110-120$ v., $50 \cdot 60$ cycle AC. Less case. 4 lbs . 72 SU 517-J. \$5 Monthly.... NET 69.50 72 SX 518 . Case. For S3MX. 3 lbs... 5.00 MODEL SL-1 "STEREO-LITE". Plugs into multiplex oulput jack of any FM tuner. Lights up when stereo is being received. $21 / 2 \times 21 / 4 \times 71 / 22^{\prime \prime}$. For 115 v. AC. $2 \frac{1}{2}$ lbs.
72 S 474. \$5 Monthly . . . . . NET 29.50


## Model 8 FM Receiving System

FM broadcast receiving system that provides brilliant performance. Consists of FM tuner with single-channel amplifier and wide-range speaker system. Two acoustic-suspension speakers are sealed in a fiberglas-filled, solid walnut enclosure. Produce amazing "big-speaker"' sound. Use with the $8 \cdot M X$ Multiplex Adapter/2nd channel Amplifier and 8-AS Speaker System, below, for a stereo FM receiving system. Sensitive temperature compensated tuner section is drift-free. Amplifier section has push-pull $31 / 2$-watt output, negative feedback for clean response. Contro/s: OnOff, Treble (needs no Bass control), Volume. Tuning. Has multiplex output jack, tuner output jack, phono inout jack, line cord antenna. Walnut cabinets, each, $57 / 4 \times 103 / 4 \times 6 / 6^{5 / 4}$. For $110-120$ v. $50-60$ cycle AC. 15 Ibs.
72 SX 483-J. $\$ 8$ Monthly
NET 159.00
MODEL 8-AS SPEAKER SYSTEM. Same as speaker system supplied in Model 8 system-use as 2nd channel. Level control and adapter-plug. Wt., 4 lbs.
72 SX 484-J. $\$ 5$ Monthly
NET 54.00 MODEL 8-MX MULTIPLEX ADAPTER/AMPLIFIER. Fully transistorized, contains multiplex, stereo preamp. and 2nd channel amplifier. With the 8-AS Speaker System and the 8 Receiver, completes a stereo FM receiving sys. tem. Has magnetic phono inputs, recorder outputs. Flip a switch-tone indicates stereo broadcast. Also Function, Master Volume, Treble controls. Walnut cabinet, $61 / 2 \times 73 / 3 x$ $61 / 2 /$. For $110-120 \mathrm{v.a}, \mathrm{AC} .7 \mathrm{lbs}$.
$72 \mathrm{Sx} 482 \mathrm{~J} . \$ 5 \mathrm{Month} / \mathrm{y}$
NET 95.00

# Outstanding Stereo Hi-Fi Components 



Exceptional dependability and superb sound reproduction highlight these distinctive music system units by Pllot

602SA

## 602SA STEREO MULTIPLEX FM-AM RECEIVER

Nef - Automatic Multiplex Feature '29950<br>- 30-Watt Stereo Amplifier<br>- Center Channel Output<br>Wiŝh Case<br>- Stereo Indicator Light

Ranking among the finest of audio components, the Model 602SA includes an AM-FM and FM stereo multiplex tuner, plus a preamp and a powerful 30 -watt stereo amplifier-all in a single, compact unit. Wideband RF and IF circuits deliver flawless responsewithout distortion. Unit has precision tuning indicator, stereo indicator light, full array of controls, line cord FM antenna. FM Sensitivily: $3 \mu \mathrm{~V}$ IHFM. Hum and Noise: -80 db . Distortion: $1 \% 30$ watts. With case. $51 / 6 \times 14 \frac{5}{6} \times 12 \frac{1}{4} /{ }^{\prime \prime}$. Output impedances: $4,8,160 \mathrm{hms}$. For $105.120 \mathrm{v}, 60$ cycle AC. Shpg. wt., 35 lbs .
72 SU 485-J. $\$ 15$ Monthly
NET 299.50
72 SU 486-J. Model 602MA FM Multiplex Receiver. As above, but less AM section. Shpg. wt., 30 lbs. $\$ 13$ Monthly...... NET 249.50
72 SU 487-J. Model 610. Same as Model 602SA above, but has 24-watt amplifier. 24 lbs. $\$ 10$ Monthly . . . . . . . . . . . . . . . NET 199.50 72 SU 488-J. Model 230 24-Watt Amplifier Only. In case. $5 \times 11 \frac{1}{6 x}$ $91 / \mathrm{A}^{\prime \prime}$. Shpg. wt., 20 lbs. $\$ 5$ Manthly.

NET 89.50

240 30.WATT STEREO AMPLIFIER

## Net '/3450 With Case

- Outstanding Sound and Flexibility
- Automatic Shutoff with Garrard Changers
- "Simpll-Matic" Test Panel for Output Tube Balancing Without Meters
You get a wealth of features with this marvelous 30 -watt stereo. phonic amplifier. Provides thrilling, distortion-free stereo reproduction. Special center-channel connection can be used with 3rd speaker for "Stereo-Plus Curtain of Sound" or extension use. Total of 13 controls and switches give you maximum flexibility of operation. 5 pairs of inputs accommodate all signal sources -stereo or monophonic. Frequency Response: $20 \cdot 20,000 \mathrm{cps}$, $\pm 1$ db. Harmonic Distortion: $1 \%$ at full output. Sensitivity for Full Output: Phono, 3 mv i Tuner, Multiplex, Tape, 110 mv . Hum and Noise: -80 db . Highly attractive, black and brass styling. Supplied complete with case. Size, $51 / 6 \times 14 \% \times 113 / 4$. Output impedances: 4,8 , 16 ohms. For $105 \cdot 120$ v., 60 cycle AC. Shpg. wt., 23 Ibs. 72 SU 489-J. $\$ 7$ Monthly..........................NET 134.50



## 280B STEREO MULTIPLEX FM TUNER

An outstanding value in an economy-priced stereo FM tuner with advanced circuit refinements. Features: Pilot's balanced time. division multiplex circuit for channel separatlon of 30 db ; highgain IF lubes; high sensitivity, low-noise triode RF amplifler; and wide-band, minimum distortion design for excellent stereo or regular FM reception. Sensitivity: $4 \mu \mathrm{IHFM}$. Also has: drift-free tuning, line cord antenna, terminals for external 72 or 300 ohm antennas. Black with gold panel. Case, $3 \frac{3}{3} \times 9 \frac{1}{3} \times 7 \frac{1}{2}$. For $105-120$ v., 60 cycle AC. Shpg. wto, 12 lbs.
72 SU 492-J. \$6 Monthly
NET 99.95

## 285 AM-FM STEREO MULTIPLEX TUNER

An ideal addition to any home music system, this fine funer provides all the refinements and features necessary for outstanding reception of AM, FM and stereo multiplex broadcasts. FM Sensitivity: 4 IV IHFM. Harmonic Distortion: $1 \%$ at $100 \%$ modulation. Multiplex section provides better than 30 db channel separation on stereo broadcasts. Also includes: tuning eye; stereo Indicator tight: buitt-in AM and FM antennas; inputs for 300 -ohm and 72 -ohm external antennas. Compact size $5 \frac{1}{6} \times 14 \% \times 9 \% \%^{\circ}$. With case. For 110.120 v ., 60 cycle AC. Shpg. wt., 18 los. 72 SU 495-J. \$8 Monthly

NET
159.50

## For Thrilling Sound

## RP50 STEREO MULTIPLEX FM-AM RECEIVER

Just add a pair of speaker systems to this fine stereo tuner amplifier combination, and you'll have a complete broadcast music system-one capable of bringing you sparkling AM, FM and FM stereo broadcasts in their full frequency range. Add a record player and/or a tape program deck, and have a home music system utillzing all available sources. FM section has 2.5 uy IHFM sensitivity, Features "time division" type multiplex circuitry and "stereo minder" indicator light. Amplifler has 60. wattIHFM output ( 30 watts per channel). Unit includes tuning eye Indicator, headphone jack for stereo tistening, switch to cut off speakers, bulit-in $A M$ and $F M$ antennas, rumble and scratch filters, etc. Output imp.: 4, 8, 16 ohms, $51 / 4 \times 15^{13} / \mathrm{ms} \times 15^{\circ}$. Less case, below. For $110-120$ v., 60 cycle AC. Shpg. wt., 35 lbs 72 SU 500-J. $\$ 15$ Monthly.

NET 299.95
72 SU 501-J. RPF60 Stereo Multiplex FM Recelver. Same as above, but less AM section. $51 / 4 \times 1515 / 16 \times 15^{\omega}$. Wt., 30 Ibs.... 279.95 72 S× 502. EN7 Metal Case for above. Wt., 6 Ibs...... NET 12.95 72 SX 503. WE7 Wood Case. Walnut finish. Wt., 7 Ibs..... 27,95


## PX-60 FM MULTIPLEX ADAPTER



Specifically designed for use with previously manufactured Bogen FM tuners and receiv. ers equipped with a multiplex jack. Simple plug-in connec. tions with cables suppliedno tools requiredl Complete with textured metal case. $41 / 2 x$ $41 / 2 \times 9^{-}$. For operation from 110 . 120 volts, 50.60 cycle AC. Shpg. wt., 4 lbs. $\$ 5$ Monthly.

ET 59.95


## AP30 30.WATT STEREO AMPLIFIER

Ideal for economy music systems, this budoet-priced stereo amplifier delivers a solid 30 watts of IHFM power output (15 watts per channel) for outstanding stereo music reproduction. Response: $\pm 1 \mathrm{db}, 20-20,000 \mathrm{cps}$. Harmonic Distortion: $0.6 \%$ at rated output. Hum and Noise: -55 db for magnetic and tape head input; -70 db for tuner and aux inputs. Features 4 position programming selector plus volume, bavance, bass, treble and loudness controls. Unique blend control permits easy adjustment of channel separation-eliminates "hole-in-middie" effect. Unit also includes rumble filter, stereo reverse switch and tape recording output jack. Output imp.: 4, 8, 16 ohms. $43 / 4 \times 15 \times 11 \mathrm{~m} / \mathrm{m}^{\circ}$. Less case, below. For $110-120 \mathrm{v}, 50-60$ cycle AC. Wt., 16 Ibs .
72 SU 504-J. $\$ 5$ Monthly
NET 99.95
72 SX 507. EN9 Metal Case for above.
Shpg. wt., 6 lbs.
NET 41.95

## AP250 50-WATT STEREO AMPLIFIER

Offering plenty of reserve power, this versatile stereo ampllfier also incorporates an array of other fine features to assure superb reproductlon of stereo and monophonic program materlal. Has total HHFM output of 50 watts ( 25 watts per channel). Frequency Response: $\pm 1 \mathrm{db}, 20-20,000 \mathrm{cps}$. Distortion: $0.6 \%$ at rated output. Hum and Noise: -60 db for magnetic cartrldge and tape head inputs -75 db for tuner and aux. inputs. Features blend control and "blend position"indicator light for easyadjustment of channel separation and ellimination of "hole-in-middle" effect. Other features: jack for stereo headphone listening; switch to cut off speakers; center channel output; tape recording output. Has $4 \cdot$ position prouramming selector, mode switch, volume, balance and coax bass and treble controls. Also includes rumble filter, loudiness control, tape monitoring jack, etc. $4 \frac{1 / 4}{} \times 15 \times 11 \frac{3}{3} .4,8,16$ ohms. For $110-120$ v., $50-60$ cycle AC. Less case, below. 20 los.
72 SU 506-J. $\$ 8$ Monthly
NET 154.95
72 SX 507. EN9 Metal Case for above. Wt. $6 \mathrm{lbs} . .$. . . NET 11.95

## TP250 STEREO MULTIPLEX FM TUNER

Enjoy the amazing fidelity of thrilling stereo FM broadcasts with this fine tuner. Its outstanding sensitivity of $0.85 \mu \vee$ for 20 db quieting assures clear, crisp reception of both regular FM and FM multiplex stations, near and far. Hum and Noise: -60 db below $100 \%$ modulation. Harmonic Distortion: $0.5 \%$ of rated output. "Stereo minder" indicator shows when stations are "stereocasting." Unit also includes tuning eye, AFC, built-in antenna and terminal connections for an external antenna of either 75 or 300 ohms. Has tuning control; AFC, mode and power switches. With attractive, gold panel. $43 / \times 12 \% \times 10^{\circ}$. Less case, below. For 110.120 $v .50-60$ cycle AC. Wt., 16 lbs.
72 SU 508-J. \$8 Monthly
NET 159.95
72 5X 509. EN8 Metal Case for above.
Shpg. wt., 6 lbs.
NET 11.95


TYPE "A" AUTOMATIC TURNTABLE AND CARTRIDGE
Garrard's luxury record changer. Combines the smooth operation and dependability of the professional turntable with the convenience of a 4 -speed changer. Handles records gently and efficiently. Features a dynamically balanced, 6 lb . cast turntable that is rotated with exireme accuracy regardless of load or voltage changes by a laboratory balanced motor. Plays at $162 / 3,331 / 3,45$ and 78 rpm . Additional features: separate manual and automatic switches; pusher-type mechanism for maximum protection of records; precision pickup arm counterweighted for accurate tracking, with built-in stylus pressure gauge; rubber pad for damping noise and vibration. Specially designed mount permits installatlon wlthout tools. Size, $16 \times 131 /{ }^{\prime \prime}$. Requires $2 \% /{ }^{\prime \prime}$ below, and $6^{\prime \prime}$ above motor board for mounting. With interchangeable spindies; less automatic $45-\mathrm{rpm}$ spindle and wood base (see facing page for listings). For 110 130 volts, 60 cycle AC. 19 lbs . $\$ 5$ Monthly. 20 RX 362-2-J. Type " $A$ " and Choice of Cartridge. $\qquad$ BOTH ONLY 79.51 73 RX 052-J. Type "A" Turntable Only.

NET 79.50

## FOR IC MORE THAN THE PRICE OF A CHANGER YOU GET ONE OF THESE CARTRIDGES



Emplre 880


Shure M3D Cartridge


Pickering U38AT

## PURCHASED SEPARATELY

EMPIRE 880 CARTRIDGE. Has $.0007^{\circ}$ diamond stylus. Shpo. wt., 3 oz. 73 RC 902-J.

NET 42.50 SHURE M3D CARTRIDGE. Has 0007* diamond stylus. Shpg. wt., 3 oz. 73 RC 900-J.

NET 44.10
PICKERING U38AT CARTRIDGE. 0007* diamond stylus. Shpg. wt., 302. 73 RC 901-J.

NET 46.50
KNIGHT KN-505X CARTRIDGE. .0006* diamond stylus. Shpo. wt., 3 Oz 95 RC $806-\mathrm{J}$.

NET 39.95

## AN ALLIED SUPER VALUE

When purchased separately, the cartridges above cost up to $\$ 46.50$. Save up to $\$ 46.49$-when you buy a Garrard changer.


Styled in Rich WalnutLook Well Anywhere

Dust Cover to Protect Changer

GARRARD DUST COVER AND CHANGER CABINET
MOLDED VINYL DUST COVER. This IIghtweight, easy-to-clean cover gives invaluable protection to your record changer, keeping it free from harmful dust and lint. Attractive, transparent vinyl cover slips over changer in seconds. Molded to fit specific Garrard changers-not interchangeable. $11 / 2$ lbs.
73 RX 069-J. DC-3. Fits Type " $A$ " Turntable
NET 4.95
73 RX 070-J. DC-4. Fits AT6 Changer. NET 4.95 73 RX 071-J. DC-5. Fits Autoslim/P Changer NET 4.95

TABLE-TOP CHANGER CABINET. Handsomely styled cabinet Ilnished in walnut, allows you to place your changer anywhere. Gives you convenient access plus a decorative addition to your furnishings. Also protects changer from dust. Sturdily constructed of stain and scuff-resistant formica, with rich walnut finish. Functional design permits playing records with tambour door open or closed. With mounting board cut to accommodale changer to be installed. Size, $10 \frac{1}{1} \times 10 \times 15 \frac{1}{2}$. Wt. 15 lbs.
73 RX 064-J. TM-1. For Type A and 88 Series..... NET 34.50 73 RX 065-J. TM-2. For 210, AT-6 and Autoslim/P.... NET 34.50 73 RX 068-J. TM-3. For Any Other Garrard Model or Unit Made by
Another Manufacturer. Supplied with blank mounting board that Another Manufacturer. Supplied with blank mounting board that accepts most changers or turntables

NET 34.50

## Model <br> AT-6

Economy-Priced Automatic Turntable. Offers Changer Convenlence

AT-6 Onily
$\$ 54^{50}$

With Cortridge
s54"

Glves Expensive Performance at An Inexpensive Price-Pleases The Budget, Ear and Eye.

## Autoslim/P Only <br> $\$ 3950$

 With Cortridge\$3951

## AT-6 AUTOMATIC TURNTABLE AND CARTRIDGE

For those who want turntable precision and changer convenience in a space-saving, moderately priced unit, the AT-6 is the logical choice. Accurately plays all four speeds: $162 / 3,331 / 3,45$ and 78 rpm. Garrard's smooth-operating changer mechanism assures quiet, gentle handling of records. Oversized turntable rotates precisely at the designated speed-regardless of load or voltage change. Interchangeable spindles are furnished-long spindle for automatic playing; short spindle for manual play. Dynamically counterbalanced tubular pickup arm tracks with precision; has adjustable counterweight. Gram scate built into arm permits setting exact tracking weight. 4 -pole motor; has separate controls for manual and automatic operation. Handsomely styled. Size, $41 / 2 \times 153 / 2 \times 13^{\prime \prime}$. For mounting, requires $21 / 3^{\circ}$ below motor board and $11 /{ }^{\prime \prime}$ to right and rear of arm. Less $45-\mathrm{rpm}$ automatic spindle and wood base (see below). For operation from 110-130 volts, 60 cycle AC. Shpg. wt., 12 Ibs. $\$ 5$ Monthly. 20 RX 363-2-J. AT 6 and Choice of Cartridge.
54.51

73 RX 053-J. AT-6 Turntable Only
NET 54.50

## AUTOSLIM/P CHANGER AND CARTRIDGE

New in looks and new in performance, the Autoslim/P features a new furntable-type tubular pickup arm with plug-in head that tracks with remarkable precision. Intermixes all records of the same speed regardless of size. Addltional features: separate manual and automatic controls; quiet, efficient center changing mechanism that assures gentle record handling; 4 -pole shaded motor that rotates the rubber-matted furntable at exactly $162 / 3$, $331 / 3,45$ and 78 rom . Has pickup arm clip that locks arm securely in rest position. Compact, and exceptionally functional, the Autoslim/P is only $61 / 4$ high-fine for limited space installations. Spring mounts provide isolation from external shock and vibra. tions. Overall size, $61 / 4^{\prime \prime}$ high, $13 \frac{3^{\prime \prime}}{}$ wide, and $12 \frac{1 / 2 "}{}{ }^{\prime \prime}$ deep. For mounting, requires $41 / 2$ above, and $2 \frac{1}{2}$ below, motor board. Neat trim styling throughout. Less 45 -rpm automatic spindle and wood base (see listings below). For $110-130$ volts, 60 cycle AC. Shpg. wt., 9 lbs. $\$ 5$ Monthly.
20 RX 364-2-J. Autoslim/P and Cholce of Cartridge.... 39.51 73 RX 054-J. Autoslim/P Changer Only

NET 39.50

## QUALITY ACCESSORIES FOR YOUR GARRARD CHANGER

UNFINISHED MOUNTING BOARDS. Specially cut and drilledfor custom installation of Garrard units. $11 / 2 \mathrm{lbs}$.
73 RX 059. For Type "A"
$\qquad$ NET 1.5073 RX 060. For AT. 6 and Autoslim/PNET 1.50
RA-7 RECORD ADAPTER FOR TYPE "A." Clips
platform for 7 ", $331 / \mathrm{rpm}$ small-hole records. $11 / 2 \mathrm{lbs}$. 73 R 082. ..... NET 1.50
45-RPM SPINDLE ADAPTERS. Av. wt., 10 oz
73 R 083. For Type " $A$ " ..... NET 3.80
73 R 085. For Autoslim/P
73 R 085. For Autoslim/P ..... NET 3.80
PLUG-IN HEADS. Accept all standard cartridges. 6 oz
PLUG-IN HEADS. Accept all standard cartridges. 6 oz


WOOD BASES SPECIALLY DESIGNED TO ACCEPT GARRARD CHANGERS

- Easy to Install
- Handsome

Finishes

- For Shelf or

Table

$\$ 5$ monthly

- Has Heavy, Constant-Speed Turntable
- Includes Built-in Record Brush
- With Sonotone Sfereo Cartridge
- Built-In Leveling Indicator

The Ensign Supreme-a record changer offering every kind of deluxe feature, yet selling at an extremely low price. With it. you enjoy an extraordinary combination of economy and quality. The arm and controls are in gleaming muted gold that contrasts pleasingly with the changer's deep-tone brown finish. The record-changing mechanism functions smoothly and quietly. Turntable rotates accurately at $331 / 3,45,78$ and $16^{2 / 3}$ rpm, while the arm-with pressure adjustment-tracks flawlessly. Built-in automatic shutoff after last record. Sonotone turnover stereo cartridge has diamond stylus for LP's and sapphire for 78's. Record brush attached to arm keeps records free of dust particles. A bubble level indicator built Into the changer indicates proper leveling, assuring longer record life and high-fidelity quality. $13 \times 12^{2}$. Requires $3^{\prime \prime}$ below and $4^{\circ}$ above mounting board. Less wood base and 45 rpm spindle, below. For $105-120$ volts, 60 cycle AC. Shpg. wt., 10 lbs .
73 RX 050 -J. $\$ 5$ Monthly.
NET 29.95
73 RX 062C. Wood Base. Specify choice of mahogany, limed oak, or walnut. Shog. wt., 4 lbs .

NET 4.49
73 RX 063. Unfinished Mounting Board. Wt., $11 / 2$ lbs.
73 R 075. 45-RPM Automatic Spindle. Wt:, 10 oz.
NET 1.50
NET 1.69

## Nef

\$5 monthly

- One Knob Controls All Functions
- Has Ceramic Stereo Cartridge
- Shuts Off Automatically

Low-cost stereo record changer that performs like a deluxe model. Has lightweight arm, heavy furntable and balanced 2 -pole motor-handles records gently and quietly. Plays records at 4 speeds: $331 / 3,45,78$ and $162 / 3$ rom. Includes ceramic turnover stereo cartridge and dual sapphire needles. Plays $10 \cdot 12^{*} 12 \cdot 10^{\prime \prime}$ or $7^{\prime \prime}$ records, and automatically shuts itself off after the last record has played. Ribbed turntable cushlon protects records. Excitingly styled in dawn gray, black and silver. Size, $13 \frac{1}{2} \times 12^{*}$. Requires $3^{*}$ below and $4^{*}$ above mounting board. Less wood base and $45 \cdot \mathrm{rom}$ automatic spindle, listed below. For operation from 105.120 volts, 60 cycles AC. Shpg. wt., 10 lbs.
73 RX 051 -J. $\$ 5$ Monthly.
NET 19.95
73 RX 062 C . Wood Base. Specify mahogany, limed oak or walnut. Wt., 4 lbs. NET 4.49
73 RX 063 . Unfinished MIg. Board. $11 / 2 \mathrm{Jbs}$. 1.50

73 R 076. 45-RPM Spindle. 10 lbs.
NET 1.69


## WEACOR MODEL 1041-50 STEREO DISKCHANGER

Smooth 4-speed changer for $162 / 3,331 / 3045$ and 78 rpm . Ceramic turnover stereo cartridge with sapphire needles. Features: 2-pole motor; extra-long turntable bearing; automatic shut-off; $8^{\text {c }}$ turntable. Intermixes $10^{\circ}$ and $12^{\prime \prime}$ records. "Rumble ribs"" prevent rumble. Adjusts for stylus pressure. Beige and brown finish. Mounting space: $14^{11 / 10^{*}}$ wide, $\left.13 \frac{1}{2}\right|^{\prime \prime}$ deep; $51 / 2^{\prime \prime}$ above and $4^{*}$ below mounting board. With two $36^{\circ}$ connector cables. Less base, below. For $110-120 \mathrm{v}$., 60 cycle AC. Wt., $101 / 2 \mathrm{lbs}$.
73 RX 072-J
NET 27.39
MODEL 1041-51 DISKCHANGER. As above, but has .0007* diamond stylus and $.003^{\circ}$ sapphire stylus. Wt., $101 / 2 \mathrm{lbs}$. 73 RX 073-J. $\$ 5$ Monthly.

NET 30.83 73 RX 074. Base for 1041 Changers. Brown. 4 lbs...... NET 5.68
 NET 1.96 73 R 078. 45-RPM Spindle Adapter. Wt., 8 oz...........NET 2.94 73 R 077. 45-RPM Insents. Pkg. of 10.6 oz

Manual Player and Cartridge Offers


This extraordinary low-cost manual player, containing a preci-sion-built Garrard mechanlsm with 4-pole motor, is an Allied exclusive. Plays 4 speeds; has automatic start and stop. Just move pickup arm to start its quiet, smooth operation-automatically shuts off after playing record. Size $143 / 2 \times 121 / 2^{\circ}$. Requires $3^{\circ}$ above and $21 / 10^{*}$ below mounting board. With universal plug-in head for all standard cartridges; line cord with plug; and output cables. Less base, below and cartridge (see combination offer above). For $110-120 \mathrm{v}, 60 \mathrm{cycle}$ AC. Wt., 13 los.
73 RX 055-J. $\$ 5$ Monthly.
NET 22.95
WOOD BASE. Specify mahogany, Blonde or walnut. 4 lbs.

## 73 RX 058C

NET 4.49
73 RX 061. Mig. Board. Unfinished. I $1 / 2$ lbs............ NET 1.50
73 RX 079. Extra Plug-In Head. Wt. 3 oz.
NET 1.50

# Fine Stereo Balanced Components <br> Deluxe Turntables and Arms For Stereo Listening <br> <br> empire 

 <br> <br> empire}


# REKO.KUT Famous Precision Hi-Fi Stereotables 



## MODEL N-34H TWO-SPEED STEREOTABLE

Designed for beauty and versatility, this attractive $12^{\circ}$ turntable plays records at $331 / 3$ and 45 rpm . Features highly accurate rotational speed through a hysteresis-synchronous motor, permanently lubricated, with special winding to minimize coating. Aluminum turntable is ball-bearing suspended and rotates on micro.finish shaft-virtually noise-free operation. Unique "Rekothane" drive belt is adjustable to obtain optimum tension for noise-free operation. Noise level: 57 db below average recording level; wow and flutter, less than $0.15 \%$. Turntable has ribbed rubber mat. Less base (betow) and arm (listed on facing page). Requires $41 /{ }^{\prime \prime}$ clearance below motor board. 12\% $\times 19^{\prime \prime}$. For $110-120$ volts, 60 cycle AC. Shpg. wt., 17 lbs .
73 RX 008-J. $\$ 5$ Monthly
NET 89.95
NET 14.95

## K-33H SINGLE-SPEED STEREOTABLE KIT

An easy-to-build professional-type turntable-requires only a screwdriver to assemble. Similar to the $\mathrm{N}-34 \mathrm{H}$ (at left), but plays at $331 / 3 \mathrm{rpm}$ only. Noise level: 57 db below average recording level. Wow and flutter: less than $0.15 \%$. Size, $16 \times 175 / 60^{\prime \prime}$. Requires $4 y^{\prime \prime}$ clearance below motor board and $3^{\prime \prime}$ above. Less walnut base (listed below) and arm (listed on facing page). For 110-120 volts. 60 cycle AC. Shpg. wt., 15 Ibs.
73 RX 010-J. $\$ 5$ Monthly.
NET 59.95
MODEL K-34H. Same as above, but plays two speeds: $331 / 3$ and 45 rpm . Shpg. wt., 16 lbs .
73 RX 011-J. $\$ 5$ Monthly................................ NET 69.95
MODEL KB WALNUT BASE. For above turntables. 8 Ibs. 73 RX 012.

NET 14.95


## MODEL B-12H 3-SPEED STEREOTABLE

Expertly engineered to meet the professional specifications of the broadcast studio and dedicated audiophile, the $\mathrm{B}-12 \mathrm{H}$ plays records at $331 / 3,45$ and 78 rpm . Features massive, custom-built hysteresis motor for unparalleled rotation accuracy under heavy-duty, continuous operating conditions. Heavy turntable cast from special aluminum alloys, carefully selected for resonance-damping qualities. Noise level: 57 db below average recording level; wow and flutter, less than $0.12 \%$. Idler disengages in off position. With ribbed rubber turntable mat, built-in 45 rpm adapter, and neon Indicator light. $17 \% \times 16^{\circ}$. Requires $61^{-}$below motor board for clearance. Less base (listed below) and arm (on facing page). For $110-120$ volts, 60 cycle AC. Shpg. wt. 20 lbs.
73 RU 013-J. 88 Monthly.
NET 149.95
MODEL B-12GH. As above, but with standard hysteresis synchronous motor for home use. Requires $43 / 4^{*}$ below deck. Shpg. wt., 18 lbs.
73 RU 014-J. \$6 Monthly............. NET 109.95
73 RX 015. BW-1 Walnut Base. 8 lbs.


## SPACE-SAVING RONDINE II PRECISION TURNTABLE

MODEL R TURNTABLE ONLY. A professional turntable meeting precision specifications, yet only a little larger in size than a record changer. In view, the Model $R$ makes an attractive furnishing-or, if desired, easlly hides away. Has permanently lubricated hysteresis-synchronous motor that rotates with phenomenal accuracy at $331 / 3 \mathrm{rpm}$. "Rekothane" drive belt adjusts for desirable tension and minimum noise. Solid aluminum turntable with rubber mat. Noise level, 57 db below average recording level. Wow and fluttsr, less than $0.15 \%$. Compact size: only $14 \frac{1}{6} \times 141 / 2^{*}$. Requires $31 / 2^{*}$ above the motor board and $41 / 2^{*}$ below. For 110-120 v., 60 cycle AC. Wt., 17 lbs.
73 RU 01 6-J. $\$ 5$ Monthly.
NET 79.95
R-320A TURNTABLE WITH AUTOMATIC PICKUP ARM. Consists of Model R Turntable and AP-320 Automatic Pickup Arm (described on facing page) factory-installed. Gives excellent protection to records and cartridge. Less base (below) and cartildge. 20 lbs.
73 RX 017-J. 59 Monthly.
NET 169.95
R-320 TURNTABLE WITH MANUAL PICKUP ARM. Consists of Model R Turntable with S-320 Manual Pickup Arm (described on facing page) factoryinstalled. Less base (below) and cartridge. Wt., 20 lbs. 73 RX 01 8-J. $\$ 7$ Monthly.

NET 129.95
WALNUT BASE. For above turntables. Shpg. wt., 4 lbs 73 RX 019.

NET 14.95

# 2EK○.KUT Pickup Arms and Accessories 



PROFESSIONAL MANUAL AUTOMATIC PICKUP ARMS

MODEL S-320 12* MANUAL PICKUP ARM. Uses exclusive Omni-Balance for correct lateral balance under all conditions with any cartridge, any record and at any speed. Includes isolated counter-weight for static balance, micro-adjustment for perfect tracking pressure, plug-in cartridge shell and shielded, pre-wired cables for minimum hum and easy installation. Less cartridge. Wt., $21 / 2 \mathrm{lbs}$. 73 RX 020-J. $\$ 5$ Monthly.....NET 34.95 AP-320 AUTOMATIC PICKUP ARM. AS above, but with exclusive "Autopoise" converter that protects records and cartridge. Press button and turntable starts, arm lifts and sets precisely in groove at correct lateral balance. When record has
been played, arm retracts to rest position and turntable shuts off. With "omnibalance" counterweight, micro-adjustment and plug-in shell. Less cartridge. Wt., $4 \frac{1}{2}$ Ibs.
73 RX 021-J. 55 Monthly..... NET 74.95
APK "AUTOPOISE" AUTOMATIC CONVERTER ONLY. Less Arm. Use with S-320, S-220 and S-210 arms. 2 lbs.
73 R 022. $\$ 5$ Monthly ...... NET 49.95
MS-260 $16^{\circ}$ STUDIO PICKUP ARM. Same as S-320, less Omni-Balance. 3 lbs. 73 RX 023-J. $\$ 5$ Monthly....... NET 36,95
PS-20L CARTRIDGE SHELL. 60 Z .
73 R 024.
NET 5.95


A smooth-operating professional turntable with variable speed adjustment ( $\pm 3 \%$ ). Has $12^{\prime \prime}, 11 \frac{1}{2} \cdot 16$. aluminum-covered turntable and belt-plus-idler arrangement to Isolate turntable. Also features: disengagement of idler; built-in lighted strobe and leveler. Less base and mtg. board (below) and arm. $15 \frac{1}{2} \times 12 \frac{1}{6}$.". Requires $23 / 4^{\circ}$ below base plate (supplied). For 110-120 or $200-250$ v., $50-60$ cycle AC. 32 lbs.
73 RX 027-J. \$6 Monthly... NET 110.00
TD-121 TURNTABLE. As above but sin-gle-speed ( $331 / 3$ rom). $8-\mathrm{lb}$. table. Belt and idler drive isolates turntable from motor vibration. Shpg. wt., 28 Ibs.
73 RX 028-J. $\$ 5$ Monthly.
NET 85.00


## TD-135 TURNTABLE AND ARM

A superior 4 -speed manual player that automatically shuts off. Uses same drive as the TD-124 (at left) and has 8.1 lb . nonmagnetic turntable. Includes adjustable speed control and professional pickup arm. Base plate, $15 \times 12^{\prime \prime}$. Requires $21 / 2^{\prime \prime}$ below mtg. board. Less base and mtg. board (below) and cartridge. For $110-120$ or $200-$ 250 v., $50 \cdot 60$ cycle AC. Wt., 35 Ibs. 73 RX 029-S. \$6 Monthly...NET 110.00
TD-111 $331 / 3$ TURNTABLE. (Not illus.). Has $12^{\circ}$ turntable and isolated motor. Adjustable speed. Less arm, base and mtg . board. Needs $31 / 2$ below board. For 110.120 v., 60 cycle AC. Wt., 17 los.

73 RX $\mathbf{0 3 0}$-J. $\$ 5$ MOnthly.... NET 60.00

## THORENS TURNTABLE BASES and MOUNTING BOARDS

| Stock No. | For | Description | We. | NET |
| :---: | :---: | :---: | :---: | :---: |
| 73 AX031C | TD-124. TD-121 | Wood base Mahogany or Walnue | 51 tus | 0.00 |
| 73 Rx032C | TD-111 | Wood base Mahogany or Walnut | 51 be . | 0.00 |
| 73 Ax 033 C | TD-135 | Wood base Mahorany or Wainut | 5 lta | 7.00 |
| 73 R $\times 034$ | TD-124. TD-121 | Unfinished mounsing board | 3 lime. | 4.50 |
| $73 \mathrm{R} \times 035$ <br> 73 RX | TD-135 TD-111 | Unfinished mounting hoard | 3 ths. | 4.50 |



## OMNI-BALANCE and ACOUSTI-MOUNTS

MODEL OB-1 OMNI-BALANCE. An exclusive development that assures exact lateral balance at all times. improves stereo channel balance-stops groove jumping. Works with any Rek-O-Kut arm not already equipped with it. Easy to in-stall-tool furnished with kit. 5 oz.

## 73 R 025.

NET 2.95
MODEL AF-1 ACOUSTI-MOUNTS. An excellent accessory for custominstalled Stereotables. Reduces acoustic feedback drastically by isolating Stereo. tables from sources of external noise. Install in minutes with only a screwdriver. Made of soft rubber. 4 per package. 2 lbs. 73 R 026

NET PER PKG. 3.50

## BOGEN-PRESTO



# MODEL B-61 VARIABLE SPEED TURNTABLE AND ARM 

Net - Allows Perfect "Pitch-Tuning" \$5995<br>- Accepts Records Up to $16^{\circ}$ - Has 4-Pole Motor

A fine custom.crafted Swiss product. Of. fers continually variable speeds from 29 to 86 rpm , with settings for $162 / 3,331 / 3.45$ and 78 rpm speeds. Rubber covered $73 / 4 \cdot 1 \mathrm{~b}$. zinc-alloy $12^{\prime \prime}$ turntable; smooth.running 4-pole molor; gentle-action arm with micrometer-type gauge for extremely precise stylus pressure adjustment. Arm is raised by linkage to minimize record wear. Size, $151 / 4 \times 131_{6}^{*}$; requires $21 / /^{\prime \prime}$ above and $21 /{ }^{*}$ below mounting board. Less base (listed below) and cartridge. For 110-120 .60 cycle AC. Wt., 18 lbs. 73 RU 037-J. $\$ 5$ Monthiy...

NET 59.95
WOOD BASE. Walnut. Wt., 5 lbs.
73 RX 038
NET 5.25
ALUMINUM PLUG-IN HEAD. For monophonic or stereo cartidge. 6 oz . 73 R 039.

NET 4.00

# Professional Arms and Cartridges 



TRADE-IN OFFER
Get the M7D (N7D) or M3D (N3D) cartridge and save $50 \%$ by trading in your old cartridge-any model. Send your order at the trade-in price-we'll ship your new cartridge and tell you how to send your trade-in.

MODEL MTD DYNETIC STEREO CARTRIDGE WITH NTD STYLUS. Userreplaceable $.0007^{*}$ diamond stylus. Response: $20-20,000 \mathrm{cps}$ Separation: 20 db (13) 1000 cps . Compliance: $3.5 \times 10^{.6} \mathrm{~cm} . /$ dyne. Tracks at $4-7 \mathrm{gms} .3 \mathrm{oz}$.
73 RC 913-J. Cartridge Only. NET 23.52 73 RC $913-\mathrm{J}$. With Trade-In, ONLY . 11.76

MODEL M3D STEREO DYNETIC CARTRIDGE WITH N3D STYLUS. Userreplaceable .0007 diamond stylus. Response: $\pm 3 \mathrm{db}, 20-15,000 \mathrm{cps}$. Channel Separation: 20 db © 1000 cps . Compliance: $4.0 \times 10^{-4} \mathrm{~cm} . / \mathrm{dyne}$. Tracks at 3.6 oms . Shpo. wt., 3 oz.
73 RC 900 -J. Cartridge Only. NET 44.10 73 RC 900-J. With Trade-In, ONLY . 22.05 MODEL M3D "PROFESSIONAL" CARTRIDGE WITH N21D STYLUS. As above, tracks at $21 / 2$ oms max. 3 oz . 73 RC 914-J.

M7D "CUSTOM" DYNETIC CARTRIDGE WITH N21D STYLUS. Userreplaceable $.0007^{\circ}$ diamond stylus. Response: $20.20,000$ cps. Compliance: $9.0 \times 10^{-6} \mathrm{~cm} . / \mathrm{dyne}$. Std. mtg. 3 oz .
73 RC 915. \$5 Monthly....... NET 36.01
M65 STEREO PREAMP. Converts ceramic inputs to magnetic. $67 / 8 \times 315 /{ }_{6} \times 31 / 4$. For 115 v. AC. 2 lbs.
73 R 102. $\$ 5$ Monthly. $\qquad$ NET 23.52
73F 103. M61-1. Similar to above, but transistorized. $2 \times 51 / 4 \times 5^{\circ}$. For $110-120$ v., 60 cycle AC. 1 lb .

NET 27.50
73 R 104. M61-3. As above, battery operated. With battery. $1 \mathrm{lb} . . . .$. . NET 26.50 M5D MONO CARTRIDGE. User-replaceable . $001^{\circ}$ dia. stylus. Response: $20-20,000 \mathrm{cps}$. Compliance: $3 \times 10^{-6} \mathrm{~cm} . /$ dyne. 2-6 gram tracking. 3 oz .
73 RC 916. $\$ 5$ Monthly....... NET 26.95
MT7 STEREO CARTRIDGE. User-replaceable .0007 diamond stylus. Response: $20 \cdot 17,000 \mathrm{cps}$. Compliance: 6.0 x $10^{\circ} \mathrm{cm}$./dyne. Tracks 3-6 grams. 202. 73 RC 917. \$5 Monthly....... NET 26.95 73 RC 916. M33-7 "Professional Dynetic" Cartridge. As above, has 20-20,000 cps response. Tracks at 1-3 grams....... 35.77 73 RC 919. M33-5 "Professional Dynetic" Cartridge. As above, has $.0005^{\circ}$ stylus tlp for cleaner highs.

NET 35.77

M232 $12^{\circ}$ PICKUP ARM. Ball-bearing pivots, plug-in head, variable height. Adjustable 0-8 gram tracking. 121/is" long. Less cartridge. 2 lbs .
73 RX 105. \$5 Monthly.
NET 29.35 73 RX 106. M236 16" Arm. 2\%/4 los.... 31.31 73 R 107. A23H Extra Head. $402 . . . . .2 .35$
SME-3009 $12^{\circ}$ ARM. Deluxe arm takes any cartridge. Adjustable $1 / 2-6$ aram track. ing. Ball and knife-edge bearings, cue lever. Less cartridge. $11 / 2$ lbs.
73 RX 108. $\$ 5$ Monthly .........NET 89.50 73 RX 109. SME-3012. 16" Arm. As above, Less cartridge. $13 / 4 / \mathrm{Ibs}$............... 99.50
M222 STEREO DYNETIC ARM AND CARTRIDGE. Tracks at only $3 / 1 /$ gram. Response: $\pm 21 / 2 \mathrm{db}, 20-20,000 \mathrm{cps}$. Separation: over 20 db at 1000 cps . Compliance: $22 \times 10^{-4} \mathrm{~cm} /$ /dyne. Model M22 Sterep Cartridge and with $.0005^{\circ}$ dia. stylus. 1 lb . 73 RX 110. $\$ 5$ Monthly.......... NET 89.50 73 RX 114. M226 Arm And Cartridge. As above, $16^{\circ} \mathrm{arm} .11 / \mathrm{lbs}$.
. 89.50
DIAMOND REPLACEMENT STYLI.
$.0007^{\circ}$ except * $.0005^{*}$. Wt., 2 oz.

| ck No. | Tyoe | for | EACH |
| :---: | :---: | :---: | :---: |
| 920 | M30 |  | 22.05 |
| 73 AC 922 | NSO NTO |  |  |
| 73 AC 923 | W210 | M30. 70, 212, 216 | 24.2 |
| RC924 |  |  |  |
| RC 925 | ${ }^{\text {m37.7 }}$ | m33.7 |  |
| 73 RC 927 | N220 | Mm222, SME-3012 |  |



## NEWI AR $331 / 2-R P M$ TURNTABLE ENSEMBLE

Now from Acoustic Research, a completely integrated record playing ensemble that features a precision $331 / 3 \mathrm{rpm}$ turntable and a 12 pickup arm mounted on a handsome oiled walnut base, even includes cables and transparent dust cover. Features a machined and indlividually-balanced 3.5 lb . aluminum turntable platter that is belt-driven from synchronous motors. Turntable is shock-mounted from top plate. Meets NAB specs for wow, flutter, rumble and speed accuracy. Shock-mounted 12" pickup arm has damping mechanism that protects both record and needle if arm is accidentally dropped. Disengages when needle touches the record. Also has bullt-in stylus pressure gauge. Plug-in head has over-hang adjustment device-you can use it with any cartridge. Size (with cover), $51 / 4 \times 163 / 4 \times 123 / 4^{*}$. Less cartridge. For operation from $110-120 \mathrm{v}, 60$ cycle AC. Shpg.
wt., 18 los. wt., 18 lbs .
73RX 115-J. \$5 Monthly
NET 58.00


## FAMOUS CERAMIC STEREO CARTRIDGES

31 MD-7 has built-in equalizer for magnetic inputs. Others with external equalizer for ceramic or magnetic inputs.
73 RC 928. E-V 31MD-7. Tracking force: 2-6 grams. Response: $\pm 2 \mathrm{db}, 20-15,000 \mathrm{cps}$. Separation: $28 \mathrm{db} . .0007^{\prime \prime}$ diamond stylus. 3 oz. \$5 Monthly.

NET 23.52
73 RC 929. D7-7 Replacement Stylus. 3 oz. NET 4.95
73 RC 930. New Astatic 45D. Needs 1 gram tracking force. Response: $20-20,000 \mathrm{cps}$. Separation: $35 \mathrm{db} . .000 \mathrm{~T}$ diamond stylus. 4 oz . List, $\$ 44.50 . \$ 5$ Monthly.

NET 26.70
73 RC 932. Sonotone 9 TASD-V. Response: 20-17,000 cps. . $0007^{*}$ diamond stylus. Shpg. wt., 3 oz. List, $\$ 19.25$......... NET 11.55 73 RC 933. N-9TSD Replacement Stylus. 2 0z.........NET 2.94

## כ Suit Every Audio Need and Taste



Stereo 90


## ST ANTON MODEL 200 UNIPOISE ARM.

New design based upon excluslve single pivot bearing permits tracking from $1 / 2$ to 2 grams. Calibrated styfus force adjustment easily adjusts arm balance in all planes. No soldering to install-requires only single hole. Overall size, $11 \mathrm{3} / \mathrm{m}^{\prime \prime}$. With color coded leads and template. Less cartridge. Wt., 2 lbs.
73 RX 116. \$5 Monthly ....... NET $\mathbf{3 6 . 0 0}$
604 STANTON KABLEKIT. Converts manual players and automatic changers to stereo. No soldering. 3 oz. 73 R 117.

NET 3.98
STANTON 481 A STEREO CARTRIOGE. For those who want top-quallty professional pickup, the 481 A is the answer. Developed as a laboratory standard, it gives accurate, reliable measurements for channel callbration. Frequency Response: $20-10,000 \mathrm{cps}, \pm 1 \mathrm{db} ; 20-17,000 \mathrm{cps}, \pm 2 \mathrm{db}$. ChannelSeparation : 35 db . Output: 0.8 mv . Tracking Force: 2-4 grams. For use in manual pickup arms only. With stylus and hardware. 2 oz .
73 RC 934. $\$ 5$ Monthly... . . . . NET 48.00
MODEL 481AA. As above, but for arms that can track $1 / 4-21 / 2$ grams. Output: 0.5 mv, Shpg. wt., 2 oz.
73 RC 935. \$5 Monthly. . . . . . . . NET 49.50
MODEL 481E. Same as 481A, but has two styll: .001" for LP and . 0027 for $78^{\circ} \mathrm{S}$
73 RC 936. $\$ 5$ Monthly. . . . . . . . NET 60.00

ST ANTON 400C STEREO CARTRIDGE. A new professional stereo phono cartridge utilizing the famous Fluxvalve principle-adaptable to demanding broad. cast applications or deluxe home music systems. Frequency Response: 20 to 20,000 cps. Channel Separation 35 db . Output: 2.6 mv. Tracking Force: 4.7 grams. For use in record changers. Complete with stylus, instructions and mounting hardware for easy installation. Shpo. wt., 2 oz. 73 RC 937. $\$ 5$ Monthly....... NET 33.00 MODEL 400 A . As above, but for plckup arm that can track $2-5$ grams.
73 RC 938. $\$ 5$ Monthly...
. NET 39.00
MODEL 400AA. As above, but for pickup arm that can track $1 / 4=21 / 2$ grams.
73 RC 939. $\$ 5$ Monthly
NET 40.50

| Stock No. | Mfr's Type | For | NET |
| :---: | :---: | :---: | :---: |
| 73 RC 940 | D-4005AA | 400, 481 | 19.50 |
| 73 RC 941 | D-4007A | 400, 481 | 18.00 |
| 73 RC 942 | D-4007C | 400, 481 | 12.00 |
| 73 RC 943 | D.3807AT | 380, U38AT | 16.00 |
| 73 RC 944 | D.3805AA | 380, U38AT | 17.50 |
| 73 RC 959 | D-3807C | 380, U38AT | 10.00 |
| 73 RC 960 | D.3807A | 380. U38AT | 16.00 |
| 73 RC 961 | D-9007 | 90 | 7.50 |
| 73 RC 962 | D-3707C | 90, 371 | 10.00 |
| 73 RC 963 | D-3510* | 370 | 15.00 |

## TRADE-IN OFFER

Get the U38AT of 390 C -and save $50 \%$ by trading in your old car. tridge-any make or model. Order at the trade-in price now-we'll ship your new cartridge then tell you how to send your trade-in.

U3BAT STEREO CARTRIDGE. For use with autornatic turntables. Excellent shielding, high output. Response: 20$17,000 \mathrm{cps}$. Separation: 35 db . Output: 2 mv . Tracking Force: $2-5$ grams. 2 oz.
73 RC 901 -J. Cartridge Orly. NET 46.50 73 RC 901-J. With Trade-In, ONLY, 23.25

380C STEREO CARTRIDGE. Hermetically sealed and fully encapsulated. For record changers. Response: $20-15,000 \mathrm{cps}$. Separation: 35 db . Output: 2.5 mv . Tracking Force: $4-7$ grams. 202.
73 RC 945-J. Cartridge Only. NET 29.85 73 RC 964-J. With Trade-In, ONLY. 14.92 MODEL 380A. As above, but for turntables. Tracking Force: 2-5 grams.
73 RC 946. 55 Monthly.
NET 34.50
STEREO 90. Top quality cartridge. Response: $20 \cdot 12,000 \mathrm{cps}$. Separation: 20 db . Output: 1.3 mv . Tracking: $4-7 \mathrm{~g} .2 \mathrm{oz}$. 73 RC 947. . . . . . . . . . . . . . . . NET 16.50

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GRADO LAB SERIES 12" PICKUP ARM. One piece, balanced gun stock walnut with precision aluminum fittings. Tracking Efror: $0.8 \%$. Tracking Force Adjustment: to 0.1 oram. Less cartridge, below. Has Four leads. Wi., $13 / 4$ ibs.
73 RX 118 . $\$ 5$ Monthly.
NET 39.50
GRADO LAB SERIES STEREO CARTRIDGE. Meets lab standards. Response: $10-30,000 \mathrm{cps}$. Separation: 30 db . Output: 6 mv, Shpg. wt., 3 oz .
73 RC 948. \$5 Monthly.
NET 49.50
GRADO CLASSIC SERIES CARTRIOGE, Same as Lab Series above, but has frequency response of 15 to $28,000 \mathrm{cps}$.
73 RC 949. $\$ 5$ Monthly.
NET 37.50
GRADO SENATOR SERIES STEREO CARTRIDGE. Economy in price-quality in performance. Response: 18 to $24,000 \mathrm{CpS}$. Channel Separation: 20 db . Output: 9 mv .2 oz .
73 RC 953. $\$ 5$ Monthly.
.NET 24.95

ADC MODEL 40 PRITCHARD PICKUP ARM. Dynamically balanced, the " 40 " tracks precisely at $3 / 4$ gram. Features frictionfree single ball-bearing mount and bult-in arm rest. Arm is made of walnut wood. Less cartridge, below. Wt., $13 / 4 \mathrm{lbs}$. 73 RX 133. \$5 Monthly.

NET 44.50
73 RC 954. ADCS40 Plug-in Head for above. 2 02.... . NET 6.95 73 RX 132. ADC-85. Above arm with $A D C-1$ Cartridge. Shpg. wt., $13 / 4 \mathrm{lbs}$.


ADC-1 STEREO CARTRIDGE. Precision engineered. Use with professional pickup arms. Tracks at less than 1 gram. High compliance. Response: $10-20,000 \mathrm{cps}$. Channel Separation: 30 db . Output: 7 mv . Tracking force: . $75-1.5$ grams. $8 \mathbf{0 z}$.
73 RC 955. $\$ 5$ Monthly..
NET 49.50
73 RC 956. ADC-2. As above, but for changers . ..... .NET 37.50 73 RC 957. ADC-1. Stylus assembly for ADC-1.2 02... NET 25.00 73 RC 958. ADC-R2. Stylus assembly for ADC-2.2 oz. NET $\$ 5.00$


## LSI5-E-V'S LOWEST-COST $15^{*}$ SPEAKER

A beautifully performing, deluxe version of the LS12 above, this popular $15^{\prime \prime}$ speaker delivers powerful, stirfing bass all the way down to 35 cps . Quality features include: a heavy-duty die-cast frame tor precise alignment of critical parts; Radax mid-range cone for a $13,000 \mathrm{cps}$ treble response; plus an edgewise-wound voice coil of precision-flattened ribbon conductor for 18\% greater efficiency-the equivalent of up to 5 extra watts of input power! Total flux, 89,000 maxwells. Cone resonance, 50 cps . Capacity, 20 watts. Mechanical crossover at 4500 cps . Impedance, 8 ohms. Depth, $6^{11} / 3^{3}$. Shpg. wt., 12 lbs. 71 DX 123-J. $\$ 5$ Month/y.

NET 25.97

# Electro-Voics Wolverine Component. 

## VALUE PACKED LT12 12" 3-WAY HI-FI SPEAKER

- True 3-Way Design-12" Wooter, Radax Coaxial Cone, Sonophase VHF Horn-Type Tweeter
- Exclusive Indox Ceramic Magnet-Cast Frame
- Bullt-In Crossovers-40-18,000 Cps Response

The value-packed LT12 incorporates the latest refinements from the E-V laboratories It offers extended bass response from a $12^{\prime \prime}$ woofer cone, outstanding clarity from the exclusive Radax mid-range cone, and pleasing treble through the use of an integral Sonophase VHF horn-type tweeter. Other exclusive features: a patented, 12-ounce ceramic "Indox" magnet that is comparable to heavier magnets of conventlonal design: $21 / 2^{\prime \prime}$ edgewise-wound ribbon-type voice coil; and a rigid die-cast frame. These deluxe features make the LT12 an exceptional speaker buy. Response: $40 \cdot 18,000 \mathrm{cps}$-with low distortion. Mechanical and electrical crossovers at 2000 and 3500 cps , respectively. Brilliance control adjusts tweeter output-level. Total flux, 72,500 maxwells. Capacity, 20 watts. Impedance, 8 ohms. Depth, $6^{\circ \prime} .15 \mathrm{Ibs}$.

NET 31.36


71 D 128-J. $\$ 5$ Monthly. 71 DX 129-J. $\$ 5$ Monthly.

## FAMOUS LS12 DUAL-CONE 12 SPEAKER

Low-cost $12^{\prime \prime}$ high-fidelity speaker that's ideal for moderately priced stereo music systems where full-range reproduction is desired. The LS12 is also acoustically perfect for use in the Electro-Voice "Marquis" and "Aristocrat" enclosures shown elsewhere in this section.
The LS12 utilizes many of the superior features of the LT12 above, plus a dual-cone design that provides an unusually clean response of 40 to $13,000 \mathrm{cDs}$. The tough one-piece woofer cone has a resonant frequency of 65 cps , for powertul yet boom-free bass. Unlike many speakers in this price class, the LS12 has a heavy-duty frame that quarantees permanent centering of all elements for a lifetime of distortion-free sound. All internal parts are precision-ground to jewel-like accuracy.
Low-silhouette frame even permits mounting in wall or ceiling. Total flux, 70,700 maxwells. Power capacity, 20 watts. Impedance, 16 ohms. Mechanical crossover at 4500 cps . Depth, only $31 / 4^{\circ}$. Shpg. wt., 6 lbs.
71 DX 121-J. $\$ 5$ Monthly.
NET 20.58

## LS8 WIDE-RANGE DUAL-CONE $8^{-}$SPEAKER

A favorite $8^{*}$ speaker for low-cost music systems, and a splendld choice where larger speakers cannot be accommodated. Built to the same high standards as the $12^{\prime \prime}$ and $15^{\circ}$ units above, the LS8 boasts a highly authentic 55 to $13,000 \mathrm{cps}$ response. Has: longthrow voice-coil for surprisingly powertul bass; Radax midrange cone: heavy-duty die-cast frame; high-efficiency edgewisewound voice coil; and low-silhouette design for easy custom mounting. Total flux, 70,700 maxwells. Cone resonance, 75 cps . Power capacity, 20 watts. Mechanical crossover at 6000 cps. Impedance, 8 ohms. Depth, $31 / 2$ ". Shpg. wt., 5 Ibs. 71 D 124-J.

NET 19.11

## MODEL HFI HIGH-FREQUENCY STEP.UP KIT

Add these top-quality high-frequency components to any $8^{*}, 12^{\prime \prime}$ or $15^{\circ}$ woofer to obtain a moderate-cost two way speaker system that extends treble response to the limits of the audio spectrum. Also can be used in conjunction with the MF1 mid-range kit, below, to form a 3-way system. Kit includes: Model TW35 wide-angle horn-type tweeter; Model CR35 3500-cycle L.C crossover network with level control; wiring; hardware; easy.tofollow instructions. (E.V's "Marquis" and "Aristocrat" enclosures even have special cut-outs to further simplify installation.) Tweeter response is crystal-clear from 3500 to $18,000 \mathrm{cps}$. Tweeter dispersion, $180^{\circ}$. Power capacity, 50 watts. Impedance, 8 ohms. Tweeter, $51 / 4 \times 2 \times 23 / 4^{\circ}$; crossover, $31 / 4 \times 3 \times 21 / 2^{*}$. Shpg. wt., 3 lbs.

NET 24.50

## MODEL MF1 MID-FREQUENCY STEP.UP KIT

A package of first-rate mid-range components for making up a 3-way speaker systemassures improved "presence"' for natural true-to-life sound quality. Kit includes: Model MR10 treble driver; Model CR10 L-C crossover network with level control; wiring; hard. ware; and easy installation instructions. Provides extremely smooth reproduction be: tween 1000 and $15,000 \mathrm{cps}$; spreads mid-range notes evenly throughout the listening area-horizontal dispersion is $180^{\circ}$. Power capacity, 50 watts. Impedance, 8 ohms. Horn size, $4^{\prime \prime}$ long by $10 \frac{1}{2}{ }^{\prime \prime}$ wide; crossover, $31 / 4 \times 3 \times 2 \frac{1}{2}$. Shpg. wt., 5 lbs .

# eluxe Speakers by Electröorice 

## ＂RADAX＂COAXIAL HI－FI SPEAKERS

## SP12 DELUXE 12＇SPEAKER

top－performing $12^{\circ}$ coaxial speaker for th－quality music systems．Features in－ ide：powerful $3-1 b$ ．Alnico $V$ magnet； ecially treated woofer cone for ex－ ided－range bass；Radax－type high－ quency radiator．Smooth response from $-13,000 \mathrm{cps}$ ．Total flux，193，000 maxwells． une resonance， $35-45 \mathrm{cps}$ ．Crossover， 00 cps ．Capacity， 25 watts．impedance， ohms．Depth，71／2＂． 25 Ibs．
DU 130－J．$\$ 5$ Monthly．．．．．．NET 68．60

## SPPS DELUXE 15＇SPEAKER

superb $15^{\prime \prime}$ coaxial speaker offering ass reproduction down to 30 cps ，and ean highs to $13,000 \mathrm{cps}$ ．Has $4 \mathrm{~s} / \mathrm{alb}$ ． zramic magnet．Flux，248，000 maxwells． one resonance，25－35 cps． 30 watts． 16 hms． $9^{\prime}$ deep．Shpg．wt．， 31 lbs． 1 DU 132－J．$\$ 5$ Monthly．．．．．NET 93.10 P15B．Similar to above，but $11 / 2 \cdot 1 \mathrm{lb}$ ．ce－ zmic magnet． $35 \cdot 13,000 \mathrm{cps} .16$ ohms $5 / 3=$ deep．Shpg．wt．， 14 lbs.
1 Dx 133－J．$\$ 5$ Monthly．．

## SP12B ECONOMY 12＊SPEAKER

Moderately priced full－range coaxial speaker with a high－efficiency $11 / 2 \cdot 1 \mathrm{~b}$ ． ceramic magnet．Has the same Radax mid－range cone as the SP12，at left，for treble extending to $13,000 \mathrm{cps}$ ；bass re－ sponse descends to 40 cps ．Has bulit－in mechanical crossover at 4500 cps ．Total flux，79，600 maxwells．Cone resonance， 40－50 cps．Capacity， 20 watts．Impedance， 16 ohms．Depth，63／4＂． 12 lbs. 11 DX $134-\mathrm{J} . \$ 5$ Monthly．．．．．NET 36.85

## SPAB DELUXE 8 SPEAKER

E．V＇s finest $8^{\prime \prime}$ speaker．Boasts the same basic desion as the $12^{\prime \prime}$ units above，for full－range sound in limited－space appli－ cations．Exclusive Radax principle and a double－flux $11 / 2 \cdot \mid b$ ．ceramic magnet give a rich and full－throated 45 to $13,000 \mathrm{cps}$ output．Total flux，79，600 maxwelis．Cone resonance， $50-65 \mathrm{cps} .6000 \cdot \mathrm{cps}$ crossover Capacity， 20 watts．Impedance， 16 ohms ． 43／3 deep．81／4 Ibs．
71 D134－J．$\$ 5$ MOnthly．
NET 31.36

## TRX 3－WAY HI－FI SPEAKERS

## 15TRXB 15＂SPEAKER

Zhoose this $15^{\prime \prime}$ speaker for magnificent 3－way performance in one compact， judget－sparing assembly．Combines an SP15B woofer and mid－range radiator with T 35 B VHF driver for a $35-18,000 \mathrm{cps}$ re－ sponse．Mechanical and electrical Cross－ jvers at 2000 and 3500 cps ，respectively： has tweeter＂brilliance＂control．Flux， 79，600 maxwells．Resonance，35：45 cps． 30 watts． 16 ohms． $7 \%$＂deep． 17 lbs． 71 DX $135-\mathrm{J} .55$ Monthly ．．．．．NET 83.30

## DELUXE 15TRX 15＊SPEAKER

E－V＇s best $15^{\prime \prime} 3$－way speaker．A deluxe version of the 15TRXB above，this speaker boasts the SP15 woofer assembly，plus a T35 VHF drlver，X36 L－C crossover and AT37 tweeter－level control．30－19，000 cps response．248，000 maxwells． $4 \% / 1 \mathrm{lb}$ ．mag－ net．Resonance， 25.35 cps .30 watts． 16 ohms． $91 / 3^{*}$ deep．Shpg．wt．， 33 lbs
71 DU 136－J． 58 Monthly．．．NET 151.90

## 12TRXE 12 SPEAKER

A fine buy in a 3－way speaker for the critical listener．Three－in－one design gives flawless $35-15,000 \mathrm{cps}$ range with excellent dispersion of treble notes． Employs the SP15B woofer and T35B VHF driver．Total flux，79，600 maxwells．Cone resonance， $40-50$ cps．Crossovers at 2000 and 4500 cps ；tweeter level－control． 20 watts．Impedance， 16 ohms．Depth， $6^{1 / 14^{\prime \prime} .}$ Shpg．wt．， 14 lbs．
71 DX137－J．$\$ 5$ Monthly．．．．．NĖT 68.60

## DELUXE 12TRX 12＇SPEAKER

Premium－quality version of above．Con－ slsts of SP12 wooler，integral T35 VHF driver．X36 crossover and AT37 tweeter－ level control．Response is a dazzling 35－19，000 cps．Total flux，193，000 maxwelis． Mechanical Crossover at 4000 cps ．Ca－ pacity， 25 watts．Impedance， 16 ohms． Depth，61／16＂．Shpg．wt．， 27 lbs．
71 DU＇138－J．$\$ 7$ Monthly．．．NET 127.40


71 D 139－J．TRSA MID－RANGE DRIVER．700－3800 cps． 1 －lb．magnel． 30 watts． 16 ohms． $31 / \mathrm{Ka}_{4^{\circ}}$ ． Shag．wt． 7 lbe．\＄s Manthiy NET 49.00

71 D 140－J．T 250 MIO－RANGE DRIVER． $600-3800$ cps． 3 －tb．magnet． 50 waths． 16 ohme． 57 自梱 $1 / 6 \mathrm{x}$ $5^{1} 16{ }^{\prime}$ ．Shps．wt．， $141 / 22 \mathrm{lb}$ ． 55 Monthly．NET 83.30

71 D 141－J．BHD DIFFRACTION HORN． For unite above． $15 \times 41 / 2 \times \mathrm{E}^{5}$. Shpg．m．． 4 lbs．NET18． 62

71 D 142－J．T35 VHF TWEETER．19－ke response．
6.8 oz．magnet． 30 watte， 16 ohme． $5 \% \mathrm{xa}^{2}$ horn
$21 / \mathrm{m}^{\mathrm{d}} \mathrm{dla}$ ．pol． $31 / 2 \mathrm{lbe} . \$ 5$ Monthly ．．．．．．NET 29.40

71 DX 143－J．T350 VHF TWEETER．35－he re－ sponse．1－1b，magnet． 50 watte． 16 ohme． 7 ／ k － $2 \%^{\circ}$ horn； $31_{i}^{\circ}$ dla．pot． 91 bs．s5 Monthiy NET 63.70 71 D 144－J．TCs CONE－TYPE TWEETER． 800 cps to 15 kc .20 watts． 16 ohms． $5^{\circ}$ dte．； $29^{9}$ 公＂deep． Shpg．wt．， $21 / 2$ ths．$\$ 5$ Monthly．

MET 24.50
T1D 145－J．TC3S CONE．TYPE TWEETER． 3500 CpE 10 beyond audiblilty． 20 watte． 8 ohme． dia： $\mathbf{2}^{7} / 6^{\prime \prime}$ deep． $21 / 2 \mathrm{lb} .85$ Monthly ．．．．NET 24.50
71 D 146－J．AT37 TWEETER LEVEL－CONTROL （Not Illua．）＂L＂－pad tyoe．Impedance， 16 ohme．Shpg．Wi． 6 oz．



71 DU 147－J．18w $188^{\circ}$ WOOFER．（Not lllm．） 20 800 cps ．Resonance．20－25 cpa． $4 \%$－ bs ． ceramic magnet． 30 watts． 35 lbs． 16 ohms 127.40 71 D 154－J．30W $30^{\circ}$ WOOFER．（Not IIluit．）15－300 cos．Resonance， $15-z_{3}$ cpe． $910^{*}-1 \mathrm{~b}$ ．Ceramle magnet． 100 watts． 16 ohms． $131 / 2{ }^{\prime \prime}$ deep． 49
tos．
CROSSOVER NETWORKS（MOT HUE．）
$X 8,6$ lbs．$X 36,3$ lbs．$X 1020,11$ lbs．

| Stock No． | Type | ｜Crossover（8） | For | NET |
| :---: | :---: | :---: | :---: | :---: |
| 710165－J | $\times 8$ | 800 | T25A－18w | 33.3 |
| 710168 J | $\times 36$ | 3500 | T35 | 10.2 |
| 710169 J | $\times 1020$ | 100－200 | 30 w | 49.00 |

## Electro-Voics Top-Performing Shelf Speaker System



## ESQUIRE 200 3-WAY SPEAKER SYSTEM KIT

Treat your ears to superb sound, flat over a wide frequency ran of 40 to $18,000 \mathrm{cps}$; treat your eyes to simplicity in styling tr complements any interior decoration. $10^{\circ}$ woofer with $11 / 2$ ceramic magnet produces deep, natural bass notes; $5^{\circ}$ cone-ty speaker assures wide dispersion of smooth mid-range; very his frequency tweeter delivers sparkling high tones. Two crossov points for evenly distributed sound: at 800 cps for mid-rant speaker; at 3500 cps for high-frequency compression drive In a short time you can easily assemble kit-unfinished birs finishes beautifully in just the shade you want. Shelf size, me sures only $14 \times 25 \times 131 / 2$. Power handling capacity, 50 watts. Ir pedance 8 ohms. Shpg. wt., 50 lbs.
70 DZ 609-J. $\$ 5$ Monthly.
NET $97 . \mathrm{C}$
FACTORY-ASSEMBLED. Same as above, but assembled an finished in striking oiled walnut or mahogany (specify whic desired) on all four sides. Wt. 50 lbs .57 Monthly. 70 DU 267C-J. Specify Finish.

NET 133.2

## LEYTON 2-WAY SPEAKER SYSTEM

A speaker system that offers space-saving compactness an excellent fidelity at moderate cost. Only $13 \frac{1}{\mathrm{~s}} \mathrm{high}, 24 \frac{1}{4}{ }^{\circ}$ wid and $12^{\circ}$ deep-can be placed anywhere: on a bookshelf, recor shelf, room divider, etc. Consists of: $10^{\circ}$ woofer and $5^{\circ}$ higt frequency driver with level control-all sealed in an air-tigh enclosure featuring $3 / 4$ plywood construction throughout. Em ploys "air cushion" principle for distortion-free. low resonan bass reproduction. Finished in genuine mahogany or oiles walnut veneer (specify your choice). Frequency range, 50 to $16,000 \mathrm{cps}$. Power handling capacity, 25 watts; can handle peak: to 50 watts. Requires amplifier rated at least 12 watts per channel Impedance 8 ohms. Shpg. wt., 29 lbs.
70 DU 265 C-J. $\$ 5$ Monthly.
NET 87.71

## REGINA 200 SLIM 2-WAY SPEAKER SYSTEM

A slender shelf system designed for modern-style living. Less than $6^{\circ}$ deep, it easily fits into the shape and styling of any room. The Regina 200 delivers impressive sound-full-bodied bass and mid-range, highs of great purity, and clarity-throughout its frequency range of 50 to $15,000 \mathrm{cps}$. Features a high compliance $10^{\circ}$ wooter with $1.6-1 \mathrm{l}$. ceramic magnet and long-throw voice coil for extended bass response. Has electrical crossover at 800 cps to the TC8 $5^{\circ}$ dynamic cone-type speaker, mounted in a totally isolated chamber to prevent inner action with rear wave pressure of the woofer. Finished expertly in eye-appealing olled walnut veneer. $263 / 6 \times 163 / 65 \% / 3$. Power handling capacity, 20 watts. Impedance 8 ahms. Shpg. wt., 22 lbs.
70 DU 138 -J. 55 Monthly.
NET 87.71

MARQUIS 300 3-WAY SPEAKER SYSTEM
Net
$\$ 186^{20}$
$\$ 10$ monthly

Newest and smallest 2-way speaker system in the Electro-Voice family of compacts. inctudes unique $8 \times 12^{\prime}$ bass speaker with high-compliance suspension and longthrow voice coil, and $5^{\circ}$ cone type tweeter. woofer and tweeter are isolated to prevent interaction. Rigid frames assure unvarying performance. Beautifully finished in oiled walnut. Size. $105 / 1919 \times 8^{-}$. Frequency range, 60 to $15,000 \mathrm{cps}$. Crossover, 2000 cps. Capacity, 20 watts. Impedance, 8 ohms. Shpg. wt., 15 lbs.
70 DU 696-J. $\$ 5$ Monthly..... NET 51.94

A direct radiator acoustical phase inverter floor system consisting of: SP128 $12^{\circ}$ woofer and XI crossover; TC8 treble driver; X37 crossover; T35 Super Sonax tweeter; two AT37 level controls. Frequency range, $40-19,000 \mathrm{cps}$. Size, $291 / 2 x$ $19 \times 15 \%$. In genuine mahogany or walnut veneer (specify choice). Capacity, 20 watts. Impedance, 8 ohms. Wt., 57 lbs. 70 DZ 139C-J. Specify Finish. NET 186.20 70 DU 140C-3. Marquis 63 Enclosure Only. Specify mahogany or oiled walnut finish. Wt., 27 Ibs. . . . . . . . . . . . NET 68.60


## Enclosure Kits and Speakers by ElectroVoics

## MAROUIS KD-9 UNFINISHED SPEAKER ENCLOSURE KIT

Styled to make a becoming addition to your room's interior decoration, and expertly designed to enhance the sound of speaker components, the Marquis is an ever-popular easy-to-assemble enclosure. Employs proven bass reflex, folded-horn design for deep, natural low-frequency reproduction without need for corner placement. Accepts 12 speakers or 2 or 3 -way systems without any modification. Easily assembled, you finish it to suit your taste. $295 / \times 19 \times 141 / 2^{\prime \prime}$ deep. Less metal grille. 42 lbs. 70 DU 268-J. $\$ 5$ Monthly.

NET 37.24
70 DX 141. AK6 Metal Grille for Above. Wt., 3 lbs.

## 2 MARQUIS ENCLOSURE KITS WITH 2 LT-12 SPEAKERS

A great combination at a great double savings-you save by
 Save $\$ 13.72$ on this Combination Regularly Priced at $\$ 137.20$ assembling the kits, and save again on the combination price. The LT-12 3-way hlgh-fidelity speakers deliver smooth response of $40 \cdot 18,000 \mathrm{cps}$. When placed in Marquis enclosure (described above) you have a superb stereo speaker system arrangement. Less grille (AK6, above), 130 lbs . 20 DZ 222-4J. 2 Marquls KIts and 2 LT-12's...NET 123.48

## REGENCY KD-4 UNFINISHED SPEAKER ENCLOSURE KIT

A splendid enclosure kit based on engineering principles which dictate that more operative space is essential for enhanced reproduction of lowest bass. The Regency enclosure kit provides ample area for use of larger, more efficient $15^{\circ}$ speakers or 2 and 3 way systems. Utilizes indirect horn radiator principle to extend lows and enhance highs-increases speaker power handling capacity. Can be used in corner or flat against wall. Response down to 30 cps . Easy to assemble-and you finish it with ease to the exact shade that suits you best. Supplied with easy-to-foltow Instructions. Less crossbar metal grille (see below). Size, $30 \times 32 \times 171 / 2^{\circ}$. Shpg. wt., 74 lbs .
70 DZ 142-J. $\$ 5$ Monthly.
NET 71.54
70 DX 143. AK5 Brass Grille for Above. 3 lbs
NET 6.37
2 REGENCY ENCLOSURE KITS WITH 2 LS-15 SPEAKERS
A fine combination specially selected for attractive exterior,

Save $\$ 19.50$ on this Combination Regularly Priced at $\$ 195.02$ quality stereo reproduction and savings. You save on the combinatlon price and by assembling the enclosure kits (described above). LS. 15 15" speakers deliver a smooth frequency range of 35 to $14,000 \mathrm{cps}$. You finish the kit to suit your taste. Less metal grille (above). 175 lbs.
20 DZ 366-4J. 2 Regency Kits and 2 LS-15's. . NET 175.52

## ARISTOCRAT KD-6 UNFINISHED SPEAKER ENCLOSURE KIT

A deluxe, space-saving, folded horn corner speaker enclosure-it's extremely easy to assemble and ready for you to finish in just the shade that pleases your taste. Utilizes walls of room as an extension to its built-in horn-extends bass range by one full octave for clean, clear reproduction of lowest notes without distortion. Accepts any 12 " speaker. Can also accommodate components to make up 2 or 3 -way systems. With grilie cloth and instructions. Less grille (see AK6 below). $29 \% \times 19 \times 15 \%{ }^{\prime \prime}$. 44 lbs .
70 DU 144-J. $\$ 5$ Monthly
NET 41.16
70 DX 141. AK6 Metal Grille for Above. Wt., 3 Ibs.
NET 5.39

## 2 ARISTOCRAT ENCLOSURE KITS WITH 2 LT-12's

Save $\$ 15.50$ Components ReguTarly Priced at $\$ 155.04$

An outstanding sound and price value-two LT-12's deliver excellent sound over a frequency range of 40 to $18,000 \mathrm{cps}$ in perfectly complementing enclosures; you save by assembling the kits (described above) and on the combination price. Less metal grille (listed above). Wt., 74 lbs.
2002 365-4 J. 2 Aristocrat Kits and 2 LT-12's. NET 139.54


## MID.RANGE AND HIGH-FREQUENCY COMPONENTS PACKAGES

| Stock No. | Type | Description of Components | Wt. Lbs. | NET |
| :---: | :---: | :---: | :---: | :---: |
| 71 D 113-J | B81 | For 2.way systems (LF and treble drivers), and coax speakers having 3.16. magnets or greater. Includes T35 VHF driver, X36 crossover, AT37 level control, wiring harness. | 5 | 44.10 |
| 71 DU 114-J | B84 | For existing LF drivers and coaxial speakers. Includes T25A driver, 8HD horn, X8 crossover, AT37 level control, wlring harness. | 16 | 104.86 |
| 71 DU 115-J | B85 | Adds very high frequencies with wide dispersion. For systems having extended bass ranges. Includes T350 UHF driver, X36 crossover. AT37. Ievel control, wiring harness. | 13 | 77.42 |
| 71 DU 117-ل | B86 | Adds very hlgh frequencies. Used with deluxe, extended-bass systems. Includes T250 driver, 8 HD horn. X 8 crossover. AT37 level control, wiring harness. | 25 | 139.16 |
| 71 DU 118-J | 8B7 | For mid-bass and treble frequencles from 200 to $10,000 \mathrm{cps}$. Ideal for use with 1 to $2 \cdot \mathrm{lb}$. magnet, full-range drivers and medium-efficiency systems. Plans for simple plywood horn extension provided. Includes TC35 driver, X36 crossover, AT37 level control, wiring harness. | 14 | 38.71 |
| 71 DU 119-J | BB8 | For mid-bass and treble frequencies from 200 to $10,000 \mathrm{cps}$. Ideal for use with deluxe full-range drivers having 3.1 b . magnets or more and high-efficiency systems. Plans for simple plywood horn extension are provided. Includes TC8 driver, X8 crossover, AT37 level control, wiring harness. | 15 | 61.74 |

# jensen Popular Series 3-P Speaker Systems 



The heart of each superb speaker system on thls page is the exciting 3-P/K Component Kit. This masterplece of acoustical deslon and craftsmanship. integrates 5 brilliant speakers into an ensemble producing truly magnificent high-lidelity sound.

The ultimate in high-fidelity is yours with this integrated group speakers. Use it with any Jensen enclosure specifically craftec complement the acoustical design, or in your own custo made enclosure. Kit consists of all components used in speaker systems on this page: 3-P/W1 $10^{\circ}$ woofer (only $2^{11}$, deep) with plane piston radiator for response to 20 cps , power magnet and die-cast frame; M-80 $8^{\circ}$ mid-range speaker givi $600-4000 \mathrm{cps}$ response; 2-TW. $4031 / 2^{\prime \prime}$ tweeters reaching to $10, \mathrm{C}$ CDS; E-10 "Ultra-T weeter" with dome radiator, carrying respon to inaudibility; M-1473 crossover with balance control. 25 wat Imp., 8 ohms. Has snap-on leads. Includes vent-tube and instri tions for best performance. Wt., 21 lbs .
70 DU 794. $\$ 5$ Monthly.................................. 97. 71 D 065. 3-P/W1 Wooier Only. 25 w .16 ohms. $9 \frac{1}{2} \mathrm{lbs} . . . .39$. 71 D 066. TW-22 Tweeter Only. $25 \mathrm{w} .16 \mathrm{hms} .13 / 4 \mathrm{lbs} . . . . .9$.

Siender lines and fine performance are distlnctive characteristics of all 3-P speaker systems. Provide great hi-fi sound.

## Nat

\$13950
\$7 monthly

## 3-P/2

SPEAKER SYSTEM
An extraordinary speaker system, only $35 / 3$ deep. Expert acoustical deslgn and 5 -speaker arrangement, deliver full-dimensional sound to thrill every listener. Can be hung neatly on the wall, or used as an attractive floor speaker. Response is 25 cps to inaudibillty. Features $10^{*}$ 3-PNW1 woofer with "Polytec" plane piston radiator; M-80 midrange speaker; 2-TW-40 tweeters; and the E-10 ultra-tweeter. The M-1473 crossover network and high-frequency belance control allow you to adjust highs to satisfy your personal listening taste. Skilfully crafted, selected walnut veneer cabinet has hand-rubbed oiled finish with modern, attractive rattan grille and oak trim strips. Power-handling capacity, 25 watts. Impedance, 8 ohms. Size. $285 / 4 \times 213 / 4 \times 35 /{ }^{\prime \prime}$. Wt., 37 lbs.
70 DU 789. $\$ 7$ Monthly.
NET 139.50


## 3-P/K SPEAKER COMPONENT KIT



## MODEL 3-P/1 SPEAKER SYSTE閣

A graceful shelf-type system with eye and ear appeal. Simpilfies placement-use on a shelf, on the floor or hang on a wall. Only $51 / 2$ " deep, the 3.P/1 provides rich satisfying sound over an astonishing frequency range of 25 cps to inaudibility. 5 -speaker design features $10^{*}$ 3-P/1 woofer; M. 80 midrange speaker; 2-TW. 40 tweeters; and the E-10 ultra-tweeter, furnishing high notes that soar beyond audibillty. M-1473 crossover network and high frequency balance control let you shade highs to exactly suit your taste and the acoustic requirements of your room. Enclosure is of carefully selected hand-rubbed oiled walnut veneer. Features modern rattan grilie and oak trip strips. Capacity, 25 watts. Impedance, 8 ohms. $13 \frac{1}{8} \times 25 \times 5 \frac{1}{2}$ ". 33 lbs .
70 DU 790J. $\$ 6$ Monthly.
NET 119.50

## MODEL 3-P/3 SPEAKER SYSTEM

20 cps to beyond audlbility. Has $10^{\circ} 3-\mathrm{P} / \mathrm{W} 1$ woofer, $\mathrm{M}-80$ midrange speaker, 2-TW. 40 tweeters, and the E-10 ultra-tweoter. Also employs the M-1473 crossover and high frequency control so that you can adjust the highs to suit your taste and the acoustics of your room. In beautiful hand-rubbed olled-walnut finish-a perfect decorator unit. Size, $161 / 6 \times 251 / 2 \times 113=$. Power handling capacity, 25 watts. Impedance, 8 ohms. 52 lbs.
70 D2 791 J .58 Monthly.
.NET 159.50
3-P/3U SPEAKER SYSTEM. Above, but smooth-sanded-ready for finishing. $16 \frac{1}{4} \times 25 \frac{1}{2} \times 113$ ". Wt., 52 lbs.
70 DZ 792-J, 57 Monthly.
NET 129.50
3-P/3 CONSOLETTE BASE. Matching walnut base for 3-P/3 systems above. $163 / 4 \times 10 \frac{1}{2} \times 3 / 6{ }^{7}$. Shpg. wt., 2 lbs .
70 DX 793.
NET 9.95

## GET ALLIED'S SYSTEM PRICE

on a music system consisting of components you select yourself, and Including Jensen speakers. You'll be amazed at how much you save. List the system you want and write: Hi-FI Manager, Allied Radio, 100 N . Western Ave., Chicago 80, III.

## Popular, Shelf-Type Speaker Systems by densen



## MODEL TR-10 SPEAKER SYSTEM

The famous Jensen "Tri-ette" system uses outstanding 3 -speaker design that delivers clean, full-bodied sound from 25 to $15,000 \mathrm{CDS}$. Finished on four sides, the 10 performs equally well on bookshelves or on floor. Has 12* xair" woofer, P8-UM $8^{\circ}$ mid-range, RP-1038 tweeter, A-645 :sover and ST. 946 balance control, $13 / / 4 \times 25 \times 11 \frac{1 / 3}{} .30$ watts. 16 is. Walnut finish. Less base. 40 lbs .
ju 135-J. $\$ 6$ Monthly.
NET 119.50
JU 231-J. Model TR-10-U. As above, but unfinished. 40 lbs. inished bases and stands not available. NET 94.50
>X 260. Walnut Table Base. $2^{\prime \prime}$ high. 2 Ibs. NET 5.45
) $\times$ 788. Walnut Floor Stand. For above systems. Helght of id, $14 \mathrm{~s} / \mathrm{s}$. Shpg. wt. 9 lbs.

NET 12.95


## TF-3 SPEAKER SYSTEM

on economical, contemporary-styled 3. ray shelf system in oiled walnut. Four peakers provide full-range realistic reroduction from 25 cps to inaudibility. :onsists of: $10^{\circ}$ "Flexair" woofer, 2-31/2" nid-range speakers and spherlcal tweetir. High-frequency control allows adjustng "highs" to suit your listening tastes and/or to compensate for room acoustics. ilze, $131 / 2 \times 23 \frac{3}{4} \times 113 / a^{\prime \prime}$. Capacity, 25 watts. mpedance, 8 ohms. ShDg. wt., 38 Its.
10 DU 675-J. $\$ 5$ Monthly. ... . NET 99.50
70 DU 635-J. As above, unfinished 79.50

## TR-9*SLIM-SHELF" SYSTEM

An extremely compact 3-speaker, 3-way system only $55 /{ }^{\circ}$ deepI The TR-9 is expertly designed and crafted to offer flexibility in placement, modern styling, and superb response from 30 cps to beyond audibility -with crossovers at 600 and 4000 cps. Features $10^{-0}$ "Flexair" woofer with heavy "Syntox 6 " ceramic magnet; 8 " mid-range speaker; and the E-10"Sono-dome" super tweeter. Also has high-frequency control. Finlshed in hand-rubbed oiled walnut. $131 / 2 \times 233 / 4 \times 5 \%{ }^{\circ}$. Capacity, 25 watts. Imp., 8 ohms. 25 lbs .
70 DU 136-J.
NET 89.50

## TF-2UUNFINISHED SYSTEM

Unfinished speaker system constructed of $3 / 4$ " gum hardwood. Can be wood finished, painted or stained, to suit your personal taste. The TF.2U's full dimensional sound pleases every taste. $10^{-}$"Flexalr" woofer, 2-P35.VAH tweeters and a crossover network combine to give outstanding sound from $25-14,000 \mathrm{cps} .131 / 2 \times 233 / 4 \times 11 \frac{3}{6}$. 20 watts. 8 ohms. 36 lbs .

## 70 DU 574-J.

net 64.50
KTF-2. Speaker components only, used above. With enclosure plans. 10 lbs .
70 DU 575-J. $\$ 5$ Monthly. . . . . . NET 39.75

## Ultra-Compact, Space-Saving Speaker Systems

## X-10 SPEAKER SYSTEM

## X-20 SPEAKER SYSTEM

A slim-compact 2-way speaker system, only $2 \%$ deepl Takes hardly any space when placed on a desk, table or shelfhas bullt-in brackets for wall mounting. If preferred. Its trim stylling enhances the interior decoration of any room, and its 2.way system provides smooth, wide. range sound, from a substantial bass to a pure high frequency response.
An excellent choice for economy music systems, It uses a specially designed shallow woofer and two tweeters. Power handling capacity of 6 watts. Volume control is conveniently located at side. Finished in tasteful oiled walnut with two-tone harmonizing custom fabric. Compact size, $12 \% \times 153 / \times 2 \%$. Impedance, 4.16 ohms. Shpg. wi., $111 / 2 \mathrm{lbs}$.
70 DU 137-J. $\$ 5$ Monthly.
NET 39.95


# Jensen Speakers Featuring "Flexair" Design 



## "FLEXAIR" DESIGN OFFERS DEEPER, MORE EXCITING BAS

"Flexalr" design has created a shalle woofer with extraordinary deep, natur bass response (as low as 16 cDs ), low dl tortion and great mechanical stabilit These are achieved by a special outer su pension with extreme accordion actio high uniformity of air gap flux over tt complete travel distance, and linear voic coil suspension for faithiful reproductic of even the deepest bass tones.

## H-222 WIDE-RANGE 12 COAXIAL SPEAKER

$$
\begin{array}{cl}
\text { Nof } & \text { : Extended Range From } 30 \text { to } 15,000 \text { CPS } \\
\$ 6250 & \text { With Hlgh Frequency Level Control } \\
\$ 5 \text { monthly } 13 / 4 \mathrm{lb} \text {. DP-Alnico Magnet } \\
\$ \text { With Built-In Crossover Network } \\
\text { : Offers } 2000 \text { Cps Crossover Point }
\end{array}
$$

An outstanding 2 -way speaker offering fine fidellty throughout an extremely wide frequency range of 30 to $15,000 \mathrm{cDs}$. Compres-sion-driver tweeter is loaded by a 6 -cell Mypex horn, assuring very high efficiency, tonal purity and wide-angle dispersion. Model ST-946 level control lets you adjust the highs to suit your personal taste and the acoustics of your room. Crossover network evenly distributes frequencies below and above 2000 cps . 12 woofer delivers full-dimensional sound from 30 to $20,000 \mathrm{cDs}$. $13 / \mathrm{lb}$. high-energy DP-Alnico magnet reproduces the dynamic range of the most powerful percussive passages with extraordinary clarity and brilliant realism. Power handling capacity, 25 watts. Impedance, 16 ohms, Shpg. wt., 12 lbs. 71 DX 074-J.

NET 62.50

## H-223F "FLEXAIR" 12' COAX SPEAKER

A superb 2-way speaker offering the deep, rich bass response 0 its "Flexair" woofer (down to a low 20 cps of natural sound), ane compact styling. Has built-in, efficient L-C type crossover net work at 2000 cps -plus reflexed compression driver tweeter that extends highs to $15,000 \mathrm{cps}$ with great clarity. Power handling capacity, 30 watts. Impedance, 16 ohms. Requires baffle opening of $101 / 2{ }^{2}$; depth of $73 / 4$ behind baffle. Includes wired-in balance control for tweeter. Wt., 13 lbs.
71 DX 075-J. $\$ 5$ Monthly
NET 72.50-

## DXF-80 "FLEXAIR" FULL-RANGE 8" SPEAKER

A perfect speaker for smaller enclosures-"Flexair" woofer assures extended natural bass response all the way down to 36 cpsi Has a concentrically mounted whizzer cone element to produce highs of starting clarity to $13,000 \mathrm{cps}$. Also has $3 / 4 \mathrm{lb}$. Alnico $\checkmark$ magnet. Crossover at 4000 cps . Power handling capacity, 20 watts. Impedance, 16 phms. Shpg. wt., $51 / 2 \mathrm{lbs}$. 71 D 079-J. $\$ 5$ Monthly

NET 24.50

## DX-120 DUAX 2-ELEMENT 12* SPEAKER

Offers finer sound at lower cost by expert utilization of two precisely coordinated cones, driven by a single voice coil. Both cones operate together up to a "mechanical crossover" at 4000 cps ; smaller cone is very effective beyond 4000 cps to deliver pure highs to $13,000 \mathrm{cps}$. The larger cone gives fine fidelity down to 40 cps. Has 1 lb . magnet. Power handling capacity, 20 watts. Impedance, 16 ohms. $73 / /^{*}$ deep. Wt., 8 lbs .
71 DX 080-J. $\$ 5$ Monthly
NET 27.50

## UX-120 UNAX $12{ }^{\prime \prime}$ WIDE-RANGE SPEAKER

A single-cone speaker reproducing extremely clear sound through a frequency range of 40 to $12,000 \mathrm{cDs}$. Has $1 / 2 / \mathrm{lb}$. magnet. Capacity, 14 watts. impedance, 9 ohms. Shpg. wt., 6 Ibs. 71 DX $081-\mathrm{J}$.

NET 17.95

## UX-80 UNAX 8 EXTENDED-RANGE SPEAKER

A low-cost, single-cone speaker that provides excellent fidelity. Offers extended frequency response of 50 to $12,000 \mathrm{cDs}$. Capacity. 12 watts. Impedance, 8 ohms. Wt., $41 / 2$ los. 71 D 092-J.

## G-610B $15^{*}$ TRIAX SPEAKER

With this 3 -way speaker you hear rich natural bass notes, a smooth real midrange and highs of great tonal purity throughout an entire range of 25 cps to beyond audibility. Uses heavy woofer and two compression-driver horn-loaded elements. Built-in dual crossover network with wired balance controls for exact adjustments. Crossovers at 600 and 4000 cps .
Has $61 / 2 \cdot \mathrm{lb}$. high energy DP. Alnico $V$ magnet. Power capacity, 40 watts. Impedance, 16 ohms. $103 /{ }^{\prime \prime}$ deep. Wt., 47 lbs . 71 DU 093-J. \$13 Monthly. . NET 252.75

## G-600 15* TRIAX SPEAKER

An economical version of the G-610B triaxial speaker at left. Produces extremely clear sound-frequency range is 30 cps to beyond audibility. Woofer employs a $31 / 2$ lb. magnet. Bore-mounted compression driver covers mid-range and has separate horn for $900-4000 \mathrm{cps}$. Super-tweeter carries sound up from 4000 cps to inaudibility.

Complete with built-In dual crossover network and wired balance controls for adjustments. Capacity, 35 watts. Impedance, 16 ohms. $111 / 6^{\circ}$ deep. 33 lbs . 71 DU 095-J. $\$ 7$ Monthly... . NET 134.50

## igh-Fidelity Speakers and Components <br> ensen

## K-210 2-WAY 12* COAXIAL SPEAKER

uressive fidelity at low cost is yours with this expertly-designed ay speaker. Features electrically and acoustically independwooter and tweeter for fine clarity and extreme realism oughout a wide frequency range of 45 to $14,000 \mathrm{cps}$. Has it-in electrical crossover network that evenly distributes sound ween woofer and direct-radiator type tweeter. Magnet is $1 / 2 \mathrm{lb}$ h.energy DP Aĺnico V. Power handling capacity, 14 watts. pedance, 8 ohms. Shpg. wt., 7 lbs.
DX 096-J. 55 Monthly.
NET 27.50

## K-80A 2-WAY 8 COAXIAL SPEAKER

fou need a small high-fidelity speaker that gives excellent per--mance, the K-80A is just what you're looking for. Delivers a squency response from 50 to $14,000 \mathrm{cps}$ with exceptional real$n$ and clarity. Has electrical crossover from wooler cone at $400 \mathrm{cps} .1 / 2 \cdot 1 \mathrm{~b}$. high-energy Alnico $V$ magnet. Power handling ipacity, 12 watts. Impedance, 16 ohms. 4 lbs.
D 097-J.
NET 17.75


Famous IENSEN Speaker Components
"Flexair" Woofers

RP-302A SUPER TWEETER. Compression-driver, horn-loaded ype for pure highs from 4000 cps to beyond audibility. Capacity with suitable crossover), 40 watts. Imp. 16 ohms. O.D., $23 /{ }^{3 \pi} ; 3 \%^{\prime \prime}$ ong. With mtg. plate. $21 / 2 \mathrm{lbs}$
110098.85 Monthly

NET 35.00
-RP-103B COMPRESSION TWEETER. For use with 2000 or 4000 cps crossovers. Extends highs clearly to $15,000 \mathrm{cps} .30$ watts. 16 ohms. Cutout $2 \times 6^{\prime \prime} .3 \times 7 \frac{1}{2} \times 6 \% / s^{\prime \prime} .3$ Ibs.

## 71 D 099-J.

NET 16.50
E-10 SONO-DOME ULTRA-TWEETER. Add this plastic dome radiator to your speaker and listen to highs of unparalleled beauty, from $10,000 \mathrm{cps}$ to beyond audibility. Complete with built-in crossover, mounts from back of baffle in $31 / 0^{*}$ cutout. O.D., $41 / 4^{\prime \prime} ; 2^{\prime \prime}$ deep. 30 watts. $4-16$ ohms. $1 \frac{1}{2} \mathrm{lbs}$. 71 D 100-J. $\$ 5$ Monthly

## NET 19.50

P8-UM MID-RANGE SPEAKER. Low-cost, direct-radiator type Smoothly reproduces $600 \cdot 4000 \mathrm{cps}$ range. Closed housing for isolation. 30 watts. 16 ohms. $4 \frac{1}{2} /{ }^{\prime \prime}$ deep. W't. 3 Ibs.
71 D 102-J.
NET 7.50
P8-RM 8 - MID-RANGE SPEAKER. Wide-range, direct-radiator type, smoothly delivering uniform output of 200 to 4000 cps . Closed housing. 40 watts. 16 ohms. $5^{\circ}$ deep. Wt. 4 lbs.
71 D 103-J.
NET 12.50

C12-NF 12" WOOFER. "Flexair" design delivers extremely wide bass response down to 20 cps . Up to 2000 cps . Resonance, 20 cps . 30 watts. 16 ohms. $13 / 4 \mathrm{lb}$. magnet. 9 lbs .
71 DX 104-J. $\$ 5$ Monthly.
NET 37.50
P15-LF 15" WOOFER. The ultimate in bass response with "Flexair" design: 16 to 2000 cps I Resonance, 16 cps . Capacity, 40 watts. Impedance, 16 ohms. $31 / 2 \cdot \mid \mathrm{b}$. magnet. 18 lbs . 71 DX 105-J. $\$ 5$ Monthly.

NET 69.75
P8QF $8^{\circ}$ WOOFER. Extraordinary response from this "Flexair" woofer- 36 to 2000 cps . Resonance 45 cps . Capacity, 25 watts. Impedance, 16 ohms. $3 / 4-\mathrm{lb}$. magnet. $51 / 2 \mathrm{lbs}$.
71 D 106-J. 85 Monthly
NET 22.50

## KT-33 SPEAKER COMPONENTS KIT

Complete-ready for easy installation. Consists of: C12.NF 12* woofer with "Flexair" design; P8-UM direct-radiator 8 " midrange speaker; RP-1038 compression-driver, horn-loaded tweeter; A. 645 two channel crossover; and ST. 946 balance tweetrol. $20 \cdot 15,000 \mathrm{cps} .20$ watts. 16 ohms. 21 lbs. 71 DU 107.J. $\$ 5$ Monthly

Net 80.00

## CROSSOVER NETWORKS

A-61. Fine two-channel 600 -cycle type. Capacity, 40 watts. Impedance, 16 ohms. $51 / 4 \times 63 / 4 \times 43 / 4{ }^{\circ}$. ShDg. wt., $51 / 2$ lbs. 71 D 108. $\$ 5$ Monthly NE
19.75

A-204. As above, but up to 2000 cps . $180^{\circ}$ constant-resistance type. 40 watts. 16 ohms. $41 / 6 \times 31 / 2 \times 31 / 4$. Wt., $21 / 2$ lbs.
71 D 109.
NET 13.00
A-402. As above, but crossover point occurs at 4000 cps . Cap., 40 watts. Imp., 16 ohms. Shpg. wt., 3 lbs.
71 D 110.
NET 10.90

## BALANCE CONTROLS

CHOICE OF TWO. Have adjustable wirewound L•pads, with bar knob and metal escutcheon plate. Mount in $111 / 6_{0}$ hole. $36^{*}$ leads. Impedance, 16 ohms. $1 / 2 \mathrm{lb}$.

ST-947. For tweeter or mid-range adjustment in 2, 3 and 4 -way speaker systems rated up to 40 watts capacity
$71-111$.
NET 4.50
ST-946. For adjusting the output of tweeter in 2 and 3 -way systems with power rating up to 30 watts.
71 D 112.
NET $\mathbf{3 , 9 5}$


## Uniersozty

## Premier Award-Winning Speaker.

200

SERIES

Custom-bults speakers offering superb performance. Each is assembled by hand with finest, carefully selected materials.

The 200 Series of custom-built speakers sets an extremely high standard of performance for superb sound reproduction. Specially molded rigid cones are mounted between two highly compliant cloth sus. pensions (inner and outer) and can undergo the large, unhindered piston-like excursions necessary to reproduce lowest bass in compact or large cabinets. Oneolece die.cast baskets assure perfect rigidity for the entire structure. Each is specially designed for mounting to either the front or rear of the baffleboard


6201 12* COAXIAL SPEAKER. A MOder. ately priced speaker offering exfremely natural bass, full mid-range and clear bright highs. Features separate drivers for heavy wooter and compression type tweeter. Has built-In 2500 cps crossover and adjustable brilliance control on 3 - ft . cable. Frequency response, 28.18,500 cps. Capacity, 35 watts. Impedance, 8 or 16 ohms. $6 \frac{5}{6 "}$ deep. $10 \% \mathrm{lbs}$.
71 DU 009-J. $\$ 5$ Monthly.
NET 56.59
DIFFUSICONE 8 2-WAY SPEAKER. An excellent speaker for installations where space is at a premium and economy an important factor. Wide-angle dispersion is successfully achieved by a dual-horn radial projector plus aperture diffraction. Response, $30-15,000 \mathrm{cps}$. Capacity, 35 watts. Impedance, 8 or 16 ohms. Depth. $45 / 16^{\circ}$. Shpg. wt., 5 lbs
71 D 010-J. $\$ 5$ Monthly
Net 27.44
308 3-WAY 8 " SPEAKER. Very compact. highly efficient speaker, designed specifically for the smaller hi-fi installation. Features expertly designed woofer with extralarge voice coil for natural bass response. Has multi-element diffusicone mid-range unit, compression-type tweeter and builtin 5000 cps crossover. True-axial construc tion-iweeter is prolected through center of wooler. Response, 30 to $17,000 \mathrm{cps}$ Power handling capacity, 35 watts. Im. pedance, 8 or 16 ohms. $6 \frac{1}{3}$ deep. Shpg. wt., 6 lbs
71 D 011 -J. 55 Monthly.
NET 41.16


## 312 3-WAY 12" SPEAKER

A $12^{\circ}$ Diffaxial speaker offering superb sound over an extremely wide frequency range of 28 to $40,000 \mathrm{cps} .12^{\circ}$ high.com. pliance wooter delivers a deep, rich bass; patented, multi-element "diffusicone" ensures a full-bodied mid-range; and cen-ter-mounted super-tweeter with a horizontal dispersion of $120^{\circ}$, produces sparkling highs. Tweeter also features a specially constructed reflector baffle to prevent acoustic interaction between itself and woofer. L.C crossover network accurately distributes frequency bands, and adjustable brilliance control lets you adjust the higher frequencies to suit your Dersonal listening taste and the acoustics of your room. Rigidity is maintained by 1 Diece die-cast basket. Power handling capacity, 35 watts. Impedance, 8 or 16 ohms. Depth. 6\%". 101/4 lbs. 71 DU 006-J.

NET 71.54

## 2-WAY 12" SPEAKER

DIFFUSICONE 12. A fine wide-range $1 \%$ Diffaxial speaker for music systems where the accents are uton economy and high. est quality. With it, you enjoy excellent sound over a wide frequency range. The Diffusicone 12 produces a deep, pervad. ing bass response without "boominess." Dual horn-loading at apex of cone consid. erably extends the mid-range and higher frequency responses. Mechanical crossover at 1000 cps offers smooth, wide-angle dispersion. Frequency response, 25-15,000 cps. Power handiing capacity, 35 watts. impedance, 8 or 16 ohms . Mounts to either front or rear of baffle board-no need to remove any panels. Has one-piece diecast basket for perlect rigidity of the whole unit, and life-long adherence to original performance standards. Size: diameter. 13"; 6\%/" deep. Shpg. wt., 83/4 IDs.
71 DU 007-J.
NET 38.95

## DELUXE MODEL 315-C 3-WAY 15* SPEAKER

A $15^{\circ}$ speaker that creates a magnificent aura of sound for supreme listening pleasure. Woofer cone features high excursion, dual-spider piston and anti-breakup, low. resonance diaphragm for a rich, natural bass. Multi-element Diffusiconemid-range secrion, crosses over at 1000 cds Uses T-50

Hypersonic driver and axially mounted wide-angle tweeter horn. Response, 25 cps to inaudibility. Balance controls for mid $\cdot$ range and treble. Magnet wt., $61 / 2$ lbs. Capacity, 50 watts. Impedance, 8 or 16 ohms. Depth $12^{\prime \prime}$. Wt., 35 Ibs
71 DU 008-J.
NET 152.88


UC-82 2-WAY 8 " SPEAKER. Expressly designed for compact enclosures. Has 5000 cps crossover. 45-14,000 cps. 25 watts. 8 or 16 ohms. $51 / 4$ deep. 3 Ibs.

## 74 D 012-J.

NET 16.61
UC-122 2-WAY 12 SPEAKER. (Not illus.) Features diffusicone element with 1000 cos crossover. $40-13,000 \mathrm{cps} .30$ watts. 8 or 16 ohms. $41 / 2$ " deep. $51 / 4$ lbs. 71 DX 019-J. $\$ 5$ Monthly.
net 34.79 UC-152 2-WAY $15^{*}$ SPEAKER. Díffusicone elerient. 1000 cps mechanical crossover. $30 \cdot 14.000 \mathrm{cps}, 30$ watts. 8 or 16 hms . 7\%" deep. Wt., 83/4 1bs.
71 DX 023-J. $\$ 5$ Monthly.
NET 44.10
UC-153 3-WAY $15^{\circ}$ SPEAKER. (Not illus.) Deluxe version of above. Has $30-18,500$ cps response. UXT-5 Tweeter. $121 / 4$ Ibs. 71 DX 024-J. $\$ 5$ Monthly.... NET 81.34

# Voofers, Tweeters and Accessories 

H-600 MID-RANGE AND HIGH-FREQUENCY HORN. For use with T.30. 600 cycle cutoff. Uniform sound from 600 cos to inaudibility. $73 / 4 \times 83 / 4 \times 43 / 4.21 / 2$ Ibs. 71 D 050-J.

NET 18.62
COBREFLEX TWIN-FLARE HORN. (Not illus.) Mid-range for 3 -way systems. Use with T-30. Crossover as low as 350 cps . $13 /{ }^{\prime \prime}-18$ throat. $101 / 4 \times 181 / 2 \times 191 / 4{ }^{*} .101 / 4$ Ibs. 57 DX 566-J. $\$ 5$ Monthly .... NET 23.67
HF-206 HYPERSONIC TWEETER. 2500 cos to inaudibility. 50 w . Requires $\mathrm{N}-1$ fil-ter-and N-2A crossover for 3 -way systems. 8 ohms. $6 \times 35 / 16 \times 69 / 16^{\circ} \cdot 31 / 2 \mathrm{lbs}$. 71 D 051-J. $\$ 5$ Monthly

NET 32.34
UXT-5 SUPER TWEETER. (Not illus.) Use with N. 1 filter. $4500-17,500 \mathrm{CDS} .50 \mathrm{~W} .8$ ohms. $41 / 4 \times 21 / 2 \times 4^{\circ}$. Wt., $13 / 4 \mathrm{lbs}$.
710 . $052-\mathrm{J}$. $\$ 5$ MOnthly .... NET 20.58

N-1 HIGH-PASS FILTER. (Not illus.) Adjustable. 2500, $5000,10,000 \mathrm{cps}$ at 8 ohms: 1250, 2500, 5000 at 16 ohms: $5000,10,000$ at 4 onms. $31 / 8 \times 31 / 4 \times 3^{\prime \prime}$. Wt., $13 / 4$ Ibs.
71 D 053-J.
NET 13.72
N-2A CROSSOVER NETWORK. (Not illus.) 300 or 700 cps at 8 or 16 onms; 700 at 4 ohms. $3 \% \times 31 / 4 \times 3$ ". $21 / 4$ lbs. 71 D 054-J.

NET 17.64
AP-8 LEVEL CONTROL. (Not illus.) Fits panels to $3 / 6^{\text {. }}$. Shpg. wt., 7 oz. 71 D 055-J.

NET 3.87


SPHERICON SUPER TWEETER. Add exciting "highs" to your system in minutes. Response: 3000 to $40,000 \mathrm{cps}$. Built-in network and level control. $120^{\circ}$ disp; 30 -watt capacity: 8 -ohm impedance. Walnut case. $63 / 4 \times 51 / 4 \times 23 / 4.3$ lbs.
71 D 060-J. \$5 Monthly . .... . NET 24.45
71 D 061-J. Above, Less Case ..... 24.45

## University's Mark II-A Speaker System Designed for Perfection



## Only <br> 28910 <br> Three superb elements, expertly integrated, deliver a virtually uniform re$\$ 15$ monthly sponse of $20-40,000 \mathrm{cps}$.

The Mark II-a classic creatlon for those who want the finest. This $15^{\prime \prime} 3$-way high compliance speaker system consists of: heavy duty $15^{\circ}$ woofer with specially desıgned diaphragm, Uniferrox-7 magnet and massive die-cast frame; $8^{8}$ mid-range speaker with reserve excursion and power handling capacity; Sphericon tweeter offering superb response and dispersion. Also has presence and brilliance controls. Capacity, 60 watts; crossover, 150 cDs ; impeaance, 4 and 8 ohms. Acoustically-engineered cabinet is styled in classic lines of slmpllcity-finished in hand-rubbed oiled walnut. $281 / 4 \times 35 \times 171 / 22^{\prime \prime} .981 \mathrm{bs}$.
70 DZ 101-J.
NET 289.10

# As Low As '55s 

- Exceptionally Compact-Fits Anywher
- Impresslve 40 to $16,000 \mathrm{cps}$ Response
- C-8 W Wooter, $31 /{ }^{2}$ " Tweeter
- Enhances Interior Decoration


#### Abstract

Compact, with lines of stylistic beauty-augmented by natul sound that covers virtually the entire listening range-this is tt S-80, a superb University creation. Contains: C-8W $8^{\circ}$ woof $31 /{ }^{2}$ direct-radiator tweeter; and LC crossover network wi frequency distribution point at 2500 cps . Enclosure emplo ported phase-Inverter principle. Range, 40 to $16,000 \mathrm{Cps}$. 11\% $213 / 4 \times 91 y^{*}$ deep. In unfinished sanded birch, for easy-finishing your taste. 25 watts. $8-16$ ohms. 17 lbs . 70 DU 239-J. $\$ 5$ Monthly. NET 55.8

NET 58. NET 58.:


Budget-Priced
Speaker System

## As Low As $578^{35}$

 \$5 monthlyCompactOnly 4" deep, but specially designed to delliver full range sound.

Syl-O-Ette

## SLIM 2-WAY SPEAKER SYSTEM

 SYL-O-ETTE. Beautiful to look at, its slender lines complement any decor. The Syl-O-Ette dellvers beautiful sound over a wide range of 40 to $17,000 \mathrm{cDs}$. Comes with decorator cane grille cloth. but has detachable grille frame for other styles (see beiow). Includes piston-action 8 woofer and $61 / 2^{\prime \prime}$ mid-range-tweeter unit. Mounts on wall or rests on floor (base included) or shelf. $4^{\circ}$ depth makes decorative placement easy. Unfinished sanded birch. $23 \times 29 \times 4^{*} .30$ watts. $8-16$ ohms. 20 los.70 DU 116-J.
NET 78.35
70 DU 123-J. Olled Walnut. . . . NET 88.15 OPTIONAL GRILLES. Wt., $21 / 2 \mathrm{lbs}$.
70 DU 127-J. Petit Point.
70 DU 128-J. Silk Screen.
.NET 9.75
NET 5.83

## 3-SPEAKER SHELF SYSTEM

COMPANION II. Styled and expertl' engineared to offer eye-appealing appeai ance and excellent sound through a wid frequency range-at moderate cost. Cabi net features molded front edging witl tastefully matching grille cloth. Con sists of: $10^{\circ}$ woofer for natural bass; $31 / \frac{2}{2}$ speaker for smooth mid-range; $3 \frac{1}{2}$ tweeter to deliver purest high notes; cross over at 3000 cps ; brilliance control th adjust highs to room acoustics. Range 35 to $18,000 \mathrm{cps}$. Compact size, $131 / 2 \times 24 \times$ $111 / 2^{\prime \prime}$ deep. Finished on all four sides in genuine oiled walnut veneer. Capacity, 30 watts. $8-16$ ohms. 30 lbs . 70 DU 109-J. $\$ 5$ Monthly.

NET 77.91
70 DU 110-J. As above, but in smoothly sanded unfinished birch..

NET 68.11

## COMPACT 3-SPEAKER SHELF SYSTEM

SENIOR II. For balanced sound-natural, without exaggeration throughout a wide frequency range of 30 to $22,000 \mathrm{cps}$. Balanced styling-natural, complementing lines balanced by genuine hand-rubbed oiled walnut veneer and matching grille cloth. Balanced placement-blends equally well on a shelf or floor. vertically or horizontally. Features: $12^{\prime \prime}$ woofer; $31 / 2^{\prime \prime}$ midrange speaker; Sphericon super tweeter; crossover at 3000 cps ; adjustable brilliance control to match room acoustics. Size, $155 / 8 \times 25 \times$ $121 /{ }^{\prime \prime}$ deep. Tuned enclosure finished on all four sides. Capacity, 40 watts. Impedance, 8-16 ohms. Shpg. wt., 44 lbs. 70 DU 111 -J. $\$ 5$ Monthly.
net 97.51
70 DU $115-J$. As Above, but Unfinished Birch.
NET 87.71

## SPEAKER SYSTEM AND EQUIPMENT CABINET

MEDALLION XII SPEAKER SYSTEM. Choose the style that suits your home. Features easily removable grille, replaceable by grille of different decor. Has $12^{\circ}$ woofer, $8^{\circ}$ mid-range speaker and Sphericon tweeter. $28-22,000 \mathrm{cps} .24 \times 17 \times 111 / 4$. Specify mahogany, olled walnut or frultwood. 40 watts. $8-16$ ohms. Less grilles, base, below. System, 40 lbs ; grille, $33 / 4 \mathrm{lbs}$.
70 DU 650C-J. Specify finish. $\$ 7$ Monthly. . . . . . . NET 137.15
70 DU 653-J. Early American Grille. Fruitwood only ........ 14.65
70 DU 652-J. French Provinical Grille. Fruitwood only...... 14.65
70 DU 651 C-J. Contemporary Grille. Specify finish......... 9.75
70 DU 592C-J. Swedish Modern Grille. Specify finish..... 14.65
70 DU 654C-J. System Base. $41 / 4 * 3 \mathrm{lbs}$. Specify finish..... 14.65
MEDALLION CREDENZA EQUIPMENT CABINET. Features replaceable doors matching speaker system's grilles. Overall, $291 / 4 \times 36 \times 19^{\prime \prime}$; amplifier-tuner section, $91 / 4 \times 24 \frac{1}{2} \times 15 \frac{1}{2}{ }^{\prime \prime}$; turntable section, $121 / 2 \times 181 / 6 \times 151 / 2^{\circ}$. Specify mahopany, oiled walnut or frultwood. Less doors, below. Cabinet, 40 lbs ; Doors, $33 / 4 \mathrm{lbs}$.
70 DZ 102C-J. Specify finish. $\$ 7$ Monthly. .
NET 135.19
70 DU 103-J. Early American Doors. Fruitwood only....... 41.16
70 DU 106-J. French Provincial Doors. Fruitwood only. .... 41.16
70 DU 107C-J. Contemporary Doors. Specify finish....... 41.16
70 DU 108C-J. Swedish Modern Doors. Specify finish..... 41.16
Madallion XII
156 ALLIED Satisfaction Guaranteed

## Ieluxe Quality Speakers and Systems by JBL



## TRIMLINE 54 SPEAKER SYSTEM

A significant achievement in the development of an extremely compact speaker system-delivers clean, superb-quality sound over a wide frequency range. New passive low frequency radiator and LEET speaker provide natural sound reproduction from the lowest note to the highest. In looks, the Trimline 54 is a model of enduring simplicity-at home with any decor, and so compact (only $51 /{ }^{\prime \prime}$ deep) that room placement is simple-hangs on a wall. silts comfortably on a shelf or on the floor. 30 to $20,000 \mathrm{cps} .233 / 3 x$ $20 \times 5 \frac{1}{/ n}$. In oiled wainut. 25 watts. 8 ohms. 29 lbs .
70 DU 196-J. $\$ 6$ Monthly.
NET 117.00
C51 APOLLO SPEAKER ENCLOSURE. An elegant biend of classic styling and superb acoustical design. Offers smart fretwork grille. Finished in genuine hand-rubbed oiled walnut veneer. Accepts any size speaker-see adapter listing below. $263 / 1 \times 261 / 2 x$ $18^{\prime \prime}$ deep. 55 lbs.
70 DZ 197-J. $\$ 12$ Monthly.
NET 225.00
C36 ENCLOSURE. Gracefully styled bass-reflex type in handrubbed oiled walnut finish. Accepts any $8^{\prime \prime}, 12^{\prime \prime}$ or $15^{\prime \prime}$ speaker. $291 / \times 193 / 6 \times 15 \%^{\prime \prime}$. With $5^{\prime \prime}$ legs. 47 ibs.
70 DZ 199-J. $\$ 5$ Monthly.
NET 93.00
C38 ENCLOSURE. As above, but low boy styling. Size, $243 / 1 \mathrm{x}$ $233 / 4 \times 15 \%^{*}$ (with leos). Shpg. wt., 47 Ibs .
70 DZ 200-J. $\$ 5$ Monthly,
NET 93.00
C53 ENCLOSURE. Styled in lines of simplicity and finished in hand-rubbed oiled walnut veneer. $14 \times 231 / 1 \times 111 / 4$ deep. Accepts 8 or 12 speaker. Shpg. wt., 30 Ibs.
70 DU 201-J. $\$ 5$ Monthly.
NET 48.00
C48 MADISON ENCLOSURE. Deluxe styling featuring special design and fiberglas damping for superb acoustics. Stands horizontal or vertically. In oiled walnut with matching grille. Accepts $8^{-}$speaker. $113 / 4 \times 23 \% / 4 \times 131 / 6^{\circ} .41 \mathrm{lbs}$.
70 DU 202-J. $\$ 5$ Monthly.
NET 63.00

## LANCER HI-FI SPEAKER SYSTEMS

MODEL L33. Exciting sound and styling characterize this compact system. Features full-range LE8T speaker and ported enclosure for distortion-free sound from 35 to $15,000 \mathrm{cps}$. In oiled wainut. $123 / 4 \times 23 \frac{1}{2} \times 113 / 4^{\prime \prime} .20$ watts. 16 ohms. 42 lbs. 70 DZ $680-\mathrm{J}$. $\$ 5$ Monthly.

## NET 93.00

MODEL L66. 2 -way system using $10^{\circ}$ woofer and a high-frequency tweeter for superb sound. Response, 15-18,000 cps. Requires amplifier of at least 20 watts (stereo, 10 watts per channel). In oiled walnut. $14 \frac{3 / 2}{} \times 23 \frac{1}{2} \times 111 / 4^{\circ} .30$ watts. 8 ohms. $47 \frac{1}{2}$ lbs.
70 DZ 682 -J. $\$ 7$ Monthly.
NET 147.00



JBL EXTENDED RANGE SPEAKERS

LE14C LINEAR EFFICIENCY SPEAKER. Reproduces entire audio spectrum. Has $15^{\circ}$ woofer and concentrically mounted high frequency radiator: $4^{\prime \prime}$ voice coil; 1200 cps crossover. 30 watts. 16 ohms. 24 lbs. 71 DU 190-J. $\$ 8$ Monthly. . . NET 150.00 LE8 $8 \times$ SPEAKER. Mounts front, rear. 30 $15,000 \mathrm{cps} .20 \mathrm{w} .16 \mathrm{hms} .11 \mathrm{lbs}$. 71 D 191-J. $\$ 5$ MOnthly. . . . . NET 66.00 LE10A $10^{\prime \prime}$ WOOFER. Has $6-\mathrm{lb}$. magnet; $3^{\prime \prime}$ voice coil. Resonance, 15 cps .30 watts. 16 ohms. Shpg. wt., 15 lbs. 71 D 192-J. $\$ 5$ Monthly...

NET 57.00 LE30 TWEETER. Use only with LX3.1, below. 30 watts, 16 ohms. 4 lbs . 71 D 193-J. $\$ 5$ Monthly. . . . . NET 57.00 D131 $12^{\prime \prime}$ SPEAKER. $30 \cdot 17,000 \mathrm{cps} .25$ watts. 16 ohms. $5^{\circ}$ deep. 21 los. 71 DU 195-J. $\$ 5$ Monthly.....NET 96.00
71 DU 196-J. D130. Same as D131, above, but $15^{*}$. Resonance, 37 CDS . 23 lbs. . 102.00

D123 12" SPEAKER. Response, 30-15,000 cps. 20 watts. 16 ohms. Wt., 12 lbs. 71 DU 200-J. $\$ 5$ Monthly..... NET 72.00 075 TWEETER. For 2 .way systems crossing 2500 cps min .16 ohms. $31 /{ }^{\text {h }} .6 \mathrm{lbs}$. 78 D 201-J. 55 Monthly. .... . NET 63.00 N2600 CROSSOVER. 2500 cps . 16 or 32 ohms. $43 / 4 \times 6 \times 31 / 2$. $33 / 4$ lbs. 71 D 202-J. $\$ 5$ Monthly. .

NET 27.00 71 D 194-J. LX3-1 Crossover Network. 16 ohms. Wt., 3 lbs. . . . . . . . . . . NET 21.00 ADAPTER KITS, for installing JBL speakers Into JBL enclosures. "Notneeded. Slock No. Type Speskere Encloeurea NET 70 OX 203 All LE1OA LE3O, LX3-1 $\frac{\text { C36, C38 }}{\frac{5}{5.00}}$ $\begin{array}{lllllll}70 \text { DK } 203 & \text { A11 } & \text { LE10A, LE30, LX3-1 } & \text { C36. C38 } & 5.00 \\ 70 \text { OX } 204 & \text { A22 } & \text { LE8. 123, 130, 075 } & \text { C36. C38 } & \text { B.00 }\end{array}$
 $70 \mathrm{DX} 207 \frac{\mathrm{~A} 24}{\mathrm{~A} 26}$ 70 DX 233 A29 70 DX 234
70 DX
70 D130. 075 . N2800 Dx A3 Di23. D130, D131
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# Wharfedale World-Famous Speakers From Britai, 



## MODEL W60 TWO-WAY SPEAKER SYSTEM

Moderately priced, and designed to please the most critical audio connoisseur, the Wharfedale W60 is an outstanding value. Employs Wharfedale's unique sand-filled principle-two layers of wood with a completely inert filler of dry sand between them for resonance-free reproduction. This remarkable feature produces full, rich bass down to 20 cycles-without spurious resonances. Fine for floor placement with optional base, below. Sound artistry of the system stems from an effective combination of specially designed $5^{\circ}$ tweeter and $12^{\circ}$ woofer, critically tuned to enclosure. Finished on 4 sides. $141 / 4 \times 24 \times 13^{\circ} .30$ watts. 8 ohms. Specify choice of mahogany or olled walnut. 50 lbs . 70 DU 038C-J. Specify Finish. \$6 Monthly. ........ NET 116.50 70 DU 039-J. Unfinished. Less divider, curved molding.. . 101.50 4-LEG MOUNTING BASE. Mahogany or walnut. 7 lbs. 70 DU 590C. Specify Finish.

NET 9.95
70 DU 554. As above, but unfinished
NET 8.95
70 DZ 599-J. W60 Provinclal. Same as W60 above, but with leas and in Fruitwood finish. $\$ 7$ Monthly.

NET 134.50


Compact Model W40

## Net \$7950

$\$ 5$ monthly

## DELUXE AODDEL W70 THREE-WAY SPEAKER SYSTEM

Thrilling fidelity and tasteful styling are yours with this superb 3 -way system. Offers extremely wide frequency range. Consists of: $12^{\circ}$ woofer with massive $9 \frac{1}{2}$ magnet for extended bass response; $10^{\circ}$ speaker for a smooth, full mid-range; $3^{-}$tweeter delivering pure, widely-dispersed highs; LC crossover networks with distribution points at 1500 and 6000 cps ; brilliance control for high-frequency adjustment. Sturdy $3 / 2$ hardwood enclosure; two layers of wood with dry sand between. Can be placed on floor with optional base, below. $24 \times 21 \times 12^{\prime \prime} .4$ sides finished in genuine mahogany or oiled walnut veneer (specify choice). Capacity, 30 watts. Impedance, 8 ohms. Wt., 60 lbs .
70 DI 659C-J. Specify Finish. \$9 Monthly......... . NET 164.50
TO DZ 660 -J. Unfinished. Less divider; curved molding... 146.50 4-LEG MOUNTING BASE. Mahogany or walnut. 7 l bs . 70 DU 590C. Specily Finish.

NET 9.95
70 DU 554. As above, but unfinished. ..................... NET 8.95
70 DZ 699-J. W70 Provincial. Same as W70 above, but with legs and in Fruitwood finish. $\$ 10$ Monthly................. NET 189.50

## MODEL W40 TWO-WAY SPEAKER SYSTEMA

When the accent is on space-saving and economy, this compact speaker system admirably fits the bill-and provides excellent reproduction. Uses two specially designed and carefully tuned speakers- $8^{1 / /^{\circ}}$ woofer with high flux-density magnet and $5^{\circ}$ tweeter-in sand.filled enclosure. Crossover distribution point at 1500 cps . Has high-frequency control to match room acoustics. $12 \times 24 \times 10^{\circ}$ deep. In mahogany or oiled walnut veneer (specify choice). Capacity, 20 watts. Impedance, 8 ohms. 45 lbs . 70 DZ 195C-J. Specify Finish.

NET 79.50
70 DZ 589-J. Unfinished. Utility model in smooth sanded birch hardwood, with curved molding. $\$ 5$ Monthly.

NET 69.50

## NEW IMPROVED $12^{-}$SPEAKER

 MODEL SUPER 12 RS/DD. Wharfedale's continuing research to improve its prod. uct has paid off in a newly-engineered $12^{\circ}$ speaker that delivers astonishingly rich. natural reproduction. Check these improved features: new, more powerful Alcomax III ceramic magnet, providing high flux density with improved flux stability; new aluminum voice coils to give maximum high frequency response-tuned ultrasonic tinning results in coils guaranteed for life of speaker; new roll foam suspension permits response below main cone resonance for maximum bass in small enclosures; new cast baskets in conjunction with foam suspension permit still larger cone excursions under airtight conditions. Die-cast frame and foam. constructed cone remain, plus all other Wharfedale features. Frequency range of $30 \cdot 18,000 \mathrm{cps}$. Cone resonance, $28-33 \mathrm{cDs}$. Capacity, 40 watts. Impedance, 12-15 ohms. Depth 7". 22 los.71 DU 183-J. $\$ 5$ Monthly.
NET 89.50

## FULL-RANGE 8- SPEAKER

MODEL SUPER 8 FS/AL. Expertly designed to deliver impressive sound you'd expect from a larger, more expensive speaker. Features aluminum voice coil and foam suspension. Frequency range, 40 to $14,000 \mathrm{cDs}$. Power handling capacity. 15 watts. Imp., $10-15$ ohms. Bass resonance, $55-65 \mathrm{cDS}$. Depth $4^{\circ} .5 \mathrm{Jbs}$. 71 D 184-J. $\$ 5$ Monthly... ....NET 26.50

## SUPER 3 HI-FI TWEETER

Extends and puriffes the high-frequency range of any speaker system. Delivers sparkling 3000 to $20,000 \mathrm{cps}$ frequency range of distilled treble. Capacity, 20 watts. Impedance, 8 ohms. Diameter, $3 \% \%^{\circ}$. Depth, $25 / \%^{\circ}$. Wt., $41 / 2$ lbs. 71 D 185-J. $\$ 5$ MOnthly. . . . . NET 26.50 4-mid FREQUENCY-DIVIDING CAPACITOR. For using Super 3 tweeter with super 12 RS/DD or other full range speaker. Provides 3000 cps crossover. 4 oz . 13 L 430.

NET 59c


G-4

## uality British Speakers <br> AVE UP TO $\$ 10.00$ ON PAIRS

## Exceptional Values

-As Low As $\$ 52.50$ Each.
in Pairs

## G-3 5-SPEAKER 3-WAY SYSTEM

ixtraordinary sound, styling and versatlity are yours with this orecision manufactured speaker system. Consists of: three $8^{\prime \prime}$ Irlver-woofers with "RIgidflex" hyperbolic floating piston cones i" $^{\text {m }}$ mid-range speaker; $31 / 2^{*}$ ultra-high tweeter; crossover network with distribution point at 5000 cps ; tuned port. These coordinated zomponents deliver 40 to $17,000 \mathrm{cps}$ of superb sound-from full latural bass notes through a smooth mid-range, up to glittering. sure highs. Placement is easy-can be used on a shelf or on the loor, vertically or horizontally to enhance room decoration. $25 \times 17 \times 51 / 4$ deep. Genuine hand-rubbed oiled walnut veneer Capacity, 45 watts. Impedance, 16 ohms. With unattached $1^{\prime \prime}$ leas for floor use. 25 lbs. $\$ 5$ Monthly.
70 DU 193-J. 2 for $\$ 149.00$.
NET EACH 79.50
MODEL G-4 3-WAY SYSTEM. Same as system above, but with three $10^{\circ}$ driver-woofers for even more natural, distortionless bass response. Compact design-28×20×61/4 deep. Cap., 60 watts. Complete with unattached $1^{1}$ legs for vertical or horizontal floor placement. 30 lbs . $\$ 5$ Monthly. 70 DU 194-J. 2 for $\mathbf{1 6 9 . 0 0}$.

NET EACH 89.50

## G-1 3-SPEAKER 3-WAY SYSTEM

Silm styling, big performance and moderate price combline to make this fine speaker system an extraordinary value-and a grand addition to any monophonic or stereo music system. Features an 8" woofer with "Rigidflex" floating piston hyperbolic cone; $6^{n}$ mid-range speaker; $31 / 2^{\prime \prime}$ ultra high-frequency tweeter; crossover network for dlstribution at 5000 cDs ; and luned port. Provides 40 to 17,000 cycles of superb sound, from lowest to highest tones-with low distortion. Can be placed on shelf or floor, vertically or horizontally. Only $5 \frac{1}{4}$ deep, space allocation is easy. The G1's smart styling adds a pleasing decorator touch to your room. Genuine hand-rubbed oiled walnut veneer. 25x17x $5 y^{\prime \prime}$. Capacity, 15 watts. Impedance, 16 ohms. With unattached $1^{\circ}$ legs for floor placement. Wt, $20 \mathrm{lbs} . \$ 5$ Monihly. 70 DU 190-J. 2 for 105.00.

NET EACH 56.50 MODEL G2 3-WAY SYSTEM. Same as system above, but with $10^{\circ}$ driver-woofer for greater bass capacity. Compactly designed -size, only $25 \times 17 \times 61 /{ }^{\prime \prime}$ deep. With unattached $1^{\prime \prime}$ legs for floor placement. 20 watts. $25 \mathrm{lbs} . \$ 5$ Monthly. 70 DU 192.J. 2 for 119.00.

NET EACH 59.50

SUPER FOAM SPEAKER


## SUPER FOAM SPEAKER

TWINAXIOM 200C $12^{\circ}$ SPEAKER. Fea. fures new "super foam" cone to assure exceptionally uniform response in the critlcal bass region of 30 to 2000 cps . Overall frequency range, 30 to $18,000 \mathrm{cDs}$, with crossover at 2000 cps . Additional features: low-resonance floating piston woofer: "axiom plastek propagator" for unlform reinforcement of 2000-18,000 cps range; two-way point source; 1-16. eflicient cylindrical ceramic magnet. Capacity 20 watts. Impedance, 16 ohms. Wt., 10 lbs . 71 DU 180-J. \$5 Monthly..... NET 24.50 2 SPEAKERS FOR.
44.00

TWINAXIOM 275C 12" SPEAKER. Heavy duty version of 200 C speaker above. Has $13 / 4 \mathrm{lb}$. cylindrical ceramic magnet and power handling capacity of 30 watts. Resonance, 35 cos. Frequency range, 30 to $18,000 \mathrm{cps} .16$ ohms. Wt., 14 lbs.
71 DU 181-J. $\$ 5$ Monthly... . .NET 34.50
2 SPEAKERS FOR
62.00

EXPERTLY DESIGNED WIDE-RANGE SPEAKERS

TWINAXIETTE 8. Heavy-duty dual cone $8^{*}$ speaker delivering a smooth response from 40 to $18,000 \mathrm{cps}$. Features Rigidflex hyperbokic free-edge cone suspension and die-cast chassis. 15 watts. 16 ohms. wt., 8 lbs .

NET EACH 18.95

## 71 D17-J.

2 SPEAKERS FOR
TRIAXIOM 8. 3-way $8^{*}$ speaker with response from 40 to $20,000 \mathrm{cps}$. Electrical crossover at 5000 cDs-compression tweeter. Tone control on $30^{\circ}$ cable, Capacity, 15 watts. 16 ohms. 10 lbs . 71 D 175-J. $\$ 5$ Monthly. . .... NET 29.50 2 SPEAKERS FOR. 53.00 TRIAXIOM 100C. $12^{\prime \prime} 3$-way speaker featuring 3 radiators concentrically placed to produce smooth sound from 20 to 20,000 cps. Electrical crossovers at 2000, 5000 cps. 20 watts, 16 ohms. 18 lbs .
71 DU 172-J. \$5 Monthly... . . NET 34.50
2 SPEAKERS FOR
62.00

250C. Heavy duty, $12^{*} 3$-way speaker. Features: $21 / 2 \mathrm{zb}$. ceramic magnet; super foam woofer; "axiom plastek" radiator; compression horn tweeter. Smooth response from 20 cps beyond audiblity. Crossovers at $2000,5000 \mathrm{cps}$. Resonance, 35 cps .30 watts. 160 hms . Wt. 25 lbs . 71 DU 170-J. $\$ 5$ Monthly..

NET 59.50 2 SPEAKERS FOR
111.00

550C. Deluxe $12^{\prime \prime}$ extra-heavy duty mode of above. Has 5 lb . ceramic magnet. Capacity, 50 watts. 16 ohms. 35 Ibs.
71 DU 171 -J. $\$ 5$ Monthly.....NET 79.50 2 SPEAKERS FOR 149.00 TRIAXIOM 215C. $15^{\circ} 3$-way speaker with response from 20 cps beyond audibility. Rigidflex woofer, "axiom plastek" radiator and compression horn tweeter assure pure sound quality. Crossovers at 2000 and 5000 cps . Resonance, $25 \mathrm{cos}, 30$ watts. Impedance, 16 ohms. 30 lbs .
71 DU 182-J. $\$ 5$ Monthly..
. NET 69.50
2 SPEAKERS FOR
130,00


Has $12^{*}$ woofer and dome radiators for mid-range and high frequencies.

## Model AR-2A

Consists of $10^{\circ}$ woofer, two $5^{\circ}$ mid-range speakers and $13 / 3^{\circ}$ super tweeter.


ACOUSTIC SUSPENSION FOR BETTER QUALITY
This extraordinary technique utilizes sealed-in air within the small-size enclosure as a preumatic spring for the speaker cone during large excurslons on very low bass notes. Exceptionally high power-handling capacity of these systems make them Ideal for most high-fidelity amplifiers.

## AR-2A ACOUSTIC SUSPENSION SPEAKER SYSTEM

As Low As

## §IOgoo

- Extremely Clean Bass Reproduction
- Super-Tweeter Delivers Purest Highs
- Sealed, Fiberglas-Filled Cabinet
- Finished on all Four Sides

Acoustic suspension design in this exciting 3 -way speaker system provides a rich natural bass response; two $5^{\circ}$ speakers de. liver a full-bodied mid-range; dome-type super tweeter produces sparkling clear highs. Sealed fiberglas-fllled cabinet of braced $3 / /^{\prime \prime}$ hardwood veneer is available in choice of finishes (all four sides): natural birch, mahogany or oiled walnut- and also unfinished. Requires ampllfier rated at least 20 watts (for stereo, amplifier should be rated 20 watts per channel). Response, 30 to $20,000 \mathrm{cps}$. Crossovers at 2000 and 7500 cps . Size, $13 \frac{1}{2} \times 24 \times 11 \frac{1}{2}$. Dispersion, $90^{\circ}$. Impedance, 8 ohms. 38 Ibs .
70 DU $600-\mathrm{J}$. Natural Birch. $\$ 7$ Monthly.
NET 122.00 70 DU 601-J. Mahogany. $\$ 7$ Monthly 70 DU 027-J. Oiled Walnut. $\$ 7$ Monthly 70 DU 028-J. Unfinished. $\$ 6$ Monthly.
AR-2 ACOUSTIC SUSPENSION SPEAKER SYSTEM
AR-2 ACOUSTIC SUSPENSION SPEAKER SYSTEM
Same as AR-2A, but less super tweeter. Wt., 36 Ibs. 70 DU 145-J. Natural Birch. $\$ 5$ Monthly 70 DU 146-J. Mahogany. $\$ 5$ Monthly. 70 DU 623-J. Oiled Walnut. $\$ 6$ Monthly 70 DU $147-\mathrm{J}$. Unfinished. $\$ 5$ Monthly

NET 96.00 NET 96.00 NET 102.00 NET 89.00

AR-3 ACOUSTIC SUSPENSION SPEAKER SYSTEM
When space is at a premium and the finest quality sound is desired, this superb 3-way speaker system is the answer. Has $12^{*}$ woofer with $31 / 4-1 \mathrm{~b}$. magnet; $2^{\circ} \mathrm{mld}$-range dome radiator with $31 / 4$ 1b. magnet; and dome tweeter. Crossovers at 1000 and 7500 cDS . Has level controls. $38-20,000 \mathrm{cps}$ ( $\pm 2 \mathrm{db}$ ). Needs amplifier rated 25 watts or more (each channel for stereo). 3 linishes, all four sides-or unfinished. $14 \times 25 \times 113 / 0^{\prime \prime} .4$ ohms. 60 lbs .
70 DZ 149-J. Natural Birch. $\$ 11$ Monthly.
net 216.00
70 DZ 148-J. Mahogany. $\$ 11$ Monthly
NET 216.00
70 DZ 624-J. Olled Walnut. $\$ 12$ Monthly
NET 225.00
70 DZ 002-J. Unfinished. $\$ 11$ Monthly
NET 203.00

## AR-1 ACOUSTIC SUSPENSION SPEAKER SYSTEM

Incomparable sound quality, lines of classic simplicity and compact size characterize this famous 3 -way speaker system. Features air-damped $12^{\circ}$ woofer for remarkably natural extended bass; $8^{\prime \prime}$ mid-range and high.frequency unit for medium and high notes of distilled purlty; and 1000 cps crossover network. Frequency range, 38 to $13,000 \mathrm{cDS}$ of clean sound throughout. Requires amplifier rated at least 30 watts (for stereo, 25 watts per channel); maximum, 60 watts (for stereo, 50 watts per channel). Three finishes available-all four sides finished for ease of placement. $14 \times 25 \times 11 \frac{1}{2}$. Imp. 4 ohms. 52 lbs .
70 DZ 150-J. Natural Blrch. $\$ 10$ Monthly
NET 185.00
70 DZ 151-J. Mahogany. $\$ 10$ Monthly.
70 DZ 152-J. Oiled Walnut. $\$ 10$ Monthly.

NET 185.00
NET 194.00


## Speakers That Meet Exacting Professional Standards

## MODEL 605A $15^{\circ}$ DUPLEX SPEAKER

 A speaker designed for those who inslst upon the finest in audio neproduction. The 605A is composed of two mechanically and electrically independent louds peakers mounted on a single frame for compactness, point-source relation, phasing and installation ease. Uses high compliance cone suspension. DeIlvers frequency range of 20 to $22,000 \mathrm{cps}$, flat from the lowest to highest note. Bass section has $3^{\circ}$ voice coll and $21 / 2 \mathrm{lb}$. magnet; treble section, $13 / 4{ }^{\mathrm{N}}$ aluminum voice coll. Exponential multi-cellutar horn produces $40^{\circ}$ vertical and $90^{\circ}$ horizontal dispersion. Includes 1600 cycle crossover network. Power handling capacity, 35 watts. Impedance, 16 ohms. Wt., 37 lbs .71 DU 213-J. $\$ 9$ Monthly . . . . . . . . . . . . NET 177.00

## 755-C $8^{-}$SPEAKER

Compact speaker famous for brilliant performance. Employs "Biflex" multiple concentric compliance. Features a remarkable wide frequency range of 40 to $15,000 \mathrm{cps}$ with minimum distortion. Has INDOX $\vee 11 / 21 \mathrm{lb}$. magnet, edgewound aluminum voice coil and deep magnetic gap for precise cone control. $21 / 4$ deep. Power handling capacity, 15 watts. Impedance 8 ohms. Shpg. wt., 6 Ibs.
71 DU $214-J . .$. NET 29.95

## Exciting Speaker Systems by $\overline{T_{0}}$ FIISHER

## KS－1B 3－WAY SPEAKER SYSTEM KIT

－Only $53 / 4$ Deep－For Wall，Shelf or Floor
－Factory－Balanced for Smoothest Reproduction
－Easily Assembled in a Few Minutes
You can see and feel the fine Fisher quality of each compon－ ent in this outstanding speaker system，as you put together the easy－to－assemble kit．Employs a $10^{\circ}$ woofer for extended bass； $5^{\prime \prime}$ mid－range unit dellivering smooth，widely dispersed sound； $3^{\prime \prime}$ super tweeter for brilliant highs；3－way crossover for best distribution of sound．Range，40－18，500 cps．Supplied with fiberglas padding to prevent resonance and vibra． tion．Easily assembles with just a screwdriver and small ham－ mer．Only $24 \times 28 \times 5 \% 9^{=}$deep．Capacity， 40 watts．Impedance， 8 ohms．Crossover frequencies， 1400 and 3000 cps ．In unfin－ ished，smooth－sanded solid birch ready for painting or stain－ ing．With instructions． 30 lbs ．
70 DU 153－J． 55 Monthly
NET 59.50
70 DU 154－J．Model KS－iW Kit．In unfinished，smooth－ sanded solld walnut．$\$ 5$ Monthly ．．．．．．．．．．．．．．．NET 64.50 70 DU 155－J．Model KS－1 A－B．Factory Assembled．Finished In natural birch．$\$ 5$ Monthly

NET 84.50
70 DU 156－J．Model KS1－AW．Factory Assembled．Fin－ ished in oiled walnut．$\$ 5$ Monthly．．．．．．．．．．．．．．．．NET 89.50

## SLIM－LINE

 3－Way Kit SystemMid－Ranoe Speaker
Super Tweeter
3－Way Crossover
Free－Plston Woofer
Fiberglas：Padding

## LAB－DESIGNED SERIES XP SPEAKER SYSTEMS

Developed to meet ex－ acting requirements and very stringent high－ indelity specifications， these superb speaker systems provide a high degree of undis－ torted audio power within a minimum of enclosure space．
Versatile 3－Way Systems For Placement on Shelf or Floor

## NEW MODEL XPGA 3－WAY SPEAKER SYSTE解

A striking departure in speaker desion makes possible a new 3－ way system delivering much smoother response with extremely low distortion．Impedance changes will not effect response． Customary bass speaker metal supporting frame has been elim－ inated，allowing use of fibergias packing directly behind speakers；also has 2 ＂voice coil wound on pure electrolytic cop－ per．Consists of：new＂trameless＂ $12^{\prime \prime}$ woofer；two $5^{\prime \prime}$ mid－range speakers； $2^{\prime \prime}$ tweeter； 3 －way crossover network with crossover points at 1200 and 2500 cps ；and balance controls．Range： 30 cps to beyond audibility． $14 \times 241 / 2 \times 12^{\circ}$ ．In mahogany or oiled walnut （specify choice）．Capacity， 60 watts．Impedance， 8 ohms．Disper－ sion， $120^{\circ}$ in all directions．Wt．， 60 lbs ．
70 DZ 157C－J．Specily finish．$\$ 10$ Monthly
NET 199.95 70 DZ 158－J．Unfinished Smooth－Sanded Birch．．

NET 189.50

NEW MODEL XP－2A 3－WAY SPEAKER SYSTE日
Redesigned to offer outstanding fidelity and compact size at a moderate price．Has $10^{-}$woofer， $5^{\circ}$ mid－range speaker， $3^{3}$ tweeter and two LC crossovers with separation points at 1600 and 5000 cps．Range： $30-15.000 \mathrm{cps}$ ．In decorator－finlshed mahogany or oiled walnut（specify cholce）．Size， $22 \times 12 \times 111 /{ }^{\prime \prime}$ ．Capacity， 30 watts．Impedance， 8 ohms．Shpg．wt．， 35 lbs．
70 DU 161 C－J．Specify finish．$\$ 5$ Monthly．
NET 84.50
70 DU 162－J．Unfinished Smooth－Sanded Birch．
．NET 79.50

## MODEL WS－1 MID－RANGE SPEAKER SYSTEM

Improves sound quality of music systems by filling mid－range ＂hole＂and delivering purer highs．250－12，000 cps．11 $1 / 2 \times 37 / 6 \times 43 / 9^{\circ}$ ． Walnut finssh．Cap．， 12 watts．Imped．， 8 ohms． 5 fbs． 70 DX 595－J． 55 Monthly

NET 24.75

NEW MODEL XP－1A 3．WAY SPEAKER SYSTE開
An improved version of the XP－1，delivering flawless sound qual－ ity over an incredibly wide range of 30 cps to beyond the limits of audibility．Consists of： $12^{\circ}$ high－compliance，high－efficiency woofer；one $5^{\circ}$ mid－range speaker； $31 / 2^{2}$ tweeter with wide dis－ persion；L．C crossover networks separating frequencies at 1800 and 3000 cps ；brilliance control for perfect sound adjustment of highs to match room acoustics．Also has newly designed 2 long－travel voice coil and dual－diameter magnet for virtual linear transfer of eneroy to speaker cone．Enclosure is filled with Acous－ tiglas． $131 / 4 \times 24 \times 111_{4}^{\prime \prime}$ ．In mahogany or olled walnut（specify choice）．Hand－rubbed to a handsome finish．Capacity， 60 watts． Impedance， 8 ohms．Shpg．wt．， 45 lbs.
70 DZ 159C－J．Specify finish．$\$ 7$ Monthly
NET 129.50
70 DU 160－J．Unfinlshed Smooth－Sanded Birch．
．NET 124.50


Your Satisfaction Is Guaranteed

## Compact High-Fidelity Speaker Systems

## ECONOMICAL MODEL SK-4 SPEAKER SYSTEM KITS

As Low As - Now-A Scott-Quality Speaker Syatem in Low-Cost Kit Form '7995 - Just Install Speaher-Enclosure is Pre-Assembled for You - 3-Way Design-8" Woofer, Mid-Range Unit, Super-Tweeter, \$5 monthly and Precision Crossover Network

A new speaker system kit priced far below what you'd expect to pay, with all the quality for which Scott is widely respected. Not only does the remarkable SK4 employ several of the same components used in much higher priced Scott units, it also comes to you with the cabinet Pre-assembled. After you mount the components and fasten the grille cloth in place, it cannot be distingulshed from a factory-built unit. Distortion-Iree sound is provided by a low-resonance $8^{\circ}$ woofer, and by the same mid-range and super-tweeter units featured in the S-3, below. Also includes crossover network that has made Scott speakers famous for perfectly balanced sound. Response, $40-17,000$ cps. 70 watts. 16 ohms. $22 \times 11 \times 9$. In unfinished pine. Shpg. wt., 29 lbs.
70 DU 163-J. \$5 Monthly
NET 79.95
70 DU 164-J. As above, but factory-finished in oiled walnut . NET 89.95 70 DU 165-J. As above, but factory-finished in mahogany. NET 99.95



## MODEL S-2 SPEAKER SYSTEM-SCOTT'S FINEST

- Four Precision Speakers : Wide-Angle Dispersion

Deluxe, compact 3-way speaker system providing extraordinarily smooth response throughout the audio spectrum-without a trace of coloration. Exclusive internal design produces wide-angle sound dispersion that allows the S-2 to be placed anywhere in a room without loss of audio quality. Four-driver acoustic-compliance system features a low-resonance 12 high-excursion woofer; two dual-cone mid-range units; a special widedispersion spherical tweeter mounted in its own matched enclosure; and a crossover network. Mid-range units are acoustically isolated to eliminate intermodulation. Response, $30-18,000 \mathrm{cps} .70$ watts. (Recommended for use with amplifiers having an output of at least 12 watts per channel.) Impedance, 16 chms. Only $23 \frac{1}{4} \times 14 \frac{1}{2} \times 121 / 2$ deep. In mahogany or olled walnutspecify. Shpg. wi., 48 Ibs. 70 DU 618C-J. Specify finish

NET 199.95

## POPULAR MODEL S-3 SPEAKER SYSTEM

- Compact-Shelf-Sized - 3 Speakers and Crossover
- Wide-Angle Dispersion - Fine-Furniture Finish

Book-shelf size 3-way acoustic-compliance system. Features the exclusive wide-angle dispersion desion of the S-2, above, to simplify speaker placement in stereo systems. Moderate-cost unit offers precise balance between deep and powerful bass, a clean mid-range and very high treble. Has: $10^{\circ}$ woofer; mid-range unit; super-tweeter in matched enclosure; crossover network. Response, 40-17,000 cps. Cap. 70 watts. Imp., 16 ohms. $23 \frac{1}{2} \times 11 \frac{1 / 2 x}{}$ $93 / 4$. Mahogany or oiled walnut-specify. 37 lbs. 70 DU 695C-J. Specify finish.

NET 134.95
70 DU $091-J$. Unfinished Pine. 37 lbs.
NET 118.95

## Rek-0-Kut "Sonoteer" Decorator-Styled Hi-Fi Speaker Systems

## MODEL CA-70 "CONTEMPORARY" SYSTEM

| Net | Only 4" Deep-Place It Anywherel |
| :---: | :---: |
| $\$ 7995$ | - 5 Speakers-2 Woofers, 2 Mid-Range Units, |
| and Super-Tweeter for Clean Highs |  |

The slender CA. 70 houses five high-fidelity speakers within its cabinet for marvelous sound reproduction-yet it's only $4^{\prime \prime}$ deep. Two woofers offer rich, full bass all the way down to 40 cos; two mid-range units and a super-tweeter extend the treble response up to $18,000 \mathrm{cps}$. Unique front and back radiation assures outstanding performance in any room. In beautiful olied walnut finish. Capacity, 45 watts. Impedance, 18 ohms. $21 \times 25 \times 4^{\prime \prime}$. Shpg. wt., 24 lbs.
70 DX 347-J. $\$ 5$ Monthly . . . . . . . . . . . . . . . . . . . . . . . NET 79.95
70 DX 349-J. Model CA-70E "Mandarin". As above, but in gleaming Satin Ebony finish. \$5 Manthly.............. NET 89.95
70 DX 348-J. Model CA-70P "Provincial". Same internal design


Two Attractive Designs
Three Finishes Match Any Decor

# :xtended-Range Shelf Speaker Systems 




## POPULAR MODEL 6 2-WAY SHELF SYSTEM

A wide-range book shelf-size system with an extraordinary transient response for strikingly clean, natural sound. Uses a $12^{2}$ acoustic-suspension woofer and a smaller direct-radiator with a thin, shell-like cone featuring a suspension technique that permits excursions up to $1 / x^{2}$--oives extra-clear mid-range. Crossover network uses air-core coils and oil-filled capacitors; 3 -position switch controls treble output. Overall response is $32-16,000$ cps. Crossover frequency, 1500 cps .1 .3 cubic ft, sealed enclosure is of solid $\%_{1 "}$ veneered plywood. 60 -watt capacity (requires 22 -watt input. minimum). 8 ohms. $23 \frac{1}{2} \times 12 \% \times 11 \%$. Shpg. wt., 36 Ibs. 57 Monthly.
70 DU 166-J. Mahogany Finjsh.
.................... NET 129.00
70 DU $167-\mathrm{J}$. Olied Walnut Finish. $\$ 7$ Monthly. .... . NET 134.00 70 DU 475.J. Unfinished. 56 Monthly . . . . . . . . . . . . . . NET 199.00


## MODELS 7 and 10 SPEAKER SYSTEMS

MODEL 7. A deluxe-quality lloor-type system. 2.6 cubic-ft. enclosure extends bass down to 25 cps , and two cone-type radiators extend treble to 20,000 cps. 75 -watt capacity (requires 20 watts, minimum). 8 ohms. $243 / 1 \times 211 / 2 \times 111 / 6^{\circ} .52 \mathrm{lbs}$.
70 DZ 606-J. Mahogany Finish. $\$ 10$ Monthly.
NET 196.00
70 DZ 607 -J. Olled Walnut Finish. $\$ 11$ Monthly.
. NET 203.00
70 DZ 608-J. Unfinished. $\$ 10$ Monthly.
NET 189.00
MODEL 10. Economy version of KLH 6. $10^{\circ}$ woofer and a conetype tweeter cover $25 \cdot 18,000 \mathrm{cps}$. 60 -watt capacity (requires 12 watts). $12 \times 231 / 4 \times 8 \% / 16^{\circ}$. Shpg, wt., 26 lbs.
70 DU 175-J. Mahogany Finish. $\$ 5$ Monthly
NET 89.00
70 DU 176-J. Olled Wainut Finish. $\$ 5$ Monthly.
NET 94.00
70 DU in7-J. Unfinished. $\$ 5$ Monthly.
NET 86.00

## DELUXE MODEL 4 2.WAY SHELF SYSTEM

KLH'S finest shelf-size speaker system, the Model 4 is ideal for the audiophile who insists on the finest performance, but requires space-saving equipment. The tightly sealed 1.5 cubic-ff. enclosure houses a $12^{\circ}$ acoustic-suspension woofer, two conetype direct radiators, and a 2 -way L-C crossover network. The crossover has controls for independently adjustino the output levels above 1500 and 6000 cps . There are also provisions for driving the low and high-frequency sections separately. Response, $25-20,000 \mathrm{cps}$. Power capacity, 75 watts (requires a minimum 30 -watt Input). Impedance ${ }^{2} 16$ ohms. $131 / 2 \times 25 \times 12^{\prime}$. Shpo. wt., 42 Ibs. $\$ 12$ Monthly.
70 DU 168-J. Mahogany Finish.
NET 224.00
70 DU 173-J. Oiled Walnut Finish. $\$ 12$ Monthly ..... NET 231.00
70 DU 174-J. Unfinished. $\$ 11$ Monthly . NET 219.45


## E-V FINISHING KITS

Electro-Voice furniture finishing kits give you a professional-like finish on your hi-fi cabinetry. Include: stain filler; sealer: shellac; hi-gloss and satin varnishes: finishing paper; brushes; and easy instructions. Wt., 4 lbs.



EICO HFS3K 2-WAY SYSTEM KIT
Shelf-size 3-way speaker system kit with a 12 woofer (has $13 / 4 \mathrm{ib}$. magnet), an $8^{-}$mid-range unit and a $31 / 2^{-1}$ cone-type tweeter. Rigid $3 / 4$ enclosure is pre-as-sembled-just mount the components on the studs supplied. Built-in 600 cps . L-C network and 4000 cps high-pass filter. Response, $45-14,000 \mathrm{cps}$. Capacity, 30 watts (requires 10 -watt input, minimum). Impedance, 16 ohms. $26 \% \times 131 / 2 \times 145 / 9^{\circ}$. 45 lbs. $\$ 5$ Monthly. 70 DU 697 -J. Unfinished .... NET 72.50 70 DU 698-J. Oiled Walnut.... NET 87.50


NEW UTAH "SORCERER" SYSTEM
This extra-small speaker system gives you "big sound" plus fine furniture quality at surprisingly low cost. An $8^{\circ}$ woofer, $3 y_{2} / 2$ tweeter and a $1 / 2^{\circ}$ plywood enclosure combine to delliver rich, low-distortion sound. Response, $40-15,000 \mathrm{cps}$. The attractive cabinet has a hand-rubbed oiled walnut veneer-its styling matches any decor from Early American through Modern. Measures just $12 \times 20 \times 5^{\prime \prime}$-use it on wall, shelf or floor. Capacity, 12 watts. $1 \mathrm{mp} ., 8$ ohms. 9 lbs.
70 Dis 178-J. S5 Monthly..... NET 29.95

# 3-Way Speakers, FM Antennas and Accessories 

Sensational 3-Wav Speaker values Thrilling Sound at Lowest Cost

## 15-Inch s $49^{95}$ \$5 Monthly

12-Inch 53995 \$5 Monthly

## ALLIED/ELECTRO-VOICE $15^{\circ}$ SPEAKER

- Deluxe 3-Way Design-Buil to Allied's Rigid Specifications Tweeter With Wide-Angie Treble Dispersion


## - Massive Ceramic Magnet <br> - Tweeter Level Control

- Compare Price-Compare Features-See How Much You Save Exclusivel Deluxe custom made speaker offers features equal to other speakers selling for up to twice its low price. 3-way design for smooth, transient-free response from $30-20,000 \mathrm{cps}$. $15^{\circ}$ high. compliance woofer with soft suspension gives spectacular bass. Mid-range propagator handles the all-important middle-range Prequencies between 2000 and 3530 cps . "Sonophase" throat design tweeter evenly spreads crystal-clear highs through a full $180^{\circ}$ arc. Has mechanical crossover at 2000 cps ; electrical cross. over at $3500 \mathrm{cps} ; 2$ edgewise wound voice coil; tweeter level. control on $36^{\circ}$ cable; free-air resonance, $35-45 \mathrm{cps}$. Heavy die-cast frame keeps all elements perfectly centered. $11 / 2-\mathrm{lb}$. ceramic magnet. 30 -watt capacity. 16 ohms . Depth, $9^{\circ} .16$ fbs. 71 DU 203-J. $\$ 5$ Monthly

NET 49.95

## ALLIED/ELECTRO-VOICE 12 SPEAKER

Sensatlonal speaker buy-compares with others selling for $\$ 60.00$. 3-way unit combines $12^{\circ}$ woofer with a Radax-type mid. range propagator and a high-frequency tweeter. Result is maximum bass without boominess, full-bodied mid-range and distinct highs. Response: $35-18,000 \mathrm{cps}$. Mechanical and electrical cross. overs at 2000 and $3500 \mathrm{cDs} .11 / 4 \mathrm{lb}$. dual-flux ceramic manet; $21 / 2^{\circ}$ edgewise wound voice coil for low transient distortion; tweeter leyel-control on $42^{\circ}$ cable. 20 -watt capacity. Impedance, 16 ohms. $6^{\prime} / 10^{\circ \prime}$ deep. Shpg. wt., 15 Ibs.
71 DU 205-J. \$5 Monthly
NET 39.95

## HOW TO GET ALLIED'S

## Big System Savings

OPEN THE DOOR to thrilling stereo sound in your home right now. How? Just write Allied's Hi.Fi Department. You may have questions about system savings, equipment or installation. You'll want expert advice before buying. Allied's audio consultants will give you the personal attention you want and need. They'll show you the substantial savings that only Allied the nation's fargest hi-fi center, can give you on music systems.
Possibly, you already have certain sys. tem components in mind. Or, you may want our staff to make a recommendation on a system tailored to your needs. You'll be pleased with Allied's low discount prices available on sys. tem purchases. Write NOW. Our staff Is ready to serve you promptly-consultation is FREE.

## EASY TO BUY! <br> No Money Down

For as little as $\$ 5$ a month you can start enjoying the music system of your choice. Use Allied's convenient Credit Fund Plan. No money down, and up to 24 months to pay. Start with' a basic record playing system and add other components at any time you wish-with only your signature required. It's the easiest way!


## For Improving FM Stereo Reception

(A) NEW RCA "BRITE SITE" TV-FM ANTENNA. For TV, FM, FM stereo. Printed circuit-fits under rug. With 10 feet of 200 -ohm twin line. $52 \times 12^{2} .13 / \mathrm{lbs}$.
92 CX 418. List, $\$ 3.95 \ldots . .$.
(B) (C) C. BLONDER-TONGUE AB-A ALL COUPLER. Power supply (Fig. C) us 3s 4 cells: provides isolation and 300 -ohm match for 4 TV.FM sets. Lead-in supplies DC to amplifier. Amp., $13 / \times 21 / 3 \times 3^{\circ}$; supply, $11 / 6 \times 3 \times 71 / 6$. Less cells. $11 / 2$ lbs.
71 C 819. List, $\$ 29.95$........ NET 18.62
55 J 005. Battery For ABove. 3 oz...... 13
KNIGHT 300-OHM TWIN LINE. (Not illus.) Web 80 mil thick. Polyethylene jacket. Wts.: 50 -ft. coil, $1 \mathrm{lb} . ; 100$-ft., 2 lbs.
49 T 477. 50 -ft. Coil.............. NET . 59
49 T 448. 100-ft. Coll. ........... NET 1.09
(D) NEW MARK MOBILE STEREO 7 FM ANTENNA. A 7 -element antenra that doubles the power of sensitive multiplex signals. You get twice the signal strength of ordinary antennas-assures you of best stereo FM reception. Omnidirectional aluminum elements for rust-free life. With hardware. Less mast and twin line. $22 \times 30 \times$ $51 / 2$ deep. Shpp. wt., 6 lbs.
92 CX 439. List. \$24.95.
NET 14.97
(E) JERROLD TX-FM TV-FM ANTENNA MIXER. Converts your present TV an. tenna into dual-purpose TV, FM, FM stereo antenna. Designed to provide maxImum separation and distortion-free signals necessary for best FM stereo reception. 300 -ohm input for lead-inf; outputs for TV set, FM tuner. Screw terminals. $41 / \mathrm{x}$ $13 / 811 /{ }^{2}$. Shpg. wt., 402.
93 C 118.

# Stereo Headphones-Personal, Noise-Free Listening 



## KNIGHT KM-8A5 HEADSET

Trim and lightweight-you hardly know if's there! Unbreakable contoured headband of spring steel. Comfortably recessed ear cups. Both headband and ear cushions padded with sponge rubber, covered with smooth leatherette skin. Easy push.in/pull.out headband adjusts for custom fit on any head. Frequency Response: $25 \cdot 16,000$ cps. $8 \cdot$ foot cord with phone plug; jack on "L"" bracket. 4-16 ohms. Wt., 2 lbs.
95 DX 825 -J. $\$ 5$ Monthly ONLY 19.95 KN-846 CHAIRSIDE CONTROL. Sepa. rate fingertip volume controls for 1 or 2 KN-845 headsets. Switch for turning regular speakers on or off. $11 / 2 \mathrm{lbs}$. 95 D 826-J.

ONLY 7.95

## KOSS STEREO HEADSETS AND ACCESSORIES

PRO- 4 PROFESSIONAL HEADSET. Fluid filled ear pads. Response: $30-20,000$ cps. Shatterproof and shockproof. Imp., 4 ohms. 8 -foot cord. Wt., 2 lbs.

## 59 D 051. $\$ 5$ Monthly

NET 44.10
59 D 054. As above, 600 ohms. NET 4.10
WM-5 WALL-MOUNT HEADSET HOLDER. 2 Volume controls. $1 / 2 \mathrm{lb}$. 7.79
T-1 HOOKUP BOX. Matching transformers, $600-10,000$ ohms. $23 / 4 \times 2 \times 4^{4} .8 \mathrm{oz}$. 59 D 189. NET 7.79
T-5 CONTROL. Speaker on-off switch, volume controis. $21 / 4 \times 2 \times 4^{\circ} .8$ oz. 59 D 188.

SP-3 HEADSET. Thrilling stereo without disturbance. $31 / 2^{*}$ dynamic reproducers in each earphone give smooth response from $10 \cdot 15,000 \mathrm{cps}$. With $8^{\prime}$ cord and T-2 stereo-phone jack for connecting to amplifier. Impedance, 4 ohms. 2 lbs. 59 D 178. $\$ 5$ Monthly

NET 24.45
SP-5NS DUAL-MODE HEADSET. Stereo plug or 2 mono plugs; switch. Response: $10-15,000 \mathrm{cps} .5 .3 \mathrm{hms} .21 / 2 \mathrm{lbs}$.
59 D 049. $\$ 5$ Monthly
NET 24.45
SP-5SM HEADSET. Stereo-mono switch; 1 plug. Frequency Response: 10-15,000 cps. $1 \mathrm{mp} ., 5.3 \mathrm{hms}$. Wt., $21 / 2 \mathrm{lbs}$.
59 D 050. $\$ 5$ Monthly
NET 24.45

STEREO..
For Most Natural Reproduction of Sound


Telex HDP-53A

 ST-M

## JENSEN HS-1 HEADSET

Lightweight headphones for stereo or mono listening. Response: 20-15,000 cps. Noise-excluding foam ear cushions remove for cleaning. High-compliance, curvilinear drivers have moisture-resistant diaphragm. Acoustic rear mesh for uniform bass. With $8 . \mathrm{ft}$. cord, standard headphone plug plus jack and 4 leads for connecting to amplifier. Imp., 8 ohms per channel. $13 / 4 \mathrm{lbs}$.
59 D 328. 55 Monthly
NET 24.95

## TELEX HDP-53A HEADSET

"Dyna-Twin" stereo headphones provide exceptional depth and direction for exciting realism. Frequency Response: 30 15,000 cps. Lightweight set weighs only 12 oz. Foam rubber ear muffs keep music in-noise out. Dynamic driver element has "Mylar" diaphragm and self-supporting voice coll. 8 ohms. 14 oz.
59 D 327. \$5 Monthly...... NET 24.40

## JENSEN "SPACE PERSPECTIVE"

CFN-1. Experience the sensation of true private stereo-from both front and sides. No unnatural partitioning of sound. Each ear hears part of opposite amplifier's sound. Works with any 8.ohm headset. $2^{1} / 10 \times 4 \times 5$ / $10^{\prime \prime}$. Wt., $11 / 4 / \mathrm{lbs}$.
59 D 055. $\$ 5$ Monthly $\qquad$ NET 19.50
CC-1. As above, with controls for: on-off; left or right channel only, or stereo with left-right reversal; mono, or stereo with "Space.Perspective" or regular; balance; volume. Jacks for 2 phones. Walnut finish. $41 / 8 \times 111 / 8 \times 3^{\circ} .31 / 2 \mathrm{lbs}$. 59 D 065 . $\$ 5$ Monthly

NET 39.75

## NEW SHARPE HEADSET

Comfortable "Live Tone" circumaural ear cushions. Liquid-filled- $99 \%$ of external nolse is eliminated. Frequency Response: $20-20,000 \mathrm{cps}$. Shockproof and shatterproof. Impedance, 10 ohms .1 1/2 lbs . 59 D 299. \$5 Monthly ....... NET 43.50

## NEW SUPEREX HEADSET

ST-M. Woofer, tweeter in each phone. Response: $20 \cdot 20,000 \mathrm{cps}$. Crossover, mono adapter, cables. Low imp. 2 lbs. 59 DX O63. \$5 Monthly .... NET 29.35 ST-MH. Above, but high impedance. 59 DX 058. \$5 Monthly . . . . . . NET 34.25 ST-S. Abova but, Frequency Response: 30$15,000 \mathrm{cps}$. Adapts for monaural listening. Low impedance. Wt., 2 lbs. 59 DX 059. $\$ 5$ Monthly. NET 24.45 ST-SU. As above, but with matching transformers and switch for low or high impedance. Shpg. wt., 2 lbs. 59 DX 060 . $\$ 5$ Monthly.

NET 29.35
SC-1 CONTROL BOX. Controls volume, balance, on-off. 2 phone screw terminals. ST-M or ST-SU jumper wires. $1 / 2 \mathrm{lb}$. 59 D 061.

NET 6.81
SC.2. Same as SC-1 but has 2 stereo jacks. For low impedance phones. $1 / 2 \mathrm{lb}$. 59 D 062.

NET 6.81

For the Finest Acoustic:


## AUTHENTIC ITALIAN PROVINCIAL ENSEMBLE

For the discr minating taste-delightful Italian Provincial styling. Inciudes Mojel 60 C cabinet and two Model 601 enclosures. Cabinet has top-ioading phono compartment, $14 \%^{\circ}$ high, $171_{4}{ }^{\circ}$ wide and $6 \% \%^{\prime \prime}$ deap. Upper left has space for tuner and amplifier$17 \% /^{*}$ wide and $14 \frac{1}{2}$ high. Accommodates more than 100 rec. ords. Cabinat size, $271 / 4 \times 38 \times 17^{7}$. Bass-reflex enclosures take speakers up to $12^{\prime \prime}$. Each enclosure, $271 / 3 \times 17 \times 17^{\circ}$. Specify fruitwood or oiled walr ut. Ensemble wt., 148 lbs .
70 DZ 688C-3J. Save $\$ 12.00 \$ 11$ Monthly. 70 DZ 685C-s. Equipnent Cabinet Only. 76 lbs. 70 DZ $686 \mathrm{C}-\sqrt{-1}$. Speaker Enclosure Only. 36 lbs.

NET 227.85
NET 119.95
EACH 59.95



## DANISH MODERN ENSEMBLE



For those who enjoy modern contemporary Scandinavian style in their furnishIngs. Consists of the Model 700 cabinet and two Model 701 enclosures. Cabinet features top-loading phono compartment, $14 \%$ high, $171 / 4^{\prime \prime}$ wide and $6 \frac{5}{6}$ deep. Upper left for tuner and amplifier-17\%" wide and $14 \frac{1 / 2}{}$ high. Has blank panel for custom mounting. Lower right has room for 100 records. Lower left accommodates additional records. Hinged doors with
convenient magnetic latches. Overall size of cabinet, $281 / 4 \times 381 / 4 \times 1714^{\circ}$. Enclosures take speakers up to $12^{\prime \prime}$. Each enclosure, $281 / 4 \times 17 \times 17^{\circ}$. Finished in oiled walnut. Wt. 160 Ibs. $\$ 12$ Monthly
70 DZ $010-3 \mathrm{~J}$. Save $\$ 14.00$. NET 239.95
70 DZ 000-J. Equipment Cabinet Only, Shpg. wt., 80 lbs. NET 124.95

70 DZ 001.J. Speaker Enclosure Only. Shpg. wt., 40 lbs....... . NET EACH 64.50


Designed for comfortable living, ensem. ble includes Model 800 cabinet and two Model 801 enclosures. Phono compartment, $14 \%$ high, $17 \%^{\prime \prime}$ wide and $6 \%$ " deep is top-loaded. Amplifier and tuner space is $17 \%$ wide and $141 / 2$ high. Holds 100 records; has panel for custom mounting. Hinged doors have magnetic latches. Overall cabinet size, $271 / 2 \times 38 \frac{3}{4} \times 171 / 4$. Each enclosure, $271 / 4 \times 17 \times 17^{\prime \prime}$-takes up to 12 speaker. Maple finish. 160 lbs. 512 Monthly
70 DZ 021-3.1. Save $\$ 15.00$. NET 244.95 70 DZ 011-J. Equipment Cabinet Only. Shpg. wt., 80 lbs. . . . . . . . . . . . NET $\$ 27.95$ 70 DZ 019.J. Speaker Enclosure Oniy, Shpg. wt. 40 lbs. . . . . . NET EACH 66.00

## MODEL 108 SPEAKER ENCLOSURE

Smartly styled shelf-type enctosure for horizontal or vertical use. Accommodates any $8^{\circ}$ speaker, plus tweeter which can easily be added at any time. Beautifully flnished on all four sides in rich hand-rubbed veneers. Cane grille cloth. $12 \times 24 \times 12^{\circ}$. Choice of mahogany or olled wainut veneer. 25 Ibs. 70 DU $462 \mathrm{C}-\mathrm{J}$. Specify Finish. $\$ 5$ Monthly NET 27.00

## MODEL 112 SPEAKER ENCLOSURE

Eye-appealing, acoustically lined enclosure for any $12^{\circ}$ speaker and tweeter. Seml back-loaded resonator combined with smart construction in a compact speaker enclosure. Hand-rubbed, genuine veneers on four sides; plastic cane grilie cloth. $24 \times 16 \times 131 / 2^{\prime \prime}$ (plus $2^{\prime \prime}$ base). In mahogany or olled wainut. Wt., 35 lbs . 70 DZ 073 C-J. Specify Finish. 55 Monthly.NET 42.95


108


HIGHLY VERSATILE COMPACT ENCLOSURE

Model 128. Low cost shelf enclosure designed for $8^{*}$ speaker and tweeter. Use singly as hi-fi speaker system or extension unit. Specify mahogany or oiled wainut finish. $19 \times 9 \times 11^{\circ}$. Wt. 15 lbs .
70 DU 586 C-J $\$ 5$ Monthly NET 21.00


## GAMBER-JOHNSON



## OVATION CABINETRY

Create new standards of elegant styling and functional design. Each ensemble features $3 / 8$ construction; hand-rubbed veneers; adjustable shelving; lift-top access to phono compartment; bass-reflex enclosures with adjustable ports. Interior dimensions of all cabinets are identical. Amplifier-tuner section at upper left, $14^{*}$ high, $171_{2}^{*}$ wide and $151_{1}^{*}$ deep; phono section, $10 \times 17^{1 / 2 \times 141 / 2}$ (equipped with motor board with adjustable height to take turntable, changer or tape deck); lower right storage section, $13 \times 171 / 2 \times 16^{-1}$ holds 100 records; lower left, $10 \times 17 \frac{1}{2} \times 16^{\prime \prime}$.

# Ovation Component Cabinetry 



## GODERN CONTEMPORARY STYLING

COMPLETE 3-PIECE ENSEMBLE. Styled and designed for today's living and listening. Consists of equipment cabinet and two matching speaker enclosures, in eyeappeating oiled walnut or mahogany. Outar dimensions of cabinet, $30 \times 37 \times 18^{\circ}$; outer dimensions of each speaker enclosure, $30 \times 191 / \times 18^{\prime \prime}$. Enclosures are pre-cut for $15^{\circ}$ speakers, with $1 \%$ speaker adapter boards; have tunable ports to match speakers per-
fectly to enclosures. Finishes of units guaranteed to match only when purchased as ensemble. Specify finlsh. Wt., 184 Jbs. 70 DZ 555C-3J. Save $\$ 12.00$. NET $\mathbf{2 2 7 . 8 5}$ Gd-630 EQUIPMENT CABINET. 98 lbs. 70 DZ 556C-J. Specify Finish. NET: 119.95 GJ-6B0 SPEAKER ENCLOSURE ONLY. Shpg. wt., 43 lbs .
70 DZ 557C-J. Specify Finish...EA. 59.95


AUTHENTIC EARLY AMERICAN DESIGN
COMPLETE 3-PIECE ENSEMBLE. Enduring style imparts warmth to its surroundings. Consists of equipment cabinet and two speaker enclosures in harvest maple. Outer dimensions: cabinet, $281 / 4 x$ $383 / 4 \times 173 /{ }^{\prime \prime} ;$ each enclosure, $281 / 4 \times 21 \frac{1}{2} \times 17 \frac{3}{4}$." Interiors of enclosures are identical to Contemporary Ensemble (above). Matching finishes quaranteed only when purchased as ensemble. 194 lbs.
70 OZ 561 -3J. Save $\$ 13.50$.
NET 256.35
GJ-620 EQUIPMENT CABINET ONLY. Wt., 102 Ibs. 70 DZ 562J.

NET 129.95
GJ-670 SPEAKER ENCLOSURE ONLY. Wt., 46 lbs .
70 DZ 563J.
EACH 69.95

## GENUINE FRENCH PROVINCIAL

COMPLETE 3-PIECE ENSEMBLE. Bring Gallic charm to your decor with an equipment cabinet and two speaker enclosures finished in authentic Normandy Fruitwood. Outer dimensions: cabinet, 29x $383 / 1 \times 18^{\text {; }}$; each enclosure, $29 \times 211 / 2 \times 18^{\circ}$. Interiors of enclosures are Identical to Contemporary Ensemble (above). Matching finishes guaranteed only when purchased as ensemble. Shpg. wt., 192 lbs . 70 DZ 897-3J. Save $\$ 15.50$.

NET 294, 35
GJ-640 EQUIPMENT CABINET ONLY. Wt., 102 lbs . 70 DZ 898-J. . . . . . . . . . . . . . . . ......... NET 149.95
GJ-690 SPEAKER ENCLOSURE ONLY. Wt., 45 lbs. 70 DZ 899-J.

EACH 79.95

## AUTHENTIC ITALIAN PROVINCIAL

COMPLETE 3-PIECE ENSEMBLE. Creates an air of elegance that adds to the enjoyment of fine components. Equipment cabinet and two speaker enclosures are in antique fruitwood. Outer dimensions: cabinet, $29 \times 381 / 2 \times 175 / \%^{\prime ;}$; enclosure, $29 \times 191 / 3 \times 17 \% 9^{-}$. Enclosure interiors are identical to Contemporary Ensemble (above). Matching finishes guaranteed only when purchased as ensemble. 184 los. 70 DZ 558-3J. Save $\$ 13.50 \ldots . .$. ... NET 256.35
GJ-610 EQUIPMENT CABINET ONLY. Wt., 98 lbs. 70 DZ 559-J.

NET 129.95
GJ-660 SPEAKER ENCLOSURE ONLY. Wt., 43 lbs. 70 DZ 560-J. . . . ........................ EACH 69.95


## 950E STEREO EMSEMBLE

\& 4-piece grouping styled in refreshing :ontours. Provides acoustic excellence as velt as roomy housing. Consists of 9561 Equipment Cabinet, two 5062 Speaker Enslosures and a sculptured, one-piece solid-walnut platform base, 8 high. Overall size, $32 \times 96 \times 18^{\prime \prime}$. Equipment cabinet featsres unique paneled tambour doors, two shelves and blank panel for custom installation. Also Includes $20^{\circ}$ wide by $15^{\circ}$ deep top-loading turntable compartment with easy-access touch-top cover; and $20^{\circ}$ by $13^{\prime \prime}$ record storage space. Overall size of cabinet, $24 \times 48 \times 18^{\circ}$. Enclosures accept $12^{\prime \prime}$ or $15^{\circ}$ speakers. Size of each, $24 \times 24 \times 18^{\circ}$. Finished in hand-rubbed oiled walnut. 247 lbs. Save $\$ 29.90$.
70 DZ 132 - J . $\$ 19$ Monthly. NET 429.95
MODEL 951C STEREO CONSOLE Same styling and design as above, but more compact. One-piece unit; $8^{\prime \prime}$ base; accepts $12^{*}$ speakers. Touch-top changer compartment, $18 \times 15^{\circ}$; record storage space, $18 \times 15 \times 13{ }^{3} .32 \times 78 \times 18^{\prime \prime} .150$ Ibs. 70 DZ 130-J. $\$ 16$ Monthly. NET $\mathbf{3 2 4 . 5 0}$

9561 B EQUIPMENT CABINET ONLY. With $8^{\circ}$ base. $32 \times 48 \times 18^{\circ} .115$ lbs.
70 DZ I33-J. $\$ 13$ Monthly..... .NET 254.95
5062 SPEAKER ENCLOSURE ONLY. With $8^{\circ}$ base. $261 / 2 \times 24 \times 18^{\circ} .66 \mathrm{lbs}$.
70 DZ 134-J. $\$ 5$ Monthly. . .... . NET 99.95

## MODEL H-200 STEREO CONSOLE CABINET AND ENCLOSURES

Acoustically superb, offering every convenience, and a masterpiece of stylish simplicity in hand-rubbed oiled walnut finish-the $H-200$ is an outstanding onepiece cabinet for your stereo music system. Equipment cabinet has spacious lifftop compartment ( $36 \times 15$ ), one half holding vertical panel-mounted amplifier and tuner; other half housing turntable. Lifttop cover rises at a touch of your hand to provide access to controls and turntable. Also has convenient pull-out

## BADTILAY

California-inspired Decorator Styling and the functional use of choice American Black Walnut woods highlight this elegant furniture grouping. Here is truly deluxe cabinetry designed to accommodate and enhance the deluxe high-fidelity music system.

"BRAX" SUPPORTS FOR SHELF-MOUNTING HI-FI EQUIPMENT


Sturdy pairs of decorative steel wallmounting strips and shelf supports that can hold a music system or other equip.

WALL MOUNTING STRIPS

| Length | Wt. lbs. | Satin-Silver Stock No. | Black Stock No. | NET PER PR. | Satin-Gold Stock No. | $\begin{aligned} & \text { NET } \\ & \text { PER PR. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $24^{* \prime}$ | 1 | 82 RX 050 | 82 RX 053 | . 98 | 82 RX 056 | 1.33 |
| $36^{*}$ | 2 | 82 RX 051 | 82 RX 054 | 1.36 | 82 RX 057 | 1.75 |
| $48^{*}$ | 2 | 82 RX 052 | 82 RX 055 | 1.74 | 82 RX 058 | 2.15 |
| SHELF SUPPORT ARMS |  |  |  |  |  |  |
| Length | Wt. lbs. | Satin-Silver Stock No. | Black Stock No. | $\begin{gathered} \text { NET } \\ \text { PER PR. } \end{gathered}$ | Satin-Gold Stock No. | $\begin{aligned} & \text { NET } \\ & \text { PER PR. } \end{aligned}$ |
| 8 | 1 | 82 RX 059 | 82 RX 064 | . 84 | 82 RX 069 | 1.09 |
| 12* | 1 | 82 RX 060 | 82 RX 065 | 1.16 | 82 RX 070 | 1.45 |
| $16^{\prime \prime}$ | 1 | 82 RX 061 | 82 RX 066 | 1.59 | 82 RX 071 | 2.29 |
| $\cdots{ }^{*}$ | 2 | 82 RX 063 | 82 RX 067 | 2.39 | $82 \mathrm{R} \times 072$ | 3.39 |

ment. Easily installed. For extra-long shelving, use 2 pairs of strips. Less shelves. -Extra heavy-duty with nylon locking cam.
"browser" drawer ( $18 \times 15 \times 13^{\prime}$ ) with rack for storing your records. Fully vented. The handsome speaker enclosures at either end are gracefully swept back to broaden stereo distribution. Each enclosure accepts a 12 speaker and utilizes phaseinversion principle for fine audio response. Overall size: $27^{\circ}$ high, $18^{\circ}$ deep, $78^{\circ}$ wide. Allows convenient placement in your home, and proper stereo spread. Shpg. wt., 125 Ibs.
70 DZ 129-J. $\$ 12$ Monthly... NET 224.95


## Adds Realism to Your Records



Recaptures Full "Impact" of Actual Performance

Action Indicators Show Dynamic Expansion


"MUSIC. MINDER" You Can Fall Asleep to Music -Shuts<br>Off<br>Entire<br>System

## NEW FAIRCHILD MODEL 510 "COMPANDER"

Adds an amazing degree of reallsm to music reproduced by your high-fidelity music system. Assures full-range dynamic reproduction-prevents overloading and distortion when recording. Automatically increases the dynamic range (loudness) of program material compressed during record cutting-without altering the frequency response of any program material. Achieves listening level gain of 6 db or more for greatiy enhanced stereo separation. With a flick of a switch, reverse the
action and make it compress (reduce) dynamics for tape recording and background music-prevents overload and sudden playback peaks. Threshold controls permit you to adjust the rate of expansion or compression. Action indicator lights let you see the effect taking place. Easy to install-simply plup stereo phono into the 510 , plug 510 into your amplifier. Size, $2 \% / 1 \times 8^{3} / 16 \times 5^{\prime \prime}$. Shpg. wt., $51 / 2 \mathrm{lbs}$.
72 SU 043-d. $\$ 5$ Monthly..... NET 75.00

## AUTOMATIC "MUSIC-MINDER"

Now any hi-fi system can be fully automatic. When your changer shuts off after last record is played, entire system is turned off. Changer and amplifier simply plug into "Music-Minder." Manual position for non-automatic operation. For Garrard, Collaro, Thorens and other European-made record changers. $61 / 2 \times 2 x$ 11/2". Wt. 2 lbs.

## 82 R 079.

NET 5.50
82 R 080. Above, for Webcor, other Ameri-can-made changers.

NET 5.50

## ALL-IN-ONE EQUIPMENT CABINET

Beautifully styled, low-cost cabinet provides space to accom. modate complete stereo system. Crafted in fine woods. has heavy hardwood top, hand-rubbed wainut veneer. Features two sliding doors for easy access to components. Bass-reflex enclosures take $8^{\circ \prime}$ or $12^{\prime \prime}$ speakers, are acoustically padded and reinforced to eliminate resonance. Convenient, slideout changer drawer has blank mounting board ( $3^{\circ}$ below, $6 \frac{1}{2 \prime \prime}$ above). Dimensions (HWD): each enciosure, $181 / 3 \times 12 \% \times 14^{\circ}$; upper section, $6 \frac{1}{2} \times 17^{3} / \mathrm{e} \times 51 / 8$; lower, $93 / 4 \times 17^{3 / w} \times 15 \%$; overall. $28 x$ $475 / 1818 / 4$. Shpg. wt., 85 lbs. 70 DZ 619-J. $\$ 5$ Month/y.

NET 88.95

## MATCHING RECORD CABINET

A marvelous value, easily stores over 150 LP records. Perfectly matches "all-in-one" equipment cabinet at left: can be used with other contemparary style units. Solld, $1 / /^{*}$ panels; sllding doors, removable dividers; accessories shelf. Olled walnut. Slze, with $8^{\circ}$ legs; $28 \times 26 \times 16^{\circ}$ Shpg. Wt., 45 lbs.
70 D2 $179-\mathrm{J}$.
onty 29.95


## NEWI HIGH POINT CABINET

MODEL 8105. Beautifully designed to give your records an attractive home. Featurling modern "low-boy" design, it's a full $40^{\circ}$ in length. Stores over 200 records in its huge compartment. Sturdy top holds stereo components. TV, etc. Constructed of durable furniture veneers. Brass hardware on sliding doors and legs. Storage compartment. $231 / 2 \times 171 / 2 \times 131 / 2$; overall, $26 \times 40 \times 18^{7}$. Mahog. or walnut finIsh. Shpg. wt., 31 Ibs.
70 OZ $180 \mathrm{C}-\mathrm{J}$. Soecily finish. NET 19.88

## HIGH POINT 811 CABINET

Two-tier record storage cabinet holds up to 600 LP records. Blends well with traditional or contemporary decor. Constructed of sturdy, durable 7 -ply veneers with polished brass door pulis and trim. Among its deluxe features are swinging doors equipped with fine-quality magnetic lock catches and heavy brass hinges. Size, $33^{\prime \prime}$ high. $27^{\prime \prime}$ wide, $15^{\prime \prime}$ deep. Avaliable in attractive, hand-rubbed mahogany or walnut finish. 4 lbs. 70 DZ 181 C -J. Specify finish. NET 35.95

## ARISTO-BILT CABINETS

MODEL 211. Attractive, low-cost show case for hi-fi components and records. Holds 150 albums. Sliding louvered doors cover lower portion of cabinet. Upper compartment, $15 \times 24 \times 8^{\prime}$; lower, $151 / 2 \times 24 \times$ $131_{2}{ }^{\prime \prime}$; overall, $30 \times 25 \frac{1}{2} \times 15 \frac{1}{2}$. Legs, $6^{\prime \prime}$. Walnut finish. Shpg. wt., 28 Ibs.
70 DU 182-J. \$5 Monthly. ... NET 27.95 70 DU 183-J. Above, untinished . . . 19.95 70 OU 186-J. Model 212. Walnut. Holds 200 albums. $34^{\circ}$ wide. $33 \mathrm{lbs} . . . . . . .31 .95$ 70 OU 187-J. Above, unfinished .... 22.95

## ＂Solar＂Grille Cloths

A． 22 RX093．＂Pandanus．＂Imported straw． $27^{\circ}$ wide（min．order 1 yd．）． ＇er yd． $1502 . . .$. NET PER YARD 1.60 12 RX 094．To $10 \frac{1}{2}$ yds．，PER YD．．．． 1.60
B 82 RX 095．＂Cane．＂Natural on brown fabric． $36^{\circ}$ wide（min．order． 1 yd．）．Per d．， 15 02．．．．．．．．．．．．．．．NET PER YD． 2.40 －2 RX 096．Over 1 yd．，PER YARD ．． 2.40
［C） $8 \mathbf{R X} 097$. ＂Cane \＆Lurex．＂Brown and tan，gold metallic thread． $36^{\circ}$ wide （min．order， 1 yd．）．Shpg．wh．，per yd．， $15 \mathrm{oz} . . . . . . . .$. ．NET PER YARD 2.95 82 RX 098．Over 1 yd．，PER YARD ．．． 2.95
（D） 2 RX 099．＂Cane．＂2－tone beige on brown． $36^{\circ}$ width（min．order， 1 yd．）． Wt．，per yd．， 15 oz ．NET PER YARD 2.50 $\mathbf{8 2}$ RX $\mathbf{1 0 0}$ ．Over 1 yd．，PER YARD ．． 2.50 ［E］ 82 RX 101．＂Lurex．＂Brown and tan shades，with gold and bronze＂Lurex＂ metallic thread． $36^{\circ}$ wide（min．order， 1 yd ）． Wt．per yd．， $15 \mathrm{oz} . . .$. ．PER YARD 4.00 82 RX 102．Over 1 yd．，PER YARD ．．． 4.00

## LOW－COST RECORD CABINETS



UNIVERSAL WOODCRAFTERS CC－22． Offers richly sculptured doors and center panel．Square tapered legs，ivory－tipped brass ferrules．Top shelf， $26 \times 15 \times 5 \%$ ， holds amp，etc．Record shelf， $24 \times 15 \times 14^{*}$ ，
 mahogany or walnut，specify choice of finlsh． 48 lbs ．
70 DZ 188C－J．\＄5 Monthly．．．NET $\mathbf{3 4 . 9 5}$
UNIVERSAL HIGH－POINT 95．Holds over 250 records，sturdy enough to support a TV set，too．Skillfully cratted．Gleaming brass trim，brass hardware and ferrules． $221 / 2 \times 24 \times 18^{\prime \prime}$ ．Shipped knocked－down，as－ sembles in a few minutes．In mahogany or walnut finish，specify choice when ordering．Wt．， 18 lbs． 70 DU 189C－J．

NET 12.95

## ＂Acoustone＂Speaker Grille Cloths <br> TESTED AND APPROVED BY U．S．TESTING COMPANY



A wide selection of popular Acousticone speaker grille cloth in highly attrac－ tive，color－fast patterns．Match virtually all types of decorative motifs．Made of highly durable Saran plastic in an open weave to permit unrestricted passage of all sound frequencies．Special construction plus professional weaving techniques－never sag or shrink．Shpg．wt．，per yard， 15 oz.

BUDGET－PRICED GRILLE CLOTH

| Description | PatternNo． | Fig． | Stock No． |  | $\begin{aligned} & \text { NET } \\ & \text { PER } \\ & \text { YD. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | In Lengths Over 1 Yd ． | 36m36＂ |  |
| Mahokany with Ivory Threads | 211 | F | 82 RX 103 | B2 RX 104 | 2.39 |
| Natural Cane | 41－X35－45 | G | 82 RX 106 | 82 RX 107 | 2.39 |
| Straw Weave（27＊weave only） |  | H | 82 RX 108 | 82 RX 109 | 2.39 |
| Blonde and Yellow | 615 | J | 82 RX 110 | 82 RX 111 | 2.39 |
| Walnut with Bronze Threads | 811 | K | 82 RX 115 | 82 RX 116 | 2.39 |
| Gold and Bronze | 213 | L | 82 RX 117 | 82 RX 119 | 2.39 |

## MODERATELY－PRICED GRILLE CLOTH

| Blonde with＂Lurex＂and Brown | 515 M | M | 82 | RX 120 | 82 | RX 121 | 3.29 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Beige with Metallic Gold | 711 M | N | 82 | AX 122 | 82 | RX 123 | 3.29 |
| Natural Cane | 1809 | P | 82 | RX 124 | 82 | RX 127 | 3.29 |
| Brown on Beige Cane | 2475 | R | 82 | RX 128 | 82 | RX 130 | 3.29 |
| Mahogany．Beige with Metallic Gold | 32－57R－2F | S | 82 | RX 131 | 82 | RX 132 | 3.29 |
| Blonde．Beige with Metallic Gold | 831 | T | 82 | RX 133 | 82 | RX 134 | 3.29 |
| Ebony and Natural Cane | 1824 | W | 82 | RX 137 |  | RX 138 | 3.29 | Ebony and Natural Cane

## DELUXE GRILLE CLOTH

Beike and Brown with Metallic Gold
Walnut and Tan Cane with Metallic Thread Black with Gold Cobweb
Beige and White with Metallic
Dark Mahogany with Metallic
Dark Mahogany with Metallic
Beige．White and Tan with Metallic Thread

| 2025 | $X$ | 82 | $R X$ | 139 | 82 | $R X$ | 140 | 3.95 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1803 | $Y$ | 82 | $R X$ | 146 | 82 | $R X$ | 147 | 3.95 |
| 453 | $Z$ | 82 | $R X$ | 148 | 82 | $R X$ | 149 | 3.95 |
| $814 B M$ | $A A$ | 82 | $R X$ | 150 | 82 | $R X$ | 151 | 3.95 |
| 300 | $B B$ | 82 | $R X$ | 52 | 82 | $R X$ | 153 | 3.95 |
| 7104 | $C C$ | 82 | $R X$ | 154 | 82 | $R X$ | 155 | 3.95 |



## G－C DECORATIVE METAL GRILLE

DD
Brushed－brass finish．Diamond pat－ tern． $21 / 3 \times 7 / \mathbf{F}^{=} .4 \mathrm{lbs}$.

## 82 RX090． $12 \times 18^{\prime \prime}$ <br> 82 RX $091.18 \times 24^{*}$

82 RX 092． $24 \times 36^{\prime \prime}$
NET 1.76
NET 3.23
NET 6.14

## SPEAKER REDUCER RINGS

EEFor mtg．small speakers in larger en－ closures． $1 / 8$＂plywood．With hardware． MODEL R／R 12／8．For mounting 8 speak－ er in $12^{\prime \prime}$ speaker cabinet． 1 lb. 82 RX 298．List，$\$ 2.00 \ldots . .$. NET 89c MODEL R／R 15／12．For mounting $12^{\prime \prime}$ speaker in $15^{\prime \prime}$ speaker cabinet． $11 / 2 \mathrm{lbs}$ ． 82 RX 299．List，$\$ 2.75$.

NET 1.19

## BARZILAY OIL FURNITURE FINISH

Liquid preparation gives soft Iuster to oiled walnut furniture ！inishes．A blend of eight basic oll compounds，in－ cluding $40 \%$＂solids．＂ 8 －oz．Wt．， 1 lb ． 82 R 089.

## TAPERED BRASS LEG KITS

6G］Include four dual－purpose mounting brackets that let you affix legs to cabinet in either straight or angle position． Kit includes 4 legs and screws．Hand－ somely finished in brass．
82 R 081．4＂Kit． 2 lbs．
NET 2.49
82 R 082． $6^{\prime \prime}$ Kit． 3 lbs． NET 2.79 82 R 003． $12^{\circ} \mathrm{Kit} .4 \mathrm{lbs}$ ． NET 3.79 82 R 084． $14^{\prime \prime} \mathrm{KIt} .5 \mathrm{lbs}$ ． NET 4.19

## UNFINISHED TAPERED WOOD LEG KITS

GG］ Same as kits，above，but legs of sanded，unfinished hardwood．
82 R 085． $4^{*}$ Kit． $11 / 2$ Ibs．．．．．．．．NET 1.79 82 R 086． $6^{*}$ Kit． $13 / 4 \mathrm{lbs} . . .$. ．．．NET 2.09

82R 088． $14^{\circ}$ Kit． $23 / 4 \mathrm{lbs}$ ．

# Add Hours of Playing Time to Your Records With These Valuable Accessories 

$\square$ESK-3 RECORD CARE KIT. Ends all record care problems. Has everything you need for preserving the life and quality of your records. Contains: stylus pressure gauge; turntable level: stylus microscope; cleaning cloth; needle brush: record brush; arm lift. Wt., 1 lb. 82 R 000

NET 3.38
E15-S PLASTIC RECORD COVERS. Protective sleeves for your $12^{\circ}$ records. Made of durable polyethylene plastic with thermoset seams to resist tearing, they keep records free from dust and moisture. Packed 15 sleeves to a package-in plastic envelopes. Wt., 7 oz.
82 R 001
.NET PER PKG. 58c NB-1 "KLEENEEDLE" BRUSH. Automatic protection for your needle and records. Whenever arm is cycled, stylus is wiped over brush. Removes accumulations of dust, lint, etc. from needle tipreduces distortion. Base has adhesive pad for very easy mounting. Shog. wt., 4 oz. 82 R 002

NET 95c
(D) TL-iS TURNTABLE LEVEL Don't gouge your records because of a tilting turntable-this easy-to-use leveler employs an air bubble indicator to ensure accurate leveling in any circumstance. With it you'll be sure of correct tracking of lead-in and changer trip grooves; even wear of records and needle. In lifetime goid-anodized aluminum case. $40 z$. $82 \mathbf{R} 003$

NET 59c
SD-4S "STROB-DISC." (Not illustrated.) Make sure that your turntable is rotating accurately. Just place the "Strob-Disc" on the turntable under neon light-you'll know immediately whether the turntable is correctly rotating at $162 / 3,331 / 3$, 45 or 78 . rpm. Shpg. wt., $20 z$.
82 R 004
NET 20c

(E)
PC-12S POLYESTER PHONO CUSH-
ION. Low-cost polyester foam mat that protects records played on changers. With cushion, records drop gently and safely. 12 diameter; ${ }^{3}$ " thick. Wt., 302.

## 82 R 005

NET 69c
82 R006. As above, but $10^{\circ}$ in diameter. Shpg. wt., 3 oz. NET 59c

## ( RB -75S CLIP-ON RECORD BRUSH.

 Soft camel hair brush that mounts on pickup arm and brushes record ahead of stylus to remove dust from grooves. Selected, lightweight fibers will not scratch record. Just clip into place-won't interfere with tone arm tracking or stylus pressure. Shpg. wt., 302.
## 82 R 007

net 29c
G SE-900 ANTI-STATIC "ATOMIC JEWEL."" A tiny jewel, on a clip, acts as an extremely effective static neutralizer. Makes records dust-resistant by neutralizing static electric charges that attract dust. Weighs less than $1 / 50$ of an ounce. Clips to tone arm. Reduces record noise; lengthens record life. $30 z$.
82 R 008
NET 2.70
H IP-16S ACOUSTIC ISOLATION
PAD. Designed by experts to minimize acoustic feedback, reduce noise and protect furniture finishes from heat. Fits beneath record changer bases, recorders, ampliffers, preamps, etc.-absorbs vibrations. Can be used beneath TV chassis. Of highly resilient urethane foam. Size, $131 / 2 \times 16 \frac{1}{2}$. Shpg. wt., 1202.
82 R 009
NET 1.00
RA-45M 45-RPM RECORD INSERTS. (Not Illus.) Durable metal inserts that easily snap into record center hole and hold position indefinitely. 5 per package. Shpg. wt. per pkg., 402
82 R 010
(1) MX-1 STYLUS INSPECTION MICROSCOPE. For easily inspecting stylus tip. Quickly reveals imperfections and signs of wear. Features: 4 precisionground optical glass lenses for clear mag. nification; knurled focusing adjustment; convenient slot at end of microscope for holding needle steady; and pocket clip. Size, $31 /{ }^{\circ}$ long; $1 / 2^{\circ}$ diameter. Wt., 5 oz. 82 R 011

NET 1.49
K "SYL-A-SCOPE" NEEDLE TIP CHECKER. A simplified version of an optical comparator used for examining tiny parts. Accurate and easy to use, il provides a magnified, illuminated image showing the detailed contour of any needle tip. All you have to do is place the pickup arm on the rest bar with the stylus set into an opening. Switch on the "Syl.A. Scope" and see a clear, magnifled picture of the tip projected on an illuminated screen-ready for examination.
SG-33 "SYL-A-SCOPE" JR. Low cost portable battery-operated model. Employs two replaceable penlight batteries avail able anywhere. In plastic case, $5 \frac{1}{2} \times 31 / 2 x$ $1.1^{\prime \prime}$. With switch and bulb. Less batteries, below. Shpg. wt., 12 oz.
82 R 012
NET 4.49
BATTERIES FOR ABOVE. Uses 2. 3 oz 35 J 020

NET EACH 10 C
SG-66 PROFESSIONAL "SYL.A. SCOPE." Deluxe AC model with extra. sharp optical system, higher power enlargement, and larger screen. A precision optical tool for use by recording studios and broadcast stations, serious record collectors, hi-fi technicians, etc. Metal housing, $7 \times 5 \% \times 3 \%{ }^{\prime \prime}$. Complete with switch, line cord and bulb. For $110 \cdot 120$ volts, 60 cycle AC. Wi., $1 \frac{1}{2} \mathrm{lbs}$.
82 R 013
Net 13.46


## Accessories for Record Changers and Turntables

TESK-5 STROBE LIGHT KIT. Shows you if your turntable is moving at the proper speed. Consists of stroboscopic card and neon lamp. Just put strobe disc on tumtable, set to desired speed and hold lamp over appropriate dots. For 110 120 v., 60 cycle AC. Wt. 6 oz .
82 R 014
NET 98c

(4)ESK-1S BALANCED SOUND KIT. Contains a quick-reading stylus pressure gauge and very accurate turntable level. With pressure gauge, you can quickIy determine the correct stylus pressure. Turntable level indicates whether there is the slightest tilt. Shpg. wt., 402. 82 R 015
(H)

ESK-45 TURNTABLE LEVELING KIT. A low-cost kit that permanently levels furntable to exact requirements. Has 4 ad justable rubber feet with mounts, and an air bubble indicator that mounts to base Shpg. wt., 1 lb.

## 82 R 016

NET 1.80
CC-US RECORD CHANGER COVER For use with Garrard, Glaser-Steers Collaro and most other popular record changers. Plastic- $17 \times 15 \times 834^{\prime \prime}$. 6 oz

## 2 R 017

NET 98c CC-TUS TURNTABLE COVER. Fits Fairchild, Rek-O-Kut, Garrard and many others. $22 \times 161 / 2 \times 9^{\prime \prime}$. Wt., 6 oz 82 R 018

NET 1.25

## Handy Accessories for Every Music System



## Storage, Equipment and Record Care Accessories

1
TURNTABLE LEVEL Precisely levels turntables and record changers with uld of water bubble indicator. 6 oz . R R 019

NET 1.50

B"PIC-A-DISC" RECORD HOLDER. Minimizes record warping by using ninged-wire record retainers that also make selection quick and easy. Hoids fifty $7^{\prime \prime}, 10^{\circ}$ or $12^{\prime \prime}$ records in jackets. Brass finished steel. Shpg. wt., 5 lbs.

## R R 020

NET 4.98

(C)ESL "DUST BUG." Lightweight plas. tic arm with fine nylon brush, pad-type dust collector and pad cleaning fluid. Arm suction-cup mounts to base. Brush loosens dust and dirt in record grooves-pad picks it up. Fluid cleans pad. 8 oz.
82 R 021. For Changers....... NET 4.75 82 R 022. For Turntables . . . . . . NET 5.75
(D) LEKTROSTAT RECORD CLEANING
(D) KIT. Contains plastic bottle ( $11 / 4$ fluid oz.) of anti-static detergent fluid, and tufted wiping pad. Apply fluid to record; then wipe with pad. Shpo. wt. 5 oz .
82 R 023
NET 1.96DELUXE $12^{\circ}$ RECORD ALBUM. Un usually sturdy, with 12 tough Kraft paper envelopes in binder. Has inside cover index. Fabrikoid cover. $21 / 2 \mathrm{lbs}$.

## 82 RX 024

NET EACH 1.75
3 or More
NET EACH 1.49
DELUXE $7^{*}$ RECORD ALBUM. As above, for $7^{*}$ records; less index. 12 oz . 82 R 025

NET EACH 1.15 3 or More e. . NET EACH 99c
F DISC STORAGE AND CARRYING
CASES. Metal or fiberboard. $12^{\circ}$ cases hold thirty $12^{\prime \prime}$ records; have numbered index separators. $7^{*}$ cases hold seventy. five 7 " records; have numbered index and separators. Metal cases styled in red and while. Fiberboard cases are black with gold thread pattern and white trim. Sizes: $12^{\prime \prime}$ cases- $133 / 131 / 2 \times 43 /{ }^{\circ} ; 7$ cases- $73 / 4, \times$ $8 \times 71_{2}{ }^{\circ}$. With plastic handies.
12" METAL CASE. Wt. $51 / 4 \mathrm{lbs}$.

## 82 RX 026

NET EACH 4.95
12 FIBERBOARD CASE. $31 / 2 \mathrm{lbs}$. 82 RX 027

NET EACH 3.95

## Stylus Pressure Gauges and Arm Positioner

(J)WALCO PRESSURE GAUGE. Sets pressure from 2 to 10 grams without using springs or cams. Just set correct weight for your cartridge (as recommended by the cartridge manufacturer) on the gauge. Adjust counterweight on tone arm until it's in balance. Wt. 6 oz . 82 R 032

NET 1.00
(K) GARRARD PRESSURE GAUGE. Ac-
curately measures weight exerted by the needle on a record. Markings in one gram intervals to 10 grams. All moving parts are of lightweight alloy, sealed for added protection. Shog. wt., 5 oz . 82 R 035

(b)
"MICRO-GRAM" PRESSURE GAUGE. Uses system of weights and balances. Imported, Japan. 8 oz. 82 R 036

NET 1.98
(4) DEXTRAFIX ARM POSITIONER. Gently and accurately raises or lowers pick-up arm with lever-type control. Stop is adjustable to all record sizes. Adjusts to any pickup arm helght. Wt., 5 oz.
82 R 037
NET 3.95WEATHERS PRESSURE GAUGE. Indicates pressure with calibrations from 0 to 10 grams. Shpg. wt. 5 oz . 82 R 041

NET 2.00

## Accessories for Custom Installations

PFIBERGLAS ACOUSTIC INSULA-. TION. Prevents distortion in speaker enclosures. $1 \times 24 \times 60^{\circ}$ :Wt., 2 lbs. 22 RX 042

NET 1.32
R AUDIOTEX REMOTE CONTROL. Turns music system, or appliances on or off from any place in your home, by means of switches installed in outlets or cabinets. Capacity, 10 amps at $110-120$ volts, AC. Supplied less wire (see 3Conductor Wire, listed below).
30-300. Includes power control unit with 3 switches (add any number of switches de. sired-see below). Wt., 2 lbs.
82 R $04 . . . . . . . . . . . . . . .$. . NET 13.52
82 R 045. Extra Switch. 5 oz. . . . . . . 1.32
3-CONDUCTOR WIRE. 100 - ft. coll. 2 lbs.
47 T 360
00 -ft. coll. 2 Ibs.
PER 100 ft .2 .43
s
$15^{*}$ PHONO DRAWER SLIDES. With ball bearings. Extend 11". 4 lbs. 82 R 046

NET 1.90 82 R 047. As above, but $13^{7} \ldots$ NET 1.90 82 R 048. 18 Phono Drawer Slides. Extend $16^{\circ}$. Shpg. wt., 5 lbs . NET 3.50FM $300-$ OHM TWIN LINE ANTENNA. Folded dipole. 6.ft. lead-in. 6 oz
92 C 019
NET 99e
(WNFINISHED RECORD CHANGER
BASES. With ball bearing drawer slides; pre.drilled holes. $31 / 2 \times 161 / 4 \times 141 / 2{ }^{\circ}$. Shpg. wt., 8 lbs .

## Stoolin No.

-a Cor
NET
73 AX 042 Webcor 1000 Seriea
73 सX 048 Gerrard Type A
73 月X 045 Garrard AT6, "Autonlim
7.75

73 RX 049 Uncut. with blank top

$7^{\circ}$ METAL CASE. Wt., 31/4 Ibs.

## 82 RX 028

NET EACH 3.45
7 FIBERBOARD CASE. $21 / 2$ lbs.
82 RX $029 . . . . . . . . . .$. NET $^{2}$ EACH 2.95
G WALCO ANTI-STATIC RECORD
SPRAY. Deposits thin anti-static film on record surface. Aids in preventing records from accumulating dust and lint. In 6-oz. aerosol spray can. 7 oz.
82 R 030
. . . . . . . . . . . . NET EACH 88e ROTRON EQUIPMENT COOLING FAN. New deluxe "Whisper Fan" inaudibly cools amplifiers, tuners, tape recorders, etc. Lengthens tube and equipment life-improves their performance. $41 / s^{\circ} \mathrm{sq} . \times 11 / 2^{\prime \prime}$ deep. 60 cm . For $110-120$ v. 60 cycle AC. $11 / 4$ lbs.

82 R 031
NET 14.85



Switch Between Two Monophonic Inputs.


## L-PAD VOLUME CONTROLS

Provide convenient remote control speaker volume, with no loss of aud quality. Stereo types control both spea ers simultaneously. Rated 10 watts; watts peak. Screw-type terminals. Wi hardware, instructions. 802.

## DUO-JACK SWITCH BOXES

For feeding either of two different monophonic signal sources into a single amplifier input without changing cables. Switch selects which signal is to be fed into the amplifier. Two phono jack inputs, one output cable. Cable has $18^{\circ}$ length and is tipped with phono plug.
(A MODEL 30-294 SURFACE MOUNT SWITCH BOX. For installation on shelf, wall, etc. Shpg, wt, 10 oz.

## 82 R 156. <br> NET 1.76

(B) MODEL 30-296 PANEL MOUNT SWITCH BOX. For mounting in wood panels to $\frac{1 / 4}{}{ }^{\text {B }}$ thick. 10 oz .
82 R 157.
NET 2.20

Stock No. Model No. Fie. Impedance Mode


| Type of Mounting | NE |
| :--- | :--- |
| Wall Plite-standard outlof box | 2.9 |
| Wall Plate-standard outlet box | 2.9 |
| Wall Plate-standard outlet box | 5.0 |
| Wall Plate-standard outlet box | 5.0 |
| Surface Mount-self-contained box | 4.1 |
| Surface Mount--self-contained box | 4.1 |
| Surface Mount-self-contained box | 6.1 |
| Surface Mount-self-contained box | 6.1 |
| Panel Mount-1" shank, dial plate | 2.0 |
| Panel Mount-1 shank, dial plate | 2.0 |

## SPEAKER SELECTOR SWITCHES

Select any combination of 1 to 3 speakers. Switch matches impedances as various combinations of speakers are used. Screw terminals. Av. shpg. wt., $1 / 2 \mathrm{Ib}$.
(C) 30-388 WALL PLATE. Stereo.

C 82 R 169.
NET 2.9
(D) $30-360$ SURFACE MOUNT. MONO
(D) 82 R 170 .


## SWITCHCRAFT Audio Switches and Controls

656 SPEAKER VOLUME CONTROL. L. pad with "Off" position-cuts off speaker completely. Brass wall plate-fits standard etectrical outlet boxes. Rated 10 watts. 8 ohms. $41 / 2 \times 23 / 4 \times 11 / 4{ }^{\prime \prime} .10 \mathrm{oz}$. 82 R 172.
.NET 4.09
655 MULTI-SPEAKER SELECTOR SWITCH. Selects any combination of 3 speakers. Brass wall plate-fits standard electrical outlet boxes. Maintains constant impedance regardless of switch position. Screw terminals. $41 / 2 \times 2 \frac{3}{4} \times 11 / 0$. Shpg. wt., 8 oz.
82 R 180.
NET 3.30 82 R 175. $655-$ S. Same as 655 , except stainless steel wall plate........ NET 3.30

367 DUAL VOLUME CONTROL ADAPT. ER. For two-channel, high-impedance circuits. Ideal for stereo. Two phono lack inputs, two phono plug outputs, with separate recessed volume controls. 8 oz .

## 82 R 185.

NET 4.50
670 STEREO SPEAKER SWITCH. 3-posi-tion-select either or both pairs of steren speakers. Screw terminals. 8 oz.

## 82 R 186.

NET 3.70
662 STEREO-MONO SELECTOR WITH CHANNEL REVERSE. Switches from stereo to mono at amplifier input: plus channel reverse. Phono jacks. $11 / 2 \times 2 \times 2$. Shpg. wt., 10 oz.
82 R 191.
NET 2.06

655 SPEAKER-PHASE CONTROL. Provides proper phasing in stereo and other multiple speaker installations. Surface mounting. $2 \times 2 \times 1^{\prime \prime} .10 \mathrm{oz}$.

## 82 R 192.

NET 1.47
663 PHONO-TUNER ADAPTER. Feeds either of 2 monophonic signal sources into a single amplifier input. Phono jacks. Sur. face mounting. $2 \times 2 \times 1^{\prime \prime} .10$ oz,
© R 193.
NET 1.50
668 STEREO SELECTOR SWITCH. Feeds both channels of any of 3 stereo sources into a stereo amplifier input. Phono jacks. Surface mounting. $2 \times 2 \times 1^{\circ} .10 \mathrm{oz}$. 82 R 194.

NET 3.30

## Audio Switches and Controls by VIDAIRE



SPEAKER SELECTOR SWITCHES. Quality switch panels for multi-speaker monophonic or stereo systems. Wiring instructions include details on selecting the correct resistors to maintain proper impedance. Less resistors. Include 31/4x $23 / 8$, brass plates, howe. 8 oz .
MS-6. Swifches up to 6 speakers in monophonic installations.

## 82 R 196.

NET 2.10
MS-12. As above, but controls 6 pairs of speakers for stereo, or 12 speakers in monophonic applications.
82 R 197
NET 2.64


MS-12


SE-B


RS-10


RF-10


STEREO SPEAKER EQUALIZER WITH PHASING.SWITCH. L-pad controls ad. just speakers in stereo system for equad output. Minimizes need for unbalancing amplifier. Includes phasing switch. Bras's plate. Hdwe. $2 \frac{1}{4} \times 4 \frac{1}{2} \times 21 / 0^{\circ} .1002$.
82 R 198. Model SE-8. 8 ohm .
82 R 200. Model SE-16. 160 hm , EA. 7.1?
RS-102-SPEAKER SELECTOR SWITCH. 3 positions-selects either or both of 2 speakers. Brass plate. With hardware. $21 / \times 21 / \times 13 / 4^{\circ} .807$.
82 R 201.
NET .98

RF-10 SPEAKER FADER CONTROL. Provides variable distribution of volume between main speaker and remote speak= er. Decreases volume of one speaker while increasing volume of the other (does not maintain constant impedance). For 4-8 ohm speakers. Rated 5 watts. Brass plate. Hdwe. $21 / 2 \times 21 / 1 \times 11 / 4 / 8$ oz. 82 R 202.

NET 1.15
SP-5 SPEAKER PHASING SWITCH. Reverse polarity of one of two stereo speakers when necessary to insure proper phasing. Brass plate, $21 / 8 \times 21 / 1^{\prime \prime} .4 \mathrm{oz}$. 82 R 203 .

NET 1.05


NERAL INDUSTRIES MODEL TR. 3. ed phono motor with $9^{\circ}$ turntable. $2 \cdot$ e motor. $331 / 3,45$ and 78 rpm . With 45 ) adapter. $311 / n \times 53 / 4 \times 53 / 4^{\prime \prime}$. Requires $1 / /{ }^{\prime \prime}$ ow mtg. piate. For $110-120$ v., 60 cycle Shpg. wt., 4 fbs.
R 115. List, $\$ 12.45$
NET 7.47
NERAL INDUSTRIES MODEL DSS. - illus. 3-speed phono motor with $10^{\prime \prime}$ ntable. 4-pole, shaded-pole motor. $1 / 3,45$ and 78 .rom. With 45-rpm adapter, in.Off" switch. $43 / 1 \times 6 \frac{3 / 8}{} \times 61 / 16^{\prime \prime} .221 / 2^{2}$ be. $v$ mtg. plate. For $110 \cdot 120$ volts, 60 cycle $61 / 2 \mathrm{lbs}$.
R 107. List, \$25.75.
NET $\mathbf{1 5 . 4 5}$
ENERAL INDUSTRIES MODEL SS. tt illus. Phono motor with $8^{\prime \prime}$ turntable. pole motor: $331 / 3.45$ and 78 rpm . With 45 m adapter. $315 / 16 \times 413 / 12 \times 43 / 4{ }^{\circ}$ without turnble, $2^{15} / \mathrm{g}^{\prime \prime}$ below mig. plate. For 110.120 60 cycle AC. 4 lbs .

- R 108. List, $\$ 10.95$.

NET 6.57

- R 109. SS-4. As above, but has 4th jeed ( $16 \frac{2}{3} \mathrm{rpm}$ ).

NET 7.05

GENERAL INDUSTRIES MODEL RM4-3 PHONO MOTOR. $331 / 3 \cdot \mathrm{rpm}$ phono motor with $10^{*}$ turntable. Heavy-duty, rim-drive 4.pole motor-rubber insulated from mounting plate for quiet operation. $33 / 8$ $33 / 0 \times 3^{\circ}$. Requires $215 / 6^{*}$ below mig. plate. For $110-120$ v., 60 cycle AC. 9 lbs 79 R 105.

NET 15.90
GENERAL INDUSTRIES SERIES BX BATTERY-OPERATED PHONO MOTORS. Dependable phono motors that operate on four flashlight cells (below). 2 . pole enclosed motor has self-lubricating bearings. Model BX has neutral "off"shift lever can be placed on either side of the turntable. $6 \frac{1}{2} \times 4 \frac{1}{2} \times 23 / 4^{\prime \prime}$. Require $2^{\prime \prime}$ space below mtg. surface. 1 lb.

| Stock No. | Model | RPM | NET EA. |
| :---: | :---: | :---: | :---: |
| 79 - 100 | BX | 45. $3.31 / 2,16 \%$ | 10.20 |
| 79 日 102 | $8 \times \times$ | $\text { 78. } 45,331 /$ | 10.65 |
| 79 A 101 | BX-45 | 45 | 8.85 |

TYPE 2 BURGESS BATTERY. For all Series $B X$ phono motors. Use 4. 6 oz . 55 J 005.

GENERAL INDUSTRIES D-10 RECORDER MOTOR. Heavy-duty 4 -pole, shadedpole induction type. For use in almost any tape, wire or disc recorder being made. Clockwise or counter-clockwise rotation. 1/70 HP; free speed, 1740 rpm . Max. run-
 33"; $3^{\circ}$ below mtg. plate. For $110-120 \mathrm{v}$. 60 cycle AC. 3 Ibs.
79 R 106. List $\$ 15.00$
NET 9.00
ALLIANCE JPT8. 3-speed phono motor with $8^{\prime \prime}$ turntable. Constant speed, rubber shock-mounted 2 -pole motor. $331 / 3,45$ and 78 rpm . With 45 rpm adapter. Mounts in $43 / 651 / 4$ cutout. Requires $21 / 2^{\circ}$ below base plate. For $110-120 \mathrm{v}, 60$ cycle AC . Shpg. wt., $31 / 2 \mathrm{lbs}$.
79 R 113. List, $\$ 10.95$
NET 6.44 JPQ8. As above, but all 4 speeds. 79 R 114. List $\$ 13.50$

NET 7.94 RCA $240 X 1$ PHONO SWITCH. For operation of record players through radios that do not have a phono input. With plug. cable, instructions. 6 oz .
80 R 104. List $\$ 3.35$
NET 1.96

## DISC RECORDERS AND ACCESSORIES



EEK-O-KUT M-12S OVERHEAD RESORDING LATHE. Used in DR. Inter:hangable with M-12. Less head. 20 libs.
9 RU 044.
.NET 150.00
11 RC 112. REK-O-KUT RH-5 CUTTING tEAD. For M-12S. 8 ohms. 1 lb . NET 115.00 ASTATIC X-26 CRYSTAL CUTTING AEAD. High impedance; response to 6 kc . -Requires approx. 150 v . (rms) drive. $13 / 6 \mathrm{x}$ $5 / 0 \times 311^{\prime \prime} .24^{\prime \prime}$ leads. 1 lb .

ASTATIC M41-8 MAGNETIC CUTTING HEAD. 8 ohms; connects to amplifier. 7 kc response. Requires 3 v . (rms). 1 lb . 81 RC 111.

NET 7.53

REK-O-KUT R8B RECORDING AMPLIFI-
ER. For making professional recordings with DR disc cutter (at right). Response, $20-20,000 \mathrm{cps}$ at 20 watt out put. Distortion: harmonic, $0.32 \%$ at 1000 cps at full output; $I M, 0.825 \%$. 4 inputs: mike, tape and phono mixing, tuner. Outputs: speaker and cutter, 4,8 and 16 ohms; monitor, 2000 ohms. VU meter. In portable carrying case. $51 / 4 \times 19 \times 6 \frac{1}{2}$ ". For 110.120 v., $50-60$ cycle AC. 25 lbs.
79 RU $00 \%$
NET $\mathbf{2 2 5 . 0 0}$
79 RZ 002. REK-O-KUT Imperial II DIsc Recorder. Consists of DR disc cutter (right) and R8B recording amplifier. 70 lbs.

REK-O-KUT DR DISC CUTTER. Professional cutter with M12S overhead lathe. Operates at $331 / 3$ and 78 rpm ; has idler and adapter for 45 rpm . Makes masters from $6^{\circ}$ to $13 y^{\prime \prime}$. Accepts all standard vertical mounting cutting heads. 120 line leadscrew; interchangeable with leadscrews to 270 lines. Can be hand cranked for run. In spiral grooves. Hysteresis motor. Callbrated timing scale. S-120 arm with dual sapphire magnetic pickup plays up to $12{ }^{2}$ records. With RH-5 cutting head; $50-13,000$ CDS (left). Uses standard short-shank needle. Portable case. $7 \times 10 \times 201 / 2^{\prime \prime}$. For $105-125$ v., 60 cycle AC. 45 lbs.
79 RZ 000.
NET 475.00

## AUDIODISC RECORDING BLANKS

Recording blanks smooth-coated on both sides of aluminum base. Red Label discs exceed the most exacting needs for highest quality professional recordings. Yellow Label discs are for general purpose work in studios and schools; Blue Label for home recording; have same highquality lacquer as professional discs, but on thinner aluminum base. Types marked with * have center hole for 45 -rpm records


Aluminum Base Blanks

| Stock | Size | Label | Base | E. | Lbs., |  | NET EACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Singlo Lo | Sid. Pkg |
| 80 R 007 | $7{ }^{7}$ | Red | .050" | 502. |  |  | 1.01 |  |
| 80 ค 003 | ${ }^{80^{87}}$ | Red |  | $\begin{aligned} & 5 \text { oz. } \\ & 600 . \end{aligned}$ | 812 | $\begin{aligned} & 25 \\ & 25 \end{aligned}$ | .79 .12 | .72 1.01 |
| 80 ค 004 | $\begin{aligned} & 10^{\prime \prime} \\ & 12^{\prime \prime} \end{aligned}$ | Red | $\begin{aligned} & .040^{\circ \prime} \\ & .050^{\circ} \end{aligned}$ | $\begin{aligned} & 600 . \\ & 900 \\ & 90 \end{aligned}$ | 131/2 | 25 25 | 1.12 | 1.01 |
| 90-009 | $7{ }^{\circ 0}$ | Yellow | .050* | 502. | 5 | 25 |  | , 77 |
| 80 R 008 | $8{ }^{\prime \prime}$ | Yellow | . $0400^{\circ}$ | 5 oz. | 5 | 25 | 67 | . 60 |
| 80 R 010 | $10^{*}$ | Yellow | . $040{ }^{\prime \prime}$ | 6 oz. | 812 | 25 | 89 | 80 |
| BOROI | $12^{\prime \prime}$ | Yellow | . 050 | 9 oz. | 13/2 | 25 | . 44 | 1.29 |
| 80 A 000 | $61 / 2^{*}$ | Blue | . $027{ }^{\circ}$ | 3 oz. |  |  |  |  |
| 80 ¢ 001 | $8^{8}$ | Blua | .027" | 402 | 7\% | 50 | . 55 | 49 |
| 80 R 002 | $10 *$ | Blue | .027" | 502. | 10\% | 50 | 78 | 71 |

## DISC CUTTING NEEDLES

AUDIOPOINTS. High-qually recording needles. For all professional and non-professional recorders. Types 14, 20 and 34 have $87^{\circ}$ included angle. All have $.003^{\circ}$ tip radius except Type 20, $0005^{\circ}$. Shpg. wt., 2 oz.

| Stock No. |  | Type | Description | net ea. |
| :---: | :---: | :---: | :---: | :---: |
| 81 | - 102 | 14 | Sapphire, short dural shank |  |
| 81 | - 109 | 20 | As above, for microgroove |  |
| $\begin{aligned} & 81 \\ & 81 \end{aligned}$ | ${ }^{\text {R } 103}$ | 14 | Sapphire. long dural shank | 4.85 |
| 81 |  |  |  |  |
| 81 | - 107 | 34 | Stellite, long brasa shank | 1.47 |

KNIGHT STEEL CUTTING NEEDLES. Short shank. Have $.003^{\prime \prime}$ tip. Av. cutting life, 20 minutes. 3 oz. 81 R 101. Pkg. of 5.

NET 59c KNIGHT SAPPHIRE CUTTING NEEDLE. Short shank. Has .003 tip. Av. life, 5 hrs. 2 oz. 81 R 100.

NET EACH 3.88
GUMMED RECORD LABELS. Shpg. wt, per-pkg., 2 oz. 50 per pkg.
80 R 100.4 or more Pkgs., Ea. 41 c NET PER PKG.. .45c

## 宗 KNIGHT <br> Quality Exact-Replacement Monophonic Needles



Top-quality monophonic replacement needles at low, low prices. All are precision made to rigid Knight specifications. All have sapphire tips except *osmium. Letters or numbers following the word "Series" in listings below, cover all cartridges whose type numbers begin with these letters or numbers. Wi., 2 oz.

FOR SHURE CARTRIDGES

| Stock No. | Type | Fig. | Fits Cartridge Numbers | Tip | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| - |  |  | P30, P37, P57, P70, P71, P72, |  |  |
| 81 R 598 | JPS-30 | 1 | P72V, P73, P76, P76V, P77, P79, P81 P81AD P85, P88 | Sid. |  |
| 81 R 599 | JPS-30LP | 1 | 89, P94, PN30, PC4IV, PC12: | MG | . 98 |
| 81 R 600 | JPS-312 | 1 | Series w21 W22, w23, w26. W60. W61, W65, W65B, W66, W68. WC22 | All |  |
| 81 R 535 | TPS-32 | 2 | W3IAR, W36B, | St | . 98 |
| 81 R 537 | JPS.32LP | 2 | WC31AR, WC33B, WC36B. | MG | . 98 |
| 81 R 538 | JPS. 322 | 2 | PC9, PCIO, PC11, PC40 | All | . 98 |
| 81 R 661 | JPS-39 | 3 | WC-6, PC-6, PC- 7 | Twin | 2,48 |
| 81 R 539 | JPS-35 | 4 | PC2, PC-3, P7, P8, P9, w9, wC10 | Twin | 1.38 |
| 81 R 540 | JPS-36 | 4 | PC4, PC5, ML- 44 | Twin | 2.48 |
| FOR SONOTONE CARTRIDGES |  |  |  |  |  |
| 81 R 546 | S-60LP | 26 | Series 3P | MG | 1.38 |
| 81 R 547 | S-61 | 27 | Series 3T | Twin | 1.38 |
| 81 R 548 | S-63LP | 26 | Series 1 | MG | 1.38 |
| 81 R 754 | \$-632 | 26 | Series 1 | All | 1.38 |
| 81 R 550 | S-66 | 27 | Series 2T; 7T; W-9980; Magnevox560161-1;RCん78748 | Twin | 1.38 |

FOR BLAUPUNKT, GRUNDIG, TELEFUNKEN 81 R $637 \mid$ RX552-LP | $30 \mid$ P. 7000


FOR ASTATIC CARTRIDGES

| Stock No. | Tур | Fig. | Fits Cartridge Numbers | Tip | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 81 R 552 | A-67 | 5 |  | Std. | 98 |
| 81 R 554 | A-672P | 5 |  | MG | .98 |
| 81 R 555 | A-672 | 5 |  | AH | . 98 |
| 81 R 556 | A-68 | 6 | Series: 57.T | Imin | 1.38 |
| 81 R 557 | A. 71 | 6 | Series: 55-T, GCD, 409 | Twin | 1.38 |
| 81 R 560 | A.70 | 7 |  | Std. |  |
| 81 R 561 | A-70LP ${ }^{\text { }}$ | 7 | Series: 14L3, 1513 | MG | . 58 |
| 81 R 565 | A.702* | 7 |  | A | . 58 |
| $81 R 566$ <br> 81 <br> 1 | A. 73 | 8 |  | Std. | . 98 |
| 81 R 567 | A.73LP | 8 | LT-3D, LT-4,LT-4D,LT-4D1, LT.AG | 46 | 8 |
| 81 R 568 | A. 732 | 8 |  | A | . 98 |
| 81 R 569 | A. 74 | 9 |  | Sto. |  |
| 81 R 570 | A.74LP | 9 | Serles: 402, 51, 53, 59, GC, MG | H6 |  |
| 81 R 572 | A-742 |  |  | All |  |
| 81 81 81 R 575 | A-75 | 10 10 | 10L3, 11L3, Series AC, ACD | Ste. | . 98 |
| $\begin{array}{lll} 81 & \mathrm{R} 577 \\ 81 & \mathrm{R} 578 \end{array}$ | A-75LP A-752 | 10 10 | 40, 41, 42, 90 | $M G$ |  |
| 81 R 579 | A-81 | 11 |  |  |  |
| 81 R 580 | A-81LP | 11 | $36,38,44,46,48 ; 403 \mathrm{j}$. | MG | 98 |
| 81 R 581 | A-812 | 11 | Magnavox 560052 | Alt | 98 |
| 81 R 583 | CRA-55LP | 12 | Series: $310,312,414,420$, | MG | . 98 |
| 81 R 584 | CRA-55 | 12 | 422, 424 , | Sta. | . 98 |
| 81 R 623 | A.41 | 13 | 817 | Twin | 1.98 |
| 81 R 609 | A-43 | 13 | 897 | Twin | 1.98 |

FOR ELECTRO-VOICE CARTRIDGES

| 81 R 624 | E-36 | 14 | E-V 56 | Twin | 1.98 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 81 R 626 | E-37 | 15 | E-V 76 | Twin | 1.98 |
| 81 R 585 | E-90 | 16 | 10,12,14,30,32, 33, 34, 36, 40,42, | Std. | . 98 |
| 81 R 586 | E-901P | 16 | 43,44,46,80,82,84, 86,96, | MG | . 98 |
| 81 R 587 | E-902 | 16 | Admiral 409Al3-1 | All | . 98 |
| 81 R 588 | E-91 | 17 | 16TT, 22TV | Twin | 1.38 |

FOR RCA CARTRIDGES*

| 81 R 512 | M. 70 | 18 | 9890, 38598, 39550, 39851, | Std. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 81 R 543 | M.70LP | 18 | 39919, 70332, 70338, 70339 72551, 74067 |  | 98 |
| 81 R 544 | M. 74 | 19 | 74625, 75475, 75575, | Std. | . 9 |
| 81 R 545 | M.74LP | 19 | 76318, 71779 | MG |  |


| FOR PHILCO CARTRIDGES |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $81 R 591$ $81 R 662$ | $\begin{aligned} & \text { M-60LP } \\ & \mathrm{PH} \cdot 13 \end{aligned}$ | 20 21 | $\begin{aligned} & 45-1609 \\ & 76.4649 \end{aligned}$ | $\begin{aligned} & 45-1612 \\ & 425-0009,425-0014 \end{aligned}$ | $\begin{aligned} & \text { MG } \\ & \text { Twin } \end{aligned}$ | .98 .38 |

FOR VACO CARTRIDGES

| 81 R 516 | VA-29 | 22 | P45 | Std. | .98 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 81 R 517 | VA-29LP | 22 | P45 | MG | .98 |
| 81 R 520 | VA-292 | 22 | S-45 | Twin | .96 |
| 81 R 612 | J-352 | 23 | M. 50 | .58 |  |

## FOR RONETTE CARTRIDGES



## FOR GENERAL ELECTRIC CARTRIDGES

| $81 R 515$ | G-1 | 28 | Series; RPX |  | MG |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $81 R 636$ | G-4 | 29 | 4G-052, 053, 061, 063 | MG | .98 |

FOR MAGNAVOX CARTRIDGES

| 81 R 590 | M-50 |
| :--- | :--- |


| $560133,560133-4$. |
| :--- | :--- |
| $560151-5,560151-6,560158-1$ |$| \begin{aligned} & \text { win }\end{aligned}$

# Stereo and Monophonic Replacement Needles 



Low-cost stereo replacement needles from Knight. To assure finest sound from records, check your needle tip regulariy, and replace it at first signs of wear. You save money in the long run! All stereo needles listed here have .0007" tlp.

OUAL SAPPHIRE NEEDLES
One sapphire tip is for 78 -rpm records. Av. shpg. wt. 2 oz.

| Stock No. | Typ* | $F 10$. | For Cartrldge Number | NET |
| :---: | :---: | :---: | :---: | :---: |
| 81 R 615 | A-44X | 35 | Astatic 13T; Electro-Volce 13 | 3.88 |
| 81 A 730 | A-90x | 51 | Astatlc 1773 CDS-73 | 1.38 1.38 |
| 81 ค 731 | DU-13X | 52 | Dual CS-73, CDS-73 | + 288 |
| 81 ค 618 | E-46X | 36 37 | Electro-Voice 66106711 A | 1.38 |
| 81 ค 621 | M-77X |  |  |  |
| 81 ¢ 739 |  |  | RCA 110021.110020 |  |
| 81 <br> 81 <br> 81 <br> 639 | $\begin{aligned} & 5.71 X \\ & 5-75 X \end{aligned}$ | 33 44 | Sonotone 8T4, 8 TA4 Sonotone 9TA | . 38 |
|  | S-75x | 44 4 4 | Sonotone 9TA <br> Sonotone 12 THS | 1.38 |
|  | S-78X | 45 | Sonotone 18TA |  |
| 81 ¢734 | S.82X | 46 | Sonotone 16TA |  |
| 81 R 735 | S.84X | 47 | Sonotone 12THSR | 38 |
| 81 A 736 | S-85X | 48 | Sonotone 12 TLAS , | . 38 |
| 81 R 737 | TE-19X | 49 | Telefunken SA20/2; T-20 |  |
| - 73 | TE-20X | 50 | Telefunken T-200; A-200 |  |

## SINGLE SAPPHIRE NEEDLE

For stereophonic records only. Av. shpg. wt., 202.

| Stock No. | Type | Fig. | For Cartridse Number |  |
| :---: | :---: | :---: | :---: | :---: |
| B1 R 668 | CRA-55X | 34 | Astatic 70 Series: Vaco Stereo: BSR Stereo |  |
| $\begin{array}{l\|l\|l} 8 & \text { A } 740 \\ 8 & R & 666 \\ B & R & \text { R } \end{array}$ | $\begin{aligned} & \text { E.98X } \\ & \mathrm{J}-47 \mathrm{X} \end{aligned}$ | $\begin{aligned} & 42 \\ & 32 \\ & 38 \end{aligned}$ | Columbia SC-1, SC-2. SC-7. SC-8 Electro-Voice 26 <br> Euphonic E Seriew; Jenmen 53, 55 |  |
| $\begin{array}{lll} \hline 81 & A & 741 \\ 8 & A & 40 \\ B 1 & R & 64 \end{array}$ | $\begin{aligned} & \mathrm{J}_{6}^{-57 X} \\ & \mathrm{CRA}^{-19-57 x} \end{aligned}$ | $\begin{aligned} & 50 \\ & \hline 33 \\ & 39 \\ & 31 \end{aligned}$ | Euphonic U Series; Jensen 80 G.E. VR-227 <br> Ronetie Stereo BF-40, P Series | $\begin{array}{r}.98 \\ .98 \\ .98 \\ \hline\end{array}$ |

MONOPHONIC NEEDLE-CARTRIDGES FOR ZENITH


Duotone direct replacement plug-in type needle-cartridges for Zenith "Cobra Arm" phonographs. Each is a complete assembly with unitized construction-stylus is coupled directly to inductive element. When needle is worn. entire unit must be replaced. Performance is unaffected by extremes in temperature or humidity. For all slandard or microgroove records. Av. shpg. wt., 4 oz.

|  | Stock No. | Zonith Type | Type No. | Siylus | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | R631 | 2-62 | S-15780 | Sapphire | 1.88 |
| 81 | RC693 | 2-62D | S-15780 | Diamond | 7.95 |
| 81 | ค 632 | 2.61 | S-15222 | Sapphire | 1.88 |
| 81 | RC 694 | 2-61D | S-15222 | Diamond | 7.95 |
| 81 | H 633 | 2.65 | 142-72 | Sapphire | 2.68 |
|  | HC695 | 2-65D | 142-72 | Diamond | 7.95 |
| 81 | R 634 | 2.64 | 142-71, 142-74 | Sapphire | 2.68 |
| 81 | RC 696 | Z-64D | 142-71, 142.74 | Diamond | 7.95 |
| 81 | R 635 | 2-59 | 142-76. 142-77 | Sapphire | 3.98 |
| 81 | RC 697 | 2-59SD | 142-76. 142-77 | Diamond | 8.95 |

## (dx. New Low Prices on Stereo Diamond and Sapphire Needles

Protect your valuable records with precision polished diamond needles. And save -diamond needles outlast all others by more than 2 to 1 .

| Slock Mo. | Type | Fie | For Cantidige Number | EACH |
| :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & 35 \\ & 31 \\ & 52 \\ & 36 \\ & 37 \end{aligned}$ | Astafic 137 X; Electro-Voice 130 Astatic 1 Dual CS-73; cos. 73 Electro-Voice 650 RCA 106770 a 105711A | $\begin{aligned} & 5.99 \\ & 1.99 \\ & 1.99 \\ & 5.99 \\ & \hline 1.99 \\ & \hline \end{aligned}$ |
|  |  | 54 33 43 45 46 46 46 | RCA 110021,10020 Sonotone 814, 87M sonotone 9TA Sonotone 12THS sonotone 18TA Sonotone 167A | 1.99 |
|  |  | $\begin{aligned} & 47 \\ & 48 \\ & 19 \\ & 50 \\ & 40 \\ & 41 \end{aligned}$ |  | 1.99 |

## SINGLE DIAMOND NEEDLE

For stereophonic records only. Av. shpg. wt., 202.

| Stock No | Typo | Fis | For Cosrtrispe Mumber | EACH |
| :---: | :---: | :---: | :---: | :---: |
| B1R669 | Cra-55xo | 34 | Astancic 70 Serves; Vico Stereo; |  |
|  |  | $\begin{aligned} & 42 \\ & 32 \\ & 38 \\ & 53 \\ & 39 \end{aligned}$ | Columbia SC-1. SC-2. SC-1. SC-8 Enextro-Voica 26 Ewohonic E Series; Jensen 53, 55 Euphonic U Serius; Jonsen of c. Vi-227 | 1.99 |
|  |  | $\begin{aligned} & 39 \\ & 39 \\ & 34 \\ & 43 \\ & 43 \\ & 34 \\ & 34 \end{aligned}$ | C.E. VA. 225 Ronetle stermo Cartidazes Shura m70 Dyelic Shure M30 Dyntic Shure M21D Oynelic Wabsier Electrie | 1.99 1.99 6.49 12.99 13.99 1.99 |

## CONVENTIONAL-SHANK PHONO NEEDLES- <br> LOW COST SAPPHIRE AND OSMIUMA TYPES

Economy-priced needles fit cartridges with screw-type chucks. Sapphires are recommended for minimum record wear. "Have flexible nylon material from tip to shank to reduce pickup of record scratch. Wt., 2 oz.


| Stock No. | Type No. | Fig. | Styius | Tip Size | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 81 ¢ 592 | NY-253* | B | Sapphire | Standard | 98 |
| 81 R 593 | J-10 | A | Osmium | Standard | 58 |
| 81 R 594 | NY-252* | B | Sapphire | All-purpose | 98 |
| 81 R 595 | NY-152* | B | Osmium | All-purpose | . 58 |
| 81 ค 596 | J-152 | C | Oamium | All-purpose | 58 |
| 81 R 597 | NY-251* | $B$ | Sapphire | Microgroove | . 98 |
| 81 ค 663 | J-252 | C | Sapphire | All-purpose | 98 |

$$
\begin{aligned}
& \text { ABOUT KNIGHT }
\end{aligned} \begin{aligned}
& \text { Knight diamond needles are made by Jensen Industries to Allied's ex- } \\
& \text { acting specifications. All are precision crafted from whole diamonds having }
\end{aligned}
$$

## ASTATIC

(B)


## DUAL-NEEDLE TURNOVER CARTRIDGES

For $78,45,331 / 3$ and $162 / 3$ rpm records. Crystals treated to resist heat, humidity. Sapphire needles; .001" for microgroove, .003* tip for standard records. *Ceramic-all others Rochelle-salt crystal. †Subminiature. ILess bracket. Av. wt., 4 oz.

| Stock No. | Model | Fis. | Replaces Astalic | Volts | CPS | List | MET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 81 R 219 | 40.7 | H | ACD 10 L 3 | 1.0 | 50-6000 | 6.95 | 4.09 |
| 81 P 241 | 40.18 | A | ACD-1 series ${ }^{\text {ACD } 2 \text { series, }} 11 \mathrm{l}$ |  |  |  |  |
| 81 P 212 | 55-T | C | ACD-2 sefies, 1113 GCD series | 1.0 | $50-6600$ $30-15,000$ | 8.45 7.95 | 4.97 4.67 |
| 81 P 252 | 57-T* | C | 57. TJ series | 0.7 | 30-15,000 | 4.50 | 5.59 |
| 81 P 236 | 62-TY | D | LQD-1 series | 1.0 | 50-7000 | 7.95 | 4.67 |
| 81 A 766 | 64-TS | 8 | 64-T (M)S | 3.0 | 50-5000 | 6.95 | 4.09 |
| 81 ค 013 | 66.TS | D | 66-T (M)S, 68-1S | 3.0 | 50-5000 | 7.25 | 4.26 |
| 81 R 253 | 66.TY\$ | D | $\begin{aligned} & \text { LI. } 401,14 L 3-D M, \\ & 15 L 3-D M .6-T(M) Y . \\ & 68-T(\mathrm{M}) Y \end{aligned}$ |  |  |  |  |
| 81 P 209 | 118-75 | F |  | $\begin{aligned} & 3.0 \\ & 0.75 \end{aligned}$ | $\begin{aligned} & 5 C-5000 \\ & 30.13,000 \end{aligned}$ | $\begin{aligned} & 6.50 \\ & 6.45 \end{aligned}$ | $\begin{aligned} & 3.82 \\ & 3.79 \end{aligned}$ |
| 81 P 210 | 120-T\$ $\uparrow$ | F |  | 3.0 | 30.11,000 | 6.45 | 3.79 |
| 81 P 200 | 310-T* | E |  | 3.0 | 30.11,000 | 5.45 | 3.20 |
| 81 P 201 | 312-TS | F |  | 0.75 | 30-13,000 | 6.45 | 3.79 |
| 81 R 301 | 314-TS | - |  | 3.0 | 30-11,000 | 5.45 | 3.20 |
| 81 P 269 | 316 -Ts | F |  | 0.75 | 30-13,000 | 5.95 | 3.50 |
| 81 R 302 | 4061 | 0 | F-22(webster) | 3.0 | 30.5000 | 7.95 | 4.67 |
| 81 R 303 | 409* | C | 409A11(Admiral) | 0.7 |  | 9.50 | 5.59 |
| 8: $\mathrm{R}^{\text {P } 220}$ | 410 | P |  | 0.8 | 50.6000 | 6.50 | 3.82 |
| 81 R 202 | 420-TS- T8 | F |  | 3.0 | 30-11.000 | 5.45 | 3.20 |
| 8 ¢ A 203 | 422-T5-18 | f |  | 0.75 | 30-13,000 | 5.95 | 3.50 |
| 8) R 204 | 424-TS | f |  | 3.0 | 30. 11,000 | 6.50 | 3.82 |
| 81 P 304 | 426-TS; | $F$ | A.204(Webster) | 3.0 | 30-11,000 | 7.50 | 4.41 |

Crystal and Ceramic Replacement Cartridges

## ALL-GROOVE CARTRIDGES

$002^{"}$ sapphire needle, except $\dagger .002^{*}$ osmlum, for mono records. SLess needle-screw-type chuck for conventional needle. *Moisture resistant; ceramic. Others R ochelle-salt crystal, 4 oz

| B1R 250 | 168 | G | 1613, 1713 | 3.5 | 50-5000 | 3.95 | 2.32 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 日i R 234 | 221 | G | L-29, 1-92-33, 1813 | 3.0 | 50.5000 | 3.95 | 2.32 |
| O1R213 | $28\}$ | 1 | M-22, M. 23 | 3.5 | 50-6500 | 3.95 | 2.32 |
| 81 ค 243 | 40-2 | M | AC-AG series | 1.0 | 50.10,000 | 6.50 | 3.82 |
| 81R251 | 51-2* | 1 | GC. AG series | 0.7 | 30-10,000 | 7.40 | 4.35 |
| 81 R 224 | 66-2t | 6 | LT-2M, LT-5AG, 68-2 14L-AGM 15L3-AGM | 3.0 | 30-5000 | 4.95 |  |
| 81 ¢ 305 | 1065 | N | (Webster) | 3.5 | $50-5000$ | 4.95 | 2.91 |
| 81 ค 205 | 310-2 | K |  | 3.0 | 30.11,000 | 4.95 | 2.91 |
| 81 A 307 | 414-2 | E | (Ronette) | 3.0 | $30.11,000$ | 4.45 | 2.62 |
| 8) R 310 | 416.2 | E | (Ronette) | 8.75 | 30-13,000 | 5.45 | 3.20 |



SERIES 70 CRYSTAL CARTRIDGES. .O007**.003* sapphires; 18 db sep.; 2 v.; 50-10,000 cps. *With brackets. Shpg. wt., 3 oz.



## MICRO-GROOVE CARTRIDGES

Crystal type, except *ceramic, unaffected by heat and humidity. .001" sapphire needle for 45 and $331 / 3 \mathrm{rpm}$ records. Needle pressure, 10 grams, except $\ddagger 8$ grams, $\uparrow 6$ grams. Av. wt., 4 oz.

| Stock Mo. | Type | Fis. | Replaces Astatic | Volts | CPS | List | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 81 P 242 | 40.11 | 0 | AC series | 1.0 | 50-10.000 | 6.50 | 3.82 |
| 81 R 237 | 51-1* |  | GC series | 0.7 | 30-15,000 | 7.40 | 4.35 |
| 日1 R 217 | 62.1 | P | 62-1-m | 3.0 | 50-50,000 | 4.95 | 2.91 |
| 81 1268 | $310 \cdot 1 \%$ | K |  | 3.0 | 30-11,000 | 4.95 | 2.91 |
| 81 P 244 | 408 | P |  | 0.8 | 50-6,000 | 4.45 | 2.62 |
| 81 R 206 | 414-14 | E |  | 3.0 | 30-11.000 | 4.45 | 2.62 |

## STANDARD-GROOVE CARTRIDGES

High-output crystal types, except *ceramic type. Use .003* needles. $\$$ With osmium needle; others less needle-have screwtype chuck for conventional needle. Av. shpg. wt., 402.

| 81 ค 226 | 2 | W | B-2 (Magnavox) | 2.5 | 50.4000 | 9.00 | 5.29 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 81 ค 227 | 4 | 5 | L-22A, L-26A, L-27A | 1.4 | 50.4500 | 4.45 |  |
| 81 A 226 | 6 | S | L.40A, L-41A ${ }^{\text {a }}$ | 0.6 | 50-4500 | 4.45 | 2.62 |
| 81 R 232 | 12 | 1 | L-10, L. 12 | 4.0 | \$0.5000 | 4.45 | 2.62 |
| 81 P 233 | 12-U | $T$ | L-12 ${ }^{\text {L }}$ | 1.25 | 50-5000 | 4.95 | $\begin{array}{r}2.62 \\ 2.91 \\ \hline\end{array}$ |
| 81 R 230 | 24 | S | L.25A. sefres L. 70 |  |  |  |  |
|  |  |  | L.71. L.75, L-76 | 1.0 | 50-4000 | 4.95 | 2.91 |
| 81 R 231 | 26 | S | L-46A, L-50A, L-72A | 3.5 | 50.4000 | 4.95 | 2.91 |
| 81 R 237 | 32 | S | L-24A, L-36A, L-82A, |  |  |  |  |
|  |  |  | L.92, L.92A, 34 | 3.5 | 50.5000 | 4,45 | 2.62 |
| 81 R 299 | 66-3 | G | Series R30 | 3.0 | 50.5000 | 4.95 | 2.91 |
| 81 R 225 | 402* | 8 | 4024 | 0.7 | 50-10.000 | 7.95 | 4.67 |

## CERAMIC STEREO TURNOVER CARTRIDGES

SERIES 17 CARTRIDGES. (Not illus.) $20-20,000 \mathrm{cps} ; 25 \mathrm{db}$ separation. Tracking force, $4-5$ grams; 35 v . Replaces E-V 26 series, RCA 106770A, 106771A. Sonotone 8TA4 series. $40 z$.

| Stoch Mo. | Type | Description | List | NET |
| :---: | :---: | :---: | :---: | :---: |
| 81 RC 355 | 17 | .0007, $005^{\circ}$ sepphires |  |  |
| 81 RC 356 | 170 | . $00077^{+}$diamend, $0003^{\circ}$ sapphire | $19.75$ |  |

SOUNDFLO CARTRIDGE-NEEDLE COMBINATIONS


Plug-In Units Consisting of Cartridge and Neadles


Ceramic monophonic cartridges. 30 to $15,000 \mathrm{cps}$. Tracking force, 6 grams. Housing takes "plug-in" cartridge-needle combination. Flip-over mounting bracket: . 001 " for LP's. . $003^{*}$ for 78 's. Type 91 T replaces Webster V8-10. Webcor A1919, E-V 76S; Type $91 T X$, Webster V8-2D. Webcor A-1920, E-V 76DS; Type 93T, E-V 56S, Webster V8-1, Zenith 142-80; Type 93TX. E-V 560S, Webster V8-1D, Zenith 142-83. "S"-sapphire; D-diamond tip. *With mtg . bracket; turnover holder. Av. wt., 4 oz.

| Sock No. | Type | Fig. | Tip | Voles | List | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| R 207 | 81 | 2 | $01^{\circ}$. | 1.0 | 4.95 |  |
| A 208 | 81 |  | S.001. S-003 | 1.0 | 3.95 |  |
| 81 R 214 | 81 T |  | 1).001\% $5.003^{\circ}$ | 1.0 | 7.95 | 4.67 |
| 81 RC 344 | 81 TB3 | Z*V | D-001. S-.003 | 1.0 | 8.95 | 5.26 |
| 81 A 272 | 89.1 | Z | 5.0 | 1.3 | 4.25 |  |
| 81 RC 376 | $89-1$ |  | D.001" | 13 | 10.25 | 6.03 |
| $81 R 215$ | 89-T | 2 | S- $001^{\circ}$ S 5 . $00.3^{\circ}$ | 1.3 | 4.95 | 2.91 |
| 81 R 216 |  | 28Y | S-.001 ${ }^{\circ}$ S-.003 | 1.3 | 5.95 | 3.50 |
| 81 RC 345 | 89 T \% | - | 5-001. $5.003^{\circ}$ | 1.3 | 10.95 | 6.44 |
| 81 RC 351 | 89 TB . | 2\&Y | D-.001. S.003 ${ }^{\circ}$ |  |  |  |
| 81 R 311 | 91 T | - | S.001. ${ }^{\text {s }}$.003 | 1.0 | 1.95 | 2.32 |
| 81 RC 396 | 917 |  | L-001' S 003 | 1.0 | 9.95 | 5.85 |
| 81 R 312 | ${ }_{9} 93 \mathrm{~T}$ | 2 | S.061 ${ }^{\circ}$ S.003* | 1.0 | 3.95 | 2.32 |
| 8 t RC 398 | 93 TX | 2 | D-.001\%. S-.003* | 1.0 | 9.95 | 5.85 |

# itereo and Monophonic Replacement Cartridges 



## MONOPHONIC TURNOVER CARTRIDGES

Ceramic cartridges protect against distorting effects of heat and moisture--prevent hum pickup. Require no preamp or equalizatlon. High compliance for precision tracking. Series "2TA" can safely be used with stereo recordings. Cartridges with suffix "D" in type number have diamond styli; "S" have sapphire styli; "SD" have dual styli--one sapphire and one diamond. 1 volt output. except $\$ 0.5$ volt. For $1 / 2^{4}$ to $\% "^{-}$mounting centers, except tless bracket for narrow pickup arms. Av. shpg. wt., 3 oz .

SERIES 2TA CARTRIDGES

| Stock No. | Type | Styll | Ust | EACH |
| :---: | :---: | :---: | :---: | :---: |
| E1 1.248 | 2TA.S | S-.009. 5.0007 | \$5.65 | 3.32 |
| 81 RC 358 81 R 247 | 2TA-SD 2TA-LB-St | D.006\%, S. $00007^{\circ}$ | 8.70 6.65 | 5.70 3.32 |

## SERIES 3T WIDE-RANGE CARTRIDGES

万1 RC 360
## 

S-.001; S. $003^{\circ}$

| 7.75 | 4.56 |
| ---: | ---: |
| 12.40 | 7.20 |

## REPLACEMENT NEEDLES

* Indicates replacements for stereo cartridges, at right. 2 oz .

| Stock No. | Type | Tip | For | List | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 81 R 533 | NIP.IS | S.001 | Series iP | \$2.25 | 1.32 |
| 81 R 249 | N2TA-S | S. $0003^{\circ}$, S.0007 ${ }^{\circ}$ | Serles 2TA | 2.50 | 1.47 |
| 81 RC 679 | N2TA.SD | D..0007, S-.003 | Series 2TA | 5.50 2 | 3.23 1.47 |
| 81 R 532 | N3T.S | S.0001, S.006 | Serles 3T | 2.50 |  |
| \%rC 686 | N3T.SD | D.001', S. $000^{\circ}$ | Series 37 | 5.50 | 3.23 <br> 3.23 <br> 1.27 |
| O1 RC 702 | NBTA4-SD* | D.0007, S.000 | Serles 8TAA Series 9TA | 5.50 | 3.23 1.47 |
| 81 R 755 | N9916-S* | S.0007' S.003' | Series 9TA Serles 9TA | 2.50 5.50 | 1.47 3.23 |
| B1 R 756 | N9816-SD* | D..0007'. S-.003 |  |  |  |
| 81 R 800 | N9916-S ${ }^{\circ}$ | S.0007, S.003 |  |  | 1.47 3.23 |
| 81 R 801 | N9916-SD* | D.00070 ${ }^{\text {S. }} 00007^{\circ}$ S.003 | Series 15TA | 3.50 2.50 | ${ }_{1.47}$ |
| 81 R 630 $818 C 692$ | N18TA-S*********** |  | Serias IBTA | 5.50 | 3.23 |

TI PICKUP ARM WITH I2T STEREO CARTRIDGE
Quality plastic pickup arm with crystal cartridge installed. Cartridge has . $0007^{\circ}$ and $.003^{\circ}$ sapphire styli. Shpg. wt., 402.

| Slock No. | Type | Description | Let | EACH |
| :---: | :---: | :---: | :---: | :---: |
|  | T81.12THRS | Gray plastic; high output | 7.45 | 4.38 |
| 81 R 264 | TB1.12TLAS | Gray plastic: low outout | 7.45 | 4.38 |
| 81 R 265 | T11.12THRS | Brown plastic; hioh outout | 7.45 | 4.38 |
| 81 R 266 | T11-12TLAS | Brown plestic: low output | 7.45 | 4.38 |

## Electro76ic

## TURNOVER CARTRIDGES

"S" Indicates sapphire: "D"-dlamond. "Not tumover type. SERIES 20 STEREO CARTRIDGES. Low distortion, high channel separation. $7 / w^{*}$ to $1 / 2 \mathrm{mtg}$. Centers. Av. wt. 3 oz .

| Stock No. | Tyoe | Flg. | Styli | Output | Llet | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B1 RC 403 | 21* | 8 | . 0007 T | 500 mv | \$9.50 | 5.59 |
| 91 1 RC 4 t3 | 210 | 8 | . 00070 | 500 mv | 15.00 | 8.82 |
|  | $22^{\circ}$ | A | . 00075 | 20 mv | 12.50 | 7.35 |
| $\$_{11}$ RC 407 | 220 | A | . 00070 | 20 mv | 18.00 | 10.58 |
| E1 RC 401 | 26 | 8 | .00075/.0035 | 500 mv | 10.50 | 6.17 9.70 |
| 81 RC 407 | 260 | 8 | .000701.003s | 500 mv | 16.50 | 9.70 |
| 81 RC 399 | 27 | A | .0007S1.003s | 20 mv | 13.50 | 7.94 |
| 91 RC 406 | 270 | A | .000701.003s | 20 mr | 19.50 | 11.51 |

F SERIES 60 STEREO "POWER POINT" CARTRIDGES. Wide range, low distortion. Tracking force: 2.8 grams. Require holding mechanism listed below, at right. Wt., 4 oz .

| Stock No. | Type | Styli | Fits | List | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| O1R292 | 61 | . 000751.00075 | PFT. 3 | \$5.95 | 3.50 |
| 81 RC 386 | 610 | .000701.00075 | PFT-3 | 12.95 | 7.61 |
| 81 R 294 | 66 | .0007S/.003S | PT 3 | 5,96 | 3.50 |
| $\square_{1} \mathrm{RC} 301$ | 660 | . 000701.0035 | PT. 3 | 12.95 | 7.61 |

SERIES 100 STEREO "POWER POINT" CARTRIDGES. 5 contacts. High capacity elements for Improved bass response. High compliance, low tracking force. Av. wt., $3 \frac{1}{2} \mathrm{Oz}$.

| B1 R 281 | 101 | .0007S/.0007S | PT. 4 | 5.85 | 3.57 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 81 RC 381 | 101D | . $00070 / .00075$ | PT-4 | 12.95 | 7.77 |
| 81 R 2 s | 106 | .0007S/.003S | PT 5 | 5.96 | 3.57 |
| 81 RC 382 | 106 D | .00070/.0035 | PT-5 | 12.96 | 7.77 |
|  | 107 | .0007S/.0007S | PT. 6 | 5.95 | 3.57 |
| 81 RC 727 | 1070 | . 000701.00075 | PT-6 | 12.55 | 7.77 |
| 81 R 728 | 108 | .0007S/.003S | PT-7 | 6.95 | 3.57 |
| 81 RC 729 | 1080 | .000701.0035 | PT. 7 | 12.96 | 7.77 |

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SERIES ITA4 CARTRIDGES. 0.3 volt output.

| Stock No. | Type | Styll | Llet | EACH |
| :---: | :---: | :---: | :---: | :---: |
| 81 RC 392 | 87 A4-S | .0007 ${ }^{\circ}$ and $.003^{\prime \prime}$ sepphires | \$88.75 | 8.14 |
| 81 RC 405 | 8 8JA4.S. 7 | Two.0001 sapphires | 8.75 | 5.14 7.84 |
| 81 RC 414 | 8TA4-SD | .0007 ${ }^{\circ}$ diamond; .003 ${ }^{\text {a }}$ sapphlre | 13.00 | 7.64 |

SERIES תTA SUPER CARTRIDGES. 0.35 volt output. \begin{tabular}{l|l|l|l|l|l|}
\hline 81 RC 377 \& 97A.S \& $.0007^{\circ}$ \& and $.000^{\circ}$ sapphlres \& 8.35 \& 4.91 <br>
\hline

 

81 RC 379 \& $9^{+4} A-S D$ \& $.0007^{\circ}$ dlamond; $.000^{\circ}$ sapphire \& 13.00 \& 7.64 <br>
\hline
\end{tabular}

SERIES SOT PLUG-IN CARTRIDGES. 0.5 v . output.

| 81 R 261 | 1072.S | .0007* and .003 ${ }^{\circ}$ sapphires | 9.70 | 5.70 |
| :---: | :---: | :---: | :---: | :---: |
| 81 RC 363 | 10T2-SD | $.0007^{\circ}$ diamond: .003 stophire | 13.00 | 84 |
| 81 R 262 | 1072-S77 | Two .0007 ${ }^{\circ}$ sapphires | 9.70 | 5.70 |
| 1 RC | 1072.507 | .0007 ${ }^{\circ}$ diamond; . $0007^{\prime \prime}$ sapph | 13.00 | 7.64 |



| 81827 | 12THRS* | .0007* and .000' sapphires | 5.85 | 3.44 |
| :---: | :---: | :---: | :---: | :---: |
| 818273 | 12THRS $77 *$ | Two .0007" sapphires | 5.85 | 3.44 |
| $81 R 274$ $81 R 275$ | 12THASt | .0007\% and . $003^{\circ}$ sapphlres | 5.85 | 3.44 |
| 81 R 276 | 12TLA.S77 ${ }^{\text {P }}$ | Two .0007* sapphires | 5.86 | 3.44 |

## SERIES 16TA, 18TA CARTRIDGES. *0.5 v.; t0.7 v.



SERIES M6TA CARTRIDGES. (Not lilus.) . 42 volt output. \begin{tabular}{l|l|l|l|l|l|}
\hline 81 R 723 \& 916 TA-S \& $.0007^{\circ}$ and $.003^{\circ}$ sapphlres \& 7.15 \& 4.20 <br>
81 RC 724 \& 916 TA-SO \& $.0007^{\circ}$ diamond: $0003^{\circ}$ sapphlre \& 11.25 \& 6.63 <br>
\hline

 

81 RC 724 \& 916TA-SO \& $.0007^{\circ}$ diamondi ${ }^{0003^{\circ}}$ sapphlre \& 11.25 \& 6.63 <br>
B1 R 725 \& 916TA-S77 \& Two .0007 ${ }^{\circ}$ sapphires \& 7.15 \& 4.20 <br>
\hline
\end{tabular}

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Crystal Cartridge in High or Low Output

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(D) SERIES 76 MONO "POWER POINT" CARTRIDGES. For Webcor phonos. "S"-sapphire; "D"-diamond.

| \% 18 | 765 | White | S | $\begin{aligned} & 3 \\ & 3 \end{aligned}$ | $\begin{aligned} & 3.95 \\ & 9.95 \end{aligned}$ | $\begin{aligned} & 2.32 \\ & 5.85 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
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E
HOLDING MECHANISM. For "Power Point" cartridges. Have $3 / 6^{\prime \prime}, 1 / 2^{\circ}$ and $5 / 0^{\circ}$ mounting centers. Wt. $1 / 202$.

| Stoed No. | Type | For Modela | Lst | EACH |
| :---: | :---: | :---: | :---: | :---: |
| 1/R24 | PFT-1 | 51. 52.2. 53-3 | \$1.00 |  |
| 81 R 287 | PT-2 | 56, 560 | 1.00 1.00 |  |
| 81 R 297 | PT-3 ${ }_{\text {PfT }}$ | 66,660 61.610 | 1.00 | 59c |
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79 RX $321-\mathrm{J}$. Brushed Brass Legs. For above. $16^{\circ}$. Shpg. wt., 5 lbs...... NET 6.95


## STEREO PHONO WITH REVERBERATION

This smartly styled phono allows you to inject reverberation into stereo sound when you want it, adding even greater depth to stereo. Has $8^{\prime \prime}$ speaker in main cabinet for lows-two $\sigma^{\circ}$ remote speakers, with $13 / 4$ whizzer cones for mid-range and highs. Each remote has 12 -ft. cable for stereo spread. Automatic record changer plays 4 speeds-gently handles $10-12^{\prime \prime}, 12-10^{\circ}$ or 14 $45^{\prime} \mathrm{s}$. Ceramic turnover cartridge has diamond stylus for LP and 45 's; sapphire for 78 -rpm records. 5 fingertip controls: dual Bass, Treble and Loudness; Balance, and Reverb control. In gold and white leatherette tweed. Cabinet, $9 \% \times 25 \times 193 / 4^{\circ}$; each remote: $93 / 14 \times 41 / 2$. With 45 -rpm spindle. Less legs. For 110.120 v ., 60 cycle AC. Shpg. wt., 40 lbs.
79 RU 305-J. $\$ 7$ Monthly.
79 RX $321-\mathrm{J}$. Brushed Brass Legs. $16^{\circ} .5 \mathrm{ibs}$


## PORTABLE STEREO PHONOGRAPH

A stereo phono, pleasing to the ear and eye. Impressive sound is oblained from $8^{\circ}$ speaker in maln cablnet reproducing low tones, and two remote $6^{\circ}$ speakers with $13 / 4^{\circ}$ whizzer cones, furnishing medium and high tones. Remotes can be separated up to 24 feet. Automatic record changer accurately plays 4 speeds and shuts off after last record has played. Turnover stereo cartridge has diamond needle for LP's and 45 's-sapphire for 78 's. 4 controls quickly adjust sound to exactly suit your taste: dual Bases, Treble and Loudness; Balance. Appealingly styled in gray leath. erette trimmed with silver tic. Size: cabinet, $93 / 9 \times 25 \times 193 / 4$; each remote, $93 / 3 \times 14 \times 41 / 2$. . With 45 rpm spindie. Less legs. For $110-120$ v., 60 cycle AC. 40 Jbs.

79 RU 304-J. $\$ 6$ Monthly
NET 109.50
79 RX 332-J. Satin Chrome Legs. $16^{\circ} .5 \mathrm{lbs}$.
NET 6.95

## 7gineered and Styled for Contemporary Living



## (A) BUDGET-PRICED STEREO PHONO

An attractively styled phonograph that ofters excellent stereo sound. Low notes are carried by a $6^{\prime \prime}$ speaker in the main cabinet, while the mid-range and highs are produced by two $51 / 4$ " remotes. 12 -ft. remote cables allow up to 24 -ft. stereo spread. Automatic changer plays 4 speeds $-10-12^{\circ}$ or $12-10^{\circ}$ records. Shuts off after last record. Turnover cartridge has diamond needie for LP's and $45^{\circ} \mathrm{s}$-sapphire for $78^{\prime} \mathrm{s}$. In brown, white and brushed gold. Cabinet, $91 / 2 \times 201 / 2 \times 201 / 2{ }^{\prime \prime}$; each remote, $61 / 4 \times 61 / 2 \times 43 /{ }^{\prime \prime}$. Less $45 . \mathrm{rpm}$ spindle and legs, below. For 110.120 v .060 cycle AC. Shpg. wt., 31 lbs.
79 RU 331-J. $\$ 5$ Monthly NET 77.95
.... NET 6.95
NET 1.89
79 RX 321 -J. Brushed Brass Legs. $16^{\prime \prime} .5$ lbs. $\qquad$ B0 R 162-J. $\mathbf{4 5}$-rpm Spindle. 10 oz.

## B STEREO PHONO AND FM-AM RADIO

With this moderately-priced unit, you can enjoy stereo recordings, as well as FM and. AM broadcasts. Two $51 / 4$ " remote speakers with $1 \frac{1}{2}$ whizzer cones, reproduce full, rich stereo sound and can be separated up to 24 feet for desired stereo spread-en. hance the sound of FM and AM, too. Record changer automatically ptays 4 speeds, and intermixes all size records of the same speed--shuts off after last record. Smoothly handles 12-10", $10-12^{\prime \prime}$ or $14-7^{\prime \prime}$ records. Turnover cartridge has diamond needle for LP's and 45's-sapphire for 78's. Radio has AFC circuit for drift-free FM reception. Black diamond finish with accent striping of jet white and French gray. Cabinet, $81 / 3 \times 201 / 2 \times 21 \frac{1}{2}$; each remote, $8 \frac{1}{4} \times 103 / 4 \times 4 \frac{1}{2}$. With $45 . \mathrm{rpm}$ spindle. Less legs. For $110-120$ v., 60 cycle AC. 35 Ibs.

79 RU 329-J. $\$ 6$ Monthly
NET 112.50
79 R $\times$ 332-J. Satin Chrome Legs. $16^{\prime \prime} .5 \mathrm{lbs}$
NET 6.95

## c] LOWEST-COST STEREO PHONO

Top-rated stereo phono providing excellent sound through 3 speakers-one $51 / 4^{*}$ speaker in the main cabinet and two 4" remotes. Each remote has 8 -It. cable for up to 16 feet of stereo spread. Automatic changer plays 4 speeds, smoothly handling $10-12^{\prime \prime}$ or $12-10^{\circ}$ records. Shuts off automatically and shifts to neutral position after last record has played. Turnover crystal cartridge has two sapphire needles. Has separate volume control for each channel and dual tone control. Handcrafted all wood cabinet, plastic-coated in iridescent blue and gray. Size: Cabinet, $8 \frac{1}{2} \times 18 \times 173 / 4^{\prime \prime}$; each remote, $81 / 2 \times 91 / 4 \times 31 / 4^{\circ}$. Less $45-\mathrm{rpm}$ spindle. For $110-120$ v., 60 cycle AC. Wt. 31 lbs. 79 RU 300-3. $\$ 5$ Monthly.

NET 59.95
80 R 162-J. 45 -rom Spindle. 10 oz
NET 1.89


## [D MANUAL 2-SPEAKER PHONOGRAPH

An inexpensive portable phonograph offering high-quality monophonic sound through a $4^{\circ}$ Alnico $V$ dyriamic speaker and $2^{*}$ whizzer cone. Has turnover cartridge with sapphlre needles, and a built-in 45 -rpm adapter. Charcoal and white. $12 \frac{1}{2} \times 6 \frac{1}{2} \times 10^{\circ}$. For $110-120$ volts, 60 cycle AC. Shpg. wt., 9 Ibs.
79 RU 317-J. \$5 Manthly
NET 19.50
( 4-SPEED AUTOMATIC PHONOGRAPH
A low-cost portable phono featuring automatic record changing and excellent monophonic sound. Uses extended-range Alnico $\checkmark$ speaker and whizzer cone. Changer shuts off after last record. Has turnover cartridge with sapphire needles. Gray and white. $12 \frac{1}{1} \times 11 \frac{1}{2} \times 9{ }^{1 / 2}$. For $110-120 \mathrm{v} ., 60 \mathrm{cycle} \mathrm{AC} 21 lbs.$. 79 RU $318=\mathbf{J}$. $\$ 5$ Monthly.

NET 39.95


Functional, Modern Styling-Full Response

## ELEGANTLY STYLED PROFESSIONAL GUITAR

You'll be thrilled by the brilliant sound of this handsome, double cutaway electric guitar. And you'll enjoy the way your fingers swiftly fly over the entire fret range of its thin, adjustable neck. Features Bigsby vibrato fallpiece and steel-reinforced hard maple neck. Top, back and sides are of select laminated curly maple. Oval rosewood fingerboard with inlaid genuine pearl markers, nickel-silver frets, and celluloid binding. Flat wound professional strings. Also has two pickup units with individual adjustable posts; separate controls and selector switch. Cremona violin-brown with golden sunburst. Hand-rubbed, pollshed finish. With instructions, song book and pick. $41 \times 151 / 8 \times 2$. Less case. below. Shpg. wt., 14 Ibs.
24 RX 725. \$8 Monthly.
NET 149.95
24 RX 729. Case. Shpg. wt., 10 Ibs.
. NET 30.00


# эve On Easy-To-Play Acoustical Guitars and Banjos 



## JELUXE 5-STRING BANJO

in the folk song trend and sing ong, string along with this lively string banjo. Makes perfect enirtainment for informal gatherigs. Its laminated, crack-proof raple resonator gives a bright, parkling tone. Tough, celluloidound edge. Maple shell and neck -comfortable to hold-feels just ght. Attractive shaded brown finth with golden highlights on resnator. Sixteen nickel-plated rackets assure even tension on he calfskin head. Has adjustable enslon pegs. With clear, easy-toollow, step-by-step instructions. size, $381 / 4 \times 121 / 4 \times 4^{"} .10$ lbs.
A RX 726
NET 39.95
IENOR BANJO. Same as banjo bove, but has 4 strings
R RX 727

## A FULL.TONED FLAT-TOP GUITAR

It's easy to play this guitar-and fun, too. You get round, full tones and an excellent response. Features crack-proof laminated body construction, with a slimly-styled, steelreinforced neck. Has a full 14 -fret maple fingerboard. White-striped edje and sound hole, and a bright, reflecting metal tailpiece. With instructions and pick. Size, $381 / 2 \times 133 / 94^{\circ}$. Less case, below. 10 lbs .

## 24 RU 714

net 14.95
24 RU 742. Case. Wt., 10 lbs......................NET 7.95
[B FULLSIZE ARCHED GUITAR
An expertly crafted guitar of super-auditorium size, that produces a large round tone. Has a fully arched, laminated crack-proof maple body. Its slim neck is steel-reinforced to resist twisting and warping. Has an adjustable bridge, and a celluloid guard plate. Attractive shaded reddish brown finish with golden sunburst. With easy-tofollow Instructions, comfortable neck cord and pick. $41 \times 15 \frac{1}{2}$. Less case, below. Wt., 10 lbs.
24 RU 713. $\$ 5$ Monthly
NET 19.95
24 RU 714. Case. Shpg. wt., 10 Ibs.

## MELLOW FOLK GUITAR

Be the center of any folk music get-together with this easy-toplay, mellow-toned guitar. Attractively styled, with a natural white spruce top, offset by genuine mahogany back and sides. Neck is steel-reinforced-resists twisting and warping. Celluloid bound edges plus an extra inlay on the top edge. Sound hole is also bound in celluloid. Rosewood fingerboard with inlaid markers. Has classic type rosewood bridge. Beautiful hand rubbed and polished finish. With instructions, extra nyion strings, cord and pick. $41 \times 151 / 2^{\circ}$. Less case, below. Wt., 10 lbs . 24 RX 723

NET 39.95
24 RU 714. Case for Guitar Above. Wt. 10 lbs................. NET 8.95

## DELUXE 20-WATT SPEAKER AMPLIFIER

- Has Two $10^{\circ}$ High-Fidelity Speakers
- Vibrato Intensity and Amplitude Controls
- Housed In a Solld-Wood Cablnet
- With Stand-By and Separate On-OHf Switches

A superb speaker-amplifier engineered specifically to faithfully reproduce the wonderful tones of the electric guitars described on the lacing page. Each of two channels has two inputs, and its own tone and volume controls. Vibrato circuit has input jack for a foot switch. Has 7 tubes. Attractive cabinet. Size, 20×24". For $110-120$ volts, AC. Shpg. wt., 45 Ibs.
24 RX 728. \$5 Monthly.
NET 89.95
12-WATT SPEAKER-AMPLIFIER. Has $12^{\circ}$ spoaker and six tubes. Vibrato clrcuit with separate intenslty and amplitude controls, plus on-off switch. Two channels, each with separate volume controls and a master tone control. Input jack for foot switch. Stand-by switch. Handsome solid-wood cabinet. Size, $16 \frac{1}{2} \times 20 \frac{1}{2}$. For $110-120$ volts, AC. Shpo. wt. 24 lbs .

## 24 RU 708. $\$ 5$ Monthly

## NET 69.95

5-WATT SPEAKER-AMPLIFIER. Has 8 speaker, and 4 tubes. Built-in vibrato. Separate tone and volume controls: 2 vibrato zontrols and vibrato on-off switch. Jack for foot switch. $17 \frac{1}{2} x$ 43/4". For 110-120 v., AC. 20 lbs.
24 RU 707. $\$ 5$ Monthly. $\qquad$ NET 39.95


## LINCOLN ... Finest Transistor Radios

Pocket Radios of Highest Quality at Economy Prices


## LINCOLN 8-TRANSISTOR POCKET RADIO

Only
$\$ 1750$

- Really "Pulls In" Distant Stations
- Precise Silde Rule Dial Tuning
- Large $21 /^{\circ}$ Full-Toned Speaker
- Includes Leather Carrying Case

A transistor radio designed for the person on the go-the man or woman who wants a compact, smartly styled radio that can be depended on for excellent reception, long life and exceptlonal reliability. Weighs only 12 ounces-yet covers the entire AM band with extraordinary sensitivity. 8 -transistor circult pulls in distant stations with ease.
Has large $21 / 6$ speaker that delivers full-bodied sound, rivaling radios costing much more. Tuning Is easy and extremely precise. "Full vision" slide rule dial lets you tune right in without any fumbling. Radio is supplied complete with convenient, durable genuine leather carrying case; earphone for late listening or whenever privacy is desired; and 9 -volt battery. Compact size, $41 / \times 21 / 2 \times 1{ }^{10}$. Imported from Japan. Shpg. wt., 14 oz .

## 24 SC 001 .J.

55 J 119. Extra Battery. Shpg. wt., 2 oz.
ONLY 17.50
... EACH 21 c


## LINCOLN 6-TRANSISTOR POCKET RADIO

## Only <br> ${ }^{5} 0^{95}$

- Sllps Easlly Into Pocket or Purse
- Solt Pigskin Case and Earphone
- 6 Transistors, 1 Dlode, 1 Thermistor
- Designed for Eye and Ear Appeal

A combination of three remarkable features makes this 6 -transistor radio the perfect companion to keep you posted on the latest news, sports events and music. It's extremely compact-slips easily into your pocket or purse. It's "feather" light-there's no feeling of carrying a welght around. And it's quality-proven-pulls in the entire AM broadcast band-plays through a big $2^{\circ}$ speaker with full-toned sound that lets you catch every word and every note without straining.
You'll enjoy this radio's economy-efficient low-drain circuit adds hours of use to your battery. Tuning scale features large $1 / s^{*}$ optic glass for fast station selection. Whth attractive leather carrying case, earphone for private listening and battery. 3\%x $25 / 6 \times 13 / 10^{\circ}$. From Japan. 12 oz .
24 SC 027-J.
55 J 119. Extra Battery. Shpg. wt., 2 oz.
. ONLY 10.95
(

## Attractively Styled Transistor

## REALTONE 9-TRANSISTOR RADIO

## Nef <br> ${ }^{5} 2195$

- Has Full-Toned $23 / 4^{*}$ Dynamic Speaker
- Operates From 4 Penlight Cells
- Sensitive Superheterodyne CIrcult
- With Leather Case and Earphone

Highlights automatic volume control to ensure a steady signal, and AGC to prevent fading when radio is moved. Large $23 \%^{\circ}$ speaker delivers full-bodled sound. Uitra-modern tuning tace looks sharp and tunes sharp. Uses 4 cells that last a long time due to radio's low current drain. $31 / 2 \times 61 / 2 \times 1 \frac{1}{2}$. With earphone, leather case and batteries. From Japan. Shpg. wt., 2 Ibs.
24 SC 029-J. $\$ 5$ Monthly.
NET 21.95
$55 \mathrm{~J} \mathbf{0 2 0}$. Extra Batteries. Wt., 2 oz. . . . . . . . . . . . . . . . . EACH 10c

## LINCOLN ... Tune in the World



## 4-TRANSISTOR FM-AM-SHORT WAVE RADIO

$\begin{array}{ll}\text { Only } & \text { - } 14 \text { Transistors, } 6 \text { Dlodes and } 2 \text { Thermistors } \\ \$ 5095 & \text { - Has FM Dlpole Antenna in Handle } \\ \text { - Teiescoping Shortwave Antenna } \\ \text { - AFC Circuit for Drift-Free FM Tuning }\end{array}$
Thls powerful 14 -transistor, 3 -band radio puts the world right at your lingertips. No need to get the news second-hand-just tune in the shortwave band and get your news directly from Moscow, Paris, London or other centers of international interest. If you're in the mood for fine music, flip to the FM band and relax-you'll enjoy the bio sound that pours out of the top-quality $3 \frac{1}{2}$ " speaker Of course the AM band is available any time you want to hear popular music, a thrilling sportscast or favorite program. Uses 4 flashlight " C " cells that give up to 400 hours of dependable service between changes. Tuner and phono jacks. In slender black plastic case, $71 / 2 \times 91 / 4 \times 21 / 2^{\prime \prime}$. With convenient earphone and batteries. Imported from Japan. Shpg. wt., $4 \frac{1}{4} \mathrm{lbs}$.
24 SC 022-3. $\$ 5$ Monthly.
ONLY 59.95
24 SC 024. Leather Case. Wt., 402.
NET 4.95
55 J 099. Battery. $20 z$
EACH 16 c

## 10-TRANSISTOR 4-BAND PORTABLE RADIO

- Hear AM, Short Wave and Long Wave
Only
5395
- Features Electronic Band Spreader
- Has Large, Full-Toned $31 / 3^{2}$ Speaker
- Slide Rule Dial for Precise Tuning

A very attractive, powerful 10-transistor portable radio that lets you get news at first hand from sources not ordinarily available. Features four tuning bands: long wave- 130 to 380 kc ; short wave -2 to 18 mc on two bands; and the entire AM broadcast band. There's nothing like the thrill of making personal contact with major cities throughout the world-and it's exciting to hear communications between ships at sea and aircraft in action. It's nice, too, to have popular AM shows available whenever you're in the mood. Dial calibrations are at 75, 49, 41, 31 and 25 meters for convenience. Has AGC, ferrite and telescoping antennas. In sharp black and chrome. $71 / 2 \times 91 / 9 \times 21 / 2$. With earphone and batteries. From Japan. 4 $1 / 4 \mathrm{lbs}$.
24 SC 013-J. $\$ 5$ Monthly.
ONLY 39.95
24 SC 024. Leather Case. Wt., 4 oz.
55 J 017. Battery. 2 oz...
NET 4.95
EACH 13c

## Portable Radios by Realtone

## REALTONE 10-TRANSISTOR RADIO



- Has Full-Toned $4^{\circ}$ Speaker for Big Sound
- 10 Transistors, 2 Dlodes, 1 Thermistor

Big set performance 1 Features AGC stage to prevent fading when the radio is moved. Direct drive tuning is extremely precise. AVC assures steady signal-never any blasting or fading. Uses 4 flashlight " C " cell batteries. Top grain calf leather case is integral part of radio. $5 \frac{1}{2} \times 9 \times 23 / /^{\prime \prime}$. With batteries. From Japan. Shpg. wt., $33 / 4 \mathrm{lbs}$.
24 SC 028-J. $\$ 5$ Monthly
NET 32.95
55 J 017. Battery. 20 z.
EACH ${ }^{3} 3 \mathrm{c}$



## 9-TRANSISTOR 3-BAND PORTABLE RADIO

$$
s{ }^{\text {only }}
$$

- Antenna Supplied For Each Band
- $21 / 2$ " Speaker for Big Sound
- With Leather Case and Earphone

A powerful portable with three bands for hours of pleasurable listening. On longwave you hear ships plying the oceans of the world, aircraft communications, etc. Shortwave band puts the world Into your hand, and the entire AM band is at your service when you just want to relax. And you get all this in a radio so small that it slips into your coat pocket. Has detachable $10-\mathrm{sec}$ tion short wave whip antenna that clips to the pocket like a penextends to $29^{\circ}$. Tunes 130.400 kc on long wave and 4.12 mc on short wave. $1 \% / 84 \frac{3}{6} \times 6^{\prime \prime}$. With case, earphone and 4 penlight batteries. From Japan. $11 / 2 \mathrm{Ibs}$.
24 SC 002 -J. $\$ 5$ Monthly.
55 J 020 . Battery. Uses 4. 2 oz.
. ONLY 29.95
.EACH TOC

## 10-TRANSISTOR FM-AM PORTABLE

Only
$\$ 3995$

- Up to 200 Hours on 4 Flashlight Cell-
- 10 Transistors, 3 Diodes, 1 Thermistor
- Large $41 / 4 \times 21 / 2^{-1}$ Oval Speaker
- Twin-Telescoping Whip Antennas

Enjoy pleasurable FM programs anywhere in the house, o wherever you go outdoors, with this handsome 10 -transisto portable radio. You'll also appreclate the clear, crisp reception o the AM band. Operation is economical-uses 4 flashlight " C ' cells that provide up to 200 hours of playing time. Features AVC circuit to prevent fading and blasting; tone control for precise adjustment to suit your taste. Also has leather handle for easy carrying. Size, $5 \times 8 \times 21 /{ }^{\prime \prime}$. With earphone for private listening and batteries. Slim-lined in charcoal brown and ivory. Imported from Japan. Shpg. wt., 5 lbs.
24 SC 003-J. $\$ 5$ Monthly.
net 39.95
55 d 017 . Battery. 2 oz......
EACH 13e

## Fine AM and FM Car Radios That Add to the Pleasure of Riding



## 6-TRANSISTOR AM CAR RADIO

A moderately priced AM car radio offering pushbutton ease and superior sound. Compact, all-transistor unit is easily Installed beneath or into your dash-rnakes a handsome addition to the car's interior. Has 3 separate controls: off-on, volume and tone. pushbutton panel quickly and easily selects 5 stations. Operates in all cars--simply flip polarity switch to match the electrical system of your car. Features sensitive superhet circult. Supplied with quality speaker and highly efficient antenna. For 6 or 12 volts, D.C. From Japan. Shpg. wt., 6 lbs.

$$
24 \text { Sx 218-2J. } \$ 5 \text { Monthly. }
$$

NET 39.95

## KINEMATIX FM CAR RADIO

Auto radio designed to provide the ultimate in FM reception. Completely handwired, and specially engineered to absorb the shocks of driving. IF Band width: 180 kc . Selectivity: $2.5 \mu \mathrm{v}$. for 20 do signal to noise ratio. AFC and AGC. Has four IF stages, two limiters and Foster-Seeley discriminator. Impedance: 4 ohms. Capacity: 5 watts. Has tone control and fused input. 8 fubes, 1 transistcr. Mounts below dash. For 12 v.. DC neg. ground only. Less speaker and antenna-can be used with present antenna and speaker. $21 / 5 \times 7 \frac{1}{4} \times 81 /$ k $^{*} .9$ lbs. Reduced $\$ 4.55$ ! 24 SX 219-J. $\$ 5$ monthly..
net 79.95
Allied Guarantees Your Satisfaction

# Blank-Tape Bonus with Pre-Recorded Stereo Tape 

## FREE

1200 ft . reet of nk tape when buy a tape be-


## Only $53^{99}$

2 for $\$ 7.49$

With the purchase of each $7^{\circ}$ reel of 4 -track. $33 /$ los stereo tape below, you receive one 1200 ft . reet of blank tape at no extra cost. Originat price of pre-recorded tape, $\$ 5.95$; of blank tape, $\$ 1.29$; you save $\$ 3.25$. Or buy 2 for $\$ 7.49$ and save $\$ 6.99 .11 / 2$ lbs.
\& SPOTS. St. Louis Blues, Swanee er, Cuddle up a Little Closer, etc ick No. 27 RR 003. Mfr's STF3-801.
EAT MARCHES. Vienna Army, French ratroopers and Deutschmeister Bands. ,ck No. 27 RR 003. Mfr's STF3-808. -WAllan. George Poole's Orchestra. li Hai, Hilo March, Blue Moon, etc. xck No. 27 RR 003. Mfr's STF3-810.
-IEP FIELDS. Me and My Shadow, Harr Lights, For Me and My Gal, etc. ock No. 27 RR 003. Mir's STF3-816. . OYD MUM. Tea for Two, Elmer's Tune, jampagne Waltz, Beer Barrel Polka, etc. ock No. 27 RR 003. Mir's STF3-818.
ZD WEEMS. Heartaches, Mickey, On e Alamo, These Foolish Things, etc. ock No. 27 RR 003. Mtr's STF3-824.
EORGE LIBERACE. Blue Danube Waltz, hey Can't Take That Away From Me, etc. tock No. 27 RR 003. Mfr's STF3-829.
ny Tape Above, With Bonus Tape,
ACH........................ ONLY 3.99
For. ONLY 7.49

HAPPY HARMONICA. No Other Love, Yama Yama Man, La Cucaracha, Humoresque, etc.
Stock No. 27 RR 003. Mir's STF3-843.
SALUTE TO TOMMY DORSEY. Well GIt It. Daybreak. This Love of Mine, etc. Stock No. 27 RR 003 . Mfr's STF3-860, SALUTE TO GLENN MILLER. Adios. In the Mood, Tuxedo Junction, etc.
Stock NO. 27 RR 003. Mfr's STF3-861.
PIPE ORGAN. Kibbe and Thomson. Dark Eyes, Oh Promise Me, At Dawning, etc. Stock No. 27 RR 003. Mfr's STF3-881. DANCING AT THE WALDORF. Carina, Piove, Man I Love, Mustafa, etc. Stock No. 27 RR 003. Mir's ST F3-882.
SOUNDS. Jet engines, sonic booms, trains, sports cars, speed boats, etc. Stock No. 27 RR 003. Mfr's STF3-885. DIXIE LAND. Wild Bill Davidson. Sweet Sue, Ballin"the Jack, Muskrat, etc. Slock No. 27 RR 003. Mfr's STF3-907. Any Tape Above, With Bonus Tape,
EACH ....................... ONLY 3.99 2 For.

QNLY 7.49

OLD TIMERS. After the Ball, Harrigan, Bicycle Built for Two, On the Banks of the Wabash, Side by Side, etc. Slock No. 27 RR 003. Mir's STF3-911. LONDON POPS ORCH. Ravel's Bolero, Seranati Espanot, Viva Navarra, Laura, Charmaine, La Paloma, Moulin Rouge, etc. Stock No, 27 RR 003. Mir's STF3-918. BROADWAY SONGS AI Goodman. Kansas Clty, Gigi, Love Look Away, Do Re Mi, Like a God, Some Enchanted Evening. Stock No. 27 RR 003. Mfr's STF3-930. HONKY TONK PIANO. EIbows Balley. Mr. Dooley, Chopin Nocturne, etc. Stock No. 27 RR 003. Mir's STF3-932. MUSIC OF THE BULL RING. Andaluzia, Gailto, Granada, Angelina, Toque, etc. Stock No. 27 RR 003. Mifr's STF3-934.
STRAUSS WALTZES. London Pops. 1001 Nights. Fledermaus, Vienna Blood. Stock No. 27 RR 003. Mfr's STF3-941.
Any Tape Above, With Bonus Tape,
EACH
ONLY 3.99
2 For.
ONLY 7.49

## Super Stereo Tapes-Up to 80 Minutes Playing Time




BROADWAYI. 25 "show-stopping" tunés by famous artists. Jane Morgan-Bushel and a Peck; Ella Fitzoerald-Manhattan; Margaret Whiting-Let's Begin; Pete King Choraie-Sound of Music; Mel TormeToo Darn Hot; many more artists and all-time favorite selections.
27 RR 004. Mir's RL-406
6.95

5 CENTURIES OF MUSIC. Extraordinary selection from works by classical composers from Gabriell to Khatchaturian. Includos Corelli, Vivaldi, Bach, Handel, Haydn, Mozart, Beethoven. Schubert, Dvorak, Tchaikovsky, others. Performed by the Bach Guild.
27 RR 006. Mfr's VTC-1700
6.95

SONG FAVORITES. Pete King-Wlllow Weep for Me; David Rose-Continental; Jane Morgan-Tammy; Frank HunterAvalon; Michael Lelghton-I Only Have Eyes for You; Peter London-1 Can't Get Started With You; Art Lund-A Quiet Life; more songs by these and other artists. 27 RR 007. Mif's KTL-42000.
6.95


Super $71 / 2$-Ips 4 -track stereo tapes that play up to one hour and twenty minutesl Equal in playing time to 2-12" LP's or 2 regular 4 -track tapes, these super tapes offer real price savings in addition to the luxury of longer continuous play. Outstanding performances by fine artists highlight the selections below. Wt., 1 lb .


DANCE BEATI. Montenegro-Patricia; Andre Previn-Guido's Blackhawk; Cyril Ornadel-Got You Under My Skin; Ira Ironstrings-Charleston; Dizzy Gillesple - Always; Tarrango-Anna; MozianCarioca; more listening and dancing music by these and other artists. 27 RR 004. Mfr's RL-405
6.95

MOOD MUSIC. Ferrante and TeicherStella by Starlight; David Rose - Thanks for the Memory; Raymond Lelevre-Paris In Stereo; Jose Melis-Sieeping Bee: John Trotter-Miserlou; Buddy Cole-I Cover the Waterfront; more. 27 RR 004, Mfr's RL-408.
6.95

ROMANTIC AND NOSTALGIC MOODS. Tex Beneke-Chattanooga Choo Choo: George Greeley-Tonight; Martha Tilton-And the Angels Sing; Buddy Cole -Star Dust; Matty Matlock-Sensation; Don Tiare-Blue Hawali; Shorty Rogers -Taboo; plus many more.
27 RR 005. MPr's WSTC-1500
6.95


## SERIES 86 STEREO-COMPACT OUTFIT

With this carefully selected outfit, you can easily make superb stereo or monophonic tape recordings, and save $\$ 40.45$ over the cost of components purchased separately. Consists of: Model RMQ. 86 Stereo-Compact: 2-Knight KN-4500 Microphones with Desk Stands and 10 of Cable; 20 reels of Knight KN-15 Recording Tape; Robins Cleaner-Lube Kit and Booklet. The RMO (described below) is a recording marvel. Accessories have been expertly chosen to complement lt. Wt., 55 lbs . 20 HF 858-J. $\$ 17$ Monthly.

NET 349.95
ERQ 86 STEREO-COMPACT OUTFIT. Same as above, but with the ERQ 86 Stereo-Compact (described below). 20 HF 859-J. $\$ 17$ Monthly.

NET 349.95
ESM 86 STEREO-COMPACT OUTFIT. Same as above, but with the ESM 86 Stereo-Compact (described below). 20 HF 360 -J. $\$ 17$ Monthly.

NET 349.95

## SERIES 86 STEREO-COMPACT RECORDERS

A combination of Series 86 tape transpart and improved record/ playback preamp, for a wide range of 20:20,000 cps ( $\pm 3 \mathrm{db}$ ). Features: front panel selection for sound-on-sound and special effects; automatic equalization setting for $71 / 2$ or $33 / 4 \mathrm{ips} ;$ headshift control for playback of 2 or 4 -track tapes. $13 \times 13 \times 7 \frac{1}{4^{2}}$. $121 / 2^{\circ}$ sq. cutout. For $110-120$ v., 60 cycle AC. Wt., 25 lbs.
79RU421.J. ModeIRMQ.Records, monitors4-trackstereo
and mono only; plays 2 or 4 -track stereo or mono. NET 299.50
79 RU 420-J. Model ERQ. Records 2.track stereo or mono
only; plays 2 or 4 -track stereo or mono .......... NET 299.50
79 RU 452-J. Model ESM. Records, monitors and plays
2 -track stereo or mono only...................... NET 299.50


## SERIES 86 "STEREO SUPER.PRO" RECORDER

New, improved professional-quality portable tape recorder usi? an 86 transport and 2-RP 83 preamps. Has separate inputs \& mike and tuner, or mixer-preamps, sound-on-sound recordin "Erase Protek" switch. Response, 30-16,000 cps ( $\pm 3 \mathrm{db}$ ). Brov case, $203 / 4 \times 133 / 4 \times 101 / 4{ }^{3}$. For $110-120 \mathrm{v}$., 60 cycle AC. 40 lbs .
79 RU 428-J. Model ES. Records and plays 2 .track stereo or mono only. $\$ 17$ Monthly.

NET 364.5
79 RU 433-J. Model ERQ. Records 2-track stereo or mono; plays 2 and 4 -track stereo or mono. $\$ 18$ Monthly. ..... NET 394.8
79RU429-J. ModelRMQ. Records, monitors 4-trackstereo or mon, plays 2 or 4-track stereo or mono. $\$ 18$ Monthly...... NET 394.5 79 RU 453-J. Model ESM. Records, monitors and plays 2 -trac stereo or mono only. Has separate erase, record, play heads. $\$ 18$ Monthly.

NET 394.5

## VIKING "76 COMPACT" RECORDER

Add 4 -track stereo and monophonic recordings to your musit system with this versatile, easy-to-use recorder. Consists of : 2-speed transport with two 4 -track heads (erase and record/play) and stereo-recording preamp. Specifications: Speed: $71 / 2$ and 33: ips. Reel Size: to $7{ }^{*}$ max. Response: $25-16,000 \mathrm{cps}( \pm 3 \mathrm{db}$ ) at $7 \%$ ips. S/N Ratio: 55 db or better. Inputs: mike and tape head (or front panel); high-level (Radio/TV/Phono) on rear panel. Outputs. playback head and monitor (third head for monitoring can be added). Contro/s: single, rotary-type Motion control for Rewind, Stop, Play, Fast Forward; Jape Speed Selector; Stereo-Mono; volume, for each channel; and Function for On-Off, Play and Record. Custom-mounts vertically or horizontally. Handsome two-tone brown $13 \times 13 \times 61 /{ }^{* \prime}$ deep; requires $121 / 2^{\prime \prime}$ sq. cutout. For 110.120 volts, 60 cycle AC. Shpg. wt., 28 lbs.

79 RU 426-J. $\$ 10$ Monthly.
NET 199.50


## RECORD-PLAY PREAMPS

MODEL RP83. Provides an 80 kc bias, with response of $\pm 3 \mathrm{db} .30-16,000 \mathrm{cps}$. Has neon record indicator, VU meter and bias current adjustments, and independent high and low level input controls. For 86 P and $86 R O$ transports. $23 / 4 \times 13 \times 51 / 2^{\circ}$. For 110 . 120 v .. 60 cycle AC. Wt., $5 \frac{1}{2}$ lbs.
79 RU 460 -J. $\$ 5$ Monthly.... . NET 87.50 MODEL RP83-3. As above, but has extra head lead. For 86RMQ transport.
79 RU 472-J. $\$ 5$ Monthly.
NET 89.50
MODEL RP73. Same as RP83, but finish matches Model 76 Transport.
79 RU 473-J. $\$ 5$ Monthly....... NET 87.50

## MX10 MULTIPLEX FILTER

Permits interference-free tape recording from any FM tuner equipped for stereo multiplex reception. Connects between output jacks of any stereo FM tuner and high level or tuner input of any hi-fi tape recorder. Only $1^{1 / 16 \times 21 / 16 \times 23 / 4}$. With phono jacks and mtg. lug. Wt., 2 lbs.
79 RU 477 -J.
NET 14.50

## SERIES 86 TAPE TRANSPORT

2 -motor unit. $71 / 2,33 / 4$ fps. $30-16,000 \mathrm{cps}$ ( $\pm 3 \mathrm{db}$ ). $\mathrm{S} / \mathrm{N}, 55 \mathrm{db}$. Flutter-wow, under $0.2 \%$. Max. reel, $7^{\prime \prime}$. To record, use RP-83 preamp ( 2 for stereo). $101 / \times 13 \times 5 \frac{1 / 2}{2}$. For 110.120 v., 60 cycle AC. $121 / 2 \mathrm{lbs}$.

79 RU 454-J. Model 86P. For play-
back only-2-track mono. NET 123.00
79 RU 431 -J. Model 86RQ. Records 2-track mono; plays 2 -track and 4 -track stereo or mono

NET 158.50
79RU427-J. Model86RMQ. Records,monitors 4 -track stereo or mono; plays 2 or 4-track stereo or mono . ...... NET 179.50 SERIES 76 TAPE TRANSPORT. See specifications under "76 Compact." Shpg. wt., $51 / 2$ lbs.
79 RU 478-J. Model 76Q. Playback
only. 2 and 4 -track stereo or mono. 99.00
79 RU 481-J. Model 76HQ. Records 4 -track stereo and mono; plays 2 and 4.track stereo and mono

NET 114.00
79 RU 482-J. Model 76RQ. Records 2-track mono; plays 2 and 4 -track stereo and mono. . . . . . . . . . . . . . . . . . . . . NET 106.00


MODEL 1270 STEREO RAONITOR RECORDER
Net
$=645^{00}$

- Built-In Amplifier-Speakers
\$31 monthly
- Plays 2-Track and 4-Track Stereo and
jerb professional results are yours with this extraordinary table recorder. Records 4-track stereo and monophonic tapes; ys 2 -track and 4 -track stereo and monophonic tapes. Has built-implifier-speakers for top-quality monitoring or listening-ellipal speakers are $7^{\prime}$, and utilize deflecting panels for effective roo separation. Also offers: output circuits and jacks for nitoring while recording, with the use of optional stereo headts: 2 automatic shut-off positions for unattended recording or yyback; selective erase head for monophonic flexibillty with und-on-sound and language study; automatic tape take-up; aster selector switch; built-in mixer, 2 mic., 2 line for professiontechniques; recording level meter-reads both channels by nple switching.
secifications: Speed: $71 / 2$ and $33 / \mathrm{lps}$. Reel Size: $7^{70}$ maximum. equency Response: 50 to $15,000 \mathrm{cps}$ at $71 / 2 \mathrm{ips}$; 50 to $8,000 \mathrm{cps}$ $3 \%$ los. Flutter and Wow: less than $0.2 \%$ rms at $71 / 2 \mathrm{ips}$. Record$g$ inputs: Radio/TV/Phono/Auxiliary; high.impedance microoone inputs. Playback Outputs: cathode follower. Monitor mplifier/Speakers: dual-channel, two-stage amplifiers with inroral power supply, utilizing negative feedback for low distor-on-peak output power in excess of 5 watts.
ontained in attractive, two-tone gray, scuff-resistant portable ase. Compact size, only $9 \times 15 \times 251 / 2^{\prime \prime}$. Less microphones. For $10-120$ volts, 60 cycle AC. Shpg. wt., 46 lbs .
-9 RU 380 -J. \$31 Monthly.
NET 645.00

MODEL 1260 PORTABLE STEREO RECORDER

Net<br>s54500<br>- Has 3 Precision Heads<br>- Exact Tape Tracking<br>- Selective Erase Head<br>\$23 monthly<br>- 2 Automatic Shut-Offs

A portable recorder that's professional all the way. Records 4-track stereo and mono; plays 2 -track and 4-track stereo or monophonic tapes. Features: 3 precision heads for narrow track recording; exact tape tracking with improved tape guidance system; 2 automatic shut-offs for unattended recording or playback: new selective erase head; automatic take-up; master selector switch; buitt-in mixer. Operates at $71 / 2$ and $31 / 4 \mathrm{ips}$. Frequency response, 50 to $15,000 \mathrm{cps}$ at $71 / 2 \mathrm{lps} ; 50$ to $8,000 \mathrm{cps}$ at $31 / \mathrm{ips}$. Only $9 \times 15 \times 17 \frac{1 / 2}{2}$. Has smart charcoal gray portable case. Plays back through external power amplifiers and speakers-will drive high-impedance headsets directly. Less power amplifiers and speakers (see Model 2012 Amplifier-Speaker, below); and less mikes. For 110-120 v., 60 cycle AC. 38 Ibs.
79 RU 379-J. $\$ 23$ Monthly.
NET 545.00
79 RU 378-J. Model 1250. As above, but less portable case. Finished in charcoal gray. $\$ 21$ Monthly.

NET 499.50

## MODEL 2012 MATCHING ABAPLIFIER-SPEAKER

Designed for use with Ampex 1200 Series recorders, but can be used with any recorder for excellent audio response and clarity. Can be used singly for monophonic, or used as matched pair for stereo. Output, 10 watts ( 20 watts peak) flat, $\pm 0.1 \mathrm{db}$. In handsome portable charcoal case, $9 \times 171 / 2 \times 15^{*}$. For operation from $110-120$ volts, 60 cycle AC. Shpg. wt., 35 lbs .
79 RU 381 -J. $\$ 10$ Monthly.
NET 199.50

## MODEL 351-2P PROFESSIONAL STEREO RECORDER

i portable recorder, designed for continuous duty operation in exacting proessional applications. Records and plays 2 -track stereo and monophonic apes. Excellent for use by broadcast studios, educators, research labs, ndustry, social and religious organizations, etc.-wherever professional Juality tape recordings are a must. Consists of two separate elements: tape transport and electronics assembly (with individual electronic panels for each channel) in separate cases.
Specifications: Speed: $7 \frac{1}{2}$ and 15 ips ; or $33 / 4$ and $71 / 2 \mathrm{ips}$. Reel Size: $101 / 2$ maximum. Frequency Response: $\pm 2 \mathrm{db}, 301015,000 \mathrm{cps}$ at $15 \mathrm{ips} ; 30$ to 10,000 cps at $71 / 2 \mathrm{ips} ; 40$ to $7,500 \mathrm{cps}$ at $31 / 4 \mathrm{ips}$. Flutter and Wow: below $0.15 \%$ at 15 ips; below $0.2 \%$ at $71 / 2$ ips: below $0.25 \%$ at $31 / 4$ Ips. Signal-to-Noise Ratio: 55 db at $15 \mathrm{lps} ; 55 \mathrm{db}$ at $71 / 2 \mathrm{lps}$. Record Input: low impedance microphone, balanced or unbalanced bridge. Playback Output: plus 8 dbm into 600 ohms. balanced or unbalanced. Amplifiers: separate record (4-stage) and playback (3-stage). Monitor: monitors tape while recording. Meter: 2-4" VU. Motors: hysteresis-synchronous and 2 torque.
Sizes: tape transport, $151 / 4 \times 19 \times 7^{\text {; }}$; electronics assembly, $14 \times 19 \times 7^{\prime \prime}$. Less microphones. For $110-120$ volts, $60^{\circ}$ cycle AC. Shpg. wts., tape transport, 58 lbs .; electronics assembly, 36 lbs .
79 RU 458-J. 351-2P ( $30810-07$ ). $33 / 4$ and $7 \frac{1}{2}$ ips. $\qquad$ . NET 2325.00 .NET 2325.00


79 RU 459-J. 351-2P (30810-03). $71 / 2$ and 15 ips .


## Recording Equipment

## Only s40550

## CS. 300 STEREO TAPE SYSTEM

Save $\$ 88.00$

- Top Savings
- Superior Qualliy

A deluxe stereo tape system--at savings of $\$ 88.00$ ! Complete facilities for 2 and 4-track stereo and monophonic playback and recording. System includes: Sony CS-300 Sterecorder with 2 dynamic mikes and carrying case: Sharpe HA-10 professlonal stereo headset; $20-7$ reels of Knight KN-30 $1800^{\prime \prime}$ "Plus-Play" tape; Robins TK-4STD splicing and editing hit. The versatile CS-300 is packed with features: built-in 6 -watt stereo amplifier and speakers, adjustable sound directors, hysteresis-synchronous drive motor, 2 VU meters, provision for FM stereo recordings. Response ( $\pm 2 \mathrm{db}$ ); 50-15,000 cps at $7 \frac{1}{2} \mathrm{ips}, 50 \cdot 8,000 \mathrm{cps}$ at $31 / 4 \mathrm{ips}$. Shpg. wt., 70 lbs .
Shpg. Wt.,
20 HF $\mathbf{8 6 1 - J . ~} \$ 19$ Monthly.
NET 405.50
79 RZ 413-J. CS-300 Sterecorder Only. With mikes and carrying case. $9 \times 20 \times 14^{\text {f }}$. Imported from Japan. For 110.117 v ., 60-Cycle AC. Shpg. wt. 50 lbs.

NET 399.50


## Only

## CS 464 HI-FI TAPE SYSTEM

s30550
Save $\$ 66.80$

- Bullt-In Speakers and Stereo Amplifier
- Channel integrator for Sound on Sound
- Includes Two Dynamic Microphones; Headset; Recording Tape; Tape Spllcing and Editing Kit
Save $\$ 66.80$ on this outstanding stereo tape system. Records and plays back 4 -track stereo and monophonic tapes. System includes: Sony CS-464 recorder with 2 dynamic mikes and case, Sharpe HA-10 protessional stereo headset, $10-7^{*}$ reels of Knight KN-30 1800" "Plus-Play" tape, Robins TK-4STD splicing and editing kit. The CS-464 is the same as the 464.D listed on the facing page, but it includes a built-in 6 -watt stereo amplifier and speakers, channel integrator for sound-on-sound recording. and adjustable sound directors. Shog. wt., 60 Ibs.
20 HF $862-\mathrm{J}$. \$15 Monthly.
NET 305.50
79 RU 417-J. CS-464 Only. With dynamic mikes and carrying case. $221 / 2 \times 131 / 2 \times 8 \frac{1}{2}$. Imported from Japan. For 110.117 v ., 60 cycle AC. Shpg. Wl., 40 lbs .

NET 299.50

s20550

\author{

- Save $\$ 31.89$
}
- 5 Stereo Tapes
- Sound on Sound

Connect to any stereo system for playback of 2 and 4-track stereo tapes. 4-track monophonic record and playback. You get: Sony 262-SL recorder with case, earphone and dynamic mike; $10-600^{\prime}$ reels of Knight KN-15 tape; Robins TK-4STD tape kit, TE-128 booklet; 5 reels of Líncoln pre-recorded 4-track stereo tapes. Shpo. wt., 37 Ibs.
20 HF 646-J.
. NET 205.50
79 RU 414-J. 262-SL Only. Case,earphone. mike. $7 \times 14 \times 11^{\prime \prime}$. From Japan. For $110-120$ v., 60 cycle AC. 21 Ibs.

## 111 "TAPECORDER" OUTFIT

$$
\begin{aligned}
& \text { '8050 } \\
& \$ 0450 \quad \text { - Pave } \$ 7.88
\end{aligned}
$$



You'll get top performance from this compact recorder. Records and plays 2 -track monophonic tapes at $1 / 3$ and $31 / 4 \mathrm{ips}$. Has built-in amplifier, speaker, level Indicator, record interlock, mike and radio inputs. With mike and emply reel.
You also get a $600^{\circ}$ reel of tape, splicer. tape cleaner kit and editing and splicing book. $43 / 4 \times 8 \frac{1}{4} \times 73 / 4$. Coral and white. Includes external speaker output jack. From Japan. For operation from 110-117 $v_{\text {. }} 60$-cycle AC. Shpg. wt., 16 lbs. 20 RU 331-2-J. \$5 Monthly... NET 80.50 79 RU 409-J. 111 Only. 14 lbs.


## 101 "TAPECORDER" OUTFIT

\$ $4050 \quad$ - Save $\$ 10.98$
Capture the sounds of children at play, narrate home movles. Everything you need for easy recording. Records and plays 2 track monophonic tapes at $3 \frac{1}{4}$ and $71 / 2$ los. Includes tevel indicator, automatic tape llfter. With dynamic mike and empty plastic take-up reel.
You also get 3-600 reels of tape, splicer, tape cleaner kit, editing and splicing book and "How to Make Better Recordings" book. $6 \frac{1}{2} \times 13 \times 10^{-}$. From Japan. For 110.117 v., 60-cycle AC. 28 lbs.

20 RU 330-2-J. S6 Monthly. NET 100.50 79 RU 415-J. 101 Only. 26 Ibs.


## NEW MODEL 64 4-TRACK STEREO DECK

Not - Records/Plays 4-Track Stereo/Mono<br>$\$ 49800$<br>- Three Speeds-1 $1 / 331 / 4.71 / 2$ Ips<br>- Hysteresis-Synchronous Drive Molor<br>$\$ 21$ monthly - Three Separate 4-Track Stereo Heads

New model of the renowned Model 6, now offers even more superb features. Three separate 4 -track heads, including new ferritecore erase head, plus 2 record and 2 playback preamps permit stereo and mono recording, sound-on-sound, echo, etc. Also has multiplex filter. Response: $\pm 2 \mathrm{db}, 30-16,000 \mathrm{cps}$ @ $71 / 2 \mathrm{ips}$; $40-11,000 \mathrm{cps}$ at $31 / 4 \mathrm{lps} ; 50-5,500 \mathrm{cps}$ at $11 / 2 \mathrm{ips}$. Flutter/Wow: under $0.1 \%$ G $1 / 2 \mathrm{ips}$. Cathode-follower outputs. $6 \times 16 \times 12^{\circ}$. Wood base. Less mikes, below. U.L. Approved. For $115 \mathrm{~V}, 60$ cycle AC. 27 lbs.
79 RU 48s-J. $\$ 21$ Monthly
NET 498.00
79 RU 489-2 J. 64-1. Above, with carrying case. 30 ibs. . . . 519.00 79 R 446. 22-FP Fool Pedal. For remote operations. Controls start-stop, forward-reverse. 3 lbs. . . . . . . . . . . . . . . . . . . . NET 18.00 79 RX 443. TC-56 Case. 6 lbs.............................. NET 24.50
79 R 439. CM-6 Mike. 30-12,000 cps. 12' cable. 4.02. . ....... . 15.00

## NEW MODEL 74 4-TRACK TAPE RECORDER

Net - Record/Playback Preamplifier<br>$\$ 39950$ - Three Speeds, Synchronous Drive Motor<br>- Precision Record/Play Head, Erase Head

\$18 monthly - Bullt-In Stereo Amplifier, Speakers
Deluxe 3-speed stereo recorder has built-in 6-watt stereo amplifler and $2-7^{\circ}$ speakers. Records and plays 4 -track stereo and mono tapes. Precision record/play head; ferrite-core erase head Lever controls forward, rewind, fast-forward, stop; "Iree" position for threading. Record/playback/amplifier mode switch. Syn chronous motor. Separate stereo volume controls. Response: $\pm 2 \mathrm{db}, 40-16,000 \mathrm{cps}$ © $71 / 2 \mathrm{i} \pm 2 \mathrm{db}, 40 \cdot 10.000 \mathrm{cps} 931 / 4 \pm 2 \mathrm{db}$. $50-5,000 \mathrm{cps}$ (3) $1 \% \mathrm{ips}$. Wow \& Flutter: $15 \%$ © $71 / 2 \mathrm{ips}$. Mike and line stereo inputs, stereo cathode follower and speaker outputs. Less mikes. $151 / 4 \times 1111 / 1 / 6^{6} 6^{6}$. For $110-120 \mathrm{v} ., 60 \mathrm{cycle}$ AC. 271 lbs.
79 RU 487-J. $\$ 18$ Monthly.
NET 399.50
79 RU 440-J. Model 65 Tape Player. Same as Model 64, left, but less record-play preamplifiers, base. Stereo tape head outputs. Mtg. bracket. 18 Ibs. \$10 Monthly.

NET 199.50

## Model T-347 4-Track Stereo Tape Deck



Custom-mount your Bell stereo tape deck. Its hand-somely-styled woodgrained finish with chrome highlights. blends with any cabinetry, and you'll have good results using it either upright or horizontally.


# T霛 <br> SLA <br>  <br> TLA <br> $\square$ <br> SLF <br> SEH BESQ MT. <br>  <br>  <br> MEH <br> 4 <br> SLS <br> Magnetic Tape Heads 

2-T゙RACK AND 4TRACK STEREO AND MONOPHONIC TAPE HEADS

RECORD/PLAYBACK HEADS. Professional-type laminated cores except SLS types. Response: $30-15,000 \mathrm{Cps}$ at $71 / 2$ ips. Crosstalk rejection on stereo heads: 50 db . Av. wt., 6 oz .

ERASE HEADS. Efficient double-gap construction, all metal case. High imp. types require 100-150 v. Medium imp. types require $30-50 \mathrm{v}$. For erase frequencies up to $100 \mathrm{kc} 602.$.
"QUIK-KIT" MOUNTING KITS. For converting no-mount heads in table, right, to side or base-mount heads. $40 z$.

| $\begin{aligned} & \text { For } \\ & \text { Hoands } \end{aligned}$ | Slde-Mount |  | Dano-Mount |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Stoek No. | QK | Steok No. | OK |
| SO. TLAA. |  |  |  |  |
| SLA. SLF |  | 438 |  | +21 |
| All Era | 8 | 18 | 81 nep | 119 |
|  |  |  |  | 1.00 |

## TAPE HEADS DO WEAR OUTI

 You Can Check Them Yourself Even the best tape head can wear. When it does, you lose much of the quality and response you get from tape. Here's how you check
## INSPECT HEAD FOR:

A Worn spot-causes
loss of highs.
(8) Vertical black line dividing either pole plece-causes loss of gain.
If head shows either or both symptoms, it needs replacement.


WR-35

## FOUR-TRACK STEREO CONVERSION KITS FOR POPULAR TAPE RECORDERS

Permit playback of 4 -track stereo pre-recorded tapes while retaining existing monophonic record/playback facilities.

MODEL WR-35. Record/play head kit for Wollensak and Revere 2 -track stereo recorders. Height adjuster. 6 oz. 81 RC 029. $\$ 5$ Monthly.

NET 25.50 MODEL WR-40. Erase.record/play assembly for all Wollensak and Revere mono recorders. Height adjuster. $60 z$. 81 RC 957. $\$ 5$ Monthly.

NET 32.50
MODEL WR-60. Stereo erase and record/play assembly with head shifter for 4 -track mono recording. Fits Wollensak and Revere stereo and mono recorders. 602
81 RC 009. $\$ 5$ Monthly.
NET 49.50
MODEL P-6. Conversion record-play head and bracket. For Pentron mono and 2 -track stereo recorders. 6 oz.
81 RC 010. $\$ 5$ Monthly.

## MODEL V-6. Record/olay head for VM recorders. 60 oz 1 RC 033. \$5 Monthly NET 25.50 <br> MODEL W-6. Record/play head with shifter and bracket. For

 Webcor 2800, 2900, and 2000 (except 2020 series). 6 oz.st RC 034. $\$ 5$ Monthly W-2. Not ins. Playback only conversion record-play head kit. For Webcor Models 210, 2020, 2100, 2600 and 2700 series recorders. Wt., 6 oz.
81 RC 958. \$5 Monthly.
NET 27.00
MODEL WR-20. Complete monophonic erase and fine-gap record/play head assembly. For Wollensak and Revere recorders. Provides better high frequency response. With cable. 6 oz 81 RC 959.

NET 15.60

## EGUBCRD TARE RECORDING AGGBS ORIBS -PRPENDABLE...TOR QUALITY

TGOE BIAS OSCILLATOR COIL. For 12AU7 tube circuit. Supplies 115 v . at $60-75 \mathrm{kc}$ to all recording heads and high-imp. erase heads listed, above. 6 oz .

## 81 RC 960.

NET 4.50
T60-T2 BIAS OSCILLATOR COIL. For single or push-pull transistor circuit. Supplies $30 \cdot 120 \mathrm{v}$., at $60-100 \mathrm{kc}$ to record and erase heads, above. 6 oz . 81 RC 961.

NET 4.50 AT-100 ALIGNMENT TAPE. Full-track $71 / 7$ ips tape for checking azimuth alignment and frequency response of any recorder. Instructions recorded on tape. 8 oz .

## 80 R111.

NET 4.95
TG-5 TAPE GUIDE POST. Useful to control height of tape near tape head. 3 oz .
81 R 962.
NET 70c
TG-8 TAPE GUIDE PLATE, Use with any sidemount style head to control tape position. 3 oz. 81 R 963.

NET 50c

L-5 BRACKET. Universal type, for mounting sidemount style heads on any tape recorder. 3 oz. 81 R 004.

NET 50c
PL-100 PLAYBACK AMPLIFIER. Compact. delivers 3 watts to 4, 8, or 16 -ohm speaker. Inputs: high-imp. tape head, magnetic or ceramic cartridge phono, tuner. Equalization: variable, NAB/RIAA. Response: $30 \cdot 15,000$ CDS. $\pm 2 \mathrm{db}$ Output: P-P triodes and $1-v$. cathode follower. For 115 v. 60 cycle AC. $2 \% \times 5 \times 8 \frac{1}{1 / 2} .6 \mathrm{lbs}$.
81 R 052. \$5 Monthly.
NET 46.50 RA-100 RECORDING AMPLIFIER. Use in pairs for recording stereo. Adjustable for use with most tape heads, supplies audio and 65 kc bias to any head listed above, plus 115 v . to high-imp. erase head. VU meter, monitor output. Inputs: mike, tape head, phono, tuner. Equalization: NAB/ RIAA. $25 / 65 \times 81 / \mathbf{3}^{\prime \prime}$. For 115 v ., 60 cycle AC. 6 lbs . 81 R 055. \$5 Monthly. recording accessories, including TS-8D splicer.

TC-7

## HC-2 TAPE HEAD CLEAIURR

Removes distortion-producing dirt, grime and oxides from heads. Applicator cap. 2 fi. oz. Shpg. wt., 4 oz.
80 R 113. List, $\$ 1.00$
NET 69c

## TAPE STORAGE CABUS

TC-7. Steel can for safe storage of tapes to $7^{7}$ dia. Shpg. wt. 8 oz.
80 R 207. List, 75 c .
NET 50c
80 R 208. TC-5. $5^{\prime \prime}$ dia. 6 oz. .36c

## REPLACEMENT PRESSURE PADS

PP-1. Assortment of pre-cut felt pressure pads to fit almost all recorders. Shpg. wt., 2 oz.
80 R 209. List, $\$ 1.00$
NET 69c


Head cleaner, Jockey cloth for cleanin? and lubricat ing tape.


80 R 174. "KLEEN-TAPE". For cleaning heade. $5^{\circ}$ reel. 402

NET 1.73
SO R 138. "LONG LIFE" KIT. One bortle each of hond cleaner, head lubricant, sape conditioner. Shpg. wt. 1 lb.

NET 3.45 COUSINO U-31OC TAPE VENDOR. PIays mesages conthually. Fits ath 3 3 -lps recorders. Plays up to 12 min . as supplied: $24 \mathrm{~m} / \mathrm{n}$. with Moeblus loop. Reel rotetes clockwlee. With tape. $11 / 2 \mathrm{Ib}$.
80 R 135.
.NET 9.75 80 R 136. U-310CC. Counterclockwise. NET 9.75


ROBINS-M/M
RMMR 4 TAPE
HEAD MANUAL
AND REPLACE-
MENT GUIDE

Here's a complete cross-reference, replacement and conversion manual for tape heads. Listings arranged by name of head manufacturer, and by name of rerorder manufacturer. Gives full installation instructions. Includes description of how heads are made. Slize, $6 \times 9^{\prime \prime} .16$ pages. No charge with any order to Allied. 80 R 280. Postpald in U.S.A.
$24 c$

ROBINS "GIBSON GIRL" TAPE RECORDER ACCESSORY KITS

| Stock No. | Type | Description | We. | List | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 80 R 121 | TK-2 | HC-2 head cleaner and JCT-2 cloth. | 4 oz . | \$2.00 | 1.35 |
| $\begin{array}{ccc}80 & R & 120 \\ 80\end{array}$ | TK-4H | H-4 splicer, ST- 500 spl tape, TC-4 2 tape clips, JCT-2 jockey cloth. TE24 book. | 1 lb . | 3.25 | 2.19 |
| 80 R 115 | TK-4]R | TS-4] splicer. HC-2 head cleaner, ST375 splicing tape, TT-1 tape threader. JCT-2 cloth. TC-12 tape clips. SL-30S labels, TE- 24 book | $11 / 2 \mathrm{lb}$. | 10.00 | 6.75 |
| 80 R 213 | AVK-1 | Complete kit-every accessory for the language lab, recording studio, aud-lo-visual dept., professional recordist ME-99 eraser, HD-6 demagnetizer, TS-8D splicer, 6 rolls of ST. 500 spl . tape. TK-5 strobe, TK-6 cleaner and lubricant. TT-1 tape threader, JCT-2 jockey cloth, 12-SL-30S labels, 2 -TC- 12 tape clips. | 14 lbs. | 65.00 | 48.75 |



ROBINS-M/M TAPE HEADS
For replacement, conversion to stereo See RMM-4 book (left) for replacement data. Heads with L, B and Q in Type No. are completely interchangeable for stereo conversion. 90E3 erase head is 4 -track re. placement for 5S1 and 5SS1. *No. is no. of tracks; $S$ for stereo, $M$ for monophonic: RP for record/play, $E$ for erase. 6 oz .

| Stock No. | Mir's Type | * Function | List | NET |
| :---: | :---: | :---: | :---: | :---: |
| AC | 2FM $20-500$ |  |  |  |
| BORC220 | $3 F 20-101$ |  |  |  |
|  | $3 F$ | 2 S |  |  |
| 80 | 3FM20- | 2MR |  |  |
| 81 RCO | 3 FM 20 |  |  |  |
| BORC | 120-502 | 2 MRP | 30. | 2.50 |
| BI RCO | 320 | 2MRP |  |  |
| BORC | SAV17 | 4SRPE | 32.0 | 2.00 |
| 80 RC | 5B20L | 2SRP | 27.0 |  |
| BORC | O17 | 4SRP |  |  |
| 80 RC 229 | 5Q17-105 | 4SRP |  |  |
| 80 | QT17 | 4SRP |  | 1 |
| 80 RC | SQT17-105 | 4SRP | 28.5 | 21.38 |
| 80 RC | 5 S 1 | 2ME | 10.50 | 88 |
| 80 RC233 | S1-10 | 2ME | 0.50 |  |
| 80 | 5SS1 | 2SE |  |  |
| C2 | $7 \mathrm{B17}$ | 2 SRP |  |  |
| C25 | 7H17 | 2MRP |  |  |
| 81 RCOS | 7 L 17 | 2MRP |  |  |
| 80 RC 25 | 7L17-108 | 2MRP |  |  |
| 80 | 7EM 1 | 2 ME |  |  |
| 80 RC 2 | 90 C 3 | 4SE |  |  |
| 80RC25s | 10B20LS | 2SRP | 27. |  |
|  | 10L17-104 | 2MRP | 13.5 | 10.12 |
| 80 R | 40EM 12 | 2 ME | 10.5 |  |

## 5 TRB ROBINS-SHURE REPLACEMENT

 HEAD. 2-track record/playback/erase head replaces Shure 815. TR5, TR5B, TR5D, TR5H, for Wollensak, Revere, etc. Monophonic. Shpg. wt., 6 oz. 80 RC 258. List, $\$ 16.50$
## ROBINS-用/M 4-TRACK STEREO CONVERSION KIT

## TYPE 5K17. Converts $90 \%$ of all U.S.

 made 2 -track stereo recorders to 4-track with only screwdriver and pliers. See RMM-4 book (at left) for a list of convertible recorders. Contains 5017 4-track record/play head, head alignment tape. hardware and instructions. Additional amplifiers required for use with monophonic recorders. Shpg, wt., 8 oz.80 RC 259.
NET 22.50
80 RC 260. 5 K 17 U . Same as 5 K 17 kit , except that head (5Q17-105) mounts from opposite side..

NET 22.50

## TELEPMOME.TAPE ACCESSORIES

TRB-3 TELE-TAPE BEEPER-INDUCTOR. Makes it easy to comply with the law. Transistorized signal generator-timer with attached ferrite-core induction coil automatically injects 1 -kc "beep" into phone lines and recorder at $15-\mathrm{sec}$ intervals. Battery lasts for more than 3000 average phone calls. "Easy-on" spring fastening to phone. Has 6 -ft. cable to phone and to recorder. With On-Off switch. Supplied less battery (listed below). Size, $5 \times 2 \times 11 / 2^{\prime \prime}$. Shpg. wt., 1 Ib.
80 R 210.
NET 16.88
55 J 061 . Battery For Above.
NET 16.88

TRP-1 TELE-TAPE INDUCTOR. Pickup coil with high-efficiency ferrite core. High gain: high signal-to-noise ratio. "Easy-on" mechanical spring fastening. 6 -ft. shielded cable from telephone ear piece to recorder. 6 oz .
80 R 211....
NET 3.98

# Tape Heads and Recording Accessories 

 ROBINS TAPE SLICERS

TS-8D "STEREO 4" DELUXE SPLICER. Developed to meet the critical requirements of splicing 4 -track tapes withoul affecting program material on the outside tracks. Works equally well for single-track and 2 -track tapes. Cuts tape dlagonally, and trims minute indentations on sides of splice to prevent adhesive contact with recorder parts. Replaceable cutter cartridge; blade-centering adjustment. "Seethru" windows show operating positions. Made of almost indestructable "Implex." Has integral tape dispenser. With roll of $1 / 2{ }^{*}$ splicing tape, plus complete instructions. Shpg. wt., 1 lb .

NET 7.77 80 R 190. RK-8. Replacement cutter cartridge and 2 cutting pads for TS-8D. Shpg. wt., 3 oz.
.NET 85e

TS-4S "STEREO 4" STANDARB SPLICER. Utility version of the TS-8D at left. Has all of its features except "seethru" windows. Made of metal and plastic. Replaceable cutter cartridge; biade-centering adjustment. Integral tape dispenser. Complete with $100^{\circ}$-roll of $3 / 8^{\prime \prime}$ splicing tape and plastic dust cover. 12 oz

## 80 R 192.

NET 5.75
TS-AJ "STEREO 4" JUNIOR SPLICER. Same as TS-4S above, except without tape dispenser and splicing tape. Uses $\%$ splicing tape. With plastic dust cover. Shpg. wt., 8 oz. B0 R 195

NET 4.39
80 R 200. RK-3. Replacement cutter cartridge, 2 cutting pads for TS-4S and TS-4J. Shpg. wt., 3 oz.

RK-2 REPLACEMENT KIT. For older TS. 4A series splicers. Replacement cutter cartridge, 2 cutting pads. 3 oz . 80 R 151.

NET 85c
SP-4 "SEMI-PRO" SPLICER. Small, efficient, non-stereo tape splicer. Tape alignment puide with adhesive back: hand-held cutting unit. Blade cover protects blades. Makes diagonal cuts and "Gibson Girl" trim cuts. 3 oz .
80 R 150.
NET 1.69
H-4 "HOBBYIST" SPLICER. (Not illus.) An excellent low-priced tape splicer. Consists of adhesive-backed plastic tape gulde and unique curved razor-type blades. With instructions. 2 oz. so R 201.

NET 85c


## ROBINS TAPE RECORDING ACCESSORIES

JCT-2 "JOCKEY CLOTH." Cleans and lubricates tape, while running, with silicone. Washable, reusable. 3 oz . 80 R 152.

NET 69c
SPLICING TAPE. Mylar. Characteristics carefully controlled. 100"; 1" core.

| Stook No. | Type | Width | Oz. | NET |
| :---: | :---: | :---: | :---: | :---: |
| 80 R 202 | ST-2.34 | $1 / 4$ " | 1 | 27 e |
| 80 R 203 | ST-375 | 1/8" | 1 | 30 |
| 80 R 155 | ST-500 | $1 / 2^{\prime \prime}$ | 1 | 33 c |
| 80 ค 204 | ST-750 | $1 / 4{ }^{\prime \prime}$ | 2 | 40 e |

TC-12 TAPE CLIPS. Keep tapes from unwinding. Fit all reels. Plastic; reusable. 3 oz. per pkg. 12 per pkg.

## 80 R 153.

PER PKG. $27 c$
HC-5 "TAPE CLEAN." 5 " reel. 6 oz
80 R 205.
NET 1.73
TT-1 TAPE THREADER. For all $3^{*}-7^{*}$ reels. Shpg. wt., 2 oz.
80 R 166.
NET 69C
TE-24 EDITING AND SPLICING BOOKLET. By Haynes, Illus. 6x9". 24 p.
80 R 131. Postpald In U.S.A.
.24c
TE-48 TV TAPE RECORDING BOOKLET. By Goodall. Illus. 48 p.
80 R 126. Postpaid in U.S.A.
69c
TE-128 HOW TO GET THE MOST OUT OF TAPE RECORDING. By Sheridan. Illustrated. 128 p.
80 R 123. Postpaid in U.S.A. . . . . . .69c
SL-30S REEL LABELS. (Not illus.) 30 adhesive labels. 2 oz .
80 R 124.
NET 12c
RC-2-22 TAPE HEAD LUBRICANT. 2 ff. 02. Shpg. wt., 4 oz.

80 R 206.
NET 69c

RH-2 REEL HOLDERS. Prevent wobbling, 3 oz. per pkg. Pkg. of 2.

## 80 R 122.

NET 58c
HD-6 HEAD DEMAGNETIZER. (Not illus.) Remove residual magnetism from tape head for optimum signal-to-noise ratio. $4 \% \times 11 / 4$ dia. For $110 \mathrm{v} ., 60$-cycle AC. U.L. Approved. 1 lb . 80 R 154.

NET 6.75
HD-3 HEAD DEMAGNETIZER. Elficient, low cost unit. $31 / 2 \times 11 / a^{\prime \prime}$ dia. For 110 v ., 60 cycle AC. 8 oz .
80 R 127.
NET 3.95
ME-99 8ULK TAPE ERASER. Erases entire reel at once, with residual noise levels 3.6 db below most erase head levels. For reels to $10^{\circ}$, tapes to $1_{2}^{\circ} .51 / 4 \times 63 / 4 \times 33 / 4^{\prime \prime}$. For $110-120$ v., $50-60$ cycles AC. U.L. App. Shpg, wt., 81/2 lbs.
80 R 114.
NET 22.27
ME-T7 BULK TAPE ERASER. (Not lllus.) For reels to $7^{\prime \prime}$ : $1 / 4$ tape. Erasure $2-4 \mathrm{db}$ below erase head levels. $21 / 2 \times 61 / 4 \times 31 / 4$. For 110 v. 60 cycle AC. 5 lbs. 80 R 130.

NET 14.85
TK-5 TAPE STROBE KIT. Lets you check the speed, flutter and wow of $15,71 / 2$ and $33 / 4$-ips recorders. Instructions. For $110 \mathrm{v}$. . 60 -cycle AC. $1 / 2 \mathrm{lb}$.

## 80 R 128.

NET 1.35
VU-100 $4 \frac{1}{2}{ }^{\circ}$ VU METER, $0.100 \% \bmod$ : -20 to +3 db . Dual-impedance input. Sensitivity, $200 \mu \mathrm{\mu}$; shunts for 1.2 or $12-\mathrm{v}$. "zero" VU. Mounts in $23 / 4$ "dla. hole; requires $11 / 2=$ depth. 1 lb . 80 R 125.

NET 14.85


EXACT-REPLACEMENT HEADS
All are Fig. A, except TR16-J and TR2K-J, Fig. B. All are high Imped., except 815 and TR5B-J, low imped. TR21C-J, TR16-J are 0.093* upper-track record/playback;others, std. record/playback, erase. TR5B-J has Cinch plug, $14^{*}$ leads. 3 oz.

| Stock No. | Typo | Roplaeen | NET |
| :---: | :---: | :---: | :---: |
| 81 P 000 | 815 | $\begin{gathered} \text { TR5, TRSD, } \\ \text { TRSH } \end{gathered}$ | 8.82 |
| 81 ค 002 | 815H | TRSC, TRSK, TRSL | 8.82 |
| 81 R 421 | TR21C-J | TR16A, 817 | 8.23 |
| 81 R 003 | TRSB-J | TRSB | 9.99 |
| 81 RC 008 | TRSE-2-J | TRSZ-1 | 11.10 |
| B) R OOI | TR16-J |  | 5.29 |



## "IIVING LETIERS"



111 STANDARD-11/2-MIL ACETATE. High-quality generalpurpose tape. Molded plastic reels, except aluminum NAB reel ( $3^{*}$ center hole). Av. wt., 8 oz.

| Stock No. | Type | Footoge | Reel | List | 1-11. EA | 12-Up,EA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 80 n 543 | 111-3 | 300 | $4 \prime$ | \$1.35 | . 88 | 79 |
| 80 ค 547 | 111.6 | $600{ }^{\prime}$ | $5 *$ | 2.25 | 1.47 | 1.32 |
| 80 ค 548 | 111-12 | $1200^{\prime}$ | $7{ }^{\prime \prime}$ | 3.50 | 2.29 | 2.06 |
| 80 ค 549 | 111-24R* | $2400^{\circ}$ | 101/2* | 10.90 | 7.13 | 6.41 |

120-12 HIGH-OUTPUT-1 $1 / 2$-MIL ACETATE. 7 db higher output. 1200'. Plastic $7^{7}$ reel. Shpg. wt., 1202.
R R 554. 12-UP, EACH.....2.06 i-11, NET EACH...... 2.29
LOW-PRINT-11/2-MIL ACETATE. *NAB reel. 12 oz.

| Stock No. |  |  | Type | $\frac{\text { Footage }}{1200^{\prime}}$ | $\frac{R_{e o l}}{7^{\prime \prime}}$ | List | 1-11, EA. | 12-Up, EA. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 80 | - | 534 | 131-12 |  |  | \$ 4.40 | 2.88 | 2.59 |
| 80 | R | 540 | 131-24R* | $2400^{\circ}$ | 101/2* | 12.40 | 8.10 | 7.29 |

150 EXTRA-PLAY-1-MIL MYLAR. Extra-strong "Mylar" base tape. Plastic reels except *NAB aluminum $101 / 2^{*}$ reel ( $3^{7}$ center hole). Av. wt., 12 oz.

| 80 R 531 | 150.9 | $900^{\prime}$ | $S^{\prime \prime}$ | $\$ 3.60$ | 2.35 | 2.12 |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| BO R 532 | 150.18 | $1800^{\prime}$ | $7^{\prime \prime}$ | 6.20 | 4.04 | 3.65 |
| 80 R 533 | $150-36 R *$ | $3600^{\prime}$ | $101 / 2^{\prime \prime}$ | 14.40 | 9.41 | 8.47 |

190 EXTRA PLAY-1-MIL ACETATE. Gives $50 \%$ more playing time. *NAB aluminum reel ( $3^{*}$ center hole). 12 oz.

| 80 | - 550 | 190.9 | $900{ }^{\prime}$ | 5 " | \$3.50 | 2.29 | 2.06 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 80 | ค 552 | 190-18 | $1800^{\prime}$ | $7 *$ | 5.50 | 3.60 | 3.23 |
| 80 | - 553 | $190.36{ }^{\text {* }}$ | $36000^{\prime}$ | $1043^{\prime \prime}$ | 12.85 | 8.40 | 7.56 |

TYPE 200 TENSILIZED TAPE. Super-strength. long-play tape. Polyester $3 / 4$-mil base. Av. shpg. wt., 12 oz .

| 80 | П | 500 | $200-12$ | $1200^{\prime}$ | $5^{\prime \prime}$ | $\$ 5.45$ | 3.56 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 80 | П | 541 | $200-24$ | $2400^{\prime}$ | $7^{*}$ | 9.50 | 6.20 |

## TYPE 175 "TENZAR" TAPE $11 / 2$ MIL.

For applications requiring frequent repeats, fast starts and stops Withstands roughest usage. Offers 16 times greater tear resistance than ordinary tapes. Non-drying-lasts indefinitely. Stretch resistant. $5^{\prime \prime}$ reeis are 600, $7^{\prime \prime}$ reels are $1200^{\prime}$. Av. wt., 10 oz .


RED SEAL TAPE. Used by recording studios for highest-quality recordings. Consistent oxide thickness provides minimum background noise, lowest distortion. Minimum response: $0.31,000$ cps. "Tensilized. Av. wt., 10 oz .

| Stock No. | $\begin{aligned} & \text { Mir'a } \\ & \text { Type } \end{aligned}$ | Loth. Ft. | Mil | Acel Size | Base | NET EACH |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | List | 1-11 | 12-UP |
| 80 R 726 | 15A-1.5 | 150 | 11/2 | 3" | Acetate | \$.70 | .46 | 41 |
| 80 日 763 | 15 A-3 | 300 | $11 / 2$ | $4{ }^{\prime \prime}$ | Acetate | 1.35 | .90 | .81 |
| 80 R 753 | 10A-9 | 900 |  | $5{ }^{\circ}$ | Acetate | 3.50 | 2.34 | 2.10 |
| 80 R 711 | 15A-6 | 600 | $11 / 2$ | $5{ }^{\circ}$ | Acetate | 2.25 | 1.47 | 1.32 |
| 80 R 713 | 10A-18 | 1800 | 1 | 70 | Acetate | 5.50 | 3.67 | 3.30 |
| 80 - 710 | 15A-12 | 1260 | 11/2 | $7{ }^{\prime \prime}$ | Acelate | 3.50 | 2.29 | 2.06 |
| 80 ค 751 | $10 \mathrm{M}-2.25$ | 225 | $1 / 2$ | 3* | Mylar | 1.00 | 2.26 | 2.06 .59 |
| 80 ค 737 | 5TM-36 | 300 | $1 / 2$ | 3 | Mylar | 1.60 | 1.05 | . 94 |
| 80 ค765 | 5TM-6* | 600 | 1/2 | 4 | Mylar | 3.05 | 2.03 | 1.83 |
| 80 R 714 | $15 \mathrm{M}-6$ | 600 | $11 / 2$ | $5{ }^{\circ}$ | Mylar | 2.65 | 1.73 | 1.56 |
| 80 ค 716 | 10M-9 | 900 | 1 | $5{ }^{\circ}$ | Mylar | 3.60 | 2.35 | 2.12 |
| 80 ค 725 | $5 \mathrm{M}-12$ | 1200 | $1 / 2$ | $5{ }^{\circ}$ | Mylar | 4.55 | 2.97 | 2.68 |
| 80 ค 739 | 5TM-12* | 1200 | $1 / 2$ | $5{ }^{\prime \prime}$ | Mylar | 4.75 | 3.11 | 2.79 |
| $80 \cap 715$ | $15 \mathrm{M}-12$ | 1200 | $11 / 2$ | $7 *$ | Mylar | 4.25 | 2.77 | 2.50 |
| $80 \text { ค } 717$ | 10M-18 | 1800 |  | $7{ }^{\circ}$ | Mylar | 6.20 | 4.05 | 3.65 |
| 80 п 712 | $5 \mathrm{M}-24$ | 2400 | 1/2 | $7{ }^{\circ}$ | Mylar | 7.85 | 5.14 | 4.61 |
| 80 ก 750 | 5TM-2t* | 2400 | 1/2 | $7{ }^{*}$ | Mylar | 8.75 | 5.71 | 5.14 |

264-C1 SNAP-LOAD TAPE CARTRIDGE. For cartridge tape players. Contains 560-1t. of "Red Seal" tape. "Mylar" base for strength, 1 mil tape thickness. 9 oz .
W R 797. List, \$4.50
NET 2.70
"LIVING LETTERS" 3" TAPE. With mailable carton. 2 oz.

| Stock No. | $\begin{aligned} & \text { Mfr's } \\ & \text { Type } \end{aligned}$ | Base | Foot. oge | Lis! | NET EACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 1-11 | 12-Up |
| 80 R 542 | 111.1.5 | Acetate | 150 | \$. 70 | . 46 | . 41 |
| 80 R 502 | 150.2 .25 | "Mylar" | 225' | 1.00 | .66 | . 59 |
| 80 R 530 | 200-3 | Tensilized | 300' | 1.60 | 1.05 | . 94 |

EMPTY PLASTIC REELS. With index box. 4 oz .

| Stock No. | Reel Size | List | I-II, EACH | 12-UP, EACH |
| :---: | :---: | :---: | :---: | :---: |
| 80 R 559 | 3* | 25c | 178 | 158 |
| 80 R 563 | $4{ }^{\prime \prime}$ | 55 c | 374 | 338 |
| 80 R 558 | 5* | 65 c | 448 | 398 |
| 80 ค 556 | 7* | 75c | 50 | 45 |

ONE-REEL MAILING BOXES. 3 oz .

| 80 R 562 | $5^{\prime \prime}$ | $15 c$ | 108 | 98 |
| :---: | :---: | :---: | :---: | :---: |
| $80 R 561$ | $7^{\prime \prime}$ | 20 c | 138 | 128 |
| 80 R 560 | $101 / 2$ | $30 c$ | 208 | $18 \%$ |

TYPE 24 LEADER \& TIMING TAPE. Dispenser pkg. 3 oz .



80 R 596. 8000 Quick-Load Cartridge. Contains 560 feet. High. potency oxide for cartridge players. 9 oz .

NET 2.84
80 R 557. 41-1/2S Splicing Tape. Non.run adhesive on one side. $150^{\circ}$. $1 / 2^{\prime \prime}$ wide; handy dispenser. 3 oz .

NET 34c
30 R $57751-\% / 32$ S Aluminized Sensing Tape. For recorders with automatic "stop" and "reverse" controls. Adhesive on one side, foil on other. 150". Dispenser pkg. 3 oz .

EACH 1.85

## TYPE 282 "SANDWICH" TAPE $11 / 2$ MIL MYLAR

Provides superb fidelity. Features protective, micro-thin plastic shield over oxide coating. Eliminates rub-off, wears up to 30 times longer, reduces tape recorder maintainance and head wear. Av. shpg. wt., 10 oz .

| Size | Reel Color |  |  |  |  | List | NETEACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Clear | Med | Biu* | Green | Vellow |  | 1-11 | 12-Up |
| $5{ }^{\circ}$ | 80 1578 | 80 A579 | 80 1580 | 80 1581 | 80 1582 | \$3.19 | 2.02 | 1.82 |
| $7^{\circ}$ | 80 R583 | 80 R586 | 80 R587 | 80 H589 | 80 ค590 | 4.95 | 3.23 | 2.91 |

VIBRANT SERIES TAPE. For full.frequency recordings. Rigid production control assures consistency in oxide thickness-reduces dis. tortion and background noise. Response: 0-18,000 cps. "Tensilized. 10 oz .

| Stock No. | Mir'g <br> Туро | $\begin{aligned} & \text { Lgth. } \\ & \text { Fe. } \end{aligned}$ | M II | Neal Slize | Base | List | $\frac{\text { NET }}{\text { 1-23 }}$ | $\frac{E A C H}{124-U D}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 80 ค 754 | 701 Cl | 600 | $11 / 2$ | $5{ }^{\circ}$ | Acetate | 1.75 | 1.13 | 1.03 |
| 80 R 756 | 703 C 1 | 900 |  | 5 | Acetate | 2.50 | 1.62 | 1.47 |
| 80 ค 755 | 702 Cl | 1200 | $11 / 2$ | 7* | Acerate | 2.95 | 1.91 | 1.71 |
| 80 R 757 | 704 Cl | 1800 | 1 | $7^{\circ}$ | Acetate | 4.25 | 2.74 | 2.50 |
| 80 R 758 | 707 Cl | 900 | 1 | 5* | Mylar | 2.85 | 1.86 | 1.68 |
| 80 R 761 | $709 \mathrm{Cl}{ }^{\circ}$ | 1200 | $1 / 2$ | 5 | Mylar | 4.50 | 2.91 | 2.65 |
| 80 R 760 | 708 Cl | 1800 |  | $7{ }^{*}$ | Mylar | 4.95 | 3.23 | 2.91 |
| 80 ค762 | 710․ ${ }^{\text {¢ }}$ | 2400) | $1 / 2$ | $7{ }^{\circ}$ | Mylar | 7.95 | 5.15 | 4.67 |

## RCA TAPE REELS AND ACCESSORIES


0 R 7e9. $7^{7}$ Empty Reel. With box. 4 oz...........................................
0 R 752. 501-C1 Tape Chest. Holds $5-5^{\circ}$ reels. Simulated leather covering. $5 \frac{8}{8} \times 41 / 16 \times 53 / 6^{2} .8$ oz. . . . . . . . . . . . . . . . . . NET 75c
80 R 5e5. 547-C4 Tape Shelf. Holds $12-7^{\prime \prime}$ reels. Simulated leather covering. $13 \times 10 \times 15^{\circ} .8$ oz.......................... NET 59 .
R 592. 516-C1 Head Demagnetizer. For $110-120$ v., $50-60$ cycle AC. 5 02. List, $\$ 4.85$

NET 2.s


STANDARD-1 $1 / 2-$ MIL ACETATE. Plastic reels except *NAB aluminum ( $3^{\circ}$ center opening). $80 z$

| Stock No.l | Type | Footoge | Reel | tist | EACH | Lot Price |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 80 R 648 | 151 | $150{ }^{\prime}$ | 3 " | \$0.70 | . 46 | . 41 † |
| 80 R 647 | 351 | 300 | 4" | 1.35 | . 88 | . $79 \dagger$ |
| 80 R 637 | 651 | $\mathrm{CXOF}^{\prime}$ | 5 " | 2.25 | 1.47 | $1.32 \dagger$ |
| 80 R 627 | 1251 | $12000^{\circ}$ | $7{ }^{\prime \prime}$ | 3.50 | 2.29 | $2.06 \dagger$ |
| 80 R 628 | $2551 \mathrm{R}^{*}$ | $25000^{\prime}$ | 101/3" | 13.90 | 7.12 | 6.41 |

$\dagger$ NET EACH, 10 or more. $\ddagger$ NET EACH, 5 or more.
"LONGER-RECORDING"-1-MIL ACETATE. $50 \%$ more playing time. Plastic reels except "NAB alum. ( $3^{*} \mathrm{ctr}$. hole). 8 oz.

| 80 | R 611 | 941 | $900{ }^{\circ}$ | 5 " | \$3.50 | 2.29 | 2.061 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 80 | ค 612 | 1841 | $1800{ }^{\prime}$ | $7 *$ | 5.50 | 3.60 | 3.231 |
| 80 | A 617 | 3641 K | 3c(0) $)^{\prime}$ | 101/3" | 12.85 | 8.40 | 7.56 |

†NET EACH, 10 or more. $\ddagger N E T$ EACH, 5 or more.
"LONGER-RECORDING"-1-MIL "MYLAR." $50 \%$ more record. ing time. On plastic reels except "NAB aluminum reel (3" center hole). Self-mailer carton. 1202.

†NET EACH, 10 or more. $\ddagger$ NET EACH, 5 or more.
COLORED BASE-1 $1 / 2$. MIL ACETATE. Same high quality as acetate base (above). Plastic reels. Av. wt., 802

| No. | Green Stock | No. | Blue Foo | Foologe | Reel | EACH | 10.Up, EA. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 80 R 650 | 651096 | 738 | 65113 | $\mathrm{COH}^{\prime}$ | 5 | 1.47 | 1.32 |
| 80 R 652 | 1251G96 | - 7391 | 1251 B | $1200^{\prime}$ | $7{ }^{\prime \prime}$ | 2.29 | 2.06 |
| LOW-PRINT. "11/2-mil acetate. $\dagger 11 / 2$-mil "Mylar." 12 oz . |  |  |  |  |  |  |  |
| Stock ${ }^{\text {No. }}$ | Type | Footoge | Reel | 1-4, EA. |  | 5-9, EA. | 10-UP, EA. |
| 80 R 608 | 1251. ${ }^{\text {* }}$ | 1200 | $7{ }^{\prime \prime}$ | 2.80 |  | 2.80 | 2.53 |
| 80 ค 607 | $2551 \mathrm{R}-\mathrm{M}$ * | $250{ }^{\circ}$ | 101/2" | - 8.16 |  | 7.35 | 7.35 |
| 80 ค 609 | $1271 \mathrm{M} \dagger$ | 1200' | 7 | 3.33 |  | 3.33 | 3.00 |
| 80 ค 610 | $2571 \mathrm{~K}-\mathrm{Mt}$ | $2500^{\prime}$ | $101 /{ }^{\prime \prime}$ | - 8.82 |  | 8.82 | 7.94 |

TAPE RECORDER REELS. $101 / 2^{*}$. With box. "3" center. Wt. \& vz.


80 R 618. "Mylar" Self-Timing Leader. Has spaced markings for timing. White. 100 ft .5 oz. List, 55 c . . . . . . . . . . . . . . . . . NET 37 c COLORED EMPTY PLASTIC REELS. In popular colors. Sup. plied in boxes. Av. wt., 4 oz.

| $\begin{aligned} & \text { Revel } \\ & \text { Size } \end{aligned}$ | Slock No. |  |  |  |  | List | net fach |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Clear | Red | Yellow | Green | Blue |  | 1.9 | 10.Up |
| 5. | 80~ 695 <br> 80 A 685 | 80 R65s | 80R663 | 80 80 R 670 |  | ${ }^{60 \mathrm{c}}$ | 390 496 | 356 448 |

ONE-REEL BOXES. *Self.mailer. Shpg. wt., 3 oz.

| Stock No. | Mfr's Type | Reel Size | List | 1.9, EACH | 10-Up, EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 80 R 602 | $3 \mathrm{MB}{ }^{\text {- }}$ | $3{ }^{\circ}$ | 15c | 10 c | 98 |
| 80 ¢ 603 | 5R | 5* | 20 c | 13 c | 2. |
| 80 R 605 | 7 B | $7 *$ | 20 C | $13 ¢$ | 12. |

TEMPERED "MYLAR". Has twice the strength of conventional $1 / 2-$ mil tape. Plastic reel. Av. shpg. wt., 8 oz.

| Stock No. | Type | Reel | Length | List | 1.9, EA | IO. Up.EA. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 80 R 619 | 1231 T | $5^{\circ}$ | $1200^{\circ}$ | $\$ 5.45$ | 3.56 | 3.20 |
| 80 R 622 | 2431 T | $7^{\prime \prime}$ | $2400^{\prime}$ | $\mathbf{9 . 5 0}$ | 6.20 | 5.59 |

80 R 124. SL-30S Identification Labels. Self-adhesive, $1 / 2 \times 2^{\prime \prime}$ labels. 30 per pkg. $402 . . . . . . . . . . . .$. ............. PER PKG. 12 c 80 R 606. Head Alignment Tape, $300-\mathrm{ft} .4^{\circ}$ reel. $1 \frac{1}{2}$-mil "Mylar." Shpg. wt., 4 oz. List, $\$ 10.00$

NET 5.88
TYPE 400 HEAD DEMAGNETIZER. Demagnetizes tape recorder heads. Reduces noise and distortion. Consists of an AC magnet with pole pieces shaped to fit contour of recording head. Easy to use. Case dia., $1 \frac{13 / 4}{}$. For $110-120 \mathrm{v}$., 60 cycle AC. 1 lb . 80 R 649.


COMBINATION OFFERS-TAPE IN CHESTS. Get the record. ing tape of your choice, plus a convenient case to store it in. At tractive durable chest holds five reels. $8 \times 7 \frac{3}{4} \times 7 \frac{1}{2}$. .

| Stock No. | Type | Tape | Reels | Lbs. | Lisp | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 80 R 804 | SC. 7 | "Standard" | 5-1200 | 8 | \$17.50 | 11.45 |
| 80 R 806 | LC. 7 | "Lifetime" | 5-1200' | 8 | 21.25 | 13.87 |
| 80 R 805 | PI | "Plus 50 | 5-1800' | 0 | 29.00 | 18.96 |
| 0 R | 7STC | ape Cliest Only |  |  | 1.50 | 98 |

SOUNDCRAFT "MAGNA-SEE." See the sound track on your recorded tapes with this unique kit. Tape is run through a col. loidal iron suspension, which deposits fine iron particles on the magnetic track. Deposit pattern indicates head allgnment, and wear. Kit includes $1 / 2-$ pt. can of iron suspension, jewelers' "loon," plastic tray, a roll of transparent tape with 4 slides, instructions Shpg. wi., $1 \frac{1}{2}$ lbs
80 R 139.
net 7.95
IRON SUSPENSION. $1 / 2$-pt. can. For above. $3 / 4 \mathrm{lb}$. 80 R 187.
"LIFETIME"-1 $1 / 2$-MIL "MYLAR." Micropolished. On plastic reels. Av. shDg. wt., $80 z$.

| Stock No. | Mfr's Type | Footoge | Reel Sizo | 1-9, EA. | 10-UP, EA. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 80 R 815 | L-6 | $600^{\circ}$ | $5^{\circ}$ | 1.73 | 1.56 |
| 80 R 820 | L.12 | $1200^{\prime}$ | $7^{\circ}$ | 2.77 | 2.50 |

STANDARD-1 $1 / 2$-MIL ACETATE. Micropolished. On plastic reels. Av. shpg. wt., Boz.

| 80 | R 800 | $\mathrm{~S}-1$ | 150 | $3^{\prime \prime}$ | .41 | .38 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 80 | R 801 | $\mathrm{~S}-3$ | $300^{\circ}$ | $4^{\prime \prime}$ | .81 | .73 |
| 80 | R 802 | $\mathrm{~S}-6$ | $600^{\prime}$ | $5^{\prime \prime}$ | 1.37 | 1.23 |
| 80 | R 803 | $\mathrm{~S}-12$ | $1200^{\circ}$ | $7^{\prime \prime}$ | 2.29 | 2.06 |

"PLUS-50"-1-MIL "MYLAR". $50 \%$ more footage. 8 oz.

| 80 | R 823 | PL-2 | $225^{\circ}$ | $3^{\prime \prime}$ | .62 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 80 | R 821 | PL-9 | $900^{\prime}$ | $5^{\prime \prime}$ | 2.22 |
| 80 R 822 | PL.18 | $1800^{\prime}$ | $7^{\prime \prime}$ | 3.79 | 3.41 |

XP-24 "PLUS 100"-1/2-MIL "MYLAR." Extra-play, micropolished. Requires careful handling. 2400'. $7^{\prime \prime}$ plastic reel. 14 oz. 80 R 824, 10-Up, EACH 3.82 NET EACH4.25


## MAKE FAST, RELIABLE TESTS ... SAVE CALL BACKS <br> SELL MORE TUBES ... ASSURE CUSTOMER SATISFACTION



## MODEL 700 "DYNA-QUIK" TUBE TESTER

## A protessional dynamic mutual conductance tube tester for

 today and tomorrow. Obsolescence-proof circuit features multiple-socket section-just plug tube in proper socket and it is ready to check-plus simplified switching section for checking new tube types. In addition to testing radio and TV types, unit checks voltage regulators, thyratrons, and radio hybrid types, European hi-fi tubes, and industrial types. Includes sockets for nuvistors, 10 -pin tubes and 12-pin Compactrons. Has provision for new sockets. Checks each section of multi-section tubes separately. Tests for all shorts, grid emission, leakage and gas. Grid emission test is adjustable, with sensitivity to over 100 megohms. Makes quick "life" test. Large $4 \frac{1}{2}$ " plastic meter has easy-to-read "Good-Bad" scale. With complete reference chart in cover. In leatherette-covered case. $161 / 8 \times 15 \% / 45 \% /{ }^{\prime \prime}$. For $105-125 \mathrm{v}$., $50-60$ cycle AC. Wt., 16 lbs. 87 FX 385. $\$ 9$ Monthly.NET 166.55


MODEL 600 "DYNA-QUIK" TUBE TESTER
A low-cost, high-quality emission type tube tester. Checks all TV and Radio tubes, plus nuvistors, 10 -pin tubes, 12 -pin compactrons, voltage regulators, thyratrons, auto radio hybrid tubes, European hi-fi types, and most industrial tubes. Determines tube capabilities under simulated load conditions. Rejects only tubes that are definitely bad. Checks each section of multi-section tubes separately. Features adjustable gridemission test, sensitive to over 100 megohins. Tests for shorts, leakage and gas. Has phosphor-bronze socket contacts. In leatherette. $8 \frac{1}{2} \times 11 \times 4 \frac{1}{2}$. For $105-125 \mathrm{v}$., 50.60 cycle AC. $53 / 4 \mathrm{lbs}$. 87 FX 386. \$5 Monthly. .

NET 68.55



NEWI 3-in-1. uniquely designed, compact tester. In one instrument you get these 3 qualliy testers: 1. Tube Tester 2. VOM 3. Rejuvenator

## NEW MODEL 625 DYNA-TESTER

An extremely versatile instrument combining a tube tester, VOM and CRT in one compact unit. Tube tester section's coverage is the same as the Model 600 (at left). Checks for shorts, grid emission leakage and gas. Adjustable grid emission check to over 100 megohins. VOM section offers 7 ranges: 3 DC ranges-$0-10,100,1000 \mathrm{v}$; 3 AC ranges- $0-10,100,1000 \mathrm{v} ;$.1 ohm range3K center scale. CRT section tests and rejuvenates black-andwhites (in set) with heaters up to 50 v . Checks for leakage, shorts and emission. Removes shorts and leakage. Case, $11 \frac{1}{1} \times 15 \times 41 /{ }^{\prime \prime}$. For $110-120$ v., $50-60$ cycle AC. $121 / 4$ lbs.
65 FX 009. $\$ 7$ Monthly.
NET 137.15

## DELUXE CATHODE REJUVENATOR TESTER

MODEL 440. Quickly checks and rejuvenates color and black-and. white CRT's while still in set. Checks and corrects each gun of color tube separately. Detects opens, shorts, emission, cut-off voltage. Repairs shorts, opens; restores weak emission. Tests all CRT's with $1-12 \mathrm{v}$. filaments including $2.34,2.68$ and $8.4-\mathrm{v}$. tubes and $110^{\circ}$ types. Portable leatherette-covered case. $4 \% \times 8 \times$ $14^{*}$. For $105-125$ v., 60 cycle AC. Wt., 10 lbs.
87 FX 218. $\$ 5$ Monthly
.NET 73.45

## DYNA-SWEEP CIRCUIT ANALYZER

MODEL 1070. Expertly designed for trouble-shooting horizontal, vertical and sync problems in TV sets. Injects horizontal and vertical sync pulses, grid and plate drive signals directly into output trnasformers. Helps isolate trouble to defective part Checks flyback transformer and yokes for shorted turns, leakage, opens continuity, etc. Also provides B+boost indicator, high voltage indicator, and vertical yoke test signal, $91 / 2 \times 7 \times 5^{\circ}$. For $110-120$ volts, $50-60$ cycle AC. $81 / 2$ lbs.
87 FX 217. $\$ 5$ Monthly.
NET 73.45

## BUDGET-PRICED CRT REJUVENATOR

MODEL 420. Checks and rejuvenates black-and-white CRT's in set. Checks for leakage, shorts and emission. Removes shorts and leakage. Tests CRT's at 2,6 and 8 v., including $110^{\circ}$ tubes. Compact, two-tone plastic and metal case, $83 / 8 \times 63 / 4 \times 3 \%{ }^{4}$. For $110-120$ volts, $50-60$ cycle AC. Shpg. wt., $51 / 2$ lbs.
65 F 010. $\$ 5$ Month/y...
NET 53.85

## EASILY CHECK ALL CIRCUITS . . . PINPOINT ANY TV TROUBLE WITHIN MINUTES . . . CUT SERVICING TIME IN HALF . . .

## MODEL 1076 COMBINATION TELEVISION ANAEYST

A versatile alf-in-one instrument combining a miniature TV transmitter with the famous "Dyna-Sweep" circuit analyzer, to give a complete television analyst. Saves endless hours of labor and assures proper correction. Injects RF. IF video or audio signal directly into any stage of black-and-white or color TV sets to isolate and pinpoint trouble. "Dyna-Sweep" sectlon injects horizontal and vertical sync pulses, plus grid and plate drive signals for checking sync and sweep stages. Also offers: switch-type tuner for instant and accurate channel selection from 2.13; negatlve bias supply for sync overload and AGC troubles; AGC keylng pulse for troubleshooting gated AGC systems; high-level test signal for modulating TV picture tubes directly.

In addition to generating black and white patterns, the 1076 Analyst generates white dot, crosshatch and color bar patierns for color convergence adjustments. Generates full color rainbow display and color bar pattern to test color sync circuits, check range of hue control and align color demodulators. Size, 101/x $17 \times 10^{-}$. For 110.120 volts, 60 cycle AC. Shpg. wt., 29 Ibs.
87 FU 222. $\$ 15$ Monthly.
NET 293.95


MODEL 1076
A complete TV Analyst-increases manpower by decreasing labor time.

In One Unit: Signal Generator, Power Supply, Milliammeter. VTVM, Battery Tester, Ohmmeter, plus 1 n -and-Out-of-Clrcult Transistor Tester


## MODEL 960 TRANSISTOR RADIO ANALYST

A complete transistor radio analyst, combining all the instruments needed for a quick, thorough check. Injects RF, IF signals and audio tones directly into all circuits stage-by-stage to isolate and pinpoint exact trouble within minutes. Unique "Dyna-Trace" single-point probe needs only one contact to transistor, speeding in-circuit testing. Meter has "Good-Bad" scale for leakage and beta. Also determines whether transistor is NPN or PNP. Power supply provides from 1 to 12 volts in $11 / 2$ volt steps, and has meter with 2 current ranges- 150 ma and 15 ma . Signal generator tunes from 250 kc to 2 mc in two bands. VTVM has two ranges- 1.5 and 15 volts. Ohmmeter reads up to 1 meg. ohm and tests front-to-back ratio of diodes. In handsome, sturdy metal case, $121 / 673 / 6 \times 4 \%$. Complete with valuable Japanese-toAmerican transistor cross-reference chart. For 110.120 volts, 50 . 60 cycle AC. Shpg. wt., 8 lbs.
87 FX 358. $\$ 5$ Monthly.
NET 97.95

## DELUXE MODEL 360 "V-O-MATIC" VOM

An outstanding VOM featuring an individual, full-size scale for each range. Range switch automatically sets correct directreading scale. Sensitivity: 20,000 ohms/volt DC; 5000 ohms/volt AC. Ranges: AC and DC volts, 0-3-15-60-300-1000-6000; DC ma, 0-100; DC ma, 0-5-100-500; DC amps, 0-10; resistance, 0.1000 . 10,000 ohms, $0.1-100$ megs. Accuracy: $3 \%$ DC, $5 \%$ AC. Meter protected against overload and burn-out. Size, $61 / 4 \times 81 / \times 41 / 4$ With batteries, leads, extra scales for audio power, db , peak-to peak volts, and capacity. Shpg. wt., $41 / 2 \mathrm{lbs}$.
87 F 212. $\$ 5$ Month/y.
NET 58.75

## MODEL 375 AUTOMATIC VTVM

A deluxe VTVM featuring direct, error-free readings without multiplying. Range switch automatically selects correct, fullsize scale. Ranges: DC.AC rms and AC D.p v. $0 \cdot 1.5 \cdot 5 \cdot 15 \cdot 50 \cdot 150$. 500-1500; DC ma. 0.5-50-500; resistance, $0.500-5000 \cdot 50,000-$ $500,000 \mathrm{ohms}, 0-5-1000$ megs. Input, 11 megs on all DC ranges, Accuracy, $\pm 3 \%$ of full scale AC and DC. Features: 100 на meter movements, $1 \%$ multiplier resistors, anti-parallax mirrored scale. With battery, probe and swivel stand. Size, $6 \frac{3}{4} \times 10 \frac{3}{4} \times 4^{\prime \prime}$. For 110.120 v ., 50.60 cycle AC. 9 lbs.

87 FX 586. \$5 Monthly.
NET 88.15

## MODEL 850 COLOR TV ANALYST

An advance-design Analyst making color TV installation and servicing simple and accurate. Provides crystal controlled sync system. Gives excellent line and dot stability for static and dynamic convergence and for linearlty adjustments. Generates white dot, crosshatch, vertical lines, horlzontal lines, burst pulse and individual colors. Tuned, switch-selected RF signals are available for channels 3,4 and 5 . Exclusive gun killer, with front panel switch control, makes it easy to disable any combination of 3 color guns. Sweep jack provides a 15,750 cycle sawtooth signal for simple demodulator alignment. Has video output jack and level control for positive and negative polarity; power off-standby-on switch. Deconverging assembly ellminates need for continued static convergence adjustments during set-up. Size, $9 \times 121 / 2 \times 81 / 2^{\circ}$. For 110.120 volts, 60 cycle AC. Wt. $141 / 2 \mathrm{lbs}$.
65 FX 012. S6 Monthly.
NET 195.95


## Test Equipment Famous for Superior



NEW WODEL 6000A TUBE TESTER
Checks transistors (both 5 and 7 -pin), diodes, Compactrons, Novars, 5 and 7 -pin Nuvistors and 10 -pin miniatures, as well as octals, loctals and 7 and 9 -pin miniatures. Has Hickok-developed $\mathrm{Gm}_{\mathrm{m}}$ circuit. Provides a sensitive inter-element leakage and shorts test, as well as a grid current test. Constant indication of line voltage. Immediate fitament continuity test. Replaceable socket plate for obsolescence protection. Roll chart. Portable. $71 / 2 \times 161 / 4 \mathrm{x}$ $113 / 4^{\circ}$. For $105-125$ v. $50-70$ cycles AC. Shog. wt., 121 lbs.
65 FU 006 .
NET 239.50

## MODEL 000 TUBE TESTER

Hickok-developed $\mathrm{Gm}_{\mathrm{m}}$ circuit. inter.element leakage, filament continuity and grid-current tests. Checks 4, 5, 6, 7-pin, octal, loctal, 7 and 9 -pin miniature tubes. Tests transistors and diodes. Roll chart. Portable. $7 \frac{1}{2} \times 163 / 4 \times 113 / 4$. For $105-125 \mathrm{v}$., $50-70$ cycles AC. 21 lbs.

## 87 FU 187.

NET 179.50
65 F 114. CA-4. Adapter for testing Compactrons, Novars, 5 and 7 -pin Nuvistors and 10 -pin types. Use with any tester having an octal socket. 4 lbs.

NET 49.50 84 F 184. CRT Adapter. For all current Hickock manual testers. 1 lb. . .NET 15.75

## NEW RODEL 539C TUBE TESTER

Industrial and laboratory portable. Hickokdeveloped $\mathrm{G}_{m}$ test circuit. 6 micromho ranges to $60,000 \mu \mathrm{mhos} ; 4 \mathrm{AC}$ signal voltages. Measures inter-element leakage to 50 megohms. Checks 4, 5, 6, 7-pin, octal, loctal. 7 and 9 -pin miniature, 7 -pin in line and 8 -pin round sub-miniature, and acorn tubes, as well as all Compactrons, Nuvistors, and 10 -pin types. Tests VR tubes, low-power thyratrons, "4-digit" types. Provision for plate and heater current measurements. $71 / 2 \times 161 / 9 \times 183 / \%^{\prime \prime}$. For 105 125 v., $50-400$ cycles AC. 39 lbs.
65 FU 005.
NET 485.00

Tests VR tubes to manufacturers' specifications.


123A "CARDMATIC" TUBETESTER
Card-proorams complete "fringe" tests, Gm , saturation and cut-off tests. Portable. With cards. $91 / \times 161 / 2 \times 191 / 2$. For $105-125 \mathrm{v}$., $50-60$ cycles AC. 57 ibs.

## 65 FZ 115.

NET 585.00
87 FU 186. $121^{\text {" }}$ "Cardmatic" Tube Tester. $8 \times 19 \% \times 13 \%^{\circ}$. For 105.125 v., 60 cycles AC. 39 lbs.

## MODEL 890 TRANSISTOR TESTER

Measures AC Beta to $\pm 5 \%$ in or out of cir. cuit. Measures input res., base-em. circuit impedance and $\mathrm{l}_{0}$ in circuit; input res., $\mathrm{l}_{\mathrm{c}}$ and lebo out of circuit. Less batterles, below. $61 / 2 \times 103 / 1 / \times 9^{9} .8 \mathrm{lbs}$.

## 87 FZ 173

.......... NET 137.50
55 J 017, Type 1. Use 4. 2 oz............13e

## NEW MODEL 752A TUBE TESTER

Tests 5 and 7 -pin Nuvistors, Novars. Compactrons, 10 -pin types, as well as $4,5,6$, 7-pin, octal, loctal, 7 and 9 -pin miniature, 7 -pin in-line and 8 -pin round sub-miniature, VR tubes and acorn tubes. $71 / 2 \times 181 / \mathrm{x}$ $163 \%^{\circ}$. For $105-125$ v. 50.60 cycles AC Shpg. wt., 27 Ibs.
65 FU 116.
NET 345.00


## Quality and Dependability



Crystal-controlled, hlgh-output AM.FM sweep and marker generator-a complete alignment instrument. 8 bands from 35 kc to 160 mc FM, 110 kc to 110 mc AM. Has built-in db meter. Provides for internal or external amplitude or Irequency modulation of RF output. AF output, 20-15,000 cps varlable or 400 cps fixed. Choice of 100 kc or 1000 kc crystal output. With crystals, cable assembly. $13 \times 16 \times 7^{\prime \prime}$. For $110 \mathrm{v} ., 50-70$ cycles AC. 33 lbs.
65 FU 120.
NET 315.00


## MODEL 660 COLOR-BAR/DOT/ CROSSHATCH GENERATOR

Lightweight, portable unit for color-TV servicing. All frequencies generated are crystal-controlled and locked together for maximum stability. Color display pattern sequence: orange, red, magenta, blue, cyan, green. White dot and crosshatch size: as small as 2 lines in both horiz. and vert. planes; approximately 300 dots total. 20 vert. and 15 horiz. crosshatch white lines, less those in blanking. Circuit completely compatible with new-design receivers. With crystals. $51 / 8 \times 10 \frac{1}{2} \times 10 \frac{1}{2}$. For $105-125$ v. $50-60$ cycles AC. 21 Ibs. 65 FU 121.

NET 245.00

## MODEL 615 SWEEP AND MARKER <br> ALIGNMENT GENERATOR

Permits complete TV RF and IF alignment; provides harmonic output on UHF. Has an all-electronic sweep-no moving parts. Unwanted amplitude modulation is less than $0.1 \mathrm{db} / \mathrm{mc}$. Marker frequency is $0.5 \%$ or better at any dial setting. $131 / 4 \times 161 / 4 \times 8^{\circ}$. For $110-120$ v., 60 cycle AC. 39 lbs. 65 FU 122.

NET 359.50
65 F 123. Type 75 Termination Pad. Match from 75.90 ohms unbalanced to 300 ohms balanced. Shpg. wt., 2 lbs.... . NET 12.95

## 850P TRANSISTOR ANALYZER

Ideal for use as a "breadboard" in circuit design. Tests transistors under actual operating conditions in any of 6 circuit configurations: common emitter, collector, or base, NPN or PNP. Checks alpha, beta, input and output res., $l_{00,}$ leeo, lebo and power gain. Panel controls set circult conditions. $131 / 2 \times 161 / 2 \times 8^{\circ}$. With leads, less batterles (below). 20 lbs.
65 FU 124.
NET 169.50
55 J 017. Type 1 Battery. Use 10. 2 oz. 13 c

## MODEL 675A OSCILLOSCOPE

Wide-band, high-sensitivity $5^{\circ}$ oscilloscope. Smooth response from $D C$ to 4.5 mc (within 3 db ). Assures undistorted reproduction of $3.58-\mathrm{mc}$ color TV signals. 20 rms mu/inch vertical sensitivity. With lowcapacity probe $13 \times 10 \times 16^{\circ}$. For 105.125 v : $50-400$ cycles. 45 lbs.
84 FU 634.
NET 299.90
65 F 126.35 Demod. Probe. 8 oz, .... 7.75

## NEW CR33 COLOR CRT TESTER

Checks beam current capabilities of all 3 guns of color picture tube. Makes color purity tests of each gun individually. Adapter socket fits all color kinescopes. $61 / 433 / 4 \times 21 / 4^{\prime \prime}$. For $105-125$ v., $50-70$ cycles AC. Shpg. wt.. 3 lbs.
65 F 127.
NET 39.95

## MODEL 656XC COLOR-BAR/DOT/

 CROSSHATCH GENERATORProduces the standard fully-saturated NTSC color bar pattern. Design based on NTSC standards-assures obsolescence prolection. Color generation: 3 primaries, 3 complementaries, plus black and white; I, Q, R-Y,B-Y,G-Y.G-Y. Color phase is accurately set with precision delay lines and referenced to crystal oscillator. Also produces a choice of: crosshatch, vertical lines only, horizontal lines only and smallsize white dots, locked to assure stability. Sound carrier provided for setting TV local oscillator. $71 / 2 \times 16 \frac{1}{4} \times 18 \frac{1}{6}{ }^{*}$. For $105-125 \mathrm{v}$. $60-$ cycle AC. 48 lbs. 87 FU 176.

NET 549.50


## MODEL 870 TRANSISTOR TESTER

Measures both $A C$ and DC beta, to accur. acies well within $5 \%$. Checks collector sat. voltage. Provides low-voltage, highcurrent tests. Controls laid out for fast testing. Roll chart. $71 / \times 14^{4 / 1} \times 113 / /^{-}$. For 115 v., 60 cycles AC. 22 lbs. 87 FU 199.

NET 355.00


## 810 TRANSISTOR-RADIO TESTER

Combination AM signal generator and signal tracer-RF, IF and audio, and transistor tester, High gain. $9 \times 111 / 6 \times 7$. For 105. 125 v., $50-70$ cycles AC. 16 lbs.
87 FU 188.
NET 138.50


## WR-GAA COLOR-BAR/DOT

 CROSSHATCH GENERATOR
#### Abstract

Portable and easy to use, connects to antenna terminals of any color TV receiver. Produces 10 bars of different colors simultaneously. Provides stable fine-line cross-hatch and dot patterns. Fixed number of bars and dots facilitate over-scan and linearity adjustment in both color and black-and-white sets. Sound carrier permits accurate adjustment of receiver. Chroma control helps check color sync lock and color AFC alignment. Color sub-carrier, horizontal sync-pulse and "bar" frequencies are all crystal controlled. With shielded output cable. $10 \times 131 / 2 \times 71 / 2$ ". For 105.125 v.. 50.60 cycle AC. Wrt. 13 ibs. 87 FU 324. $\$ 10$ Monthly.


NET 189.50

## WR-50AK PORTABLE RF SIGNAL GENERATOR KIT

Ideal for alignment and signal-tracing applications in the repair of AM and FM radios and TV neceivers. Provides continuously tunable output from 85 kc to 50 mc , all on fundamentals. Dial calibration is accurate within 1\%. Incorporates builtin 400 -cycle audlo oscillator for internal or external modulation
Cathode-follower output isolates oscillator -maintains waveform, voltage regulation and stability. Attenuator control of RF output level has range of approximately 2000 to 1. Provides at least 0.05 and 0.01 v . rms at high and low connectors, respectively. Shielded outputs. $71 / 2 \times 101 / 2 \times 6^{\prime \prime}$. For 105-125 v.. $50-60$ cycle AC. 10 los. 65 F019. $\$ 5$ Monthly..

NET 37.95

WA-44C SINE/SQUARE WAVE AUDIO GENERATOR
Provides $20 \cdot 200,000 \mathrm{cps}$ output in 4 ranges. Switch selects sine or square-wave output. Square waves have less than $5 \%$ tilt, better than $0.15 \mu \mathrm{sec}$ : rise time. Output: 8 v. rms ninimum with rated load; $\pm 1.5 \mathrm{db}, 30-100,000 \mathrm{cps}$. Distortion: less than $1 / 4 \%$. Has separate 60 CDS output, 10 -to- 1 step attenuator, variable output control. $7 \times 10^{11} 1 / 16 \times 6 \frac{1}{s^{\prime \prime}}$. For 105.125 v .550 .60 cycle AC. Shpg. wt., 12 los.
87 FX 071. $\$ 5$ Monthly
NET 98.50

## WR-69 TV-FM ALIGNMENT SWEEP GENERATOR

Switch selects VHF TV channels, FM. TV video, chrominance frequencies and IF. VHF output on fundamentals. Sweep width variable $50 \mathrm{kc}-20 \mathrm{mc}$ on IF/video and FM, $50 \mathrm{kc}-12 \mathrm{mc}$ on TV. IF/ video output frequency funable from 50 kc to 5 mc -flat within 0.1 db per sweep mc. Blanking circuit. $10 \times 13 \frac{3}{4} \times 7 \frac{1}{4}$ ". For $105-125$ v., $50-60$ cycle AC. 17 lbs .

87 FX 070 . $\$ 15$ Monthly
NET 295.00

## WR-99A CALIBRATED MARKER-GENERATOR

Crystal calibrated, for aligning FM and TV receivers, etc. Covers 19.260 mc . Ideat for color TV servicing. Crystal calibrator provides 240 check points at 1 or 10 mc intervals. Modulation frequencies: 1, 10, $4.5 \mathrm{mc}, 600 \mathrm{cps}$. Sound and picture carrier markers available simultaneously. Output: $0.1 \mathrm{v} . \mathrm{min}$. rms. Double shielded oscillator. $10 \times 133 / 4 \times 71 /{ }^{4}$. For $105-120$ v., 50.60 cycle AC. Shpg, wt., 18 lbs. 87 FU 069. $\$ 13$ Monthly.

NET 242.50

## WR-70A RF-IF-VF MARKER-ADDER

For RF, IF, and video sweep-alignment of TV sets. Four markers: positive peak, negative peak, positive and negative peaks (wide band), and positive and negative peaks (narrow band). Use with marker and sweep generators. 0-60 db attenuation of IF sweep signal. With 4 cables. Size, $71 / 2 \times 10 \frac{1}{2} \times 6 \frac{1}{*^{*}}$. For $105-125 \mathrm{v}, 50-60$ cycle AC. Wt., 12 lbs .
87 FU 055. $\$ 5$ Monthly
NET $\mathbf{7 4 . 5 0}$


## 11 A1095 COLOR TEST JIG

Simplifies servicing of color TV receivers. Utilizes RCA type 21CYP22A tri-color kinescope. Eliminates necessity or removing picture tube from cabinet and of reconverging tube when chassis is returned. Control panel provides dynamic and static convergence. Metal cabinet has safety glass and kine mask. With instructions. Wt., 90 lbs.
87 FU 047. $\$ 7$ Monthly.
NET 135.00

COLOR AND BLACK AND WHITE TV SERVICING ACCESSORIES WG-295C VIDEO MULTIMARKER. Provides 7 simultaneous absorption-type markers at preset frequencies. 1 lb .

## 87 F 054.

NET 32.50
WG-304B RF MODULATOR. Permits marker generator modulation by sweep generator video. Wt., 1 lb .

## 87 F 098.

NET 12.50
WG-307BK TV BIAS SUPPLY. 3 outputs, 0 to -15 v ., fixed $-100 \mathrm{v}, 11 / 2 \mathrm{lbs}$.
65 F 093.
NET 11.95
WD-25A TV ISOTAP. Adjustable isolation transtormer. 15 lbs.

## 62 G 516.

NET 22.00
205-W1 DEGAUSSING COIL. Demag. netizes kinescope and chassis. $41 / 2 \mathrm{lbs}$. 65 F 094.

NET 10.53

220-X1 KINESCOPE SOCKET EXTENSION CABLE. Fits any kine tube. $1 / 2 \mathrm{lb}$. 87 F 541.

NET 7.40
$221 \times 1$ CONVERGENCE MAGNET EXTENSION CABLE. Shpa. wt., $1 / 2 \mathrm{lb}$.
87 F 542. ................................. NET 3.50
226-X1 GRID SHUNT SWITCH AND CABLE. For convergence and matrix adjustments. $1 / 2 \mathrm{Ib}$.
87 F 546.
NET 5.50
228-X1 DEFLECTION YOKE EXTENSION CABLE. Shpg. wt., 2 oz 87 F 544.

NET 5.25
13 A100 HIGH VOLTAGE EXTENSION CABLE. Extends high voltage lead to RCA Color Test Jig. $30 z$
87 F 046.
NET 2.50

## ABOUT RCA COLOR TV SERVICING EQUIPMENT

TV servicemenl Color TV is here now-and here to stay. With it comes the need for top-quality color TV servicing equipment. Choose RCA-world-renowned for accuracy and tine craftsmanship. On this page you'll find the latest in color TV servicing equipment designed to make your job easier and more protitable.


## World-Famous for Quality

## WV-38A VOLT-OHMETER

Features 1 volt and 250 mv ranges for transistor servicing. Has large $5 \%$ meter. Offers 20,000 ohms-per-volt input resistance on DC ranges: $0 \cdot 25-1 \cdot 2.5-10-50-250-1000-5000 \mathrm{v}$ AC accuracy: $\pm 5 \%$. Reads $0-20$ megs in 3 ranges. DC current: $0-50$ mamps, 0-1-10-100$500 \mathrm{ma}, 0-10 \mathrm{amps}$. Reads db from -20 to +50 in 4 ranges, DC blocking capacitor for AC readings. $6 \frac{1}{1} \times 51 / 3 \times 31 /{ }^{*}$. With batteries. leads. 5 Ibs.
87 F 095. $\$ 5$ Monthly.
NET 43.95
87 F 096. Model WV-38A(K). As above, in kit form. 5 lbs.
NET 29.95
87 F 090. Model WG-270A Case. For above, 1 lb
NET 4.95

## WV-120A POWER LINE MONITOR

Convenient to use-just plug line cord into AC outtet. Reveals fluctuations and "bounces" in line voltage. Ideal for labs, factories-wherever accurate knowledge of line voltage is required. May be hung on the wall or placed on work-bench. Range: 110.140 v. Accuracy: $\pm 2 \%$ at 120 v. Scale has large, easy-to-read markings. $315 / 16 \times 5 \times 31 / 15^{\circ}$. Wt., $11 / 2 \mathrm{lbs}$. 87 F 048.

NET 14.95

## WV-95AK DEMONSTRATOR KIT

Actual operating instrument provides effective method for teaching principles of multi-range volt-ohm-milliameters. 5 DC ranges ( 20,000 ohms/volt); 5 AC ranges (5,000 ohms/volt), $2.5 \cdot 1000$ v. 3 ohms ranges: 12, 1200, 120,000 ohms center scale. 50 C current ranges: 10 ma 10 amps . Panel, 24×12". Easy to assemble. Detailed instructions. 10 lbs. 65 FU 087. $\$ 5$ Monthly.

NET 37.95


## NEW WV.76A AC VTVM

Measures $A C$ volts trom 10 millivolts to 100 v . rms in 9 overlapping ranges; 9 db ranges: -40 db to +40 db . Rugged 200 microamp meter. Accuracy: $\pm 4 \%$ of full scale deflection. Response of amplifier: $\pm 1 / 2 \mathrm{db}, 20 \mathrm{cps}$ to 500 kc . Input resistance 1.0 megohms: shunt capacitance: 58 mmfd at input terminals. With shielded direct/low capacitance probe and cable. Brushed aluminum panel. Size, $73 / 1 / 55 \% / 0 x$ $43 / /^{*}$. For $105 \cdot 125$ v., $50-60$ cycle AC. Shpg. wt.. 5 lbs.
65 F 088. $\$ 5$ Monthly . . .... NET 79.95

## WV-87B MASTER VOLTOHMYST

Accurately measures DC voltages in high impedance circuits, even with $A C$ present. Reads sine waves (rms) and complex waves (peak-to-peak), even with DC present. Voltage ranges: 0-1.5-5-15-50 v. Meas direct current to 15 amps in 9 ranges, resistance from 0.2 ohms to 1000 meg ohms. Response: flat, 30 cDs 3 mc . Has $\pm 1 \%$ resistors, $\pm 2 \%$ meter movement. Mirrored scale, DC polarity swith, zerocenter scale adjustment. $10 \times 13 \frac{1}{2} \times 7^{7}$. For 110-125 v., $50-60$ cycle AC. 8 lbs. 65 F 089. $\$ 7$ Monthly. ..... NET 137.50

## MODEL WV-37B BATTERY TESTER

Accurately tests virtually all types of portable radio batteries. Checks each battery under its recommended load. Indicates "REPLACE-USABLE-GOOD"--shows percentage of rated output. Leads and probes attached. $67 / 6 \times 51 / 4 \times 31 / 6^{*}$. Wt., 4 lbs. 87 F 097. $\$ 5$ Monthly.

NET 24.95


WV-98C SENIOR VOLTOMMYST
Top-quality VTVM. Incorporates easy-to read zero-center scale, $200 \mu \mathrm{mp}$ meter movement: : \% precision multipliers; diecast aluminum case. $6 \frac{1}{2}$ meter has $\pm 3 \%$ accuracy. In 7 ranges per function -reads $A C$ v. rms and $D C$ to 1000 meg ohms. AC input impedance of 0.83 megohm and 70 mmf to 1.5 megohms and 60 mmf ; 11 -megohm DC Indut resistance. With AC.DC.Ohms probe. For $105 \cdot 125 \mathrm{v}$., $50-60$ cycle AC. Wt., 7 lbs.
65 F 134. $\$ 5$ Month/y
NET 79.50
WV-98C(K) KIT. Above, in kit form.
65 F 133. $\$ 5$ Monthly
NET 57.95


WV-7TE JR. VOLTOHMYST
Electronically protected. 11-meg. input. Ranges: 0-1C00 meg. 7 ranges: AC rms, DC v.: 0.1500 v., 7 ranges; AC p-p v.: $0-4000 \mathrm{v}$., 6 ranges. DC accuracy: $\pm 3 \%$. Response: $\pm 5 \%$. $40 \mathrm{cps} .5 \mathrm{mc} .73 / \times 51 / 2 \times 43 / \mathrm{m}^{4}$. With probes, leads, complete instructions. For operation from $105-120 \mathrm{~V} ., 50-60 \mathrm{cycle} \mathrm{AC}$. Shpg. wt., 5 lbs .
87 F 089.85 Monthly.
NET 43.95
83 F 999. WV-77E (K). As above, but in kit form. Wt., 5 lbs

NET 29.95

## ACCESSORY PROBES FOR ABOVE VOM'S AND VTVM'S

84 F 077. WG-289 HV Probe. Extends DC range of VOM's and VTVM's to $50,000 \mathrm{v}$ Less Multiplier. 1 lb .

NET 7.15 MULTIPLIERS. For WG.289. 2 oz . 84 F 079. WG-206. 1090 meg .
84 F 083. WG-210. 900 meg..NET EA. 2.80

07 F 091. WG-297 HV Probe. For WV.77E Volt Onmyst kit. Same as WG-289, left, but has banana plugs. $1 \mathrm{lb} . . . . . . .$. . NET 7.15 87 F 092. W G-211 Multiplier, 495-megohm multiplier resistor for WG-289 and WG-297 probes. Shpg. wt., 2 Oz.......... NET 2.80

87 F 077. WG-2990 AC-DC-Ohms Probe. Replacement for use with RCA Volt Ohmyst VTVM's. Wt., 1 lb. ................NET 7.95 87 F 052. WG-301A Crystal Diode Probe. Slips on WG.299A, B or C. Extends RF range to 250 mc .8 oz

NET 7.75


5" OSCILLOSCOPE

- Has Z-Axls Input Terminals
- Preset Sweep Positions
- Positive-Look Internal Sync

WO-91A. $5^{\prime \prime}$ wide-band scope for black and white and color TV servicing. Features: dual-band response; wide-band flat within $\pm 1 \mathrm{db}$ from 10 cps to 4.5 mc ; nar-row-band flat within $\pm 6 \mathrm{db}$ from 10 cps to 1.5 mc ; and voltage-calibrated, írequency compensated 3-to-1 step attenuator. Vertical polarity switch. Plus or minus internal sync selector. Sensitivity: narrow band, 0.05 v . p-p/inch ( $0.018 \mathrm{v} . \mathrm{rms}$ ); wide band, 0.150 v p-p/inch ( 0.053 v . rms). Input, 75 mmf and 1 meg direct. With WG-300A probe. $13 \frac{1}{2} \times 9 \times 16 \frac{1}{2}$ ". For $105-125$ v., $50-60$ cycle AC. Shpg. wt., 33 Ibs.
4 FU 049. \$13 Monthly..... NET 249.50
87 F 059. WG-300B Low-Capacitance Probe. Shpg. wt., 1 lo.

NET 9.95
87 F 060. WG-302A Demodulator Probe. Extends range to 250 mc . Input, 2.2 mm . Shpg. wt., 1 lb .

NET 8.50

Model WO-91A

Model WO-33A


## $3^{* *}$ OSCILLOSCOPE

- Sync Locks in up to 4.5 mc
- Input, $90 \mathrm{mmf}, 1 \mathrm{meg}$ Direct

WO-33A. Wide-band responce, 5.5 cps .to 5.5 mc ; narrow-band, 20 cDs to 150 kc ., both within $\pm 3 \mathrm{db}$. Sensifivity; narrowband, $.02 \mathrm{v} . \mathrm{p}-\mathrm{p} / \mathrm{inch}(.003 \mathrm{v} . \mathrm{rms})$; wideband, $0.6 \mathrm{v} . \mathrm{p}-\mathrm{p} /$ inch ( 0.1 v . rms). Sawtooth, 15 cps to 75 kc . Line sweep: $160^{\circ}$ adjustable phase. $83 / 1 / \times 61 / 2 \times 101 / 4{ }^{\prime \prime}$. For $105-125$ volts, $50-60$ cycle AC. 15 lbs . 87 FU 093. \$7 MOnthly ..... NET 129.95
87 FU 094. WO-33A. As above, but in kit form. $\$ 5$ MOnthly................NET 79.95


## LAB MICRO-MHO-METER

- Built-In Calibrating Circuit
- Comparable Accuracy to Tube Manufacturer's Equipment

WT-100A. Measures: true transconductance with $\pm 3 \%$ accuracy; transconductance to $100,000 \mu \mathrm{mhos}$ in 6 ranges; con-trol-grid-to plate and suppressor-grid-toplate transconductance. Reads individual electrode currents, AC heater currents in. cluding 600 -ma series-string TV types; voltage drop across tubes, dry-disc rectifiers and crystal diodes. $8 \times 181 / 2 \times 231 / 2{ }^{*}$. For 105.125 v. $50-60$ cycle AC. 1101 bs . 87 FZ 087.

NET 989.00

## SOCKET PLUG-INS FOR WT-100A MICRO-MHO-METER

65 F 068. WG-229A Multiple. 7 and 9-pin min; 8 -pin octal. 7 oz. . ......... NET 25.00 65 F 069. WG-230A Multipie. Lock-in 8 . pin. 7, 8-pin. 7 oz. 65 F 070. WG-231A Multiple. 6-pin. 7 oz .
65 F 074. WG-232A Multiple. Acorn, sub. min. 7, 8-pin. 7 oz.

65 F 072. WG-233A Industrial. Miniature 7-pin. Wt., 7 oz. . . . . . . . . . . . . NET 25.00 65 F 073. WG-234A industrial. Octal 8 . pin. Shpg. wt., 7 oz..............NET 25.00 65 F 074. WG-235A Industrial. Noval 9. pin. Shpg. wt., 7 02. . . . . . . . . . NET 25.00 05 F 075. WG-236A Kit. Parts for the WT. 100A. Shpg. wt., 7 oz.


## MODEL 314 TUBE TESTER

Quickly tests all recelving tubes. Filament voltages from 0.65 to 117 v. Features Include: modified plate conductance for closer correlation to tube characteristics; improved neon shorts test indicator: variable leakage test. Offers greater circuit sensitivity for the newer tube types. Has large $4^{*}$ trl-colored meter. Variableleakage test indicates leakage from approximately 0.3 megs to over 3 megs. Sturdy gray-leatherette covered wood case, $111 / 2 \times 15 \frac{1}{6} \times 61 / 2^{*}$. For $110-120$ volts, $50-60$ cycle AC. Shpg. wt., 13 lbs.
87 FX 154. $\mathbf{5 5}$ Monthly. ...... NET 89.50
T-2247-BV CRT ADAPTER. (Not illus.) For use with Model 3414 and Model 3444 testers. Permits testing televislon plcture tubes in operation-without removing them from receiver. Wi., 1 fb . 34 F 539.

NET 7.20

## MODEL 344 TUBE ANALYZER

This true dynamic mutal-conductance tube analyzer comprises a complete laboratory-type instrument in a handy portable case. Measures true Gm without any extra compensating factors, using proper DC potentials, 5 kc signal source and a vacuum tube microammeter. Selfchecking circuit checks accuracy of Gm readings on the tester. Also checks plate current cutoff, plots characteristic curves, tests for gas, check's rectifiers under load, etc. In handsome gray leatherette case, $153 / 6 \times 1813 / 6 \times 73 / 5$. (See CG adapter below and T .2247 BV at right.) For 110.120 volts. 60 cycle AC. Shpg. wt., 24 lbs.
83 FU $964 . \$ 14$ Monthly.....NET 279.50
"CG" ADAPTER. Used to extend range of the 3444 tester above to include special tube types. Shpg. wt., $21 / 2 \mathrm{lbs}$.
87 F 197. $\$ 5$ Monthly......... NET 39.50

## 2590 TRANSISTOR TESTER

Tests beta, icbo and Iceo for both power and signal types. Checks transistors for shorts and leakage; dlodes for teakage and forward current. Needs no roll chart. Transistor socket plus $26^{*}$ external leads permit use with any basing arrangement. Meter has 5 scales in black, red and green. Gray case, $85 / 8 \times 115 / 8 \times 5 \%^{\circ}$. For $105-125 \mathrm{v}$., $50-60$ cycle AC. 9 lbs.
83 FX 965. $\$ 5$ Monthly
NET 54.50

## 3432 SIGNAL GENERATOR

Cathode follower output provides high stability as buffer to oscillator. Covers 160 kc to 110 mc ( 220 mc using harmonics). Large, $63 /{ }^{\circ}$ dial has 7 directly catlbrated $160^{\circ}$ scales. Internal modulation variable from $0.100 \%$ at 400 cycles. With output cable. $1511 / 3 \times 111 / 3 \times 61 / 8$. For $110-120 \mathrm{v}$. $50-60$ cycle AC. 12 lbs.
84 FX 677 . $\$ 6$ Monthly.
NET 109.50


## 310 MINIATURE VOM

DC volts: 0-3.12.60-300-1200 at 20 K ohms $/ \mathrm{v}$. AC voits: 0-3-12-60-300-1200 at 5 K ohms/v. DC на: 0-600; DC ma, 0.6-60-600. Ohms: $0.20 \mathrm{~K}-200 \mathrm{~K}$; megs: $0-2 \cdot 20$. Accuracy: $3 \%$ DC. $41 / 6 \times 23 / 4 \times 15 / 66^{\circ} .1 \mathrm{lb}$

84 FC 674. $\$ 5$ Monthly.
NET 37.50
84 F 675. 369 Leather Case. For Model 310 only. Wt., 602.

NET 3.20
10 AMMETER ADAPTER. For above or any VOM with 3 v . AC at 5 K ohms/v. scale. Clamp-on jaws for reading 0-6.12-30.60. 120-300 amps AC without breaking circuit or insulation. $41 / 4 \times 31 / 4 \times 11 / 4.23 / 4$ lbs.

## 87 F 452.

NET 15.50
66 F 590. 379 Leather Case. Holds Models 310 and 10.8 oz.

NET 6.00
1/101 LINE SEPARATOR. (Not lllus.) For readings with 10 , above

## 87 F 153.

NET 6.00
100 VOM AND AMMETER SET. (Not illus.) Includes: $310 \mathrm{VOM}, 10$ adapter, 101 , eather case and 311 leads.
65 F 095 . $\$ 5$ Monthly.
NET 64.50
MODEL 666-R VOM
1 K ohm/v; $\pm 3 \%$ accuraсу. DC/AC v., 0-10-50-2501K.5K. DC ma, 0.10.100; DC amps, 0.1; ohms, 0 . 3 K -300K; megs, 0.3 ; output $v ., \quad 0.10-50-250-1 \mathrm{~K}$ Supplied with battery and leads. $5 \frac{1}{6} \times 3^{1 / 16 x}$ $2^{2} / 10^{\circ "} .11 / 2 \mathrm{lbs}$.
84 F 557.
NET 32.50 66-HH VOM. (Not illus.) 1K ohms/v. AC/DC v., $0.10 \cdot 50 \cdot 250-1000-5000 ; D C$ ma, $0-100-500$; ohms, 0 . $2000-400,000.3 \%$ accuracy $5 \% \times 31 / 1 \times \times 2 \% / 10^{*}$ Shpg. wt., $11 / 2$ lbs.
84 F555. $\$ 5$ Monthly
NET 29.50

## VOM ACCESSORIES

HIGH VOLTAGE PROBES. Fully insulated. $11 \frac{13 / 4}{}{ }^{\circ}$ probe with $48^{\circ}$ leads. *For VOM Models $630,630 \cdot \mathrm{~A}$ and 631. †For VOM Models $630-\mathrm{PL}$ and 630 - APL.

| Stock No. | Typo | Volta | EACH |
| :---: | :---: | :---: | :---: |
| 67F133 | T-79.68* | 0.12000 I C |  |
| 87 F 134 | T-79-69* | 0-12000 AC |  |
| 84F544 | T-79-70 | 0.30 000 DC | O |
| 87 F 135 | T-79.71* | 0-30000 AC |  |
| 65 F 098 | T-79-8.3 | 0-100001) |  |
| 65 F 099 | T-79-165 ${ }^{\text {T }}$ | 0-10 000 AC |  |
| 65 F 100 | T-79-130 | 0-25 000 DC | , |
| 65 F 101 | T-79-166 | $0-25000 \mathrm{AC}$ |  |

CARRYING CASES AND STAND. *Black cowhide. TN225A33 is stand.

| ock No. | Typo | For Teetere | W |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

611 and 311 LEADS. 611 allows use of 10 adapter with $630,630 \cdot \mathrm{~A}, 630 \cdot \mathrm{NA}, 630-\mathrm{PL}$. 631.311 separates 10 from 310.1 lb . 87F347. 611 87F174. 311...EACH 2.10


## MODEL 800 VOM

Newly designed for lab serviceability, features 70 ranges- $\pm 11 / 2 \%$ on DC to 1200 v.; $\pm 3 \%$ on AC to 1200 v . DC volts: 8 ranges to $6000(10,000 \mathrm{ohms} / \mathrm{v}) ;$.8 ranges to $3000(20,000 \mathrm{ohms} / \mathrm{v}$.). AC voits: 6 ranges to 6000 ( 5000 ohms/v.); 6 ranges to 3000 ( 10,000 ohms/v.) Db.: -30 to +70 in 12 ranges. DC microamps: 1 range to 120 ( 240 mv ): 2 ranges to $600(120 \mathrm{mv}$ ). DC milliamps: 4 ranges to 1200 ( 240 mv ); 3 ranges to $600(120 \mathrm{mv})$. DC amps: 1 range to $12(240 \mathrm{mv}) ; 1$ range to $6(120 \mathrm{mv})$. Ohms: 3 ranges to $100 \mathrm{~K}, 3$ to 100 megs. Has DC polarity reversing switch, and $7^{\circ}$ mirror scale. $71 / 2 \times 61 / 4 \times 31 /{ }^{*}$. Supplied with leads and batteries. Shpg. wt., 4 lbs.

## 83 F 216. \$5 Monthly.

NET 89.50

## MODEL $310-\mathrm{C}$ VOM

A new VOM similar to standard 310 (at left), but offers these new features: polarity reversing switch; 15,000 ohms per volt AC sensitivity; and a fully enclosed range switch. $4 \frac{1}{2} \times 23 / 3 \times 15 / 61 \mathrm{lb}$.
65 FC 096. 55 Monthly.
NET 44.50

## TOP-PERFORMING TRIPLETT VOM'S



631 VTVM-VOM. Battery operated VTVM, 0-1.2-6-30-120 v., DC; 11 megs input imp. VOM: DC v., 0-3.12-60-300.12K (20K ohms/ v.); $A C$ and audio volts, 0-3-12-60-300-12K ( 5 K ohms/v.); DC $\mu \mathrm{a}, 0-60$; DC ma, 0-1.2-12-120-1200 (250 mv); DC amps, 0-12 (250 $\mathrm{mv})$; $\mathrm{db},-20$ to +63 ; ohms, $0.1500 \cdot 15 \mathrm{~K}$; megs, 0-1.5-150. With batteries and leads. $311 / 9 \times 51 / 2 \times 7 \frac{112 " \text {. Wt., } 4}{} 4$ lbs.
84 F 546. \$5 Monthly.
NET 69.50
630 VOM. Has $5 \frac{1}{2}$ meter and $1 \%$ precision resistors. Ranges: $D C$ and $A C$ volts, $0 \cdot 3 \cdot 12 \cdot 60 \cdot 300 \cdot 1200-6000$ ( $D C$ at 20,000 ohms/ v., AC at 5,000 ohms/v.): DC current, 0-60 $\mathrm{ma}, 0.1 .2-12 \cdot 120$ ma and 0.12 amps ; resistance, $0-1000-10,000$ ohms and $0-1 \cdot 100$ megs: db, -20 to +77 in 6 ranges: output v., 0-3-12-60-300-1200, 20-positlon switch selects circuit and range. $71 / 2 \times 5 \frac{1}{2} \times 37 / 33^{\circ}$. With batteries, leads. 6 lbs.
54 F 568, \$5 Monthly.
NET 49.50 630-A VOM. As above, but lab type with $1 / 2 \%$ precision resistors, mirror scale. Accuracy, $1 \frac{1}{2} \%$ on DC to 1200 volts. With leads and batteries. 6 lbs .

NET 59.50

630-NA VOM. 70 ranges: $1 \frac{1}{2} \%$ on DC to $1200 \mathrm{v.i} \pm 3 \%$ on $A C$ to 1200 v . DC volts: 8 ranges to 6000 ( 10,000 ohms/v.); 8 ranges to 3000 ( $20,000 \mathrm{ohms} / \mathrm{v}$.). AC volts: 6 ranges to 6000 ( $5000 \mathrm{ohms} / \mathrm{v}$.); 6 ranges to 3000 ( $10,000 \mathrm{ohms} / \mathrm{v}$ ). $\mathrm{Db},-20$ to +77 in 12 ranges. DC microamps: 1 range to 120 ( 240 mv ); 2 ranges to 600 ( 120 mv ). DC ma: 4 ranges to $1200(240 \mathrm{mv}) ; 3$ ranges to 600 ( 120 mv ). DC amps: 1 range to $12(240 \mathrm{mv}$ ); 1 range to $6(120 \mathrm{mv})$. Ohms: 3 ranges to 100K, 3 to 100 megs. $71 / 2 \times 5 \frac{1}{2} \times 311 / 2^{\prime \prime}$ Mirror scale. Supplied with test leads and batteries. Shpg. wt., 4 lbs .
3 F 512. 55 Monthly.
NET 79.50
$630-P L$ VOM. AC and DC V., 6 ranges each, to 5000 v . (DC at $20,000 \mathrm{ohms} / \mathrm{v} . \mathrm{i}$ AC at 5000 ohms/v.); DC current, $0-100 \mu \mathrm{a}, 0.10-$ 100.1000 ma , and $0-10 \mathrm{amps}$; res., $0.1000-$ 10,000 ohms and $0-1-100$ megs; $\mathrm{db},-20$ to +75 in 6 ranges; output v., 0.3-10.50-250. 1000 at $5000 \mathrm{ohms} / \mathrm{v}$. Acc.: $\pm 3 \%$ on DC to 1000 v.; $\pm 4 \%$ on AC to 1000 v.i $\pm 5 \%$ on $A C-D C$ at 5000 v. $71 / 2 \times 51 / 2 \times 311 / 2^{\prime \prime}$. With leads and batteries. 4 lbs. 87 F150. $\$ 5$ Monthly.

NET 49.50

## R-C BRIDGE KIT

MODEL 950-K. Combines an R.C bridge and R-C-L comparator. Measures (in 4 ranges) 0.5 ohms to 500 megs and 10 mmf to 5000 mfd . Has .05 to 20 comparator range. Variable 0.500 v . DC source tests capacitors for shorts and leakage at rated v. Measures power factor of electrolytics. Less solder, leads. $8 \times 10 \times 43 / 4$. For 105-125 v., 60 cycle AC. Wt., 10 Jbs.

83 F 164. $\$ 5$ Monthly.
NET 19.95
84 F 387. Above, Factory-Wired . . 29.95

## RESISTANCE SUB. BOX KIT

MODEL $1100-\mathrm{K}$. (Not illus.) Gives all values that are multiples of ten of $15,22,33,47$. 68 and 100 ohms , from 15 ohms to 10 megs (1-watt, $10 \%$ ). 5 -way binding posts. $33 / 4 x$ $61 / 2 \times 31 / 2$. Less solder, leads. 2 lbs. 83 F 179.

NET 6.95
84 F 652. Above, Factory.Wired.... 10.95

## CAPACITOR SÜB. BOX KIT

MODEL $1120-K$. (Not illus.) Wide range of values from 0.0001 to 0.22 mfd in 18 steps. $\pm 10 \%$ accuracy. Most capacitors rated 600 v ., others, 400 v .5 -way binding posts. $3 y / 1 \times 6 \frac{1}{2} \times 3 \frac{1}{2}$. Supplied less solder, leads. Shpg. wt., 2 lbs.
83 F 191
NET 5.95
84 F 665. Above, Factory-Wired

## Top-Quality Test Instruments . .

Series /Parallel R-C Combination Box


## R-C COMBINATION BOX KIT

MODEL $1140-\mathrm{K}$. Versatile combination of Models $1100 \cdot \mathrm{~K}$ and $1120-\mathrm{K}$ substitution units (see specs., at left). Allows development of differentiating, integratino and other wave-shaping R.C networks. $10 \%$ accuracy. Jack-top binding posts. Less solder, leads. $5 / 46 \times 67 / 6 \times 25 / 66^{\circ} .3 \mathrm{lbs}$ 87 F 350

NET 13.95
87 F 351. Above, Factory-Wired. . . . 19.95

## RESISTANCE DECADE BOX KIT

MODEL 1171-K. Values from 0 to 99,999 ohms in 1 -ohm steps with $1 / 2 \%$ accuracy. Uses 1 -w. resistors. Five 10 -position switches. Comparator position and binding posts for instant substitution. $12 \times 31 / 2 x$ $3^{7}$. Less solder, leads. 3 lbs.
83 F 165. $\$ 5$ Monthly.
NET 19.95
84 F 388. Above, Factory-Wired. . . . 24.95

## CAPACITOR DECADE BOX KIT

MODEL $1180-\mathrm{K}$. (Not illus.) 100 mmf to .111 mfd in 100 mmf steps. 350 WVDC. $1 \%$ micas. Positive detent ceramic switches. Zero capacitance, $7 \mathrm{mmf} .9 \times 31 / 2 \times 31 / 2^{* \prime}$. Less solder and leads. Wt., 3 lbs.

## 83 F 183

NET 14.95
1180. As above, but factory-wired.

84 F 656. \$5 Monthly.
19.95


DELUXE SIGNAL TRACER KIT MODEL 147-K. High and low-gain RF Channels with internal wide-range demodulator permit direct observation of signal. Has output for VTVM or scope. Use as speaker, output transformer, or amplifier: Features RF, AF visual-aural monitoring, magic eye, $5^{\circ}$ speaker, watt-meter, noise localizer, hum balance. Gray case, $9 \times 10 \times$ $5^{\circ}$. With probes; less solder. For $105-125$ v. 60 cycle AC. 10 lbs.
$\mathbf{8 3}$ F 190. $\$ 5$ Monthly
NET 24.95
MODEL 147. As above, but factory-wired. 84 F 664. $\$ 5$ Monthly

NET 39.95


## SIGNAL

 TRACER KIT MODEL 145 K Checks IF, RF, vid. eo and audio circuits. Has speaker, amplifier and noise locator. Use with scope or VTVM for visual tracing. With probes. $713 / 6 \times 5 \% \times 51 / \mathrm{m}$. For $105-125 \mathrm{v}$., 60 cycle AC. 7 lbs.83 F 158. $\$ 5$ Monthly
NET 19.95
MODEL 145. As above, but factory-wired 84 F 385 . $\$ 5$ Monthly

NET 28.95


MODEL 630-K CRT CHECKER KIT. Has bridge for measuring peak beam current (proportional to screen brightness). 2 sockets for 12 and 14 -pin tubes. Neon lamp indicator. $61 / 2 \times 91 / 2 \times 3^{7}$. Less solder. For $105-$ 125 v. 60 cycle AC. 5 lbs.
83 F 177
NET 13.95
MODEL 630 . As above, but factory-wired. 84 F 650

NET 18.95
352-K BAR GENERATOR KIT. Adjusts vertical and horizontal linearity. Produces 16 vertical and 12 horizontal bars. Video tunable over channels 2.6. 3-way antenna cllp. $71 / 2 \times 5 \times 4 \frac{1 / 2}{2}$. Less solder. For $105-125$ v., 60 cycle AC. 4 lbs.

## 83 F178

NET 14.95
MODEL 352. As above, but factory-wired. 84 F 651. $\$ 5$ Monthly

944-K FLYBACK TESTER KIT. Spots defective flyback transformers and yokes in black and white and color TV sets. Also checks continuity. $41 /{ }^{2}$ meter. Gray case. $81 / 2 \times 5 \times 5^{\prime \prime}$. Less solder. For $105-125 \mathrm{v}$. 60 cycle AC. Wt., 5 Ibs.
83 F 184. $\$ 5$ Monthly
NET 23.95
MODEL 944. As above, but factory-wired. 84 F 657. $\$ 5$ Monthly

NET 34.95
612-K CONTINUITY TESTER KIT. (Not Illus.) Battery powered-checks tube fila. ments in series string. Neon lamp indicator. CRT adapter plug. 7, 9.pin, octal and loctal sockets. $61 / 4 \times 31 / 4 \times 2$. With bat teries. Less solder. 2 lbs.

## 83 F 966

NET 3.95
MODEL 612. As above, but factory-wired. 83 F 967

NET 5.95

710-K GRID-DIP METER KIT. Covers 400 kc to 250 mc in 8 ranges. Has sensitivity control, phone jack, $500 \mu$ a meter, plug-in coils, illuminated scale. $21 / 4 \times 29 / 6 \times 61 /{ }^{\prime \prime}$. Less solder. For 110-120 v., 60 cycle AC. Shpg. wt., 3 lbs.
87 F 352. $\$ 5$ Monthly
NET 29.95
MODEL 710. As above, but factory-wired. 87 F 353. $\$ 5$ Monthly

NET 49.95
MODEL 584-K BATTERY TESTER KIT Tests Portable radio " $A$ " and " $B$ " batteries in or out of receiver. Test-switch positions (v.): $1.5,4.5,6.0,7.5,9.0 .22 .5,45$. $67.5,75,90$, spare. $61 / \times 331 / \times 2^{2}$. Less solder. With leads. 2 lbs.
83 F 195
NET 9.95
MODEL 584. As above, but factory-wired.
84 F 671
NET 12.95

## in Both Kit and Wired Form



## AUDIO GENERATOR KIT

MODEL $337-K$. Uses Wien-Bridge type os cillator circuit with $1 \%$ resistors for sine and square waves. Perfect for servicemen, hobbyists, etc. Sine wave range: $20 \cdot 200,000$ cps in 4 bands $\pm 11 / 2 \mathrm{db}$ from $60 \cdot 150,000$ CDS, less than $1 \%$ distortion. Square wave range: $60-50,000 \mathrm{cps}$ in 4 bands. $5 \%$ tilt at $60 \mathrm{cps} .5 \%$ rounding at $30,000 \mathrm{cps}$. Output: 10 v . across 1000 ohms. $6 \frac{1}{2}$ dial has $0-100$ reference scale. Callibration accuracy, $\pm 3 \%$ or $1 \mathrm{cps} .71 \% \times 111 / 67 \% /{ }^{\prime \prime}$. Less solder, leads. For 105-125 v., 50-60 cycle AC. 14 lbs.
83 FX 169. $\$ 5$ Monthly. ..... NET 31.95
MODEL 377. As above, but factory-wired. 84 FU 349. $\$ 5$ Monthly

NET 49.95


-. Push-Pull Outputs Both Ampllifiers

- 5-inch Cathode Ray Tube
- Wide Frequency Range

New

Model 427-K $5^{-}$Wide-Band Scope Kit

Sensitivity, 0.18 V rms per centlmeter. Response, 2 cps to 450 kc . Input imp., 10 meg. Sweep range, $10-100,000 \mathrm{cps}$. External syne input. $121 / 2 \times 81 / 2 \times 167 / 6^{\circ}$. For $105-125 \mathrm{v}$., 60 cycle AC. 30 lbs.
65 FU O6s. $\$ 5$ Monthly
NET 69.95
MODEL 427. As above, but factory-wired. 65 FU 065 . $\$ 5$ Monthly

NET 109.95
488-K ELECTRONIC SWITCH KIT. For viewing 2 patterns on 1 scope. Variable switching, $10-2000 \mathrm{cps}$. Resp., $0-30,000 \mathrm{cps}$ ( $\pm 2 \mathrm{db}$ ). $6 \times 8 \times 6^{\circ}$. Less leads. For 105.125 $v_{4} 50-60$ cycle AC. 7 lbs.
83 F 185. $\$ 5$ Monthly
NET 23.95
MODEL 488. As above, but factory-wired. 84 F 658 . $\$ 5$ Monthly

NET 38.95
SCOPE PROBES. Shielded. AV. Wt. 50 oz.

| Stock No | Type | Descriotion | NET |
| :---: | :---: | :---: | :---: |
| 83F180 | PSD-K | Damodutator Probe Kit. | 3.95 |
| 845653 | PSD | As stove, but wired. | 5.95 |
| 83 F 181 | PD-K | Disect Probe Kit. | 2.95 |
| 64F654 | ${ }^{\text {PO }}$ PLK | As sbove. But wired. | 3 |
| 83 <br> 84 <br> 4 | PIC-K $P L C$ | Low-Capacity Probe Kit. As above, but wired. | 5 |



## 5* OSCILLOSCOPE KIT

MODEL $460-\mathrm{K}$. Wide-band, for color and monochrome TV. Response flat from DC to 4.5 mc , usable to 10 mc . Reproduces 3.58 mc color TV sync burst. Vertical sensitlvity, $25 \mathrm{mv} / \mathrm{inch}$. Permits peak-to-peak measurements. Full-screen DC vertical positioning, $2 \times$ horizontal positioning. Sweep: 10 cps to 100 kc , plus low frea. sweep. Size, $13 \times 81 / 2 \times 16^{\circ}$. For 105.125 volts, $50-60$ cycle AC. Shpg. wt., 29 lbs.
83 FU 193. $\$ 5$ Monthly MODEL 460. As above, but factory-wired. 84 FU 668. $\$ 7$ Monthly ... ..... . NET 129.50

## VOLTAGE CALIBRATOR KIT

 MODEL 495-K. (Not illus.) Ranges: 0. 1. 1.10-100 v., $p \cdot p_{1}$ Accuracy. $\pm 5 \% .5 \times 7 \frac{3}{1} \times 4^{*}$. Less leads. For 105.125 v., 60 cycle AC. Wt., 4 lbs.NET 12.95
83 F 176.
actory-wired.
MODEL 495. As above, but factory-wired.
B4 F 384 ............................... 17.95

RF SIGNAL GENERATOR KITS


MODEL 320-K. Uses stable Hartley oscil lator. Covers 150 kc to 34 mc on funda-mentals-to 102 mc on harmonics. 400 cps modulation. $9^{\circ}$ dlal, calibrated in 7 bands. $8 \times 1 \times 43 / 4$. Less solder. For 105.125 volts, 50.60 cycle AC. 10 lbs .

83 F154. 55 Monthly.
NET 19.95 MODEL 320. As abiove, but factory-wired. 34 F 394. $\$ 5$ Monthly.

NET 29.95 MODEL 322-K. Kit, as above, but with individual calibration of each of 5 bands. 65 F 066. $\$ 5$ Monthly. .NET 23.95 MODEL 322. As above, but factory-wired. 65 F $067 . \$ 5$ Monthly

NET 34.95 MODEL $315-$ K. $1 \%$ accuracy from 75 kc to 150 mc . Internal 400 cps sine wave generator with attenuator. $13 \times 12 \times 7^{\circ}$. For 105-125 $v_{.} 50-60$ cycle AC. Wt., 20 lbs.
B3 FU 162. \$5 Monthly
NET 39.95 MODEL 315. As above, but factory-wired. 84 FU 395. $\$ 5$ Monthly.

NET 59.95

MODEL 324-K. An accurate, wide-range signal-generator. The Model 324-K provides modulated or unmodulated RF sional and continuous output from 150 kc to 435 mc . Has expanded frequency range of 6 fundamental bands: $150-400 \mathrm{kc}, 400 \cdot 1200$ $\mathrm{kc}, 1,2-3.5 \mathrm{mc}, 3.5-11 \mathrm{mc}, 11-37 \mathrm{mc}$ and 37. 145 mc . One harmonic band covers 111. 435 mc . Calib. accuracy, $\pm 1.5 \%$. Output impedance, 50 ohms. Internal modulation of 400 cps variable from 0 to $50 \%$; can be used for audio testing. Input has gain control for use with external modulator. Colpitts RF oscillator is directly modulated by cathode follower. Fine and coarse RF attenuators. 6:1 vernier tuning knob. Size, $8 \times 10 \times 4 \frac{1 / 2}{\prime \prime}$. For $105-125$ volts, $50-60$ cycle AC. Shpg. wt., 10 lbs
83 F 192. $\$ 5$ Monthly.
NET 26.95
MODEL 324. As above, but factory-wired 84 F 666. $\$ 5$ Monthly.

## EICD Accurate, Versatile Test Equipment for All. .



222-KVTVM

Meters With Versatillty-Compactness-

MODEL 222-K. 11-meg DC input, $41 / 2^{\circ}$ me. ter and $1 \%$ multiplier resistors. Ranges: AC-DC v., 0-3-15-75-300-1500; resistance, 0.2-1000 meg in 5 ranges. With leads; less solder. Size, $81 / 2 \times 5 \frac{3}{4} \times 7$. For $105-125 \mathrm{v}$., $50-60$ cycle AC. 7 lbs .

## 65 F 043

NET 27.95
MODEL 222. As above, but factory-wired. 65 F 042 . . . . . . . . . . . . . . . . . . . NET 42.95

## AC VOLT-WATT METER KIT

MODEL 261-K. Reads AC v.: 1 mv to 1000 v.. in 11 ranges. Reads power: .015 mv to 150 w . in 7 ranges. $81 / 2 \times 53 / 4 \times 7$. For $105-125$ v. 50-60 cycle AC. 6 lbs.

65 F 041
NET 49.95
MODEL 261. As above, but factory-wired. 65 F 040

NET 79.95

## MODEL 255.K AC VTVM KIT

Lab-sensitive 12 -range unit. Has frame. grid triode cathode follower input circuit; 2-stage R-C coupled amplifier. Range: 1 -3-10-30-100-300 rms mv; 1-3-10-30-100-300 rms v. Response, 0 db 10 cps to 600 kc . Accuracy, $\pm 3 \%$ of full scale. Less solder. $81 / 2 \times 52 / 4 \times 7^{\prime \prime}$. For $105-125 \mathrm{v} ., 50-60$ cycle AC Wt., 7 lbs .
65 F 039
NET 44.95
MODEL 225. As above, but factory-wired 65 F 038

NET 72.95

## AC VTVM and AMPLIFIER KIT

MODEL 250-K. Same as $255-\mathrm{K}$ above, but selector switch on panel converts unit to amplifier with 60 db gain on 1 mv range. Max, output: $5 \mathrm{v}, \mathrm{rms} .7$ Ibs.
65 F 037
NET 49.95
MODEL 250. As above, but lactory-wired 65 F 036

NET 79.95


## BEST-QUALITY STANDARD VOM KITS

## MODEL 566-K VOM KIT

Has easy-to-read $41 / 2^{\prime \prime}$ moter for 38 ranges. Rectifier In dual half-wave hook-up. Uses divider resistors. AC IDC range: 0-1-5-10$50 \cdot 100-500-5000 \mathrm{v}$. at 1000 ohms per $v$. $0.1-10$ ma and 0.1-1 a.: 0-5000-100,000 ohms $0-1$ meg; 6 db ranges, -20 to +69 . With case. Less solder and leads. Size, $63 / 4 x$ $51 / 4 \times 3^{\prime \prime}$. Shpg. wt., 3 lbs .
65 F 045
NET 14.90
MODEL 566. As above, but factory-wired. 65 F 044

NET 20.95
MODEL 556-K. Same as $566-\mathrm{K}$, but has $1 \%$ precision resistors. 3 lbs. 83 F 173

NET 16.90
MODEL 556. As above, but factory-wired, 34 F 347

NET 23.50
MODEL 536 -K. Same as $566 \cdot \mathrm{~K}$, but has $3^{\prime \prime}$ meter and 31 ranges. 3 lbs .

## 83 F 171

NET 12.90
MODEL 536. As above, but factory-wired. 84 F 345

NET 16.90

## MODEL 565.K VOM KIT

A 31 -range VOM featuring $20,000 \mathrm{ohms} /$ volt DC sensitivity and $41 / 2^{-2}$ meter with 50 ua movement. Ranges: DC, AC, output volts, $0-2.5 \cdot 10-50-250-1000-5000$ (AC at 1000 ohms /v.): DC, 0-100 $\mu \mathrm{a}, 0-10-100-500 \mathrm{ma}$, $0-10$ a.; $0-2000-200,000$ ohms, $0-20$ megs; -12 to +55 db in 5 ranges. With batteries. Lessleads, solder. $6 \frac{3}{4} \times 51 / 4 \times 3^{\circ} .4 \mathrm{lbs}$ 83 F 172

NET 24.95
MODEL 565. Ás above, but factory-wired. 84 F 346

NET 29.95
MODEL 555-K. Same as $565 \cdot \mathrm{~K}$, but has $1 \%$ precision resistors. 83 F 467

NET 29.95 MODEL 555. As above, but factory-wired, 84 F 391

NET 34.95
MODEL 526-K. Same as $536 \cdot \mathrm{~K}$ (at left), but has 1\% precision resistors. 83 F 166

NET 13.90
MODEL 526. As above, but factory-wired.
84 F 390
NET 18.90


## MODEL 249-K VTVM KIT

Peak-so-peak VTVM for color and monochrome TV servicing. Has big $71 / 2=$ meter, balanced-bridge circuit, $1 \%$ multipller resistors and "Uni-Probe." Ranges: D-D volts, $0-4 \cdot 14-42 \cdot 140-420-1400-4200$ volts: $D C$ $/ \mathrm{rms}$ volts, $0-1.5-5-15 \cdot 50-150 \cdot 500-1500$ volts: resistance, 0-1000 megs in 7 ranges. Less solder. $81 / 2 \times 13 \times 5^{\circ}$. For $105-125 \mathrm{v} ., 50-60 \mathrm{cy}$ cle AC. Shpg. wt., 9 lbs
83 F 187
NET 39.95
MODEL 249. As above, but factory-wired. 84 F 660

NET 59.95
MODEL 232-K. Same as $249-K$, but has $4 \frac{1}{2}$ meter. $8 \frac{1}{2} \times 5 \times 5^{\circ}$. Wt. 5 lbs.
83 F $186 \ldots . .$.
MODEL 232. As above, but factory-wired. 84 F 659

NET 49.95

## MODEL 221-K VTVM KIT

Similar to model $222 \cdot \mathrm{~K}$, but has 25 meg DC input and AC/DC ranges to 1000 v . With leads. $97 / 16 \times 16 \times 5^{\prime \prime} .7 \mathrm{lbs}$.
83 F 152
NET 25.95
MODEL 221. As above, but factory-wired.
84 FX 389
NET 39.95
MODEL 214-K. (Not illus.) Same as $221 \cdot \mathrm{~K}$, but has large $71 / 2^{\prime \prime}$ meter. $9 \times 13 \frac{1}{4} \times 6^{\circ}$. Less solder. Shpg. wt., 11 Ibs.
83 FX 170
NET 34.95
MODEL 214. As above, but factory-wired.
84 FX 34
NET 54.95

## VTVM PROBES

Use with Eico VTVM s. Av. wt., 1 lb .
$\left.\frac{\text { Stock No. }}{65 \text { F 049 }}\left|\frac{\text { Trpe }}{\text { PTP-11-K }}\right| \frac{\text { Onscription }}{\text { P-10-P Kif for } 11 \text { mers }} \right\rvert\, \frac{\text { NET }}{4.95}$

65 F 048 PTP-11 83 F 188 PTP-25-K Polo-P Kit for 23 mags 4.95 84 F 661 PIP-25 As above, but fectory-wired 6.95
 84 F 662 PRF-25 As above, buif facloty-wired 4.95


HIGH VOLTAGE PROBE. Extends range of VTVM's to $30,000 \mathrm{v}$. Wired. $1 / 2 \mathrm{Ib}$.
65 F 050. HVP-1
24 F 663. For Models
. NET 4.95
84 F 669. For Models 232, 249.... NET 4.95
UNIPROBE. AC /DC Probe. $1 / 2 \mathrm{lb}$.
65 F 052. UP-K Kit
NET 4.95
65 F 051. UPWired
NET 6.95

## in Kit and Factory-Wired Form $\square$ EILD



540-K

## 540-K READI-TESTER KIT

Allin-one $A C / D C$ voltmeter, ammeter, ohmmeter, wattmeter and leakage tester. Ranges: $A C / D C$ volts, $0 \cdot 7.5 \cdot 15 \cdot 150 \cdot 300 ;$ AC /DC amps 0.15; Resistance, 0-1000 ohms. Has neon indicator and $31 / 2^{\prime \prime}$ meter. Panel outlet for current metering. Alumi num panet and bakelite case. With leads. Less solder. $61 / 2 \times 3 \frac{11 / 4}{} \times 31 / 2$. 3 lbs.

## 13 F 199

NET 12.95
MODEL 540. As above, but lactory-wired. 44 F 67

NET 15.95

## 68e-K TRANSISTOR TESTER KIT

Accurately measures basic transistor and diode characteristics. Measures ICBO, ICEO, DC Beta; simulated AC Beta. 20,000 ohm/v. meter reads 0.5 .50 DC volts: 0 . $2000-200,000$ ohms and 0.20 megs resistance; also $0.50 .500 \mu \mathrm{a}$ and $0.5 .50-500 \mathrm{ma}$ DC. Plastic case, $61 / 651 / \times 3^{7}$. With leads, batteries. Less solder. 3 lbs . 65 F 054

NET $\mathbf{2 5 . 9 5}$
MODEL 680. As above, but factory-wired. 65 F 053

NET 39.55

## 625-K TUBE TESTER KIT

Tests tubes for emission, shorts, opens and continuity. Full-vision $41 / 2^{\prime \prime}$ meter with 3-color "Replace-Weak-Geod" scale and 0 -to- 1000 scale. Fused. Ten lever-action switches. Less solder. $91 / 2 \times 12 \frac{1}{2} \times 41 /{ }^{*}$. For 105-125 v.. 60 cycle AC. 12 Ibs.

## 83 FX 161

NET 34.95
MODEL 625. As above, but factory-wired. 4 FX 397

NET 49.95
MODEL L-1. Lid for the $625-\mathrm{K}$ and 625 .
30 FX 80

666-K

## TUBE-TRANSISTOR TESTER KIT

MODEL 666 -K. $4 \frac{1}{2}$ meter reads $G m, G p$ peak emission, leakage of tubes; transis. tor coll. Current and amplif. factor. Roll chart. $12 \times 15 \times 4 \frac{1 / 2}{2}$. Less solder. For 105.130 ., $50-60$ cycle AC. 20 lbs .
83 FX 198
NET 69.95
MODEL 666. As above, but lactory-wired 37 FX 226

NET 109.95
MODEL 610 TUBE TESTER ADAPTER Adapts 625 and 666 Testers to checking new tube types: 5 and 7 pin nuvistors: novars: 10 .pin miniatures; and 12 -pin compactrons. With roll-chart supplements Size, $11 / 4 \times 21 / 2 \times 6$. Shpg. wt. 1 ib.

## 65 F 647. Kit <br> NET 5.95

65 F 046. Wired .................. NET 11.95
MODEL CRA ADAPTER. (Not illus.) Adapts 625 and 666 testers to checking all TV picture tubes except $110^{\circ} .1 \mathrm{lb}$.

NET 4.50
MODEL CRA-110. As above but tests only $110^{\circ}$ picture tubes. 1 lb . 83 F 879

NET 3.95

MODEL 955. As above, but factory-wired. 65 Fess

NET 39.85

Weston and Jackson Equipment


911


WESTON MODEL 911 DC VOLTMETER. Easily converts to panel or switchboard mounting without adapters. Has $7.2^{*}$ mirrored scale. DC volts: 0.1-3-10.30-100 ( $\pm 1 \%$ ): 0-300-1000 ( $\pm 2 \%$ ). Screwtype binding posts. Gray steel case, $71 / 2 \times 61 / 2 \times 2 \frac{1}{2}$. With panel conversion hardware. Shpg. wt., $51 / 2$ los.
87 F 751. $\$ 5$ Monthly.
NET 68.50
77 F 752. 911 DC Ammeter. Similar to above. $\pm 1 \%$ accuracy. Amps, 0.1-3.10; milliamps, $0-10-30 \cdot 100-300 \ldots . .$. 87 FTSJ. 911 DC Milliameter. As above. $\pm 1 \%$ accuracy. Ranges: 0.0.1-0.3.1-3.10-30-100 milliamps ........................ NET 68.50 87 F 754. 912 AClVoltmeter. Similar to above. AC v.: 0.3-10.30-100. $300-1000 ; \pm 2 \%( \pm 3 \% 1-K V$ and $3-V.) . . . . . . . . . . . . .$. . NET 78.50 WESTON 980 MARKII ANALYZER. Has 4.63 "scale. Accuracy, $2 \%$ on DC: $3 \%$. AC. AC v.: 0-1.6-8-40-160-400-1600 at 1000 ohms/volt. DC v.: $0-1.6-8-40-160-400-800-4000$ at 20,000 ohms /volt. DC current: 0-80 $\mu \mathrm{a}$ : 0-1.6-8-80-800 ma; Resistance, 0-1K-10K-100K; Megs, $0-1-10$-center scale, 25. Db: 6 ranges, -15 to +54 . With leads. Less batteries. $7 \% / 1 \times 61 / 4 \times 3^{3}$. Shpg, wt., 3 lbs.
87 F 427. \$5 Monthly
NET 53.50
87 F 423. Cover and 4 -way stand. Wt., 1 lb.


JACKSON 648S TUBE TESTER. Checks old and new types, including: nuvistors, compactrons, novars, etc. Only 3 controls to set-Heater Voltage, Plate Control and Sequence Switch. Tests each element for shorts; checks leakage from 250 K to 2 megs. Meter has "Bad-Good" and percent scale. In plastic case. $16 \frac{1}{2} \mathrm{x}$ $131 / 4 \times 6^{\prime \prime}$. For $110-120 \mathrm{v} ., 60$ cycle AC. 231 bs.
17 FZ 474. 58 Monthly
NET 154.95
JACKSON 600 LAB SCOPE. Wide band verlical amplifier. flat within 1 db from 20 cps to 4.9 mc , usable to 10 mc . Two range sensitivity. from 20 mv /inch. Hor, amplifier response uniform within 2 db from 20 cps to 200 kc . Linear range, $10 \mathrm{cps}-100 \mathrm{kc}$. Has internal 10 v . P.P calibration voltage. $15 \times 91 / 9 \times 13^{\circ}$. For 105.125 volts, $50-60$ cycle AC. Shpg. wt.. 29 lbs.
\$7 FZ 472. $\$ 16$ Monthly
NET 335.00
LC2-1P PROBE. For circuits to 25 volts. Shpg. wt., 1 ib.
\&5 F 57 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . NET 19.95
LC10-1P PROBE. Fot circuits to 1000 volts. Wt., 1 Ib. 65 F 058

NET 7.95
DEM-P PROBE. For signal tracing RF, IF sections. 2 lbs.
65 Fss.


## ES-150 OSCILLOSCOPE

A lab-type instrument for black and white and color TV, with push-pull outputs in both ampllfiers. Sensitivity: Vertical: DC$70 \mathrm{mv} / \mathrm{in}$.; AC-25 mv rms/in.; Hor. -0.6 v . rms/in. Response: Vert.-DC. $\pm 3 \mathrm{db}$ to 4.5 mc ; $\mathrm{AC}, \pm 3 \mathrm{db}, 1 \mathrm{cps}$ to 4.5 mc ; Hor. -3 db. 1 cps to 400 kc . Input imp.: Vert. -1.5 megs; hor. -5 megs. Has p-p voltage calibrator and vertical polarity reversal switch. $00 \times 00 \times 00^{-}$. For $110-120$ v., $50-60$ cycles ACDC. 30 lbs

## 87 FU 041 \$8 Monthly

NET 146.95

## E-200C SIGNAL GENERATOR

Deluxe, extremely sensitive sional-marker generator for $A M_{1}$ FM and TV alignment. For use with the E- -10 below, or any other high-quality sweep signal generator. Calibrated on each bnad against laboratory crystal standards. $1 \%$ accuracy on 10 easy-to-reao ranges. Frequency coverage: 88 kc to 440 mc ; to 110 mc on fundamentals. Direct-reading $61 / 2^{\sim}$ dial has 0.1000 vernier scale. Outputs: unmodulated RF; 400 cycle modulated RF; externally modulated RF; and 400 -cycle sine wave output. Supplies 0.50 volts AVC.AGC voltage. Dual RF attenuators. with cable, connectors, and manual. $111 / 2 \times 13 \times 6 \% \%^{\prime \prime}$. For $110-120 \mathrm{v}$., $50-60$ cycle AC. 17 lbs . 87 FU $000 . \$ 6$ Monthly ..... NET 107.75

## E-410 SIGNAL GENERATOR

Excellent for FM and TV alignment. Has built-in marker-adder to avold overload. ing of receiver circuits when inserting markers. Sweeps from 3 mc to 213 mc in 5 ranges with width continually variable from 0.30 mc . Output impedance, 50 ohms. Dual attenuators control RF output.. Has AGC to regulate voltage amplitude on any band. $81 / 2 \times 13 \times 7^{*}$. With 4.5 crystal. For 110 . 120 v., $50-60$ cucles AC. 14 ibs.
87 FU' 042. \$8 Monthly. ......NET 156.75

## 120 MULTI-RANGE VOM

A very sensitive instrument featuring: 61 ranges, $1 \%$ precision resistors. $\pm 2 \%$ full-scale accuracy, mirrored scale and polarity reversing switch. Ranges: AC, \#DC. -DC. output v., 0.0.3.1.2-3-12-60. $300 \cdot 600-1200-6000$ with 5000 ohms per volt on AC and 20.000 ohms per volt on DC; DC, a-60.300 $\mu \mathrm{a}, \quad 0 \cdot 1.2 \cdot 12-120-600 \mathrm{ma}, \quad 0-12$ amps; 0-200-2000-200.000 ohms, $0 \cdot 2 \cdot 20$ megs; 8 db ranges, -20 to +77 . Has full. view $51 /=$ meter. With batteries and leads. Size, $7 \times 5 \frac{3}{1} \times 3^{\prime \prime}$. Shpg. wt., 5 Ibs.
84 F 490. $\$ 5$ Monthly.
NET 44.05

## MODEL 120 M VOM

(Not illustrated.) Same as Model 120 (above), but has $1 / 2 \%$ precision multiplier resistors and a $1 \%$ mirrored-scale meter. $11 / 2 \%$ accuracy on DC: $3 \%$ on $A C$.
87 F 080. $\$ 5$ Monthly. . ........NET 54.83
LC-3 "EVEREADY" CASE. For models 120 and 120M. Shpg. wt., 3 lbs.

## 84 F 496.

NET 10.29
TV-28 HV SAFETY TEST PROBE. For models 120 and 120 M . Extends $D C$ range to 30,000 volts. Wt., 2 lbs .
84 F 495.
NET 15.63
ST-1 RETRACTABLE STAND. FOR Models 88, 120 and 120M. Wt., 1 lb
87 F 020.

## CAPACITOR-RESISTOR BRIDGE

CB-26. Versatile instrument for measuring virtually any unknown resistance or capacitance. Quickly measures mica paper and electrolytic capacitor leakage. Checks Insulation resistance, windings in transformers and cable wires. Capacity ranges: 10 mmi to 5000 mmf , 001 mfd to $.5 \mathrm{mfd} ; .1 \mathrm{mfd}$ to $50 \mathrm{mfd} ; 20 \mathrm{mfd}$ to 2000 mid. Resistance ranges: .5 to 500 ohms; 50 to 50,000 ohms; 5000 ohms to $5 \mathrm{megs} ; 2$ megs to 200 megs. $11 \frac{1}{2} \times 7 \frac{1}{2} \times 5^{\circ}$. For $110-120$ v., 60 cycles $A C .9$ ibs.

65 FU 008. $\$ 5$ Monthly.
NET 48.95

## E-450 DOT-BAR GENERATOR

A compact instrument that tests and adjusts the color-phasing, matrixing. linearity and convergence circuits in all color TV receivers. Provides direct RF output on either channel 3 or 4 . Adjusts number and thickness of horizontal and vertical bars. 300 ohm output impedance. Gener. ates: white dots, vertical and horizontal bars and crosshatch pattern. In rugged, blue-gray shielded steel case, $12 \times 13 \times 8^{\circ}$. (With cables.) For $110-120 \mathrm{v} ., 50-60$ cycles AC. 14 lbs.
65 FX 102. $\$ 8$ Monthly.
NET 186.15

## P- 28 BATTERY ELIMINATOR

Designed espectally to meet the rigid low. ripple output requirements to power transistor auto radios and other 6-12 v . equip. ment. Also makes an efficient battery charger with high-current output at sepa. rately labled terminals. Has variable output of $0-8$ or $0-16$ volts, $O C$. Current ratings: continuous -10 amps at 6 volts; 6 amps at 12 volts; intermittent-20 amps at 6 volts; 12 amps at 12 volts. Low ripple out. put: 5 amps at 6 and 12 volts. Overload protected. $11 / 1 / 2 \times 71 / 2 \times 7$." For 110.120 v. , $50-60$ cycles AC. 21 Ibs.
85 FU 005. $\$ 5$ Monthly.
NET 63.65

## IC-60 CAPACITOR CHECKER

(Not illustrated.) Designed to make fast. accurate checks for open or shorted capaçitors without removing them from circuit. Also reveals dried-out, shorted or open electrolytics while in circuit. Any electrolytic that yields a capacity reading on dial is automatically revealed as not open or shorted. Checks opens from 5 mmf; shorts from 10 ohms. Checks elec. trolytics from 2 mfd to 400 mfd in 2 ranges. Has ripple-finish steel case, $53 / \times 71 / 2 \times 41 /{ }^{\circ}$. For $110.120 \mathrm{v}, 60 \mathrm{cycle}$ AC. 6 lbs. 65 F 103. $\$ 5$ Monthly.

NET 32.29

## RS-24 POWER SUPPLY

(Not illustrated:) A source of variable, regulated DC plate voltages, plus bias and AC filament voltages with a 12.6 v. AC supply. Exceltent for circuit testing and development. Eliminates need for separate power supplies for each new circuit. Variable output of 0.400 volts, DC. Ripple, less than .003 v . rms. AC supply: output $\$ 1,6.3$ voits at 3 amps ; output $\$ 2,6.3$ volts at 3 amps: 12.6 volts at 3 amps by inter. connecting panel terminals. Milliammeter range, 0.200 ma . D'Arsonval meters. Internal impedance, less than 10 ohms from $D C$ to $1 \mathrm{mc} .81 / 2 \times 13 \times 7^{\circ}$. For $110.120 \mathrm{v} ., 60$ cycle AC. 20 lbs .
85 FU $000 . \$ 5$ Monthly.
NET 97.95

# Speed, Reliability and Accuracy 

## Quickly Pay for Themselves In Time and Trouble Saved

MODEL 650 TUBE TESTER. Quickly and accurately tests: 10 - p in miniatures, 12 pin compactrons, 5 and 7 -pin nuvistors, novars, octals, loctals, 9-pin novals, 7-pin miniatures (including battery types), voltage regulator types, industrial and European tubes. Checks for shorts, emlssion, opens and continuity. Also checks picture tubes with adapter (below). Size, $9 \times 13 \times 141 /{ }^{2}, 60$ cycle AC. Wt. 9 lbs.
87 FU 043. \$5 Monthly....... NET 68.55
65 F 104. PTA PIcture Tube Adapter. For above. Wt., 1 lb .

NET 5.83
MODEL CR-60 CRT TESTER. Speedily tests and rejuvenates color and black and white picture tubes. Checks for emission, shorts, opens and cutoff voltage. Tests CRT's with filament voltages from 1.5 to 12 volts, and $1100,1140, G 2,19^{*}$ and $20^{*}$ tubes. Checks each color gun separately. Size. $111 / 2 \times 5 \times 71 / 2$. For 110.120 volts, 60 cycle AC. Shpg. wt., 7 lbs .
65 F 105. $\$ 5$ Monthly.
NET 63.65
MODEL 48 VTVM. (Not lilus.) Has $4 \%{ }^{\circ}$ meter. Response: 40 cps to $4 \mathrm{mc}, \pm 1 \mathrm{db}$. Ranges: $D C$ volts ( 11 meg input), 0.1.5-15-50.150-500.1500; AC rms volts, 0-1.5-5. 15-50-150.500-1500; AC P.P volts, 0-4-14-40. $140 \cdot 400 \cdot 1400 \cdot 4000$; ohms. $0 \cdot 1000 \cdot 10,000$. 1000,000 and 0-1-10-100-1000 megs. 7 db ranges: -6 to +66 . 3 -way probe. For $110-$ 120 v., 50-60 cycle AC. 6 lbs. 65 F 106. $\$ 5$ Monthly.

NET 54.83
65 F 107. Hi-Freq. Probe. $602 \ldots . . .6 .81$
65 F 408. Hi-Volt. Probe. 8 oz ..........6.8.81

MODEL 100 POCKET VOM. $10000 \mathrm{hms} / \mathrm{V}$. DC, AC sens. AC v., 0.6-30-150-600.1500. 6000 ; DC v., $0-0.3 \cdot 6-30-150-600-1500-6000$; DC cur., 0-600 $\mu \mathrm{a}, 0 \cdot 6 \cdot 60-300 \mathrm{ma}$ and 0.1 .5 amps; res., 0-2000-200,000 ohms, 0-2 megs: $\mathrm{db},-6$ to +77 ( 6 ranges). $31 / 2^{\circ}$ meter, 400 $\mu \mathrm{a}$ sens. $1 \%$ resistors. $53 / 8 \times 31 / 2 \times 111 / 6 \sigma^{.}$ With batteries, leads. 2 lbs .
65 F 109. $\$ 5$ Monthly.
NET 31.31
110 POCKET VOM. (Not illus.) 20,000 ohms/v. DC; 5000, AC. DC v., 0.0.3-1.5-6-$30-150-600-3000 ;$ AC v., $0-1.5 \cdot 30 \cdot 150 \cdot 600$. 3000; DC cur., 0.60-600 на, 0-6-60-600 ma; res., $0.2000-200,000$ ohms, 0.20 megs; db.. -20 to +71 ( 6 ranges). Meter, $50 \mu$ a sens. $1 \%$ resistors. $5 \% \times 31 / 2 \times 11 /$ s" with batteries and leads. 2 lbs . 87 F 023. $\$ 5$ Monthly. NET 35.23 65 F 110. Case for Above. 8 oz....... 6.81 65 F 111. H-V Probe. 8 oz...... NET 15.23 MODEL E-75 RF SIGNAL GENERATOR. Provides 160 kc to $240 \mathrm{kc} ; 400 \mathrm{cps}$ audio output (up to 15 v .); 40 mc TV IF frequencies. $111 / 2 \times 71 / 1 \times 61 / 2$. For $110-120$ volts, 50.60 cycle AC. WI., 9 lbs.

65 FX 112. $\$ 5$ Monthly.
NET 48.95 MODEL 68 VTVM. Has large $51 / 2^{n}$ meter. $400 \mu$ a sens., $\pm 2 \%$ accuracy. $5+$ and DC v. ranges, 0-3-12-60-300-1200 ( $131 / 3$ megs); AC V. rms, 0-3-12-60-300-1200; P.P. $v_{\text {- }} 0-8-32-160-800-3200$; resistance, $0-1000-$ 100,000 ohms and 0-10-100-1000 meos. 1\% multipliers and shunts. In blue-gray cabinet, $5 \frac{1}{8} \times 7 \frac{1}{4} \times 31 / 2$. With AC.DC probe, batteries and manual. Wt., 6 lbs. 65 F 113. $\$ 5$ Monthly...........NET 69.53


## Sprague and Cornell-Dubilier Capacitor Checkers



## SPRAGUE MODEL TO-S TEL-OHMIKE

Bridge-type capacitor analyzer measures capacitance, insulation resistance, power factor and leakage current. Capacitance bridge reads to 2000 mfd -includes special low-capacitance range: 0.100 mmf with $\pm 2 \%$ or 1 mmf accuracy. "Magic-Eye" in. dicates balance. Shows insulation resistance to 20.000 megs. Power factor of electrolytics is measured to $55 \%$. Gives leakage current reading for electrolytics with exact rated voltage to 600 v ., applied. Has turns ratio scale. Size, $8 \% / 8145 / \mathrm{s}^{2} 61 / \mathrm{s}^{\prime \prime}$. For $110-120$ volts, $50-60$ cycle. Shpg. wt., $121 / 2 \mathrm{lbs}$. 66 FX 591. \$5 Monthly.

NET 90.65

## SPRAGUE MODEL M-2 MIKE-O-METER

Designed to test capacitors for air condltioning, refrigeration and electric motor service technicians. Measures capacitance and power factor of capacitors from 0.1 to 2000 mfd with Wien bridpe. "Magic-Eye" shows balance. No voltage appears at test terminals untll the "Slide-To-Test" switch is pressed. Automatlcally discharges any residual charge on capacitors upon release. Sturdy, gray-enamel steel case, size $9 \times 6 \times 5 \frac{1 / 4}{4}$. For $110-120$ volts, 6 cycle AC. Shpg. Wi. 8 lbs.
87 F 224. $\$ 5$ Monthly.
Buy Your Test Equipment on Allied's Credit Fund Plan
NET 31.85


## C-D BF-90 CAPACITOR CHECKER

Accurately checks all capacitors without having to remove them from circuil. Capacitor condition is indicated by a "Magic-Eye." 60 cycle test for direct or intermittent short; 20 mc test for open or intermittent. Checks capacitors from 30 mmf to 2000 mfd for open, short or intermittent condition; from .1 mfd to 2000 mfd for shorts. Accurately tests capacitors even when in parallel with 50 ohm resistance. In sturdy, easy-to-carry metal case, size $7 \times 10 \times 5 \frac{1}{2}$." Furnished with leads. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 8 lbs.
84 FX 619. $\$ 5$ Monthly.
NET 40.91

## C-D BF-60 CAPACITOR-RESISTOR BRIDGE

Makes fast and easy checks for opens، shorts, intermittents capacity and power factor of electrolytics, as well as the insulation resistance of paper, mica and ceramic capacitors. The BF-60 measures capacity between wires and shielding, transformer windings, etc. Ranges: 10 mmf .005 mfd ; $.001-5 \mathrm{mfd} ; .1-50 \mathrm{mfd}$; $20 \cdot 1000 \mathrm{mfd} ; 100 \cdot 50,000$ ohms and 10,000 ohms to 5 megs, 5 polarizing voltages: $25,150,250,350$ and 450 DC. Size, $5 \frac{1}{2} \times 7 \times 10^{-}$. For $110-125$ volts, $50-60$ cycle AC. Shpg. wt., 10 lbs. 84 FX 457. $\$ 5$ Monthly.

NET 50.81


Simpson Test Equipment


20,000 OHMS/V. DC 260 AND 270 VOMs
260 -SERIES III. Its low cost and dependability have made it one of the world's most popular VOMs. 2 .color scales, 5000 ohms/v. AC sensitivity, polarity reversing switch, full-wave bridge rectifler, response to $500,000 \mathrm{cps}$. Ranges: DC mv, 0-250: AC and DC v., 0-2.5-10-50-250-1000-5000; AF output v., 0-2.5-10-50250; DC $\mu \mathrm{a}, 0-50$ : $D C \mathrm{ma}, 0-1-10-100-500$; DC amps, 0.10 ; res., $0-20$ megs in 3 ranges; $\mathrm{db},-20$ to +50 in 4 ranges. $7 \times 5 \frac{1}{1 / 3} \times 3 /{ }^{\prime \prime}$. Batteries, leads. Shpg. wt., 5 lbs.
87 F 111.
NET 48.95
87 F 112. MODEL 260RT. Above in roll-top case. Size, $9 \times 63 / \times 43 / 4$.
Shpg. wt., 9 lbs.
NET 54.95
270. Deluxe version of the 260 . Will give identical readings days or even weeks apart. Has all 260 features plus mirrored scale, knife-edge pointer, extra-high stability, $1 \frac{1}{2} \%$ accuracy. $7 \times 51 / 4 x$ $31 /{ }^{\prime \prime}$. Batterles, leads. 5 lbs .
87 F 123.
NET 59.95
87 F 149. MODEL 270RT. Above in roll-top case. Size, $9 \times 63 / 8 \times 4 / 4{ }^{4}$. Shpg. wt., 9 lbs.

NET 69.95

## ACCESSORIES FOR THE 260 AND 270

| Stock Mo. | Type | Descriotion | For Models | Lbs. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 87 F 124 | 0247 | HV probe; 25 KV ranae. | $260-111270$ | \% | 1.50 |
| $87 \mathrm{~F} / 15$ | 0248 835 835 | HV probe: 50 NV range. | $260-111270$ | 灰 | 12.50 |
| 87 F 106 | ${ }_{7}^{8375}$ | Leads; alizalor clips 1 terms. | 260.11 | \% | 1.75 |
| 87F116 | 7500 | Ledse: Danama plugs allie clip | $260-111$ | $1^{\text {R }}$ |  |
| $84 F 721$ | 4236 | Ever-Ready Leather Case | 260, 270.303 | 2 | 9.75 |
| 84F782 | 1818 | Standard Leather Case | 260, 270 |  | 8.50 |

Plug-In Adapters. Turn any 260 or 270 made since 1947 into 8 different testers. $4 \frac{3}{1} \times 5^{5} / 16 \times 3^{1 / 16 " .} 2$ lbs.

| Stock No. | Type | Function | Description | NET |
| :---: | :---: | :---: | :---: | :---: |
| $87 \times 553$ | 650 | Transisfor Tester | 0.100 us 1 mo 3 beta raneses. |  |
| 87F554 | 651 | OC VTVM | 0-0.5-1.0-2.5-5-10-25-50-100-250-500 \%. | 32.95 |
| 87F555 | 652 | Temperature Tester | -50 $0^{\circ}$ to $+250^{\circ} \mathrm{F}$. in 2 ranges | 38.95 |
| $87 \% 556$ | ${ }_{654}^{65}$ | AC Ammeter |  | 18.95 |
| 87F557 | 654 655 | Audio Wattmater | $17 \mu \mathrm{w}$ to $100 \mathrm{w} ; \mathrm{i} / \mathrm{s} / 16 / 600 \mathrm{ohms}$ | 18.95 |
| $\begin{aligned} & 87 \text { F } 558 \\ & 87 F 559 \end{aligned}$ | 655 656 | Microvolt Attenuator Battery Tester | 2.5-250.000 uv, decade steps. Un to 90 volts. | 18.95 |

## 7"SCALE VOM\&

269. Ranges: DC current, 0-16-160 ма; 0-1.6-16-160 ma; 0-1.6-16 amps. DC v., 0-1.6-8-40-160-400-1600-4000. AC v., 0-3-8-40-160-800; output v., 0-3-8-40-160. Ohms, 0-2K-20K-200K; megs, $0-2-20-200$. $6 \times 8 \times 3^{*} .100,000$ ohms/v. DC. Leads, 1 btry. 6 lbs.
84 F 726.
NET 89.95
84 F 742. $0181.40,000$ VDC probe for 269.2 lbs.

## NET 13.50

267. Ranges: $A C$ and $D C$ v. $0-2.5 \cdot 10.50 \cdot 250 \cdot 500-1000 ; D C \mu a$, 0-50; DC ma, 0.1-10-100.500; DC amps, $0-10 ; \mathrm{db},-20$ to +50 in 4 ranges; output v., 0-2.5-10-50-250; ohms-RX1 (12 ohms center), RX100, RX10K. $6 \times 71 / 4 \times 31_{4}{ }^{\circ}$. With bat., leads. $31 / 4 \mathrm{Ibs}$.

## 87 F 562.

NET 54.95
268. Ranges: $A C$ and DC v., 0-3-12-60-300-600-1200; DC $\mu \mathrm{a}, 0-60$; DC ma, 0-1.2-12-120; DC amps, $0-12 ; \mathrm{db},-12$ to +50 in 4 ranges; output $\mathrm{v}_{\mathrm{W}}$. 0.3-12-60-300; ohms-RX1 (12 ohms center), RX100, RX10K. With leads, bat. $31 / 4 \mathrm{lbs}$.
87 F 563.

## 41/2"-SCALE VTVMs

311. Ranges: $A C / D C$ vo, $0 \cdot 1.5 \cdot 5 \cdot 15 \cdot 50-150.500 \cdot 1500$. Res., 0.1 K -10K-100K ohms and $0 \cdot 1 \cdot 10-100-1000$ megs. AF v., 0.1.5.5-15-50$150 \cdot 500-1500,30 \mathrm{cps} \cdot 100 \mathrm{kc}, \pm 5 \%$. P-P, 0-4.14-40.140-400-1400. 4000 v. $71 / 2 \times 5 \frac{5}{8} \times 4 \frac{1}{2}$. For $105-125$ v., $50-60$ cycle AC. 8 lbs. 87 FX 121.
87 F 122. $0732.30,000$ VDC probe for 311.1 Ib. ............ NET 69.95
87 F 131. 0731. High-frea probe for 311.1 lb
NET 11.75
312. Ranges: $A C / D C$ v., $0-1.2-12-60 \cdot 300 \cdot 1200$; res. $0-1000-100 \mathrm{~K}$ ohms, $0.1-10.1000$ megs; $\mathrm{db},-20$ to +63 in 5 ranges. $7 \times 51 / 4 \times 31 / \mathrm{c}^{\prime \prime}$. Less RF probe (below). For $110-120$ v., 60 -cycle AC. $61 / 2 \mathrm{lbs}$. 84 F 712.
84 F 725. 303RT. Above, with roll-top case. 8 ibs.
NET 73.95
84 F 716. RF Probe. For 3031 lb. NET 82.95
8f 716. RF Probe. For 3031 Ib.
NET 8.75
84 F 715. HV Probe. For 30330 KV .1 ib.
NET 11.95

## 715 AC VTVM (Not Illus.)

Response, 10 cps to $400 \mathrm{kC}, \pm 1 \mathrm{db}$. Ranges: AC rms v., 0.0 .01 . $0.03 \cdot 0.1 \cdot 0.3-1 \cdot 3 \cdot 10 \cdot 30 \cdot 100-300 ; \mathrm{db},-52$ to +52 in 10 ranges $51 / 2 \times 7 \frac{1}{2} \times 3^{\prime \prime}$. With leads. For 110.125 v., $50-60$ cycle AC. 5 lbs.
87 F 205.
NET 69.95


## A MODEL $4665^{\circ}$ "HANDISCOPE"

Compact, rugged, general-purpose oscilloscope. Push-pull amplification for $X$ and $Y$ axes; intensity modulation input for $Z$ axis. Vert. response, $\pm 1 \mathrm{db}, 15 \mathrm{cps} .100 \mathrm{kc} .121 / 4 \times 8 \times 61 / \mathrm{m}^{\circ}$. With cable. For $110-120$ v., $50-60$ cycle AC. Shpg. wt., 24 lbs.
87 FU 113.
NET 149.95

## B MODEL 4587 COLORSCOPE

Top-performance oscllloscope for black-and-white and color TV. Wide-band response, $\pm 1.0 \mathrm{db}$ to 4.5 mc ; better than 40 mv rms per inch sensitivity at 3.58 mc . Narrow-band response, $\pm 2 \mathrm{db}$, 10 cps to $300 \mathrm{kc} ; 15 \mathrm{mv}$ rms per inch. $16 \frac{1}{2} \times 11 \times 141 / 2 \times$. For $105 \cdot 125$ v., $50-60$ cycle AC. Shpg. wt., 38 lbs .

4 FU 631.
NET 249.95
C MODEL 430 COLOR BAR GENERATOR
$100 \%$ saturated NTSC signals. Exceptionally wide range of out-puts-includes G.Y at $90^{\circ}$. Positlons of master control marked with color of signal. $17 \frac{1}{1 / 2} \times 14 \times 191 / 4{ }^{\prime \prime}$. With leads. For $105-125 \mathrm{v}$. 60 -cycle AC. Shpg. wt., 26 lbs.
65 FU 129.
NET 395.00
D MODEL $383 A$ IN-CIRCUIT CAPACOHMETER
For paper, mica and ceramic capacitors. Measures teakage and capacitance ( 10.0 mmf to 10.0 mfd ). 1 n -circuit. With leads. $83 / \times 113 / 681 / 2^{\prime \prime}$. For $105-125 \mathrm{v}$., 60 cycle AC .12 ibs.
84 FX 630 .
NET 89.95
Allied Guarantees Your Satisfaction

## Test Equipment by knight WIRED AND TESTED... READY TO USE



MODEL G00A TUBE TESTER

## Only

$\$ 5$ monthly

- Tests Over 1900 Tubes
- Line-Voltage Adjust
- Lliuminated Roll Chart
- Portable Wooden Case

Checks cathode-emission of over 1900 compactrons, nuvistors, novars, 10 pins, 7 and 9 inin miniatures, $4,5,6$, and 7 . pin targe and smati types, octals and loctals. Also detects operis, shorts and cathode-filament leakage. 16 , filament voltages from 0.63 to 117. $41 / 8$ " 3 -color meter. $6 \frac{1}{2} \times 141 / 2 \times 101 / 2{ }^{\prime \prime}$. For $110-125$ v. $50-60$ cycle AC. Shog. wt., 14 Ibs.
83 YX 518-J. $\$ 5$ Monthly. . ONLY 53.95
83 YX $636-\mathrm{J}$. In Kit Form. . . ONLY 39.95 MODEL 600A FOR BENCH OR COUNTER. Electronically identical to Model 600A Tube Tester listed above, but de. signed for stationary use. Supplied with durable, heavy-duty gray metal case. Size, $51 / 4 \times 14 \frac{1}{10} \times 101 /{ }^{\prime \prime}$. Shpg. wt., 15 lbs . 83 Y $\times$ 519-J. $\$ 5$ Monthly..... ONLY 49.95 83 YX 635-J. In Kit Form .... ONLY 35.95


FAMOUS MODEL 504 VTVM

- 200 Microamp Meter
- Full-Range 0-1.5 Volt
- Large $41 /{ }^{2}$ 2-Color Meter
- $1 \%$ Multiplier Resistors

PERFECT FOR COLOR TV. All the necessary featureswide sweep. broad re. sponse, high sensitivity. cathode-follower inputs.

A favorite with quality-conscious tech nicians everywhere, the " 504 " is your best VTVM value. Has direct-reading db scale, polarity reverse switch, zero-center scale, 11 -meg input, and 30 cps to 3 mc response. AC p-p v., 0-4.2-14-42.140-420-1400-4200. AC rms and DC v., 0.1.5-5-15-50-150-500-1500; ohms, 0.1K-10K-100K and $0-1-10-100 \cdot 1000$ megs; $\mathrm{db},-10$ to +65 in 7 ranges. Complete with battery and leads. $75 / 853 / 641 / 4$. For $110-125 \mathrm{v} ., 60$ cycle AC. Shog. wt., 7 lbs.
83 Y 504-J. $\$ 5$ Monthly.
ONLY 39.95
83 Y $\mathbf{Y 2 5 - J . ~ I n ~ K i t ~ F o r m ~}$
ONLY 26.95
83 Y 125-j, High-Voltage Probe Kit. Ex. tends DC ranige to 50 kw $1 \frac{1}{2} \mathrm{lbs}$. ONLY 4.50
83 Y 127-J. High-Frequency Probe Kit. Extends AC range to 250 mc . ONLY 3.50

MODEL 502 WIDEBAND SCOPE

## Only

s1095
$\$ 6$ monthly

- Push-Pull Amplifiers
- I-v. P-P Callbrator
- $25 \mathrm{mv} / \mathrm{Inch}$ Sensitivity
- 5-Megacycle Bandwidth

A $5^{\prime \prime}$ scope highly recommended for color TV work and other high.irequency uses. Offers sweep range of $15-600,000$ cips. Locks in at frequencies up to 9 mc . Vertical response is $\pm 3 \mathrm{db}, 5 \mathrm{cps}$ to 5 mc , down only 1 db at the 3.58 mc color-burst frequency. Has: frequency compensated input attenuator; Z-axis input for intensity modulation; asilgmatism control; $1 \cdot v$. peak-to-peak callbrator; deffection-plate coupling: negative and positive sync; blanking circuit and more. With leads. $141 / 4 \times 101 / 6 \times 151 / 2^{\prime \prime}$. For $110.125 \mathrm{v} ., 60$ cycle AC. 28 lbs.
83 YU 502-J. $\$ 6$ Monthly. ONLY 109.95 83 YU 144-J. In Kit Form. . . ONLY 69.95 83 Y 147-J. Low-Capacity Probe Kit. 3.75 83 Y 148-J. Demodulator Probe Kit. 3.75


## MODEL 503 R-C CHECKER

Measures both resistance and capacity by the accurate bridge method. Checks for opens and shorts in all capacitors, in dicates PF of electrolytics from $0-50 \%$. Magic-Eye shows nulls at a glance. Reads capacity from 10 mmf to 1000 mfd , resistance from 100 ohms to 5 megs. Tests for leakage from 50.450 WVDC. Accuracy, $\pm 10 \%$. With leads. $71 / 9 \times 101 / 9 \times 51 / 4{ }^{4}$. For 110 125 v., 60 cycle AC. $91 / \mathrm{lbs}$. 83 Y 503 -J. $\$ 5$ Monthly.... ONLY 29.95
83 Y 124-J. In Kit Form.


MODEL 516 SIGNAL GENERATOR
This low.cost generator boasts a Colpitts oscillator for accurate alignment of RF and IF stages in radio and TV sets. Also has 10 -volt 400 cps output for audio work. Provides fundamental output of 0.1 volt or more, in 5 bands, from 160 kc to 112 mc -usable to 224 mc on harmonics. RF oscillator can also be externally modulated. With leads. $7 \frac{1}{2} \times 101 / 951_{4}^{\prime \prime}$. For 110 . 125 v . 60 cycle AC. 11 lbs . 83 Y 516-J. $\$ 5$ Monthly.

ONLY 29.95 83 Y 145-J. In Kit Form. .... ONLY 19.95


## 6-12V BATTERY ELIMINATOR

Heavy-duty DC power supply for many uses, including overnight charging of automobile batteries. Has variable output of $0-8$ or $0-15$ volis DC. Current ratings: continuous- 15 amps at 6 v ., 10 amps at 12 v.i: intermittent-17.5 amps at $6 \mathrm{v}$. ., 12.5 amps at $12 \vee$. Meters are calibrated $0-15$ VDC and $0-20$ amps DC. Fuse-protected. $8 \frac{5}{6} \times 12 \times 7 \frac{1}{2}$. For 110.125 v ., 60 cycle AC. Shpg. wt., 18 lbs.
83 Y $\times$ 505-J. $\$ 5$ MOnthly. . ONLY 47.95
83 Y $\times$ 129-J. In Kit Form..... ONLY 38.95


## Test Instruments...

## save energy and hours of labor time

## NEW PORTABLE $3^{\prime \prime}$ WIDE-BAND OSCILLOSCOPE

MODEL PS-120. A truly portable lab scope designed to handle any job-yet as easy to use as a voltmeter. Has just two major controls. Reponse: vertical amplifier, flat within $1 / 2 \mathrm{db}$ from 20 cycles to 5.5 mc ; horizontal amplifier, flat within -3 db from 45 cycles to 330 kc -flat within -6 db from 20 cycles to 500 kc . Sensitlvity: . 035 v . /inch rms- 0.1 v . /inch, p-p. Sweep: frequency-4 ranges, 15 cycles to 150 kc ; sync range- 15 cycles to 8 mc -usable to 12 mc . In put impedances: vertical, 2.7 meg shunted by 99 mmf ; horizontal, 330 K to 4 meg. With low capacity probe. Has steel handle and concealed storage compartment. Size, $9 \times 7 \times 111 / 4^{\prime \prime}$.


## TC114 TUBE CHECKER

The famous "Mighty Mite" portable tube tester checks almost 2000 tubes-inciuding foreign and 5 -star types, nuvistors compactrons, novars and 10 -pin types. Checks leakage and cathode emission; offers complete; automatic short tests. Checks rectifiers from $50-150$ ma and power-amplifier tubes from 15.35 maothers are checked at their rated current. Grid leakage sensitivity exceeds 100 megohms.
Illuminated meter is protected by currentlimiting circuit. Has socket for testing CRT's. Steel case, $101 / 2 \times 91 / 4 \times 31 / 2^{\prime \prime}$. For $110-120$ v. $50-60$ cycle AC. 9 lbs.
87 F 371. $\$ 5$ Monthly ........ NET 73.01


TR110 TRANSISTOR TESTER For all-around servicing convenience, a versatile tester also serving as a signal tracer, voltmeter, battery tester and milif. ammeter. Tests transistors in circuit with AC gain check-also tests DC gain and leakage out-of-circuit. Divectly réads cuf. rent gain (betal and Fests diode F/B ratios. Has $0-12 \mathrm{~F}$. scale for battery tests; $0-50 \mathrm{ma}$ scale for current drain-aids in alignment. Mirror in removable cover reflects oppo. site side of PC boards. With leads, set-up chart and batteries. $8 \times 7 \% \times 3^{\circ} .6 \mathrm{lbs}$.
83 F 990. $\$ 5$ Monthly .........NET 58.31

## NODEL TRI15 TRANSISTOR-DIODE TESTER

High quality tester. Battery powered, it checks transistors for opens shorts and eakage. Reads current gain (Beta) directly, or as good or bad. Tests diode F/B ratios, and seleniums for forward,

## HGIO4 HARMONIC GENERATOR

Battery powered signal generator for fast signal-tracing of transistor radios. Generates RF, IF and audio signals simultane ously. Traces from speaker to antenna. Puts $1000-\mathrm{cps}$ note through good stages. With battery. $13 / 3 \times 31 / 2 \times 41 / 2 / 2 \mathrm{lb}$.
83 F 986.
NET 9.75

## FCi23 TUBE-FILAMENT TESTER

Qulck checks in series-string TV sets. AI so checks voltages ( $100-600$ ) and fuse continuity, wiring, etc. $31 / 4 \times 4 \times 11 / 4^{\prime \prime}$. With leads. For $110-120 \mathrm{v} ., \mathrm{AC}-\mathrm{DC} .1 \mathrm{lb}$.
65 F 092.
NET 3.87

## VB2 "VIBRA-DAPTOR"

Adapts any tube tester to checking vibra tors. Has sockets for 3 or 4 -prong units. 2 lamps show vibrator condition. Sturdy steel case. $33 / 4 \times 13 / 1 \times 13 / 4.5 \mathrm{oz}$. 87 F 278.

NET 2.69

## SM112 COMBINED VTVM-VOM

Two instruments in a compact unit. Fea tures $1 \%$ precision resistors, single test prod, special scale indicators and $6^{\circ} 200$ $\mu \mathrm{a}$ meter. AC-DC volts: 0-3-10-30-100-3001000. P.P v.: $0-2800$ in 6 ranges. Accuracy; $D C \pm 3 \%: A C, \pm 5 \%$. Response (first 4 ranges) 30 cps to 4.5 mc . Ohms: VTVM 0.1000 megs in 6 ranges; VOM, 0.1 meg in 2 ranges. VTVM input imp., 10 megs; VOM sensitivity, 5000 ohms/v. Zero-center scale. With battery. $81 / 8 \times 7 \% \times 31 / 2^{\prime \prime}$. For 105-125 v., 60 cycle AC. Wt., 6 lbs.
B7 F 372. \$5 Monthly
NET 78.35
reverse current; lists Japanese equivalents. Charts for critical tests-but checks can be made without them; leads and batteries. $41 / 2 \times 5 \times 21 / 4.2 \mathrm{lbs}$.
87 F 375. \$5 Monthly
NET 24.45


## HM1I9 FILAMENT CHECKER

A new checker that tests all tubes including the new types, compactrons, nuvistors, 10 -pin and Novars In series string TV sets. Also checks fuses, picture tubes; continuity and voltage. Has on-off switch; pin straightener; cord with 2 plugs for iron, lamp, etc. $31 / 4 \times 4 \times 1 \frac{11 / 8}{}$. For $110-120 \mathrm{v}$. . $50-60$ cycle AC. Wt., 1 lb.
65 F 002.
NET 9.75

# To Simplify Servicing 

## VERSATILE UNITS TO SOLVE EVERY PROBLEM

## SS117 TV SWEEP CIRCUIT ANALYZER

A new circuit analyzer that solves any sweep, sync or high.voltage circuit problem in minutes. Checks black and white and color from top of chassis without removing it from set. Push buttons simplify testing procedures. Analyzer directly injects horizontal and vertical sync puises, grid and plate drive signals into the output transformers. Tests flybacks and de-


## DUAL TV BIAS SUPPLY

MODEL BE113. Twin bias supply (for RCA and Admiral TV sets) provides blas voltages for RF or IF alignments, finding AGC and sync troubles, etc. Output (each) $0-20$ VDC, neg. or pos., less than $0.1 \%$ ripple. Supplies may be used simultaneously. With leads. Size. $21 / 2 \times 4 \times 4^{\prime \prime}$. For 110 120 volts, $50-60$ cycle AC. 4 lbs. 87 F 373.

NET 12.49
flection yokes for shorted turns, leakage, opens and continuity. Only one yoke lead disconnected for tests. Roll chart provides data for control settings and interpretations. Has mirror in detachable cover, and 2.AC outlets in storage compartment. $91 / 4 \times 101 / 4 \times 31 / 22$ Instruction book and record. For 110 $120 \mathrm{v}, 60$ cycle AC. 10 lbs
87 F 370. \$5 Monthly .....NET 87.71

## COAPONENT SUBSTITUTORS

RC 121 COMPONENT SUBSTITUTOR Switches to select: 12-1-watt resistors, 10 to 5600 ohms; $12-1 / 2$-watt, 10 K to 5.6 megs: 20-20-watt, 2.5 to 15,000 ohms; $10-$ 600 WVDC capacitors, 100 mmid to 0.5 mid; 10-450 WVDC dual-section, 2 to 250 mfd; 1 selenium and 1 silicon rectifier. each rated 0.5 amp .800 PIV. $6 \times 7 \times 312^{\circ}$. Shpg. wt., 5 lbs.
83 F 499 . $\$ 5$ Monthly.
NET 39.15
87 F 269. Model H36. Same as RC 121, less power resistors, rectifiers and has only $1-10$ and $1-40$ mid electrolytic. $2 \times 43 / 633 / 4.2$ lbs. NET 12.49 83 F 984. Model ES102. 10 electrolytics, 4- 350 mfd . $21 / 6 \times 43 / 4 \mathrm{sq}$. 2 lbs . ....... 15.63 87 F 374. Model PR111. Contains power resistors only of RC121. 20 values. $5 \times 5 \mathrm{x}$ $21 / 3^{\circ}$. $11 / 2$ lbs.

NET 12.49
83 F 988. Model RS106. Rectifier portion of RC121. $31 / 2 \times 61 / 6 \times 71 / 2{ }^{\prime \prime}$. $11 / 4 \mathrm{lbs}$. NET 12.49


## Save Time and Woney With These Dependable Test Instrumants by

 ECO
## HC-6 IN-CIRCUIT CURRENT CHECKER

Permits on-the-spot check of output tube cathode current-indicates whether TV horizontal circuitry is over-loading output tube and associated components. $51 / 2 \times 2^{\prime \prime}$. Wt., 1 lb . 65F060.

NET 12.95

## MODEL 100 TRANSISTOR CHECKER

Dynamically tests small-signal drift and power types-in or out of circuit. Checks shorts, opens and gain simultaneously. Size, $61 / 4 \times 33 / 6 \times 2^{2}$. Wlth battery. Wt., $11 / 2$ Ibs. 87 F 203. \$5 Monthly

NET 19.95

## PS2 BATTERY ELIMINATOR

Supplies DC for transistor equipment. Checks receivers up to $221 / 2$ v. $1 \frac{1}{2} \times 41 / 2 \times 55^{\circ}$. For $105 \cdot 125$ v., 60 cycle AC. $11 / 2$ lbs. 65 F 061.

NET 13.95

## 510 TRANSMITTER TESTER

For low-power communications equipment. Reads modulation percentage, RF output. Tests funing stubs, transmission lines, etc. Audio monitoring, scope connection. $51 / 4 \times 6 \frac{1}{4} \times 21 /{ }^{\circ}$. 2 lbs 87 F 306. $\$ 5$ Monthly

NET 46.95

## MODEL 500 TEST SET

For servicing and installing crystal-controlled transmitters and receivers. Checks all types of crystals, provides RF signal. With $15^{\circ}$ cable, batteries. $61 / 4 \times 31 / 4 \times 21 / 4^{\prime \prime} .71 / 2$ Ibs.
87 F 305. $\$ 5$ Monthly
NET 29.95

## 520 ANTENNA TESTER

Inline antenna efficiency tester and in-llne RF power meter. Dual cylinder air coupler rated at 1000 w . max-does not insert error into line up to 160 MC . Direct, easy-to-read scales. 3 wattsranges provided with switching: 0-10, 0-100 and 0-1000 w. Size, $51 / 4 \times 21 / 4 \times 63 / 4$. Shpg. wt., $21 / 2$ los.
65 F 062. \$5 Monthly
NET 42.95


Your Satisfaction Is Guaranteed

# Selected Test Equipment 



## MILLEN GRIO DIP METER

MODEL 90651. A calibrated, stable RF oscillator unit with $2^{*}$ meter to read grid current. Frequency determining coll is plugged into unit to act as probe. Has 7 direct-reading scales and a $0-100$ scale With coils for 1.7 to $300 \mathrm{mc} .205^{\circ}$ callbrated drum dial. $7 \times 33 / 5 \times 3 \frac{3 / 4}{6}$. In handy polypropylene carrying case that holds meter and coilfprobes. For $110-120$ volts $50-60$ cycle $A C$-has terminals for battery operation. Wt., $31 / 2$ los.
65 F 090. 55 Monthly
NET 68.85

I.H. 8 TELE-CHECK

MODEL CR-118. Portable CRT substitution unit. Self-focusing. For electrostatic or electromagnetic focusing TV sets with $52^{\circ}, 66^{\circ}, 70^{\circ}$, or $90^{\circ}$ yokes. Has universal yoke. Adjustments made by use of horizontal and vertical lines on front plate. $12 \times 11 \frac{1}{2} \times 15^{*}$. With case, leads, face olate and $8 \times P_{4} C R T$. Wt., 12 lbs.
37 FX 297. $\$ 5$ Monthly.
NET 44.95
87 FX 193. CR-168. As above, but with $8 \mathrm{YP4} 4110^{\circ}$ univ. yoke.
54.50

87 FX 198. CR-167. As above, less tube. Takes 8PX4, 8YP4. $91 / 2 \mathrm{lbs}$.
. 28.50
87 FX 194. CR-168S. Same as CR-168, plus test speaker. 13 lbs .
64.50


## PRECISION SIGNAL TESTER

MODEL 202. Aural-visual tracer. 3-stage preamp has cascode circuit with feedback; additional voltage gain of 400 for scope or VTVM; flat, 2 cps to 300 kc to scope output or "Maglc Eye." Noise test with applied breakdown voltage. Wattmeter, 25-300 watts. With audio probe, less RF probe. Size, $71 / 2 \times 101 / 2 \times 61 / 2$. Built-in speaker. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 11 lbs.
84 FX 197. $\$ 5$ Monthly.
NET 58.75
87 F 258. RF Probe. 1 lb .
NET 7.35


## DON BOSCO STETHOTRACER

A pen size, transistorized self-contained signal tracer. Frequency range, 60 cps to 200 mc ; gain. 60 db ; distortion, $5 \%$ max.; AC v., 1 mv ; DC v., 250 v. Only $5 \%{ }^{3}$ long. $1 / 2^{*}$ dia. Uses single 1.5 v . battery. With earphone, cord, plug. 3 Interchangeable attenuator probes, RF detector.demodulator crystal diode probe, lead and battery. Shpg. wt., 3 oz.
65 F 018. \$5 Monthly.
NET 29.95
65 F 017. Vibrotracer. Detects minute mechanical vibrations with stethotracer. Frequency range from 200 cps to ultrasonic. Shpg. wt., 3 oz.

NET 49.95

## 87 F 470. "Mosquito." Pen-size signal in-

 jector. Oscillator provides 1000 cps test tone rich in harmonics for AF and RF. with battery. $30 z$.NET 9.95


## B\&W AUDIO OSCILLATOR

MODEL 210. Furnishes low distortion signals (on 5 bands) from $10-100,000 \mathrm{cps}$. Has $43 / /^{\text {n }}$ dial calibrated over $328^{\circ}$. Excellent for testing broadcast station response, high fidelity equipment, etc. Wave form distortion Is less than $2 \%$ at 5 v . output from $50-20,000 \mathrm{cps}$. Output imp., 600 ohms balanced. Hum and noise level, 70 db down at 5 v . With 2 -prong adapter. Gray aluminum case. $9 \times 6 \times 12^{\circ}$. For 110.120 v., $50-60$ cycle AC 11 lbs.
65 FU 091. 59 Month/r.
NET 165.00

## B\&W DISTORTION METER

MODEL 410. Measures audio distortion. nolse level, audio gain or loss in do's and AC voltages. Ranges frequency, 20-20,000 cps (harmonics to $100,000 \mathrm{cps}$ ); distortion. $1 \%, 3 \%, 10 \%, 100 \%$. 600 ohm input impedance. Voltmeter section has 1 meg input and frequency response of 20 $200,000 \mathrm{cns} .9 \times 1111^{2}$. For $110.120 \mathrm{v}$. . 50.60 cycle AC. Shpg. wt., 11 Ibs.
85 FU 003. 810 Moniniv.
NET 189.50


## WATERMAN "POCKETSCOPE'

MODEL S-11A. $3^{\circ}$ oscilloscope. Horizon. tal and vertical sensitivity, 50 mv per major division; bandpass from DC to beyond 200 kc ; sweeps from 3 cDs to 50 kc . Uses 3 MP CRT. $7 \times 5 \times 11^{\prime \prime}$. For 105.125 v., 50-400 cycle AC. Shpg, wt., 10 lbs.
87 FU 400. $\$ 8$ Monthly.
NET 149.50
87 FU 401. Model S-14A. Offers 5 mv sensitivity per major division, and sweeps from $1 / 2 \mathrm{cps}$ to 50 kc , repetitive or trig. gered. Size, $7 \times 6 \times 12^{\prime \prime}$. Shpg. wt., 16 lbs. $\$ 13$ Monthly.

NET 249.00

G-C TEST LEADS AND PRODS

(A)

33-452 Test Lead Kit. 6 prods; phono needle tips; spade lugs, alligator clips and phono tip plug fit banana plug end. 1 red; 1 black. 4 oz .
50 F 696
NET 1.84
(B) 33-464 Long Reach. 50 cables-5 prod, one end: meter plug, other end. 1 red; 1 black. 4 oz .

## 50 F 697

NET PER PAIR 1.23
[] 33-470 Stretch. $9^{\circ}$ coil extends to $6^{\prime}$. $6^{*}$ handles. Phone tips. 4 oz.
42 F 355.
NET PER PAIR 2.91
[D] 33-458 6000 v . Insulation. $6^{\circ}$ prods;
(0) phone tips. $50^{\circ}$ leads. 4 oz .

42 F358
NET PER PAIR 1.35
[E] 33-454 Slender Pencil. $5^{\circ}$ prods: $50^{\circ}$
42 cable
NET PER PAIR 73c


## f. AMF PRO-GLO CONTINUITY TESTER. Checks continuity, shorts, grounds

 and opens. Dim light indicates poor con-nection-no light when resistance exceeds 2 ohms. $51 / 2^{*} \times 3 / 4^{\circ}$ dia. With bulb and standard penlight cell. 2 oz.78 F 052
NET 99c
G G-C NEO-O-LITE. Neon glow tester. Indicates from $60 \mathrm{v} . \mathrm{AC}$ and $90 \mathrm{v} . \mathrm{DC}$ to 500 v. AC-DC. Finds hot AC leads, checks continuity, etc. $5^{*}$ leads; 3 oz.
78 F OSS
net 44c


## "nu more for your money in PUBLIC ADDRESS

## COMPONENTS AND SYSTEMS

## KNIGHT P.A. ... first choice

## for performance and value!

- Your Best P.A. Buy-More Watts Per Dollar
- Advanced Circuit Design-Newest Styling
- Underwriters Laboratorles Approved
- Satisfaction Guaranteed or Your Money Back
- Unconditional One-Year Guarantee

KNIGHT amplifiers give you more : larger transformers for better response, exclusive impedance selectors simplify speaker hook-up, special circuits to reduce feedback and avoid trumpet burnout. 25 -volt output eliminates need for conduit. Look to Knight for the best in value, performance and reliability!

## Enjoy These Buying Advantages:

## LARGEST SELECTIONS

Choose from our own Knight components, and other top names representing every type of sound equipment you require.

## SELECT YOUR SYSTEM

Send a list. of components you need to our Audio Div. We'll review it for proper matching, then rush you a special money-saving system price quotation.

## FREE CONSULTATION

Want us to plan your system? Just tell us if ambient noise will be low, average or high; approx. crowd size; include a sketch of area with dimensions.

Professional 50-WATT Amplifier


KNIGHT "PROFESSIONAL" HIGH-FIDELITY P.A. AMPLIFIER


#### Abstract

Only

$\left\{299^{50}\right.$ - 4 Locking, Broadcast-Type Mike Inputs - Master Gain, Separate Bass and Treble - Calibrated Sound-Level Meter - Output Jack for Direct Tape Recording \$7 Monthly A professional-quality 50 -watter for use where maximum audio fidelity is required. Highlights include: full mixing of 4 mikes; remote mixing facilities, and sockets for plug-in low-impedance mike transformers (see below); balance controls for output tubes and hum; boost and cut-type tone controls; anti-feedback control; pilot light. Output jack permits simultaneous recording. Aluminum and black. Size, $67 / 8 \times 171 / 4 \times 11^{\circ}$. U.L. Approved. Made in U.S. For $110-120$ v., 60 cycle AC. 29 Ibs. 57 DU 005-J. $\$ 7$ Monthly. ONLY 129.50


57 D 040. Plug-In Low-Impedance Transformer. For 50 to 600 ohm mikes. Shpg. wt., 1 lb.

ONLY 13.50
57 D 011. 3-Channel Remote Mike Mixer. For KN. 3050 only. Operates at up to $100-\mathrm{ft}$. away. Supplied with $50-\mathrm{ft}$. cable. $5 \times 21 / 2 \times 1^{\circ}$. Shpg. wt., $11 / 2$ lbs.

ONLY 12.75

Power: 50 watts (100 watts peak).
Response: $\pm 1 \mathrm{db}, 30-20,000 \mathrm{cps}$ (at rated output).
Inputs: 4-Mic; 2-Aux (high-level Phono, Tuner or Tape Recorder); Mag Phono.
Controls: 4-Mic; 2-Aux; Bass; Treble: Master Gain; Anti-Feedback; Local/Remote Mike-Control Adapter switch; Output Tube Balance; Hum Balance; Meter Calibration switch; On-Off.
Hum and Noise: 75 db below rated output.
Input Required for Rated Output: Mic, . 006 v .; Aux, .25 v.: Mag Phono, . 012 v .
Outputs: 4, 8, 16 ohms; 25 and 70.7 volts; Tape Recording Output.
Tubes: 2-6CA7/EL34; 4-12AX7; 6AV6; 5V3 rect.
Power Consumption: 160 watts at 120 volts, 60 cycle AC.

## KNIGHT P.A.

10WATTS


3210

## New Advanced-Design 10-Watt P. A. Amplifier

## '2970

\$5 monthly

- Our Lowest-Priced Public Address Amplifler
- Excellent for High-Quality Coverage in Quiet Areas
- Handy "Quick-Change" Output-Impedance Selector
- Inverse Feedback Circuit for Lower Distortion

The KN-3210 is an outstanding amplifier value for use in medical clinics, dining rooms, or any area of up to 5000 square feet. Newly designed, it gives you fullfldelity P.A. coverage, at minimum cost, in all low-power applications. Highlights include: "Quick-Change" octal selector plug that lets you instantly choose the output impedance you need; simple 2 -screw output terminal for easy speaker connection; a true inverse feedback circuit for a pleasing widerange frequency response plus greatly reduced hum and distortion; a master tone control for easy setting of tonal emphasis on both mike and auxiliary inputs; constant-voltage outputs at both 25 and 70.7 volts; and a convenient pilot light. The compact $5 \times 12 \frac{1}{2} \times 101 /{ }^{\prime \prime}$ case has black and aluminum finish. For $110-$ 120 volts, 60 cycle AC. Unconditionally guaranteed for one full year. Made in U.S. Shpg. wt., 12 Ibs.

57 DX 001 -J. $\$ 5$ Monthly
only 29.70

- KN-3210 SPECIFICATIONS Power: 10 watts ( 20 watts peak). Response: $\pm 2 \mathrm{db}, 40 \cdot 20,000 \mathrm{cps}$. Inputs: Mic: 2-Aux (Phono, Tuper or Tape Recorder).
Controls: Mic: Aux Fader; Master Tone: On-Off.
Gain: Mlc, 116 db ; Phono, 75 db . Hum and Noise: 66 db down. Input Required for Rated Output: Mic, 015 v .; phono, 0.75 v .
Output: 4, 8, 16 ohms; 25 and 70.7 volts.

Tube Complement: 12AX7A; 6L6. GC: 6CA4 rectifier.

## 10-Watt Systems Featuring the All-New KNIGHT KN- 3210 Amplifier

 500 PERSONS


Knight
KN-3210


## (A) LOW-COST INDOOR SYSTEM-SAVE \$5.f

Splendid for quiet areas. Offers excellent fidelity. Incluves: Knight KN-3210 Amplifier; Argos WB-8C Wall Baffle and $8^{\circ}$ Speaker; Astatic JT-30 Mike and Stand; $50^{\prime}$ Speaker Cable. Baffle comes in blonde or walnut-specify. Shpg, wt., 22 lbs.
20 P A 751. $\$ 5$ Monthly Specify Finish.
ONLY 44.95
20 PA 752. As above, but with 2 speaker-baffles. System price saves you \$6.96. Wt., 27 lbs .

ONLY 52.50
20 PA 753. Like 20 PA 751 above, but with Knight KN. 80 trumpet instead of Argos. Ideal for indoor-outdoor spot coverage in noisy areas. Save \$3:07. Wt., 21 lbs.ONLY 52.95 20PA 754. As above, but with $2-K N-80 ' s$. Save $\$ 3.57$. Shipg. wt., 25 lbs. $\$ 5$ Monthly

ONLY 67.95

## (B) PORTABLE SYSTEM—SAVE $\mathbf{\$ 5 . 7 7}$

Our lowest-priced and most compact portable sound sys. tem. Combines genuine lightweight design and easy setup with "'big sound." Gives full-fidelity audio reinforcement for small combos, sales demonstrations, indoor sports events and other activities. System includes: Knight KN3210 Amplifier; Combination Baffle-Carrying Case with Heavy-Duty $8^{\prime \prime}$ Speaker; Astatic JT-30 Mike and $8^{\prime}$ Cord; $50^{\prime}$ Speaker Cable. Speaker has "whizzer" cone for extended treble response. Carrying case holds the entire system, including cable. Allied's system discount gives you big savings off catalog prices. Shpg. wt., 28 lbs.
20 PA 755. $\$ 5$ Monthly.
ONLY 51.95


## New Value-Packed 20-Watt P. A. Amplifier

$\$ 5$ monthly

- Outstanding Buy for Medium-Power Applications
- High-Efficiency Circuit for More Watts per Dollar
- "Quick-Change" Plug for Instant Impedance Changes

The new KN-3220 gives you more power, more features and more quality than any other comparably priced P.A. amplifier. The $30-20,000 \mathrm{cps}$ audio response gives crystal-clear coverage in any medium-size area. Sound quality is even further improved by an inverse feedback circuit that assures extremely low hum and distortion levels. Also: noise-free Amphenol 75MCIF mike connectors; handy octal impedance-selector plug: master tone control that operates on both mike and auxiliary inputs; handsome black and aluminum finish. $5 \times 121 / 2 \times 101 / 1^{\prime \prime}$. Unconditionally guaranteed for one year. U.L. Approved. For $110-120$ volts, 60 cycle AC. Made in U.S. Shpg. wt., 25 Ibs.
57 DU 002-j. $\$ 5$ Monthly
ONLY 41.50
57 DX 006-3. KN-3201 Phono Top for Above. Plays at all 4 speeds. Attaches with
a screwdriver. Completely assembled. 4 lbs. $\$ 5$ Monthly
ONLY 17.95

## KN-3220 SPECIFICATIONS

Power: 20 watts ( 40 watts peak).
Response: $\pm 2 \mathrm{db}, 30-20,000 \mathrm{cps}$.
Inputs: Mic: 2-Aux (Phono, Tuner or Tape Recorder).
Controls: Mic; Aux Fader: Master Tone; On-Off.
Gain: Mic, 126 db ; Aux. 83 db .
Hum and Noise: 75 db down.
Input Required for Rated Output: Mic, 0065 v .; Aux., 0.45 v .
Output: 4, 8, 16 ohms; 25, 70.7 v .
Tube Complement: 12AX7A; 6AV6; 2-7189: 6CA4 rectifier.

## 20-Watt Systems Featuring the All-New KNIGHT KN-3220 Amplifier

## (A) PORTABLE SYSTEM-SAVE \$15.31

One of the most versatile P.A. systems we have ever offered. Packs enough power to cover most medium-size areas, indoors or out-light enough to carry anywhere. Our system price gives you big savings over the cost of the components purchased separately. System includes: Knight KN-3220 Amplifier; two Utah 12" Speakers installed in a Carrying Case that separates into two separate baffles; Electro-Voice 727SR Desk Mike with Floor Stand Adapter; Allas Floor Stand; 2-50' Speaker cables. Mike has a $60-8,000 \mathrm{cps}$ response; includes $10^{\prime}$ cord and on-off switch. Set-up is fast and simple, even for those with no technical knowledge. Case accommodates all components. Shpg. wt. 67 lbs.
20 PA 758. $\$ 5$ Monthly
ONLY 82.50

## [B] TOP-BUY INDOOR SYSTEM-SAVE $\$ 11.30$

A fine choice for average-size auditoriums or churches. Big savings off catalog prices, too. Includes: Knight KN3220 Amplifier; 2-Deluxe Argos Wall Baffles with $8^{\circ}$ Speakers; Electro-Voice Model 727SR Desk Mike with Floor Stand Adapter; Atlas Floor Stand; and 2-50' Speaker Cables. Wood baffles come in blonde or walnutspecify. Baffles include hardware for easy mounting. Mike has $5^{\prime}$ cord and an on-off switch. Shpg. wt., 44 Ibs .
20 PA 756. \$5 Monthly Specily Finish ...... ONLY 69.95 20 PA 757.As above, but $12^{* *}$ speakers in place of $8^{*}$. Save \$13.67. 47 lbs. Specify Finish.

ONLY 75.50




## SYSTEM PRICE SAVES YOU $\$ 35.26$

Carefully selected for maximum performance, this excellent 35 -watt system is tailored for average-size auditoriums, churches or gymnasiums. Consists entirely of big-name components. Overcomes noise levels . . . provides pleasing. high-quality voice and music reproduction to entire audience. Includes: Knight KN-3235 35-Watt Amplifier; E-V 664 Wide-Range Dynamic Mike; Atlas MS-10C Mike Floor Stand and DS-7 Desk Stand; E-V LR-4 Line Radiator with $50-\mathrm{ft}$. Speaker Cable. LR-4 speaker gives broad, even sound coverage in the most difficult installations. Microphone has $40 \cdot 15,000 \mathrm{cps}$ response. Wt., 67 lbs.
20 PA 761. $\$ 8$ monthly. .................... ONLY 143.95
20 PA 762. Same as above, but with 2-E-V LR.4's for increased coverage. 89 lbs. Save $\$ 51.83$.

ONLY 195.00
20 PA 763. Same as 20 PA 761 above, but with Vega Wireless Microphone System in place of E-V 664. Vega features complete freedom of movement-no cables. Hides easily beneath coat or gown. Includes receiver and lavalier mike/ transmitter. 72 lbs. Save $\$ 80.87 \ldots . . .$. ONLY $5 \$ 5.00$
ONLY 17.95

# . 35-Watt Quality Systems for Most P.A. Applications 

PORTABLE P.A. SYSTEMS



Knight KN-3235 35-Watt P. A. Amplifier


Two Heavy-Duty 12* P.A. Speakers with Portable Carrying Case

SYSTEM PRICE
'10995
$\$ 6$ monthly

COVERS UP TO 2000 PERSONS


For Outdoor Events


Factory Programming


Indoor Meetings

## SYSTEM PRICE SAVES YOU $\$ 19.15$

Complete 35 -watt portable sound system that sets up in just a few moments-then after using, neatly packs away just as quickly. Just right for traveling dance bands, vocal groups, etc. You get: Knight KN-3235 35-Watt Amplifier; E-V 951 Crystal Cardioid Mike; Atlas MS-10C Mike Floor Stand; Two Utah Heavy-Duty $12^{\prime \prime}$ P.A. Speakers with $50-\mathrm{ft}$. Cables; Speaker-Amplifier Carrying Case. Case separates into two individual baffles when opened; attractive bluegreen and ivory leatherette covering. $24 \times 18 \frac{1}{4} \times 121^{\circ}$. All components made in U. S. Shpg. wt., 69 lbs. 20 PA 759. \$6 Monthly.

ONLY 109.95
DELUXE VERSION OF ABOVE. System plan saves you \$22.44. Consists of: Knight KN-3235 35-Watt Amplifier with Charcoal Carrying Case; E-V 664 Wide-Range Dynamic Mike; Atlas DS-7 Mike Desk Stand; MS-10C Mike Floor Stand; Two 12" Full-Range Coaxial Speakers with $50-\mathrm{ft}$. Cables and Carrying Case. A carefully balanced audio distribution system-ideal for music or voice reproduction. Amplifier case, $12 \times 16 \times 91 /{ }^{\prime \prime}$. Speaker case, $20 \times 16 \times$ 133/4. Shpg. wt., 78 Ibs.
20 PA 760. $\$ 7$ Monthly.
ONLY 132.95


## SYSTEM PRICE SAVES YOU \$9.16

Dependable performer for use throughout offices, stores, halls, school recreation rooms, etc. System sets up with a minimum of time and effort. Provides clear voice repro. duction for paging and has provision for easy addition of extra speakers and other sound sources-radio, tape recorder or record player-whenever you wish. Includes: Knight KN-3235 35-Watt Amplifier; E-V 729SR Ceramic Mike with Desk Stand; Atlas MS-10C Mike Floor Stand; Two Argos "Thinline" Wall Baffles with Jensen 12" Heavy-Duty Speakers and 50 -ft. Cables. Baffles in blonde or walnut finish-specify choice. Wt., 57 lbs. 20 PA 76A. $\$ 5$ Monthly. Specify Finish.

ONLY 94.50
ALTERNATE SYSTEM. Save \$15.89. You get: Knight KN3235 35-Watt Amplifier; E-V 664 Wide-Range Dynamic Mike; Atlas DS-7 Desk Stand; 4-Utah 70.7-Volt $8^{\prime \prime}$ Speaker-Baffles. Mahogany or Blonde. Less cable. 73 Ibs. 20 PA 765. \$8 Monthly. Specify Finish..... ONLY 159.50
20 PA 766. As above, but with Shure 520SL Paging Mike in place of E-V mike and stand. $63 \mathrm{lbs} . . . .{ }^{\text {. }}$ ONLY 129.95


## SYSTEM PRICE SAVES YOU $\$ 23.33$

Provides exceptional full-range coverage where large indoor or outdoor areas must be blanketed with sound. Includes: Knight KN-3235 35-Watt Amplifier; Shure 520SL Grip-to-Talk Mike; 3-E-V 844 Weatherproofed Speakers with 50 - ft . Cables. Shpg. wt., 61 lbs .
20 PA 767. $\$ 6$ Monthly.
ONLY 119.95
MUSIC-QUALITY SYSTEM. Save \$41.11. Knight KN. 3235; E-V 664 Dynamic Mike; Atlas MS-10C. DS-7 Floor and Desk Stands; 2-E-V 848 Projectors. 75 Ibs.
20 PA 768. \$9 Monthly.
ONLY 167.50

# 75-Watt P.A. Equipment . 



## 75 watts

NEW KN-3275 DELUXE AMPLIFIER

## Only

- Special Antl-Feedback Control
- 25 Volt Output-No Conduit Needed
- Separate Bass and Treble Contfols
$\$ 5$ monthly " "Quick-Change" Impedance Selector
Newly designed to give you more for your P.A. dollar, we enthusiastically recommend the KN-3275 for use instadiums, factories and large auditoriums-or anywhere maximum coverage is essential. Highlights: switch that filters out low frequencies to virtually eliminate acoustical feedback, and also guard against trumpet-diaphragm burnout; "quick-change" selector that lets you choose output impedance instantly; inverse feedback circuit for superior audio quality; noise-free Amphenol 75 MCIF mike connectors; full-range response. Black and aluminum finish. $5 \times 15 \frac{1}{4} \times 101 /{ }^{\circ}$. U.L. Approved. For $110-120$ v., 60 cycle AC. Made in U.S. Shpg. wt., 39 Ibs.
57 DU 004-J. $\$ 5$ Monthly.
ONLY 82.95


## KN-3275 SPECIFICATIONS

Power Output: 75 watts (150 watts peak)
Frequency Response: $\pm 2 \mathrm{db}, 30-20,000 \mathrm{cps}$
Inputs: 2-Mic; 2-Aux (Phono, Tuner or Tape)
Controls: 2-Mic; Aux Fader; Bass; Treble; AntiFeedback; On-Off.
Gain: Microphone, 139 db ; Aux., 97 db .
Hum and Noise: 70 db below rated output.
Input Voltage for Rated Output: Mic, .002B volts; Aux- 20 volts.

Outputs : 8,16 ohms; 25 and 70.7 volts.
Tubes: 2-12AX7A; 6AV6; 2-6CA7; 5AS4A; 5Y3GT
Power Consumption: 180 watts at $120 \mathrm{v} . \mathrm{AC}$.

## 4-SPEED PHONO TOP FOR KN-3275

MODEL KN-3201. Plays at $162 / 3$. $331 / 3.45$ and 78 rpm . Assembledattaches with screwdriver. With cartridge. $5 \frac{1}{2}$ lbs.
$57 \mathrm{DX} 006-\mathrm{J}$.
ONLY 17.95

75-WATT INDOOR P.A. SYSTEM


## SYSTEM PRICE SAVES YOU $\$ 10.58$

Engineered to give you highest-quality reproduction of both voice and music in unusually large or noisy offices, auditoriums restaurants and similar applications. Powerpacked and ready for easy expansion, there's hardly an-indoor audio job this deluxe system cannot handle!

You save $\$ 10.58$ over the cost of the components purchased separately. Includes: Knight KN-3275 75-Watt Amplifier; 6-Argos "Thinline" Wall Baffles with Jensen $8^{\circ}$ Speakers, 70.7 -Volt Line Transformers and L-Pad Volume Controls installed; Astatic 200-S Mike with Stand and 8-Ft. Cord. Less speaker cable (facing page). Attractive baffles come in blonde or walnut finish-specify.

Handy screw terminals permit fast speaker hookup; just hang them on the wall and connect wiring with a screw. driver-no soldering. Built-in line transformers end im. pedance-matching problems-adding extra speakers is easy. L-pads control volume of each speaker individually. Mike has on-off switch. Shpg. wt., 72 bbs.
20 PA 769. $\$ 9$ Monthly. Specify Finish
ONLY 174.95

## Designed to Meet Every High-Power Application

## 75-WATT DIRECTIONAL SYSTEM


COVERS UP TO 50,000 PERSONS
For Outdoor
Stadiums
Factories

## SYSTEM PRICE SAVES YOU $\$ \mathbf{4 6 . 0 0}$

Especially selected to provide maximum intelligibility of speech over an extremely wide area, even under high ambient noise levels, indoors or out. Fine for music, toothe dual-horn coaxial speakers have a frequency response from 175 to $10,000 \mathrm{cps}$.

By purchasing the full system, you save $\$ 46.00$ over the cost of the same components purchased separately. System includes: Knight KN-3275 75-Watt Amplifler; 3-E-V Model 848 CDP Projectors; and Astatic 335H Dynamic Mike with convenient Swivel-Type Desk Stand. Less speaker cable (see below at right)
The weather proof projectors may be mounted horizontally or vertically, for augmented sound dispersion. Feature virtually indestructible spun fiberglas construction. Deluxe gray and chrome mike has a $60-12,000 \mathrm{cps}$ response; includes an on-off switch; desk stand; lavalier cord for lapel use; a $5 / 0^{\prime \prime}-27$ threaded adapter for a conventional floor stand; and an 8 -ft. cable. Speakers have a mesa tan finish. Shpg. wt., 87 lbs.
20 PA $770 . \$ 10$ Monthly.
ONLY 199.50
All Knight P.A. Equipment Is Guaranteed for One Year


Great for Boat Hailing, Marine Patrol Activities, Ship-Board Entertainment


Ideal for Sound Trucks, Civil Defense Units, Fire and Police Vehicles

## 30 Watts

## ALL-TRANSISTOR

## Mobile Public Address Amplifier

\$5 monthly

- Operates From Any 12-Volt Source
- Only $1 / 4$-Amp Idling Current Drain
- Extremely Compact and Lightweight
- Ideal for Autos, Sound Trucks, Boats

A triumph of skillful engineering, the new, ultra-modern Knight KN-3230M All-Transistor Mobile Amplifier provides a full 30 watts of audio power everywhere you go. Operates from any 12 volt DC source-its power cord plugs into cigarette lighter receptacles. Occupies very little spaceideal for autos, trucks, buses, boats, etc. Highly efficient transistor circuit has extremely low battery drain-iding current of only $1 / 4$ amp is less than that used by a car's parking lights. At full rated power, uses only 4.5 amps. Lightweight, it sets up in moments-perfect for use in parks, playgrounds, picnic areas, advertising campaigns and sales demonstrations. Size, $31 / 2 \times 10^{3} / 4 \times 6^{\circ \prime}$. Black cabinet, aluminum finish panel. Made in U.S. 11 lbs.
57 DX 007-J. $\$ 5$ Monthly
ONLY 69.95
57 DX 008. AC Power Supply. Converts KN-3230M for use on 110-125 v., 50-60 cycle AC. Wt., 22 Ibs..... ONLY 39.50

## SPECIFICATIONS

Frequency Response: $\pm 3 \mathrm{db}, 100$ to $10,000 \mathrm{cps}$. Hum and Noise: 67 db down.
Inputs: 1-Mic. 1-Phono.
Controls: Mike Volume, Phono Volume, Master Tone, Off-On and Trumpet Protector Switch. Impedances: 4,8 and 16 ohms.
Current Drain: 4.5 Amps at full power; $1 / 4 \mathrm{amp}$ idling

## OPTIONAL PHONO-TOP FOR KN-3230N



Takes records to 12 ; $331 / 3,45$ and 78 rpm speeds. Ceramic flip-over cartridge with sapphire needles. Powered by amplifier; includes cables, plugs, Easy to install. 6 lbs .
57 DX 009-J..... ONLY 32.40

HIGH-QUALITY MOBILE SYSTEM


## SYSTEM PRICE SAVES YOU $\$ 11.31$

Get top-notch mobile performance and reliable sound $q$. erage with this great system. It's the perfect set-up political campaigning, outdoor rallies, advertising and ai outdoor activity. Operates from 12 VDC in cars, trucks boats. System includes: Knight KN-3230M All-Transist 30-Watt Mobile Amplifier; Shure 4048 Controlled Ma netic Mlcrophone and Cable; Electro-Voice 844 Pagin Speaker with 25 Feet of Cable. Shure's microphone is ideally sulted for outdoor P.A. work-combines rugged construction with excellent speech intelligibility. Has push-to-talk switch. E-V's 844 speaker will handle 30 watts of material with good response; aluminum horn. 21 lbs .
20 PA 773. \$5 Monthly.
ONLY 99.50
OPTIONAL SYSTEM. SAVE $\$ 16.321$ As above, but with 2 E-V 844 Paging Speakers, for increased coverage. 29 lbs. 20 PA 775. $\$ 6$ Monthly

ONLY 115.95
ALTERNATE SYSTEM. SAVE $\$ 31.421$ As above, but with 2 E-V 848 Projectors. Weather-proofed fiberglas. 43 lbs. 20 PA 774. $\$ 8$ Monthly.

ONLY 154.95

VP20 TRANSCRIPTION PLA Includes B50 hl-li playergan Pla "a system in a single carrung case. has amapart" design-one sde of case $12^{\prime}$ heavy. plifief/plaver; other has one 12 heaver duty speakor and $25 \cdot \mathrm{ft}$. cable. See or features below, right. $161 / 2 \times$
117 v .60 cycle AC. 401 s . 57 SU 344. $\$ 8$ Monthly. NET 140.90
VP40 TRANSCRIPTION PLAYER Features 850 hi-fi player with a 40 -watt P.A. system. Player and amplifier are housed in one case, $181 / 4 \times 161 / 2 \times 81 / 2$; two heavy-duty $12^{\prime \prime}$ speakers with $25^{\circ} \mathrm{Ft}$. cables are in a matching case, $16 \times 153 / 4 \times 111 / 2$. For 117 v. 60 cycle AC. 55 lbs.
57 SX 343-2. \$11 Monthly. NET 204.95
SCC-12 SPEAKER CASE. For use with VP20 or VP40 players. Includes two 12" speakers with $25 . \mathrm{ft}$. cables in "Break. apart" case. Forms two separate speaker units. Gray and black vinyl fabric covered. Size, $16 \times 153 / 4 \times 11 \frac{1}{2}$ ". Wt. 18 lbs. 57 SX 342. $\$ 5$ Monthly ...... NET 54.90

## NEW VP10 RECORD PLAYER

Budget-priced 10-watt portable phonograph amplifier perfect for schoolroom or dance class. Uses B414-speed player for up to $12^{\prime \prime}$ discs. $16,33,45$ and $78-\mathrm{rpm}$ speed is $5 \%$ adjustable. Ampllfier has high-irrpedance mike input: separate bass and treble controls; mike and phono level controls. $12^{\prime \prime}$ speaker with $25 \cdot \mathrm{ft}$. cable mountod in cover. Black and oray. $151 / 2 \times 14 \times 111 / 2$. For 117 v., 60 cycle AC. 26 lbs 57 SU 345. \$5 Monthly.

NET 96.90

## ,ariscription Players by Bogent



FEATURES OF THE VP20/VP40 SERIES PLAYERS

HI-FI PLAYER. Less than $.5 \%$ wow and flutter; takes up to $16^{\prime \prime}$ discs; 4-pole shielded motor: G.E. magnetic cartridge; arm pressure adjust.
VARIABLE SPEED. From 29 to 85 rom; click-stop positions for 16, 33. 45 and 78 -rpm on control. AUTOMATIC CUEING. Lever for raising or lowering arm at any point on record

AMPLIFIER RESPONSE. $\pm 11 / 2 d b$ from 50 to $15,000 \mathrm{cps}$.
INPUTS. Phono (internal connec. tion), Tuner (or Tape Recorder), 2 High Impedance Microphones.
CONTROLS. Master Power, Bass, Treble, Scratch Filter, Volume Input 2. Volume Mic Input, Input 2 Selec. tor, Speech Filter (VP40).
CASE FINISH. Gray and black


## Sturdy "Challenger" P.A. Amplifiers and Useful Accessories

## CHB10 10-WATT AMPLIFIER

Ill, economy-priced amplifier features watt output; inputs for phono and micphone; treble tone control; usable for red music service. Response: 40-12,000 $\pm 2 \mathrm{db}$. Gain: Mic, 110 db ; Phono, 90 Hum and Noise: - 75 db . Output Imance: $4,8,16$ ohms; 25 -volt line. 3 es. Gray. $33 / 4 \times 111 / 4 \times 81 / 2{ }^{\prime \prime}$. U.L. Approved. 105-125 v., $50-60$ cycle AC. 12 lbs . $\mathbf{\$ X} 353$. List, $\$ 64.75 . . .$. . NET 38.85
ATI WIRED MUSIC TRANSFORMER. r CHB10 when using Wired Music sruice. Gain: i v., across 600 ohm line. esponse: $50-20,000 \mathrm{cps}$. Adaptable to uther Challenger amplifiers. 8 oz . 57 S 354. List, \$15.65.

NET 9.40
CHB14 14.WATT AMPLIFIER. inputs: 1 Mic; 2 Phono with fader. 4, 8, 16 ohm, 25 volt outputs. 3 tubes, rectifier. For 105-125 v. $50-60$ cycle AC. 15 lbs.
$57 \mathbf{S X} 355$. List, $\$ 75.00$.
.NET 45.00

## LPC-4 PHONO ATTACHMENT

4-speed, $16,33,45,78 \mathrm{rpm}$. Fits CHB-14, $35,50,100$ models. With brackets and hardware. $5 \times 13 \times 91 / 4$ ". 8 lbs. 57 SX 352. List, \$37.75.

## RP100BM MONOPHONIC RECEIVER

A 15 -watt amplifier, control center, and FM-AM tuner combination-all on a single chassis. Excellent for background music in offices, restaurants, medical waiting rooms, etc. Amplifier response is $\pm 1 \mathrm{db}$, $20-20,000 \mathrm{cps}$. FM section has a sensitivity of .5 uv for 30 db quieting at 75 ohm input. Has built-in FM antenna. Tunes AM from $530-1640 \mathrm{kc}$. Can be used with record player, tape recorder, or mike. Has $25-v_{4}$ output. $43 / 4 \times 15 \times 121 / 2{ }^{\prime \prime}$. Less case. For $110-120$ v. 50-60 cycle AC. 21 Ibs.

57 SX 349 . $\$ 10$ Monthly. ... NET 186.60 57 SX 350. Metal Case, 6 lbs. .NET 11.95 57 SX 351. Walnut Case. 7 Ibs.NET 24.75

## CHB100 100-WATT AMPLIFIER

Powerful, ruggedly designed for the most exacting high-level applications. Gives a usable output of 100 watts. Employs negative voltage feedback for better response, lower distortion, and superb regulation. Same inputs and outputs as CHB35 above. Identical characteristics except: Phono Gain, 100 db and Magnetic Gain, 115 db . Uses 7 tubes and siticon rectifier. Gray. $63 / 4 \times 153 / 4 \times 63 / 4$. U.L. Approved. For $105-125$ v. 50.60 cycle AC. 26 lbs. 57 Sx 348. List, $\$ 187.40$.... NET 112.45

## CHB35 35-WATT AMPLIFIER

Excellent value for all medium Dower P.A. applications. Has 2 mike inputs with individual controls; 2 phono inputs with fader; separate bass and treble controls: master volume control. Magnetic phono can be used in Mic 2 input. Response: 20$20,000 \mathrm{cps}, \pm 2 \mathrm{db}$. Gain: Mic, 120 db , Phono, 85 db , Magnetic, 100 db . Hum and Noise: -80 db . Output Impedance: 4,8 , 16 ohms; 25 and 70 -volt line. 5 tubes; 6CA4 rectifier. Gray. $63 / 4 \times 153 / 4 \times 10^{\circ}$. U.L. Approved. For operation from 105.125 V ., $50-60$ cycle AC. Wt. 18 Ibs.
57 SX 346. List, \$119.90
NET 71.95

## CH850 50-WATT A R PLIFIER

A fine choice for a wide variety of P.A. applications-requiring great area coverage. Offers the same styling and design features as the CHB35 above, except has increased power and gain. Phono Galn is 95 db , Magnetic, 110 db .5 tubes and 1 silicon rectifler. Gray. $63 / 4 \times 151 / \times 10^{\prime \prime}$ U.L. Approved. For $105-125$ v., $50-60$ cycle AC. 21 lbs.
57 SX 347. List, \$137.40.
NET 82.45
Get Your P.A. Gear for No Money
Down... Use Alled's Credit Fund

# Bogen FLEX-PAK "M" Series 




Incorporating all the latest retınements, these amplifiers olve you top flexibility. Portable, lightweight units with: leather handles; thumbscrew-fastened, slide-back cases for access to chassis; and write-in space over gain controls. All take Cannon XLR-3-11C mike connectors.

## MODEL MXM MIXER-PREAMP

For use in critical P.A. applications, or professional-quality recording on location. Unit includes five independently con. trolled mike inputs-one converts for use as a phono or tuner inout. An accurate level meter permits continuous monitoring of the combined output of all channels in use. Built-in sockets accept plug-in low impedance transformers. Output is high impedance, but may be easily converted to low impedance with T-165B 600 -ohm transformer, below, for remote broadcast or recording work Also includes Hi -Z output for connection to supplementary booster amplifiers. Portable-handy carrying strap is mounted on side.
Among its numerous features are indi. vidual speech filters for each channel; variable level markers; and feedback-type, distortion-free tone controls. Output: +18 dbm at less than $1 \%$ distortion. Controls: 5-Gain; 4-Speech Filter; Mike-TunerPhono; Bass; Treble; Off-On-Master Gain. Circuit contains eight tubes, plus $6 \times 4$ rectifier. Frequency Response; $\pm 2 \mathrm{db}, 20$ $20,000 \mathrm{cps}$. Hum: $-60 \mathrm{db} .5 \% \times 16 \frac{1}{12} \times 13^{\circ}$. For $110-120$ volts, 50.60 cycle AC. Shpg. wt., 21 lbs.
57 SU 310. List, $\$ 246.25 \ldots$ NET 147.75

## MODEL T-165B OUTPUT TRANSFORM-

 ER. Converts output impedance of MXM preamp above, to the $600-\mathrm{hm}$ broadcast standard. Quickly plugs into chassis sock. et. Shpg. wt., 1 lb. 575 333. List, $\$ 20.00$NET 12.00

## 30-WATT AMPLIFIERS

Bcth units feature constant-voltage outputs: equalized phono input; separate bass and treble controls; Cannon XL connectors; varrable level markers; etc. Response: $\pm 2 \mathrm{db}$, $35-20,000 \mathrm{cps}$. Output: 30 watts at under $2 \%$ distortion. Imp.: 4, 8, 16 and 163 ohms; balanced 25 -volt line, 70 -volt line. Pcwer consumption: 150 watts. For 110.120 v., 50.60 cycle AC.

## MODEL M330. (Not illus.) Economy-priced.

 Hum: mike, 60 db below rated output. Includes three mike channels (one converts to phono); 6 tubes, GZ34 rectifier. $53 / 1 \times 141 / 2 x$ 13". 29 lbs57 SU 309. List, \$193.75. . . . . . NET 116.25
MODEL MX30 DELUXE. For ultimate performance. Hum: microphone, 60 db below rated output. Includes fcur microphone channels (one converts to phono); Master gain control; is also wired for optional remote control accessory (see table, below). 7 tubes, GZ34 rectifier. Size, $5 \% \times 161 / 4 \times 13^{\prime \prime}$. Shpg. wt., 31 lbs.
57 SU 307. List, \$23i.25. . . . . . NET 138.75

## 60-WATT AMPLIFIERS

For P.A. applications requiring great area coverage. Include all features of the 30 -watt amplifiers at left-constant-voltage output taps; separate bass and treble controls. Cannon connectors; equalized phono input for all cartridges: plug-in sockets for lowimpedance transformers; pencil-in, eraseout identification strips for all channels; Same response and hum specificatlons; etc. Orfout: 60 watts at less than $1 \%$ distortion. Outhit Impedances: 4, 8, 16 and 83 ohms: balanced 25 -volt line, 70 volt line. Size, $5 \% / x^{x}$ $161 / 2 \times 13^{-}$. For 110.120 v. $50-60$ cycle AC Shpg. wt., each. 37 lbs.
MODEL M60. Three mike channels (one converts to phono); speech filters; 6 tubes-3-GZ34 rectifiers.

## 57 SU 308. List, \$236. 25.

NET 141.75
MODEL MX60 DELUXE. Four mike channels (one converts to pheno); Master gain control; wired for optional remote control accessory (see table, below); 7 tubes, 3-GZ34 rectifiers.
57 SU 306. List, $\$ 295.00$. . . . . NET 177.00

## 25-WATT TRANSISTORIZED MOBILE P.A. AMPLIFIER

MODEL BT-25. Hum-free, all-transistor ampliffer, with the power and facilities for a wide variety of mobile applications. Provides 25 watt output from a 12 -volt battery, or 6 watts from a 6 -volt battery. Small enough to fit in the glove compart. ment of an auto. it has inputs for mike and aux.-record player, tuner or tape deck.

Response: (optimized for best intelligibility) $400-6000 \mathrm{cps}$. Gain: 103 db . Distortion. below $10 \%$ at full output. Controls: mike gain; aux. gain; on.off; 6-12 volt selector. Impedance: 2-4, 8 or 16 ohms. Inputs are Individually controllable. Hand-wired $65 /{ }^{\prime \prime} \times 43 /{ }^{\prime \prime} \times 3 \% 4_{4} .5$ lbs.
57 S 332. List, $\$ 120.00$
NET 72.00


## LOW-COST P.A. PREAMPLIFIERS

MODEL MX6-A. Mixes any combination of 4 of its 6 inputs which include 4 high-impedance mike inputs, and 2 tuner. phono inputs. Features a gain control for each input channel. and a cathode.follower output. $51 / 2 \times 8 \times 4 \frac{3}{4}$. For 110.120 volts, 60 cycle AC. Shpg. wt., $5 \frac{1}{2} \mathrm{lbs}$.57 SX 337. List, $\$ 67.50$
NET 40.50
MODEL RP-2. For use at remote pickup points. Has separate input channels for mike and phono with volume controls for mixing. $51 / 4 \times 11 \times 7 \%^{\circ}$. Less cage, below. For $110-120$ v., 60 cycle AC. Shpg. wt., 5 lbs.
57 SX 311. List, $\$ 95.00$
NET 57.00
57 SX 312 Cage and VU Meter for RP-2. 2 lbs.


POWER BOOSTERS
P.A. booster-amplifiers for use where high-power with low distortion is required. An input of 2 volts drives any of the units to full output. Re sponse is $50-20,000 \mathrm{cps}$ at below 2\% distortion.

| Stock | Model | Wate | Size, HWD | We. | at | ${ }_{\text {HET }}^{\text {M }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 57 \text { Su } 313 \\ & 57 \text { Su } 314 \end{aligned}$ | $\begin{aligned} & \mathrm{MO}-30 \\ & \mathrm{MO}-60 \end{aligned}$ | 30 |  | 21 |  | 74.95 |
| $\begin{array}{r} 57 \text { su } 314 \\ 57 \text { Su } 316 \\ \hline \end{array}$ | $\begin{aligned} & \mathrm{MO}-60 \\ & \mathrm{MO}-100 \end{aligned}$ | 60 100 |  | 23 35 | $\left\lvert\, \begin{array}{r} 178.50 \\ 215.75 \end{array}\right.$ | 103.50 129.45 |

## ACCESSORIES FOR BOGEN P.A. COMPONENTS

| toctino | Model | Peser | Lbs | List | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $5 \times 338$ | LK. 2 | Control-Guard Locthing Plate for $M \times 60, \mathrm{M} \times 30$ M60, MXM ; includes two kers. |  |  |  |
| $575 \times 339$ |  | Rach Pmind M19. Kit for stove. 19\%). | 8 | 21.90 | 13 |
| 575 |  | Four-Channel Remote Con | 3 | 19.90 | 11.95 |
|  | T-156 | Aso-oh | 1 | ${ }_{21} 15.65$ |  |
| 53 | T-157 | As above. but 50 ohms | 1 | 13.5 | 12.75 |

Includes Desk Stand with TipProof Base

Screw-Type Connector and Phone Plug Adapter are Already Attached-No Soldering!


4550
 Ratio Sharply Lowers Audience-Noise Pickup

KNIGHT KN 4510

## SPECIAL!

MIKE and STAND COMBINATION

Order the KN=4510 with desk stand, and get both units for $\$ 9.50$. A regular $\$ 10.50$ value. Save \$1.00

# Get More for Your Money With Top-Quality KNIGHT Microphones 

VALUE-PACKED DYNAMIC MIKE
Only - Plugs into $90 \%$ of All $\$ 22^{95}$ Tape Recorders
\$5 monthly
-60-12,000 Cps Range

MODEL KN-4500. An unexcelled microphone value. Includes matching desk stand with base, 10 -ft. cord, and a screw-type connector and phone plug aiready attached. You can instantly connect it to $90 \%$ of all tape recorders. Has $5 /{ }^{n}-27$ threading to mate with any mike floor stand.

The all-directional pick-up pattern and broad $60-12,000 \mathrm{cps}$ response of the KN-4500 make it splendid for home recording. public address, etc. The moving-coil dynamic element is virtually indestructible and immune to climatic variations, as well as humidity.

Has high-impedance output of -55 db . Styled in gold and black. Mike is $7 \frac{1}{2} \times 1 \frac{15 / 6 .}{}{ }^{\circ}$; die-cast base has $51 /{ }^{\prime \prime}$ dia. Made in U.S. Shpg. Wh., 4 lbs.
57 S 220. $\$ 5$ Monthly ........ ONLY 22.95

## CARDIOID DYNAMIC MIKE

| Only | - Super-Cardioid Pattern |
| :---: | :--- |
| $\$ 34^{50}$ | - Dual-Output Impedance |
| $\$ 5$ monthly | - $50-13,000$ Cps Range |
|  | Dynamic Element |

MODEL KN-4550. A professional.quality dynamic microphone with a cardioid pick-up pattern. High directivity plus a "peak-free" response make this a superb P.A. mikesharply reduces feedback and unwanted audience-noise pick-up.
Two separately tuned chambers assure a smooth 50-13,000 cps response and consistently excellent directivity-provide marvelous clarity of tone. Tough acoustalloy diaphragm withstands extremes of heat, cold and humidity.
$3 / 8-27$ threading fits all floor and desk stands. Output, - 56 db . Has satin-chrome cast case with on-off switch. $7 \frac{1}{4} \times 1 \frac{1}{6}$. Wired for high-Impedance; easily changed to low impedance. Less connector. Made in U.S. Shpg. wt., 2 lbs.
57 S 182.15 Monthly ....... ONLY 34.50

## NEW LOWEST-COST KNIGHT CRYSTAL BIKE

High-quality at rock-bottom cost. Has shock-mounted crystal element; exceptionally high output of $-45 \mathrm{db} ; 60-8500 \mathrm{cps}$ response; tough plastic case. $211 / 15 \times 27 / 16 \times 1^{\prime \prime}$. With $5^{\circ}$ cable. Less connector. 1 lb . 57 S 166


ONLY 2.59

## ECONOMICAL CERAMIC MIKE

Only - Versatile-Many Uses<br>$\$ 795$<br>- For Hand or Stand Use<br>Less Stand

MODEL KN-4510. Newly designed to give you a budget-priced microphone well-sulted for a wide variety of uses. Small and lightweight, it can be hand-held or used on a stand (optional, below). Excellent for home recording, lecturers and paging. Ceramic element is unaffected by temperature and humidity extremes. $51 / x^{1} 19 / 6^{\circ}$. With $7^{\prime}$ cable and phone plug. Made in U.S. Shpg. wt., 2 lbs.
57 S 275
OnLY 7.95
57 S 276. Swivel-Mount Base. For above. Shpg. wt., 2 lbs... ONLY 2.55
SPECIAL OFFER. KN-4510 With Base.

## $57 S 417$.

. .BOTH FOR ONLY 9.50

## SPECIFICATIONS

Response: 50 to $11,000 \mathrm{Cps}$.
Output: -56 db : High-impedance. Coverage Pattern: All-directional. Plck-up Element: Ceramic. Cable: 7' shielded with phone plug. Styling: Brushed Chrome with gold-finished wire grille.


ElectroWoics NEW! Mobilics MICROPHONE Net
$\$ 20^{58}$

- Wide-Range Response
- High Output Level
- On-Off Switch, 6' Cable

A modern design dynamic microphone at a modest price. For P.A. use, home recording, etc. Non-directional pickup pattern and wide range response of 70 to $10,000 \mathrm{cps}$ assure excellent results. Output, -57 db . Two-tone case of chromeplated zinc and high-impact gray plastic. $43 / 4 \times 11 / 3^{"}$. 6 -ft. cable, $3 /{ }^{n}-27$ thread. Wt., 1 ib. 57 S 265. 150-Ohm Impedance.
57 S 407. High-Impedance.
List Each, $\$ 35.00$.
NET EACH 20.58

MODEL 664 VARIABLE "D." This skillfully designed, ruggedly constructed mike is a superb performer. Picks up from front only-provides high front-to-back discrim. ination against unwanted sounds, without close-talking boominess-variable distance construction produces cardioid pattern.
Provides natural reproduction of voice and music-increases working distance from microphone-provides greater protection against feedback problems. Equipped with "pop-proof" wire mesh grille to minimize wind and breath blasts.
Response from 40 to 15,000 cycles. Output -55 db . 150 -ohm and high-impedance output. Supplied wired for hi-Z. $5 / 3^{\circ}-27$ thread. Cast zinc case, finished in chrome. With on-off switch; detachable, $18-\mathrm{ft} .2$ conductor cable. Dia., 1\%:71/15 long. Shog. wt., 2 lbs.
57 S 241. List, $\$ 85.00$....... NET 49.98
MODEL 664G. As above, but gold finished.
575 261. List, $\$ 90.00$
NET 52.92

> MATCHED MIKES. Two chromed 664 's for stereo recording. Factory matched at no extra cost. 4 Ibs. $\mathbf{5 7 5 2} \mathbf{5 6 2}$.... NET PER PAIR 99.96

MODEL 644. A highly directional dynamic that lets you stand 4 times as far away as you would with ordinary mikes. Combination cardioid and distributed-front opening give greatly extended frontal pickup. Above 700 cps , sound rejection at sides and rear is 20 to 25 db . Reduces reverber. ation and feedback near the vanishing point, and lessens wind noise and mechanical shock. Output, -53 db .150 .ohm or high-impedance selected by changing MC4M connector. On-off switch. Die-cast satin-chromed case with $3 / 6$ aluminum tube. Dia.. $25 / 6^{\prime \prime} ; 16^{\prime \prime}$ long. $5 / 3^{*}-27$ thread. 18 - ft. 2-cond. shielded cable. Shpg. wt., 3 Ibs.
57 S 121. List, $\$ 110.00$....... NET 64.68 MODEL 630. Popular dynamic mike for dispatching, tape recording and general usage. Has non-directional pattern becoming directional at high frequencies. May be mounted on floor or desk stand and tilted through $90^{\circ}$ arc toward sound source, or hand-held. "Acoustalloy" diaphragm has $60-11,000 \mathrm{cps}$ response. Output, -55 db . 150 - ohm unit has $18 . \mathrm{ft}$. 2 -cond. shielded cable; hi-Z unit has 1 -cond. cable. On off switch. Chrome-plated. $61 / 4 \times 2^{\prime \prime}$. 3/: 27 thread. 2 lbs.
57 S 227 . 150-Ohm Impedance.
57 S 226. High-Impedance. List Each, $\$ 52.50$.... NET EACH $\mathbf{3 0 . 8 7}$

MODEL 636 "SLIMAIR." For P.A. use and tape recording of individual and group performers. Wire mesh blast-filter. $90^{\circ}$ swivel. $60 \cdot 13,000 \mathrm{cps}, 150$-ohm or high impedance (supplied wired for hi-Z). Output, -58 db . Chrome-plated steel case. $11 /{ }^{\prime \prime}$ dia., $10 \%_{4}^{\circ}$ long. $5 / 6^{-}-27$ thread. On-off switch. With detachable, 18 - ft . 2 -cond. cable. 2 lbs.
57 S 244. List, $\$ 72.50$
NET 42.63
MATCHED MIKES. Two Model 636 's for stereo recording. 4 lbs. 57 S 263 .... NET PER PAIR 85.26

MODEL 623. $60-12,000 \mathrm{cDs} . ~-50 \mathrm{db}$. 150 ohm or high-impedance output (supplied wired for hi-Z). On-off switch. Chromeplated. Dia., $15 / 16^{* ;} 71 / 2^{*}$ long. $5 / 6^{*-27}$ thread. $18 . \mathrm{ft}$. $2 \cdot \mathrm{cond}$. cable. 2 lbs . $57 \mathbf{S} 250$. List, $\$ 57.00$.

NET 33.52
NEW MODEL 647A. Small, all-directional lavalier mike-great wherever concealment, mobility or free use of hands is desired. Weighs only 2 oz. 60-12,000 cps. Output, -58 db .150 ohm or high impedance output (supplied wired for hi-Z). TV gray. $21 / 4 \times 3 / 4 /$. With neck cord. $18 \cdot \mathrm{ft} .2$. cond. cable. 1 lb .
57 S 264. List, $\$ 82.50 \ldots$.
NET 48.51

MODEL 419 DESK STAND. For use with 665,664 and 644 mikes. Wt., 3 lbs. 57 S 209. List, $\$ 10.00$......... NET 5.88
57 S 197. Model 418 Desk Stand. Similar to above, but for $951,636,630$ and 623 mikes. 4 lbs. List, $\$ 10.00$

NET 5.88
MODEL 420 DESK STAND. For mounting $656,655 \mathrm{C}, 654 \mathrm{~A}$ and 647A mikes. 4 lbs. 57 S 196. List, $\$ 20.00$........ NET 11.76 MODEL 428 TOUCH-TO-TALK STANO. Touch-bar on stem actuates SPDT switch. Locking button. $3 /{ }^{\circ}-27$ thrd. 2 Ibs. switch.
57 S 195 . List, $\$ 17.50 \ldots .$. NET 10.29

MODEL 300 CLAMP. Illus. with 420 . Fits mikes with 1 case dia. $1 / 2$ in. thread with adapter for $3 / 4.27$ stands. 4 oz . 57 S 258. List, \$10.00.

NET 5.88
MODEL 513 HIGH PASS FILTER. Rejects unwanted noises below 100 cps . Switched $50,150,250$ ohm impedances. On-Off

57 S 260. List, $\$ 70.00$
NET 41.16
MODEL 502A MATCHING TRANSFORMER. Not illus. For connecting longline, low. Z mikes to $\mathrm{hl}-\mathrm{Z}$. Connector, 2. ft . cable. 11 l .
$.57 \mathbf{S} 210$. List, $\$ 17.50$
net 10.29

# Low-Cost Crystal and Ceramic General-Purpose Microphones <br> MODEB 729 



## Microphones for Mobile Applications



MODEL 951 CRYSTAL. Uses variable " $D$ " principle to achieve cardioid directivity and uniform frequency response. Boasts wide-range reproduction and popproof wire mesh grille to minimize wind and breath noises. Uniform polar response makes it highly suitable for noisy locations, or where much echo is present. $50-11,000 \mathrm{cps}$. Output. -60 db . TV-gray, die.cast case. $13 / 4 \times 53 / 0^{\circ}$. $18 \cdot \mathrm{ft}$. 1 -cond. shielded cable. Wt., $11 / 2$ Ibs.
57 S 218. List, $\$ 54.50$
NET 32.05
MODEL 715 "CENTURY" CERAMIC. Ideal for home recordings, paging, etc. Resists extremes of temperature and humidity. All-directional. 60-7000 cps. Output, -55 db . High-impedance. $3 \times 21 / 15 \times 1^{-}$. s/s-27 adapter. 6.ff. cable. 1 Ib. 57 S 245. List. \$13.00

NET 7.65
MODEL 715-S. As above, but with push to-talk switch; has "lock-on" position 57 S 176. List, $\$ 15.00$

NET 8.82
MODEL 415 DESK STAND. For "Century" mikes, above. $15^{\circ}$ tilt. Satin chrome finish. Shpg. wt., 6 oz.
57 S 194. List. \$1.75

MODEL 911 CRYSTAL. For low-cost P.A. applications, tape recording. Amateur use, etc. All-directional pickup pattern becomes slightly directional at higher frequencies. 50 to 9000 cps . Output, -50 db . High-impedance. Chrome-plated. $23 / 3 \times 3 \%$ $\times 63 / 4$ long. Upright swivel mounting; OffOn switch. $5 / /^{\circ}-27$ thread. 18. ft. cable. Shpo. wt., $21 / 2 \mathrm{lbs}$. $57 \mathbf{\$} \mathbf{2 4 2}$. List, $\$ 32.50$

NET 19.11
MODEL 602 DIFFERENTIAL DYNAMIC. For 2-way radio, mobile P.A. and other uses where noise cancellation and higharticulation for maximum intelligibility are vital. Press-to-talk DPDT switch controls mike and relay. Response, 100 to 7,000 cps. Output, -55 db at $1 /{ }^{3}$. High-imped. ance. $6 \cdot \mathrm{ft}$. coiled cord. Black phenolic case. With $m$ tg bracket. $21 / 9 \times 2 \times 4^{4}$. Shpg. wt., 10 oz .
${ }_{57}$ S 174. List, $\$ 57.50$.
NET 33.81
MODEL GOOE DYNAMIC-LOW-Z. Siml. lar to Model 602 above, but not differential. Impedance, 250 ohms. 10 oz .
$57 \mathbf{S} 268$. List, $\$ 47.50$
. .NET 27.93
57 S 267. Model 600E Dynamic-Migh-Z.
As above. but high-impedance. NET 27.93
cBRAMIG MICROPHONE

## Net $\$ \mid 4^{41}$

- For Recording. P.A., Paging and Ham Use
- Smartly

Styled

- Includes

Stand
Exceptionally low-priced cardioid mike. Response, $60-8000 \mathrm{cDs}$. Output, -60 db . High-impedance Gray diecast front, plastic back. With desk stand, floor stand adapter, $10-\mathrm{ft}$. cable. $17 / 16 \times 7 \frac{1}{1 / 3^{*}}$. Wt., 1 lb . 575 173. List. $\$ 24.50$

NET 14.41
57 S 181. Model 729SR. As above, with On-Off switch. List. \$26.50 ..... 15.58
MODEL 727 CERAMIC. Similar to Model 729, but all-directional. With desk stand, plus floor stand adapter. Output level, $-55 \mathrm{db} .71 / 2 \times 11 / 2 \times 11 /{ }^{\circ}$ 5 .ft. cable. $1 \frac{1}{2}$ tos.
57 S 175. List, \$18.00.
.net 10.58
$57 \mathbf{S}$ 257. Model 727SR. As above, with
On.Off switch. List, $\$ 20.00$
11.76

MODEL 205KK-DIFFERENTIAL CARBON. Articulation $97 \%$ under quiet conditions; $88 \%$ under 115 db ambient noise. Blast-proof: shock-resistant. -50 ob at $1 / 4{ }^{\circ} \quad 100 \cdot 4000 \mathrm{cps}$. DPDT press-to-talk switch. $6 . \mathrm{ft}$. Cord. $21 / 4 \times 21 / 4 \times 4^{\circ}$. Mtg. brack.
et. 1 lb .
$\mathbf{5 7} \mathbf{S} \mathbf{2 4 6}$. List. $\$ 45.00$
NET 26.46
NEW MODEL 714S CERAMIC. Designed especially for mobile communications, paging, Ham radio and citizens band use. Response, $60-7000 \mathrm{cps}$. Output. -55 db . Case of "Cycolac" plastic for maximum durability. DPST push-button switch. $21 / 2 x$ $11 / 4 \times 35 / \mathrm{m}^{\prime \prime}$. With $10^{\circ}$ coiled cable; hang-up button and bracket. Wt., I Ib. 57 S 167. List, $\$ 16.50$.

NET 9.70

## Selected Broadcasting-Quality Dynamic Microphones

MODEL 649B. Only $3 \times 21 / 4 ; 11 / 2$ oz, $60-10,000 \mathrm{cps} . ~-60 \mathrm{db}$. 50.250 ohms. $30 \cdot \mathrm{ft}$. 2 -cond. cable. 1 lb .

57 S 118. List, $\$ 105.00$.
NET 61.74
MODEL 666. Superior mike with variable "D" desion, cardioid pattern. 30 to $16,000 \mathrm{cps}$. -58 db ; adjusts to 50 , 150,250 ohms. $13 / 4 \times 71 / 2^{*}$. With adapter for $1 / 2 *$ and $5 / 0^{*}-27$ stands. $20-\mathrm{ft} .3$-cond. cable. 1 ib . 57 S 249. List, $\$ 255.00$.

NET 149.94
$57 \mathbf{S 2 4 0}$. Model 665. Similap to above, but $50 \cdot 14,000 \mathrm{cps}$. -55 db . 50 or 250 ohms. $1 \% \times 73 / \mathrm{m}^{\circ}$. 18 - ft . 3 -cond. cable and stand adapter. 2 lbs. List, $\$ 150.00$........ NET 88.20

NODEL 655C. Deluxe "Slim-Trim" all-directional. (Only 7 oz.) Breath-blast filter. 40 to $20,000 \mathrm{cps} .-55-\mathrm{db} .50,150$ and 250 ohms (supplied wired for 150 ohms). $11 / \times 10 \frac{1}{6}$. With clamp-on adapter for $1 / 2$ and $3 / 2^{n-27}$ stands; detachable, $20 . \mathrm{ft}$. 3 -cond. cable. $11 / 4 \mathrm{lbs}$. 57 S 243. List, $\$ 200.00$.

NET 117.60


## MODEL 654A MIKE

- Great for Remotes and Studio Use - SwivelMount-Tilts $90^{\circ}$

All-directional microphone that performs beautifully in an extremely wide variety of applications. Essentially that response from $55-15,000 \mathrm{cps}$. Works into 50 250 -ohm inputs. Output, -55 db . With adapter for $1 / 2$ and $5 / /^{\circ} \cdot 27$ stands and neck cord $18-\mathrm{ft} .3$. cond cable. $7^{\circ \times 1} 11 / \mathrm{B}^{-2} .1 \mathrm{lb}$. 57 S 117. List, $\$ 100.00$ NET 58.80


## MODEL 55 S DYNAMIC MICROPHONE

Rugged, dynarnic mike; withstands severe mechanical shock as well as heat and moisture. Cardioid feature permits placement at a distance from performer $75 \%$ greater than all-directional mikes. An ideal singer's or announcer's mike. 50 to $15,000 \mathrm{cps}$. Switch selects impedances of $35.50,150-250$ ohms. or high-impedance. Output, - 57 db at high-imp. Swivel mtg. Chrome, $5 /=-27$ thread 18 - tt cable. $73 / x$ 2\% $16 \times 31 / 16$. Shpg. wt., $41 / 1 \mathrm{lbs}$. $57 \mathbf{S} 234$. List, \$83.00...... NET 48.80 MODEL 55SW. As above, but with OnOff switch for added convenience. 57 S 135. List, $\$ 85,00$......... NET 49.98 MODEL 556 S . Deluxe version of 55 S . Bullt to close tolerances for exceptional response ( $40 \cdot 15,000 \mathrm{cps}$ ), and directivity. Shock mounted. Has Cannon XL-3. $41 / 2$ los. 57 S 235. List, $\$ 135.00$.........NET 79.38

MODEL 51 "SONODYNE." Semi-direc tional; for recorder and P.A. use. Response $60 \cdot 10,000 \mathrm{cps} .35-50.150-250 \mathrm{ohms}$, and high imp. switch. Output, $=52 \mathrm{db}$. Chrome. Swivel mount. Detachable, $15 \cdot \mathrm{ft}$. cable. $51 / 6 \times 31 / 2 \times 21 / 3$. Wt. $31 / 2 \mathrm{lbs}$. $57 S$ 228. List, $\$ 49.50$

NET 29.11

## MODEL 51S. Same as above, but with

 On-Off switch.57 S 136. List, $\$ 51.50$
NET 30.28
MODEL 540S "SONODYNE II". Generalpurpose microphone for tape recording applications and sound systems. Alldirectional pattern- $360^{\circ}$ coverage. Has On-Off switch. Response switchable: 60 $10,000 \mathrm{cps}$ for music. $150 \cdot 6500 \mathrm{cps}$ for speech reproduction. Dual-impedance: 50.250 ohms, and high imp. Output: Hi-Z, -52 db ; Low. Z, -57 db . Chrome and black. Swivel mount; $5 / 6^{-2}-27$ thread. $15-\mathrm{ft}$. cable. $3 \% / 6161 / 4^{\circ}$ dia. 3 lbs.
57 S 132. List, \$49.95
NET 29.37

MODEL 545 "UNIDYNE III". Slender cardioid-pattern mike. Response, 50 to 15.000 cps . Dual-impedance. changed by moving one wire in plug (wired for hi-imp.) Output: Mi.Z. -55 db : Low. Z, -57 db . Chrome and black. With A-25 swivel adapter; 18 -ft. cable. $5^{11 / 6 \times 11 / 4}$ diameter. Shpg. wt., 3 lbs.
57 S 161 . List, $\$ 85.00$........NET 49.98 MODEL 545 S . Above, with On-Off switch. 57 S 133. List, $\$ 89.95$...........NET 52.89

MODEL 535 "SLENDYNE." Practical all. directional mike. Excellent for indoor and outdoor sound system use. Has On-Off switch. Can be hand-held, used on stand. or with lava!ier cord. Response. $60-13,500$ cps. Dual-imp. switch selects $50-250$ ohms and high-imp. Output, -61 db . With swivel adapter, $3 /{ }^{-1}-27$ thread. $18-\mathrm{ft}$. 2-cond. shielded cable, MC3 connector. Satinchrome. $719 \mathrm{gr}^{\prime \prime}$; $11 \mathrm{~m}^{\circ}$ dia. 3 lbs. 57 S 255. List', $\$ 72.50$

NET 42.63

## Broadcast and Communications Mikes

## SHUR



NEW MODEL 201. Low-cost high-quality hand-held ceramic mike for voice communications use. Omnidirectional pickup. Response: 200.4000 cDs . Output: -55.5 db at 1 to 5 megohms load. Whth mtg. bracket. 5 -ft., 3 -cond. ( 1 cond. shielded) retractable cable. $4 \times 21 / 2 \times 1 \frac{5}{6}{ }^{\prime \prime}$. Push-to-talk switch. Shpg. wt., 1 lb .
57 S 280. List. $\$ 18.00$
NET 10.58 57 S 281. Model 401 A . Same as above, but high-impedance, controlled magnetic mike. List, $\$ 22.00$

NET 12.94 57 S 282. Model 401B. Same as 401A, but low-impedance. List, $\$ 22.00$... NET 12.94 MODEL 404C. Controtled magnetic mike. Gives excellent speech reproduction. Response: $200-8000 \mathrm{cps}$. H1-imp. Output, -50.5 db . Hi-impact blue oray plastlc case. With mtg . bracket, $51 / 2$-tt., 4 -cond. (2 shielded), coiled cable. $311 / 6 \times 23 / 6 \times 149 / 44^{\circ}$. Grip-to-talk switch. Wt., 1 lb .
575 141. List, $\$ 33.00$.
NET 19.40
575 140. Model 404B. Above, low-imp. Output: $-50 \mathrm{db}, 150-250$ ohms. NET 19.40

MODEL 330 "UNI-RON." Rugged, ultracardioid studio-quality, ribbon mikedesigned to meat the exacting requirements of professional tape recording and high-quality, indoor public-address systems. Reduces pickup of random noises by $73 \%$. Shock-mounted. $\pm 21 / 2 \mathrm{db}, 30$ $15,000 \mathrm{cps}$. Switch selects 50,150 or 250 . ohm impedances. Output, -57 db . Swivel with $3 / 3^{*}-27$ thread. Satin-chrome. $3^{11 / 6 x^{x}}$ $17 / 3 \times 1 \%^{\prime \prime}$. Detachable $20 \cdot \mathrm{ft}$. cable with Cannon XL-3 connector. Shpg. wt.. 4 lbs.
57 S 216. List. $\$ 120.00$...... NET 70.56
MODEL 440SL. Omni-directional, controlled magnetic mike for radio communications. Has sharp culof below 300 and above 3000 cps . High-impedance. Output, -52.5 db . Ideal for single sideband VOX: with grip-to talk switch. Die-cast zinc case, chrome; gray base. With 7 - ft ., 2 -cond. shielded cable, Amphenol MC3M plug, and stand, $93 \times 5 \times 7$. Shpo. wt., 5 lbs. 57 S 139. List, $\$ 47.50$.

NET 27.93

MODEL 520SL"DISPATCHER". Rugged, controlled magnetic mike. Has grip-to-talk, lockable mike-relay switch. Response, $100-9000 \mathrm{cps}$. High-Impedance. Output. -52.5 db . Chrome and green with 7-1t. 2-cond. shielded cable. $93 / \mathbf{/ n}^{-h}$ high; $5^{\prime \prime}$ base. Shpg. wt., 5 lbs . 57 S 233. List, $\$ 45.00$.

NET 26.46
MODEL 520SLB "DISPATCHER." AS above, but low-imp. $-150-250 \mathrm{ohms}$. Output, -51 db . 7.ft., 4-cond. cable.
57 S 163. List, \$49.25
NET 28.96
MODEL 440. Similar to 440SL, but less grip-to-talk switch, and stand. Standard $3 / 6$. -27 thread. With 7 .ft., single conductor shielded cable. $2^{13 / 32^{\circ}}$ diameter, $3^{1 / 4}$ overall tength. $11 / 2 \mathrm{lbs}$. 57 S 138. List, $\$ 25.00$

NET 14.70
A87K SWITCH KIT. Not illus. For use with 440SL mike. Provides instant changeover, VOX to push-to-talk operation; mike-mute in either operation. 2 lbs.
57 S 143. List, $\$ 3.25$.
NET 1.91

# Controlled Magnetic, Ceramic and Crystal Mikes 

710A, 710S, 510C, 510 S

MODEL 710 A "REX." Crystal. 60.9000 cDs. Output, -50 db , high-imp. 7.ft. cable, $37 / 2 \times 211 / 5 \times 11 /{ }^{*} \quad 5 / 9 \cdot 27$ thread. $11 / 4$ Ibs 57 S 231. List. $\$ 12.00$.........NET 7.05 MODEL 710S. As above, with On-Off 57 S 232. List, $\$ 14.00$

NET 8.23 MODEL 510C "HERCULES." Controlled magnetic. 100.7000 cps .; -52.5 db ; high. imp. 7.H. cable. $37 / 2 \times 211 / 6 \times 17 / 16^{\circ} .5 / 3-27$ thread. 1 1/2 lbs
57 S 229. List, $\$ 17.00$....... NET 10.00
510 S . As above, with On.Off switch. 57 S 230. List, \$19.00 ........NET 11.17 MODEL 715 "STARLITE." High-output crystal. Built-in stand. $60 \cdot 10,000 \mathrm{cps}$. $35 / 2 \times 21 / 40 \times 19 / \mathrm{m}^{4} .5$-ft. cable $11 / 2 \mathrm{lbs}$. 57 S 215. List, $\$ 8.00$

NET 4.70 MODEL 215, As above, ceramic element. 57 S 214. List, $\$ 8.00$

NET 4.70

LAVALIER-TYPE MIKES


NEW MODEL 275S. Ceramic, 40.12,000 cps. Hi-imp. Output, -59.5 db . Switch. lav. cord, stand adap. $423 / 2 \times 111 / 22^{\circ}$. 1 lb. 57 S 284. List. $\$ 15.00$......... NET 8.81 MODEL 420. Controlled mag. $150-250$ ohms, hi-imp. Cable, lav. $3 / 4 \mathrm{lb}$.
57 S 212 . List, $\$ 30.00$....... NET 17.64 NEW MODEL 430 SL . Controlled mag. $60 \cdot 10,000 \mathrm{cps}$. Dual Imp.: $150-250$ and High Oulput, -52 db . Mike, relay switch. $15 \mathrm{ft}$. . 3-cond. shielded cable; $\$ 388$ stand; A-25B adapter. $2 \frac{13}{\mathrm{l}} \mathrm{lbs}$. 57 S 283. List, $\$ 49.95$

NET 29.37 MODEL 430. As above, mike switch only. 150.250 ohms, hi-imp. 15 -ft., 2 cond. cable: A-25B adapter. $11 / 2 \mathrm{lbs}$. $57 \mathbf{S} 213$. List. $\$ 38.50$........NET 22.64 MODEL 415. Controlled mag. High-imp. 7. 4. cord, A.25B adapter. $11 / 2$ los.
57 S 211 . List, $\$ 27.50$ NET 16.17


NEW MODEL 245 "UNIPLEX". Cardioid ceramic mike. Unidirectional-ideal for use under high noise conditions. Response: 50.7000 cps . High-imp. Output: -59 db . With $15 . \mathrm{tt} .1$ - cond. shielded cable. Amphenol MCIF plug. A25 swivel adapter. $421 / 2 \mathrm{xx} 11 /{ }^{\prime \prime}$. ShDg. wt., 116. $57 \mathbf{S}$ 285. List, $\$ 35.00$

NET 20.58 MODEL 245S. Above, with On Off switch 57 S 286. List, $\$ 37.00$

NET 21.73
MODEL 777 "SLIM-X". Not illus. Alldirectional crystal mike. Response, 6C10.000 cps . High-imp. Output, -62 dt. Chrome. Detachable, 7.f. cable; neckcord. $3 / 5^{\circ} .27$ thread. $4 \frac{1}{2} \times 1^{\prime \prime} .1 \mathrm{lb}$. 57 S 252. List. $\$ 25.00$........NET 14.70 MODEL 777S. Above, with On.Off Swlich 57 S 253. List. \$27.00

## SHURE MICROPHONE ACCESSORIES

A S-38 BASE. For 777 Series mikes. (A) Reauires A-25, below. $11 / 2 \mathrm{lbs}$. 57 S 192. List, $\$ 4.50$..........NET 2.65
(B) A-25 SWIVEL ADAPTER. For 777 - mike any stand listed in catalog. $8 / 6^{*} \cdot 27$ thread. $90^{\circ}$ Swing. $1 / 2 \mathrm{lb}$
575 193. List. $\$ 5.50$
NET 3.23
C] S-33 BASE. For any mike with A. 25
Swivel Adapter, above. $11 / 2 \mathrm{lbs}$
57 S 295. List, $\$ 15.00$
NET 8.82
(D) A86A TRANSFORMER. For running lines from low-impedance mikes to high-impedance amplifier inputs. Matches 35.50 or $150-250$ ohms. Response, $\pm 1 \mathrm{do}$. $20-20,000 \mathrm{cps} .27 / 81 \%$. 1 lb.
57 S 107. List. \$17.50.
net 10.29
[ S-36A STREAMLINED DESK MOUNT. Fits all Shure mikes except Series 405, 100. 768 and $420.1 \frac{1 / 4}{} / \mathrm{lbs} .3 .82$


## Wireless Microphones, Receiver, Accessories

## UNLIMITED FREEDOM OF MOVEMENT

Transistorized FM wireless microphone gives you the convenlence of complete mobility. Transmits on 33.13 mc to tunable receiver that easily connects to any public address system. Other transmitting frequencles are avallable on special order-write for data.
[f VEGA FM RECEIVER. Tunes 25.45 mc . Tuning eye; squelch; AFC; low, high-level outputs; "Vegatrol" output. $93 / 963 / 4 x$ $12 \% \%^{\circ}$. For $110-120$ v. $50-60 \mathrm{cycle}$ AC. 19 Ibs.
57 SX 296.
NET 267.75
(G) 57 SC 298. Vega Hand-Held Mike. $5 \% \times 1^{\circ \prime}$. Whip antenna, 2 mercury batteries ( 1 for use, 1 spare). $1 \mathrm{lb} . . . . .$. NET 249.75 57 SC 288. Press-To-Talh Accessory. For above. Controls transmitter. Extends $43 / 4$ below mike. 1 lb .
........NET 18.00万 57 SC 287. Vega Lavalier Mike. Pull-switch controls transmitter. $51 / 81^{\circ}$. Neck-cord ant., batteries. $1 \mathrm{lb} . . . . . . . . . .288 .00$ 57 SC 297. "Vegatrol" Control Relay. Connects to receiver for controlling accessories from mike. $51 / 2 \times 41 / 4 \times 7 \% /{ }^{*} \ldots \ldots . . . . .69 .90$ 55 J 672 . 8attery for Mike. Uses one. 3 oz ...... NET EACH 1.80 57 SC 299. Slip Cover for Receiver. $1202 . .$. .......... NET 4.95


## HIGH-IMPEDANCE MIKE

MODEL 511. A perfect ceramic mike for Citizen Band. Ham and other communications applications. Offers maximum clarity of speech and minimum sideband inter. ference to other stations on same channel. Frequency response, 300 to 5000 ; output level, -51 db . Press-to-talk switch. 2-tone gray, plastic body, $6 \times 21 / 4 \times 21 / 2$. 3 -cond. cable. Wt., 702 57 S 289. List, \$19.75

NET 11.61
MODEL 513H. Dynamic. 1102. 57 S 290. List, $\$ 34.50$

NET 20.29

## DELUXE CARDIOID MIKE

MODEL 77. A fine uni-directional dynamic cardioid microphone. Features extremely high front-to-back cancellation of 18 db for highest resistance to pickup from the rear-virtually eliminates feedback. Has suspended dynamic cartridge. Response, $30-15,000 \mathrm{cps}$. "Pop" and "blast-proof" Mylar" diaphragm. Output -52 db . Switch selects $30.50 \mathrm{ohms}, 150.250$ ohms and high-Z. $5 / \mathrm{s}^{*} \cdot 27$ thread. Satin-chrome. $8 \times 21 / 8 \times 25 / 0^{"}$. With $20-11$. 2 -cond shielded cable. 3 ibs. $\$ 5$ Monthly. 57 S 177 . List, $\$ 82.50$.

NET 48.51

## ECONOMY CRYSTAL MIKES

MODEL JT-30. A low priced, general purpose microphone. Excellent tor CB. Hams, P.A., recording, etc. High impedance. With removable hand grip and interlocking desk-type stand. Detaches easily from hand grio for mounting on standard floor stands. Response, 30•10,000 cps . Output level, -49 db . Gray Hammerlin tinish; chrome grille. $8^{\prime \prime}$ high. Includes 8.ft. shielded cable. Wt.. $21 / 2$ ibs. 575 223. List, $\$ 18.40$ NET 10.82
MODEL dT-30F. Same cryslal microphone as above, but less handle and basemike head only. Has $5 /{ }^{*} \cdot 27$ thread; fits any standard desk or floor microphone stand. Shpg. wt.. $11 / 2 \mathrm{lbs}$
57 S 123. List. $\$ 15.90$
NET 9.35

## "PREMIER" CRYSTAL MIKE

MODEL D-104. A high-impedance mike for Citizen Band and Hams, producing maximum amount of speech intelligibility. Response $30-70,500 \mathrm{cps}$. Output level -45 $\mathrm{db} .3 /{ }^{\prime \prime} \cdot 27$ thread. Includes $5-\mathrm{ft}$. Shielded cable. Shog. wt., $13 / \mathrm{lbs}$.
57 S 225. List. $\$ 31.00$.......NET 18.23
57 S 401. Repl. Cartridge 2 oz....5.59

## BUDGET CRYSTAL MIKES

MODEL 200. An all-ourpose crystal mike for CB, Hams, home recording, paging, etc. Response, $30 \cdot 10,000 \mathrm{cps}$. Output - 50 db. High-impedance. Includes detachable base. with $5 / \mathrm{s}^{-}-27$ thread. Gold and chrome. $8 \times 21 / 2^{*}$ diameter. 8 - $4 t$. single conductor shielded cable. Wt.. $11 / 4$ lbs. 575 126. List, \$19.50

NET 11.47
MODEL 200-S. Same as microphone above, but with convenient on-off switch Shpg. wt., $1 \frac{1}{4}$ lbs
57 S 402. List. $\$ 21.50$
NET 12.64

## ALL-DIRECTIONAL MIKE

MODEL DN-HZ. The "Commentator" a ruggedly constructed dynamic high. impedance microphone. Features a handy. tilting-head swivel mount. An oulstandina unit designed for all general purpose semi or non-directional applications. Ofters maximum speech clarity. Frequency response, $50-10,000$ cps. Output level. -52 db. Opalescent gray baked enamel with chrome grille and trim $6 \% / 162 \% \times 45 / 0^{\circ}$. $5 /{ }^{-2}-27$ thread. Includes 10 it . shielded cable. $21 / 2 \mathrm{lds} . \$ 5$ Monthly 57 S 224 List. \$39. 70

NET 23.34

## Versatile ASTATIC Economy Microphones



Series 330 on A7 Stand
MODEL 333 CERAMIC. As 332, but 30 $10,000 \mathrm{cps}$. Outnut, -58 db .
$57 \mathbf{S}$ 128. List, $\$ 17.90$
NET 10.52
Slim mikes for Citizen Band, Ham, PA, tape recording and other applications. Have off-on switch, except 331 has momentary "On" spring-return switch. With lavalier and adapter for $5 / 3$ "-27 thread stand. Less stand. $41 / 2 \times 11 / 0^{"} .1 \mathrm{lb}$.

MODEL 332 CRYSTAL. For Citizen Band, Hams, high-quality tapes and P.A. 30 $15,000 \mathrm{cps}$. Output level, -54 db . High im. pedance. Black and chrome. 57 S 122. List, $\$ 17.90$

NET 10.52
MODEL 331 CERAMIC. For Citizen Band Hams, paping, etc. Press-to-talk switch with provision for relay control. Frequency response, $300-5,000$ cos. Output level, -56 db. Hlgh-impedance. Black and chrome. With convenient hang-up bracket.
57 S 127. List, \$17.90
NET 10.52

MODEL 335H DYNAMIC. $50-12,000 \mathrm{cDs}$. Output. -56 db . High-Imp. Gray.
57 S 129. List, \$26.50.
NET 15.58
MODEL 335L DYNAMIC. As above, low impedance. Output, -57 db .
57 S 403. List, $\$ 23.50$
NET 13.82
MODEL A-7 DESK STAND. For 330 mikes above. Black plastic. 502 . 57 S 147. List, $\$ 2.45$

NET 1.44
MODEL T-3 "PIONEER" CRYSTAL. High-impedance mike with swivel hinge to convert unit from semi to non-directional pickup. Resists the effects of humidity. Frequency response, 30 to $10,000 \mathrm{cps}$. Output level, $-52 \mathrm{db} .5 / \mathrm{m}^{*}-27$ thread. 6 x $25 / 6 \times 3^{\circ} .10 \mathrm{ft}$. cable. 2 lbs .
$57 \mathbf{S} 222$ L List, $\$ 29.30$
NET 17.23

# Budget-Priced SONOTONE "Ceramikes" 

Rugged CB Mike CM-30M


CM-17A


## COMMUNICATIONS MIKE

CM-30M. Designed for Citizen's Band and other communications applications. Features a high-impedance ceramic element, immune to temperature changes and humidity. 60.7000 cps frequency response covers the voice range--assures superior transmission in noisy locations. Has push-to-talk button. Output level, -49 db . Plaslic case, with handy magnet on back for easy "pick up-put down" use. Size, $3 \times 2 x$ $1 / 2$. With $6 . \mathrm{ft} ., 4$-conductor shielded coil cable. Shpg. wt., 1 lb
57 S 277 . List, $\$ 16.50$
NET 9.70
CM-30 COMMUNICATIONS MICROPHONE. Same as above, but with mounting bracket instead of magnet. 57 S 153. List, $\$ 16.50$

NET 9.70

## TAPE RECORDER MIKE

CM-32. Fine for tape recorder and entertainment use. Frequency response, 85 . 9500 cps . Output level. -49 db . High impact plastic case. Supplied with $7 \cdot \mathrm{ft}$., 2-conductor shielded cable and phone piug. Shpg. wt., 1 lb . $57 \mathbf{S} \mathbf{1 6 0}$. List. $\$ 12.50$

NET 7.35

## LOW IMPEDANCE MIKE

CM-12A. Ceramic mike designed for public address systems or any other installation requiring long leads. Has push-to-talk button. Response, 200 to 8000 cps. Output level, -63 db . Die-cast metal case is finished in satin chrome. With 18 . ft . cable. Shpg. wt., $21 / 4 \mathrm{lbs}$. 57 S 152. List, \$29.50....... NET 17.35

## CERAMIC "FLEX-MIKE"

MC-17A. A high-impedance mike that's periectly suited to Citizen's Band, Ham, audio-visual, paging and P.A. applications. Frequency response, 50 to over 11.000 cps . Output level, -56 db . A controlled presence peak in mid-range adds vocal realism. Has convenient Hexible stand with $13^{\prime \prime}$ cable attached to removable mounting plate. Brush chrome with gold finished wire grille. With 6 -ft. shielded cable. Shpg. wt., 4 tbs. 575 154. List. $\$ 24.50$

NET 14.41
CMS-10 MIKE STAND. Chrome-finished, swivel mount. Padded felt removable base with $5 / 0^{-27}$ thread. Wt., 2 lbs 57 S 179. List, $\$ 5.00$

NET 2.94

## Cables, Connectors and Mixers



BELDEN SHIELDED CABLES
Single-Conductor - For High-Imp. Mikes
 Type O.D T00 No. NET No. Per 100



Two-Conductor-For Low Imp. Mikes


## SWITCHCRAFT CONNECTORS

SINGLE CONTACT TYPES. Standard 3" 27 threads. 2501 fits all Knight P.A. amplifiers. When splicing 2 cords, use two 2501 F (as plugs or jacks). 3 oz .

| Sti. No. | Flo. | Type | Descilition |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | ${ }^{8}$ | 250 |  | 26 |

## STRAIGHT-CORD PLUGS

Cannon 3.contact audio connectors with clamps and resilient socket insulator Satin-nickel; push-action, latch-lock. Each
contact rated 15 amps. Av. wt., 4 oz Sth. No. Fig. Tyo Description NET 50 H 750 D XLR.3.11C Female Socket 1.28 ${ }_{40}^{0} \mathrm{H}$ 791 E XLR-3.12C

## MIKE EXTENSION CABLES

Plug extension cable into mike: connect old cable to tree end of extension. 2conductor shielded.
Sth. No Firir Typo Descriplion Laith: Wt NET

 57 S 279 F 87 AK 87 Same As Above. $6 \mathrm{HI}^{2}$ ibs itil 57 S 158 G |918U92 Cinnon XL3-11
(25 11.|1 $1 / 4$ tos. 7.35

## MINI-MIX AUDIO MIXERS

H Accept 2 high impedance sources. Separate gain controls. 21/6x $\times 13 / 1 / 6 \times 11 / 66^{\circ}$. Av. shpg. wt., $40 z$.
575 112. Phone jack input and plug output for std. jacks.

NET 4.67 $57 S$ 114. As above, but with longer output for recessed jacks. NET 5.26 57 S 113. Male inputs, female output for $5 /{ }^{1}-27$ screw-type conn.
4.67

57 S 404. For late model Wollensak
and Revere recorders.
NET 5.26

## "MATCHED TWINS" MIKES

CM-T10A. A pair of deluxe ceramic microphones for tape recording. Acoustically matched al the factory to capture the full brililiance of live stereo sound. Response, 50 to over $11,000 \mathrm{cps}$. Unaffected by temperature and humidity. Output level, -56 db . All-directional; high-im. pedance. One plece metal case in brushed chrome, with gold finished wire grille. Size, $5 \% /{ }^{\prime \prime}$ long and $19 / 6^{\circ}{ }^{\circ}$ in diameter. $7 \cdot \mathrm{ft}$. shielded cable with phone plug. Less CMS-10 stands, below left. Shpg. wt., 8 lbs. List, $\$ 35.50$
57 S 151.
NET PER PR. 20.87
CM-104 . Single mike, similar to above, for monophonic recording, P.A., etc. With 7.H. cable and phone plug. Less CMS-10 stand. Shpg. wt., 2 lbs.
57 S 178. List. $\$ 17.50$.. NET EACH 10.29
CM-11A. Similar to above, but output level is -53 db . For use where greater sensitivity is desired. Frequency response, $80-9000 \mathrm{cps}$. Supplied complete with $7 \cdot \mathrm{ft}$. cable and phone plug.
57 \$ 180. List, $\$ 17.50 \ldots$. . NET EACH 10.29


## 306 Microphone Mixer

SWITCHCRAFT STEREO MIXERS
MODEL 306. Flip a switch and this mike mixer's 4 monophonic channels convert to 2 -stereo's. Four input jacks on rear panel; high impedance circuitry. Two phono jacks for output to amplifier or tape recorder. $2 \times 3 \times 6^{\circ}$. Wt., $11 / 2 \mathrm{lbs}$.
57 S 171. List, $\$ 22.50$
NET 13.23
MODEL 306 TR. As above, but with two battery-operated transistor amplifiers. with battery, Wi., $1 / 1 / 2$ lbs.
57 S 172. List, $\$ 37.50$
NET 22.05

## SWITCHCRAFT MONOPHONIC MIXERS

MODEL 301. (Not illus.) Similar to 306. Permits mixing four signals into a single output. Accepts std. 2-cond. phone plugs: std. phono jack output to tape recorder or amplifier. $2 \times 3 \times 6^{\circ}, 1 \frac{1}{2}$ Ibs.
57 S 169. List, $\$ 19.50$
NET 11.47 MODEL 301 TR. Above, but batterypowered transistor amp. With battery. 57 S 170. List, \$30.00

NET 17.64 41 H 341 . Connector Cable. $36^{*}$. Pin plug one end, phono plug other. 4 oz . . . . 88 c



Base has selfleveling pads.

MS-10C FLOOR STAND. Excellent for average weight mike. Clutch for secure hand grip. Adjusts from $35^{\prime \prime}$ to $64^{\prime \prime}$. Gray base has self-leveling, shock absorbing pads. 2 -section chrome tube. Base dia., $10 ", \$ 0^{\prime \prime}-27$ thrd. 10 lbs.
$57 \mathbf{S X} \mathbf{3 2 5 - 2}$. List, $\$ 10.00 \ldots .$. NET 5.88 MS-11C. As above; all chrome. 12 lbs. 57 SX 326-2. List, \$13.75 . ...... NET 8.09

MS-4 TELESCOPING FLOOR STAND. 3 sections permit frequent adjustments with ease from $26.61^{*}$-perfect for schools, etc: Gray shrivel base, chrome tube. Base diameter, $10^{\circ} .5 / 40.27$ thrd. 11 lbs.
$575 \times 270$. List, $\$ 15.75 \ldots$ NET 9.26

MS-11S AUTOMATIC FLOOR STAND. Press "Sleeve Action" control-telescop. ing section lowers to desired position. Adjustable from $35^{\circ}$ to $65^{\prime \prime}$. All chrome. Base dia., $10^{\circ}$. 5/" -27 thrd. 13 lbs.
57 SX 271. List. $\$ 25.00$
NET 14.70
MS-25 PROFESSIONAL FLOOR STAND.
"Air Lock" controls drop-prevents mike damage. Adjusts from $37^{\prime \prime}$ to $66^{\circ}$. Base dia. 17"-very stable. Chrome and gray base; chrome tube. $5 / 6$ " 27 thrd. 22 lbs. 57 SU 330-2. List, $\$ 28.00 \ldots$ NET 16.46 CS-42 COLLAPSIBLE BASE STAND. 3-legged portable stand easily folds or unfolds. Chrome tube adjusts from $34^{\circ}$ to 62". Shrivel gray base-dia., $16^{\circ}$. 5/" -27 thrd. With base pads. Wt., 9 Ibs. $575 \times 315$. List, $\$ 13.00 \ldots . .$. NET 7.64

BB-1 "BABYBOOM" STAND ATTACHMENT. Converts any floor stand with $5 /{ }^{6}$ ". 27 thread to boom-type stand. 5 - tt. circle positioning: adjustable counter-balance. Chrome plated. $32^{\prime \prime}$ long. $41 / 2$ lbs 57 SX 328. List, $\$ 8.00$...... NET 4.70
BS-36 PROFESSIONAL BOOM STAND. Similar to MS. 25 (at left) but with removable $62^{\prime \prime}$ arm. Adjusts from $48^{\circ}$ to $72^{\prime \prime}$. Chrome. Base dia.. 17". 33 lbs . 57 SU 329-2. List, \$66.50 .... NET 39.10 BS-36W. As above, but mobile. 40 lbs .

CS-33. "TAKE APART" TYPE FLOOR STAND. Collapsible, 3-section portable stand. Adjusts from $26^{\prime \prime}$ to $64^{\prime \prime}$. 3/" ${ }^{3 \prime}-27$ thrd. Chrome plated. Shpg. wt., 4 lbs.
57 SX 327. List, $\$ 14.50$.
NET 8.53

## MICROPHONE DESK, BANQUET AND SWITCHBOARD STANDS



US-2 MULTI-PURPOSE STAND. Floating vertical $\left(180^{\circ}\right)$ and rotation ( $360^{\circ}$ ) movement. Arm, $12 \frac{3}{4}$ - long. Base dia., $2 \frac{5}{6}$. Chrome. 5/s"-27 thrd. 2 Ibs.
57 S 273. List, \$9.50.
NET 5.59
SA-115. As above, for 1 -hole ( $11 / 2$ dia.) mounting. $225^{\circ}$ rotation. 2 lbs . 57 S 274. List。 $\$ 8.25$.

NET 4.85
DS-4 DESK STAND. Attractively styled -light beige finished base and detach. able chrome tube. Base dia., $4^{*}$; tube $4^{*}$ high. $5 / 8=27$ thread. Wt., $1 / 2 \mathrm{lb}$. $\mathbf{5 7} \mathbf{S}$ 272. List, $\$ 2.50$

NET 1.47
SB-1 SWITCHBOARD STAND. Sits atop switchboard. Has $12^{\prime \prime}$ flexible arm ( $5 / \mathrm{s}^{\prime \prime}-27$ thrd.). Cast base, $9 \times 6 \frac{1}{2}$ *. 13 Ibs .
575 145. List, \$15.75.
NET 9.26
NS-1 NECK and CHEST HOLDER. Neck cord, non-rolling chest support and re.

## movable goose-neck holder. 10 oz .

 57 S 183. List. $\$ 5.50$NET 3.23
DS-5 DESK STAND. Chrome-plated tube. $4^{\circ}$ high. Cast-iron base; $6^{*}$ diameter. Rubber pads. $5 / 8 \cdot 27$ thread. 2 los 57 S 208. List, \$3.25

NET 1.91
DS-7 ADJUSTABLE DESK STAND. Clutch adjusts from $8^{\prime \prime}$ to $13^{\circ}$. 2-section chrome-plated tube. Gray base diameter, $6^{*}$; has rubber pads. $5 /{ }^{*}-27$ thrd. 3 lbs.

## 57 S 186. Lis1, $\$ 5.50$

NET 3.23
DS-10 DESK STAND. Cable fits in slot under chrome trim. Gun-metal enamel fin. ish. $8 /{ }^{\prime \prime}-27$ thread. Wt., $11 / 2$ lbs.
$57 \mathbf{5} \mathbf{2 0 5}$. List, $\$ 5.50$
NET 3.23
TS-6 BANQUET STAND. Not illus, For speaker's table. Extends from $141 / 2$ to $26^{\prime \prime}$. Base diameter, $8^{*}$. Wt., 6 lbs . 57 S 188-2. List, $\$ 9.75$
net 5.73


| Stock No. | Type | Fig. | Description | Wi. | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 41 H996 |  | A | 'Y"' Mike Connecto | 2 Oz | 97 |
| $57 \leq 189$ | GN-13 | B | Flexible $13^{\prime \prime}$ Gooseneck | 1 lb | 1.62 |
| 57 S 206 | GN-19 | 8 | As above. $19^{\prime \prime} \mathrm{long}$ | $11 / 1 \mathrm{lbs}$. | 2.35 |
| 57 \$187 | SO. 1 | C | Snap-on Mike Attachment | 11 | 1.62 |
| 57 \$ 207 | $\overline{\mathrm{CH}}-1$ | D | Cable Hanger; fits all stems $7 / 0^{\circ}$ to $11 / 4^{\prime \prime}$ in diameter | $1 / 2 \mathrm{lb}$. | 1.62 |
| 41 M 946 | 329 | E | Mike Volume Control; Hi-imp. | 6 oz . | 4.09 |
| 57 S 106 | AD. 7 | F | $3^{\prime \prime}$ Extension Rod; 5/0. 27 ends | 3 oz | . 38 |
| 57 \$ 105 | AD.8 | F | As above. $6^{*}$ long | 4 Oz | . 44 |
| 41 H 950 |  | G | Push-to-Talk Switch with lock | 6 oz | 1.89 |
| 57 S 115 |  | H | "Save-Ur-Mike" Plastic Cover | 2 oz | . 69 |
| 57 S 190 | BC-1 | J | Bracket Clamp; $6^{*}$ stem | 1 lb | 2.06 |
| 575204 | SW-1 |  | Gyromatic Mike Lock Swivel | $11 / 2 \mathrm{lbs}$. | 2.79 |

ATLAS MIKE STAND ADAPTERS. For desk and floor-type microphone stands. All are chrome-plated. Shpg. wt.: Models AD1, AD2, AD3, AD4, AD5, and AD10, 202 .; AD11 and AD12, 602.

Stock No. Type Fig Description EACH 57 S $108 \frac{\text { ADI }}{\mathrm{L}} \frac{\text { For adapting RCA mikes. } K^{\prime \prime} \text { male }}{}$ 575198 AD2 $K \quad$ to $5 / 10-27$ fenale. 575199 AD3 $1 /{ }^{* \prime}$ pipe female to $5 / 0^{*}-27$ male. | $1 / 8 "$ pipe female to $5 / 1^{\prime \prime} .27$ female. | 388 |
| :--- | :--- | :--- | 575201 AD4 $\quad 1 / 44^{*}$ long. $5 / 9{ }^{*}-27$ male coupling. 575202 AD5 M $3 / 0^{*}-27$ to $3 / 0^{\prime \prime}-27$ female coupling. 575203 ADto … Adapts W.E. mikes. $\$ / /^{\prime \prime}-24$ female to $3 / 3=-27$ female.

57 S 104 AD11 $\quad \mathbf{P} \quad$ Mike base flange. Female. $5 /{ }^{\prime \prime}$-27. 474 57 \$ 103 AD12 N Mike base flange. Male. $5 /{ }^{2}=27$.

## KNIGHT KN-85 Paging and Talk-Back Unit



- Highly Efficient Built-In Aluminum Driver Unit
- Excellent Speech Intelliglbility
- Speaker Offers Wide Frequency Response
- Can Be Used Indoors or Outdoors

Allied's own, best value reflex.fype paging and talk-back speaker with built-in 5 -walt driver. Offers frequency response of 400 to $13,000 \mathrm{cps}$ with a special rising frequency characteristic to assure excellent speech intelligibility. Horn has $120^{\circ}$ dispersion angle. Sensitivity when used as mike, -26 dbm . Impedance, 80 hms . Bell is $6 \%^{\circ}$ in diameter. Overall length. $7^{\prime \prime}$. With mounting
bracket. Made in U.S. Shpg. wt.. $31 /$ Ibs 57 D 579

NET 12.75
MODEL KN-80. As above, but for areas with high noise levels. Capacity, 25 watts; imp., 8 ohms; response, 250-13,000 cps: disp.. $90^{\circ}$; dia.. $101^{\prime \prime}$ : length, $9^{\circ} .4 \mathrm{lbs}$.
57 DX 517
NET $\mathbf{1 5 . 5 0}$

## Multi-Purpose Portable Power Megaphones



## FANON ECONOMY MEGAPHONE

MODEL MV-1. This low priced unit projects voice 300 yards. Two switches in stantly select high or low dower for most efficient battery use. Aluminum with enamel finish. Has carrying strap. Battery Iffe, 10 hours (continuous). Less batteries, below. Horn dia., $61 / 2^{\prime \prime}, 4 \mathrm{lbs}$.
57 SX 320. List, $\$ 44.95$.....NET 26.41 55 J 501 . Burgess 210 Battery. Uses 4. Shpg. wt., $50 z$.

EACH 17e

## FANON DELUXE MEGAPHONE

MODEL MV-8. Professional all.transistor unit with a range of 600 yards. Offers excellent speech intelligibility. Durable aluminum with baked-enamel finish. Rugged, waterproof dynamic microphone, pistol-grip trigger, variable volume control. Carrying strap. Average continuous battery life, 10 hours. Horn diameter, $9^{\circ}$. Less batteries. $6 \mathrm{lbs} . \$ 5$ Monthly.
$\mathbf{5 7}$ SX 321. List, \$112.50 NET 66.15 55 J 017 . Battery. Uses 8.3 oz....EA. 14c

## ALL-TRANSISTOR BULLHORN

Lowest-cost, all-transistor directional megaphone with voice throw up to 300 yards. Lightweight and easy to operatejust press trigger and talk. Features adjustable volume control, plus leather carrying strap. $101 / 2^{\prime}$ long. Uses 4 standard $11 / 2$ volt batteries (not supplied with unitsee below). Shog. wt., $21 / 2 \mathrm{lbs}$ 57 SX 322. List, $\$ 10.00$

NET 6.89
55 J 005 . Burgess " 2 " Battery. Uses 6. Shpg. wt., 3 Oz................EACH 14c

## UNIVERSITY "POWRPAGE"

Model PP-2. An excellent general purpose unit with a 440 yard range. Easy to handle-weighs only $33 / 4$ pounds, including batteries. Has convenient jack for use with external 6 or 12 volt DC source; press-to-talk switch. Horn diameter, 8 ". Less batteries, below (uses 6). Shpe. wt.. 6 Ibs. $\$ 5$ Monthly
57 SX 323. List, \$82.50 . .....NET 48.51
55 J 020. Battery. 2 Oz
EACH 10 C

## DELUXE UNIVERSITY

MODEL PP-1. Powerful P.A. system delivering 25 watts for intelligible voice throw up to 1000 yards. Offers high stability under all operating conditions. CD-approved for fund matching. Press-totalk "Powrsaver" switch gives instantaneous operation and lengthens battery life. Has input jack for record player. "Talk/over" feature lets voice be heard

## OWRPAGE" SYSTEMS

over music; Talk/Listen switch for directional listening. Less batteries, below. Carrying strap. Dia., 9". 13 lbs. 57 SX 302. List. \$104.50....NET 61.45 MODEL PP-1T. As above, but transistorized. Shpg. wt., 8 lbs . $\$ 9$ Monthly.
57 SX 301. List, \$283.25....NET 166.55
55 J 016 . Battery. Uses 4.2 lbs EA, 87c

## HOLMIN DELUXE VOICE GUN

MODEL 120. An exiremely efficient all. transistor portable system, specifically desligned for use wherever large groups or crowds gather. Delivers 10 watts of sound power for deep voice penetration. while two angled reftex speakers assure very wide coverage. Easy to carry-weighs only 12 pounds, including batteries. Has only two controls (both on mike housing) for easy operation: a press-to-talk switch for instantaneous use and increased battery life; and a volume control. A special microphone design virtually eliminates feedback problems. Can be used in any kind of weather. Overall size, $8 \times 171 / 4 \times 11^{1 \%}$. Supplied complete with 2 standard 6 -volt batteries and a convenient leather carrying strap. Wt., 16 lbs.
57 SX 331. \$8 Monthly.... NET 157.35 55 J 016 . Extra Battery. 2 lbs... EACH 87 c

## HOLMIN VOICE GUN

MODEL A-12. Heavy duty, hand-held P.A. unit with husky 3 -transistor amplifier to punch voices out 500 yards or more. Withstands all weather conditions. Transistors plus press-to-talk switch give instant operation and long battery life-up to 1 year in normal use. With leather carrying strap. Includes 8 standard penlight cells. Horn diameter, $71 / 4$. . Shpg. wt.. $6 \mathrm{ibs} . ~ \$ 5$ Monthly.
57 SX 319. List, $\$ 119.95$. ....NET 89.96
55 J 005. Battery. $3 \mathrm{oz} . . .$. EACH 14 e


Consisting of several speakers arranged one above another in a special enclosure, the Sound Column or Line Radiator offers uniform loudness over a wide horizontal pattern. The people in front are not blasted by sound, and the people in back can relax and hear as well as those in front. Annoying feedback and reverberation ettects are greatly reduced. Installation is simple-complicated planning and installation fees are eliminated. Anyone can install sound columns for any job, and get better coverage-in most installations-at lower cost.


CS-3
CS-4

## Electrơorice

Sound Line Radiators

## MODEL LR-4 CURVED LINE RADIATOR. Wide-range projector

 designed specifically to control feedback in difficult P.A. In. stallations for natural sound reinforcement. May be hung in clusters in theaters, cathedrals, gyms and other difficult surroundings. 12 top-quality $4^{\prime \prime}$ speakers provide a response of $150-10,000 \mathrm{cps}$. Dispersion: horizontal, $160^{\circ}$, vertical, $60^{\circ}$. Ca pacity, 25 watts. Impedance, 8 ohms. Neutral tan finish. Universal mounting brackets. $4^{\prime \prime} \times 7^{\prime \prime} \times 13^{\prime \prime}$. Wt., 22 Ibs57 DZ 529. List, \$115.00. \$5 Monthly.
NET 67.62
MODEL LR-7. As above, but with 9-5 $5 \times 7^{* \prime}$ speakers and 2-VHF drivers. Response: $100 \cdot 20,000 \mathrm{cps}$. Dispersion: horizontal. $160^{\circ}$, vertical, $45^{\circ}$. Capacity, 50 watts. Size $60 \times 11 \times 14^{\prime \prime}$. Shpg. wt., 70 Ibs. 57 DZ 699. List, \$165.00. \$5 Monthly.

NET 97.02
MODEL LR-4S. STRAIGHT LINE RADIATOR. Horizontal, $160^{\circ}$; vertical. $30^{\circ}$. Response, $150 \cdot 10,000 \mathrm{cps}$. Capacity, 25 watts. Impedance, 16 ohms. $52 \times 71 / 2 \times 45 / \mathrm{m}^{\prime \prime} .16 \mathrm{lbs}$.
57 DX 698. List, $\$ 125.00$. $\$ 5$ Monthly
NET 73.50

## Aninastî Sound Column Speakers

MODEL CS-3 COLUMN SPEAKER. Designed for use in high reverberation areas where speech clarity is vital. Also fine for wide music projection. Features "Acoustic Tapering" for uniform dispersion and response. Has 6 oval and 2 tweeter speakers. Capacity, 25 watts. Dispersion: Horizontal, $120^{\circ}$; vertical, $20^{\circ}$. Response, $150 \cdot 10,000 \mathrm{cps}$. Impedance, 8 ohms. Neutral finish. 48x $71 / 2 \times 81 / 4 *$ Shpg. wi., 55 lbs . $\$ 5$ Month/y. 57 DZ 532. List. $\$ 149.95$

NET 88.15
MODEL CS-4. Similar to CS.3-provides excellent music and voice reproduction, with 80 -watt power-handling ability. Uses four 8 " speakers for wide response of $70 \cdot 17,000 \mathrm{cps}$. Dispersion: horizontal, $120^{\circ}$; vertical, $22^{\circ} .40 \times 10 \times 7^{\circ} .55$ lbs.
57 DZ 531. List, \$216.58. \$7 Monthly.
NET 127.35
MODEL CS-6. As above, but has power handling capacity of up to 150 watts. Response. $55-17,000 \mathrm{cps}$. Dispersion: horizontal, $120^{\circ}$; vertical, $16^{\circ}$. Impedance. 16 ohms. Size, $591 / 6 \times 107 / 1 / \times 91 / \mathrm{m}^{*}$. Shog. wt., 61 lbs. 59 Monthly.
57 DX 530. List, $\$ 299.90$
NET 176.35

## Enjoy High Fidelity Music Outdoors



## P. A. Speakers, Trumpets and Drivers by

## PAGING and TALK-BACK SPEAKERS

Highly efficient reflex type air-column reproducers. All speakers listed below are complete driver-trumpet units, designed specifically for maximum speech intelligibility. Speakers are weatherproofed, rugged and reliable Driver units are hermetically sealed PM dynamic types. LIL-8 is decorator pager; IB8A is general purpose: CIB.AB, wide angle tor unitorm coverage MIL-AB and CMIL-A8 for low power systems. IBR.A8 for widest dispersion Complete with mounting accessories. 8 -ohm impedances. *HWD

| $\begin{aligned} & \text { Stoch } \\ & \text { No. } \end{aligned}$ | Mfr's <br> Type | Frequency Response | Watts | Olsper- sion | Dla. | Lergth | Wt. Lbs. | List | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| O | LIL-8 | 300.10,000 | 15 | ${ }^{110^{\circ}}$ | 6 | 15\% | 41/2 | \$41.58 | 24.45 |
| $370 \times 504$ | 18.AB | 250.13.000 | 25 | $0^{\circ}$ | 10 |  |  | 34.50 | 20.20 |
| $570 \times 585$ | CIB.A8 | 250-13.000 | 25 | $120 \times 60^{\circ}$ |  | -71/4x $14 \times 12$ | $51 / 2$ | 46.00 28.35 | 21.65 16.67 |
| 57 D 569 | MIL.AB | 350.13 .000 | 11\% | $120^{\circ}$ | 6\% |  | 3\% | $\begin{aligned} & 28.35 \\ & 32.73 \end{aligned}$ | 18.67 18.25 |
| 570 $570 \times 512$ | CMIL.AB IBR.AB | 350.13 .000 $300 \cdot 10.000$ | $31 / 2$ 25 | $\begin{gathered} 120 \times 60^{\circ} \\ 360^{\circ} \end{gathered}$ | 13 | $\begin{gathered} * 6^{7} / 3 \times 91 / 2 \times 8^{3} / 14 \\ 101 / 4 \end{gathered}$ | 51/4 | $\begin{aligned} & 32.73 \\ & 48.83 \end{aligned}$ | 28.71 |

## DIRECTIONAL REFLEX TRUMPETS

Directional P.A. trumpets for deep sound penetration with a narrow distribution angle. Excellent for applications where an exceptionally "long throw" is necessary, or for areas where high noise levels have to be overcome. The large horn diameters of the units listed below provide a sharper distribution pattern than would be obtained with smaller unlts--provide more sound intensity along the speaker axis. Model SMH for voice only. Supplied with "U" mounting bracket. Less driver.

| Stock No. | Mir" Type | Low Cutoll | Disper. sion | Length | Dia. | W: Lbe. | List | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 57 D2 543 | PH | 150 cos | $85^{\circ}$ | 15\%** | 20\% | 11\% | \$34.13 | 24.67 |
| 57 D2 564 | SMM | 200 cps | $95^{\circ}$ | 12* | 16\%** | 8 | 28.88 | 14.24 |
| 57 D2 545 | GH | 85 cps | $65^{\circ}$ | $28^{\circ}$ | $31^{\circ}$ | 22 | 75.60 | 44.45 |
| 57 D2 582 | LH | 120 cos | $75^{*}$ | $19^{\circ}$ | 25\%" | 161/3 | 46.73 | 27.44 |
| 57 DU 535 | CLH | 120 cps | $120 \times 60^{\circ}$ | 21\%x $11 \%$ | $20^{\circ}$ | 15 | 46.50 | 21.34 |
| 57 DX 543 | 2WP | 350 cps | $120^{\circ}$ | 2015 | 8\% | 4 | 29.40 | 17.24 |
| \$7 DX 56 | Cobre. <br> Flex II | 200 cos | $120 \times 60^{\circ}$ | 181/29 91. | 10\% | 10\% | 40. 25 | 23.87 |

## HEAVY-DUTY DRIVERS FOR TRUMPETS

ToD-quality drivers for any trumpet listed above. All are PM type, hermetically sealed, with $16 . \mathrm{ohm}$ impedances. ID.40T, ID.60T have built-in multi-impedance transformers with power taps. *For 70.7 v . systems.

| Stock No. | Mis' Type | Frequency Range | Waltage of Taps | Max. Watts | Wt. Lbe. | List | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 57 D 573 | ID.20 | 120-6500 |  | 20 | 3 | \$5.00 | 14.70 |
| 57 D 574 | ID. 30 | 85.7500 |  | 30 | $31 / 4$ | 31.50 | 18.52 |
| 57 D 575 | ID. 40 | $80 \cdot 12.000$ |  | 40 | $41 / 2$ | 39.50 | 23.23 |
| 57 D 577 | 10. 60 | 70.12 .000 |  | 60 | 5\%, | 52.75 | 31.02 |
| 57 D 576 | 1 D .40 T | 80. 12.000 | $\begin{gathered} 40.20,10.5 \\ 2.5 \end{gathered}$ | 40 | 5\% | 52.75 | 31.82 |
| 57 D 571 | 1D.60T | 70-12,000 | $\begin{gathered} 60,30,20,10 \\ 5,2.5 \end{gathered}$ | 60 | 61/6 | 63.25 | 37.14 |



## Sound Projectors, Horns and Drivers by ElectroWoice

## PAGING SPEAKERS AND PROJECTORS

Very efficient re-entrant type paging speakers and coaxial projectors Speakers teature die-cast horns, and are complete with drivers. Excellent for paging systems, police and fire vehicles, etc. Compound projectors have single driver-feature fiberglas construction, and offer wide horizontal coverage and smooth frequency response from two horns coupled to opposite sides of the driver's diaphragm. Speakers and projectors are weatherproof. CDP with type number indicates compound projectors.

| Stoch No. | Mfr's Type | Frequency Response | Watt | Disper ston | Ohme | Slie | Wt. Lbs. | List | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 57 DX 819 | PA. 7 | 400-13.000 | 71/9 | $120^{\circ}$ | 16 | 61/4 $\times 6^{-1}$ | 31/6 | \$29.35 | 16.67 |
| 57 D 574 | PA-15 | 350-13.000 | 15 | $120^{\circ}$ | 8 | 81/6x $\times 1 / 688^{1 / 4}{ }^{-}$ | 51/2 | 30.00 | 17.64 |
| 57 DU 540 | 848 CDP | 150-10,000 | 30 | $120^{\circ}$ | 16 | $201 / 2 \times 10^{1 / 2} \times 20^{\circ}$ | 15 | 82.50 | 44.51 |
| 57 DX 542 | 847 COP | 250-10,000 | 25 | $120^{\circ}$ | 16 | 111/4 $\times 71 / 6 \times 10^{\prime} / 31^{\circ}$ | 10 | 51.00 | 28.54 |
| $570 \times 54$ | 844 | 250-13,000 | 30 | $90^{\circ}$ | 8 | $91 / 8 \times 8^{3 / 15}$ | 81/2 | 36.50 | 21.44 |

## HORNS FOR SPECIAL APPLICATIONS

Rectangular compound horn (FC-100) has large horn for bass-small for highs. Round re-entrant horn (AR-150) has spun aluminum bell. Less drivers.

| Stoch No. | Mfr's Type | Low Cutoff | Disperslon | Length | Mouth Size | Wi. Lbs. | det | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 57 \text { DU } 520 \\ & 57 \text { DU } 821 \end{aligned}$ | FC. 100 AR- 150 | $\begin{aligned} & 100 \mathrm{cps} \\ & 150 \mathrm{cps} \end{aligned}$ | $90 \times 120^{\circ}$ | $\begin{aligned} & 201 / 2^{*} \\ & 17^{\circ} \end{aligned}$ | $\frac{101 / 2 \times 201 / 3}{}$ | 12 8 | $\begin{array}{r} \$ 50.00 \\ 34.00 \end{array}$ | $\begin{aligned} & 29.40 \\ & 19.50 \end{aligned}$ |

## DRIVERS FOR ABOVE HORNS

Can be used in both compound and re-entrant horns. Have double power ceramic magnets, edge-wound ribbon voice coils. T in type no. indicates with transtormer. All have 16 -ohm impedances. For use in 70.7 v . systems.

| Stock No. | Type | Range, Cps | *Watt Taps | Watts | Lbs. | List | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 57058 | DC30A | 150-10.000 |  | 30 | 41\% | \$31.00 | 18.23 |
| 570587 | DC30T | 150-10.000 | $30,15,5,2.5$ | 30 | 5\%/4 | 41.00 | 24.11 |
| 57058 t | DC40 | 140-11.000 |  | 40 | $61 / 6$ | 40.00 | 24.52 |
| 570588 | DC40T | 140.11.000 | $40,20.10,5$ | 40 | $8 \%$ | 52.50 | 30.17 |




## Deluxe Speaker-Baffle Combinations

## 8-OHM WALL SPEAKER-BAFFLE COMBINATION

Ruggedly constructed, tastefully styled and completely wired, it's a wonderful choice as an extension speaker for the recreation room or den. Delivers twice the sound per watt! Features dualdiameter 8 " speaker with 10 -watt capacity; L-pad volume control; 8 -ohms impedance. $91 / 2 \times 12 \times 6^{-}$. Available in choice of mahogany. wainut or blonde finish. Shog. wt., 6 lbs
57 DX 552C. Specily Finish.
NET 13.95
70.7-VOLT SPEAKER-BAFFLE. Above, but for systems with 70.7 volt outputs. With 70.7 -volt transformer and L-pad. 7 lbs . 57 DX 553C. Specify Finish.

NET 15.95
8-OHM SPEAKER ONLY. With wired L-pad, $18^{\circ}$ cable. 3 lbs . 57 D 570.

NET 6.65
70.7-V. SPEAKER. As above, for $70.7 \cdot v$. systems. 4 Ibs. 57 D 571.

NET 8.65
BAFFLE ONLY. Mahogany, walnut, or blonde. 3 lbs. 57 DX 556C. Specily Finish

NET 7.50

WALL SPEAKER SYSTEM

## Ultra-Smart Styling

- Mounts Anywhere
- Easy to Connect
- Use with Hi-FI or TV
- Includes Hardware


## 2.WAY WALL-MOUNTING SPEAKER SYSTEM

Add impressive sound to your home-without disturbing room decor. This fine-quality 2 -way system is only $3^{\prime \prime}$ deepmay be hung on the wali just as easy as you hang a picture. Use it for high fidellty systems where floor space is limited or as a remote speaker to carry hi-fi music to other rooms in the home. System consists of $6 \times 9$ wooter with inverted construction and dual-diameter magnet structure design that provides twice the sound per watt; high efficiency $3 \times 5^{\circ}$ conetype tweeter with 2000 cps crossover; and tuned port baffle for extended bass response. Screw slots and " $S$ " hooks are provided for easy installation within a matter of minutes. Attractive modern styling and fine-furniture finish also makes it suitable for use in restaurants, clubs, schools and offices. Size, $12 \times 18 \times 3^{\circ}$. Power handling capacity, 8 watts. Impedance, 8 ohms. In choice of mahogany, blonde or walnut-specify when ordering. Shpg. wt. 5 lbs .
57 DX 503C. Specify Finish.
NET 15.85

## 240 ALLIED

## UNIQUE CEILING BAFFLE-SPEAKER

Eliminates the need of making ceiling cut-outs. This flne-performIng speaker-baffle combination measures only $21 / 2$ deepquickly mounts on ceilings $3 / /^{-6}$ to $3 / 4$ thick with mounting hard. ware supplied. Perfect for tiled or regular ceilings in homes, offices, restauranis, department stores, etc.: gives excellent voice and music response. Uses the unique $8^{\prime \prime}$ inverted speaker developed by Utah to save soace while assuring maximum operating range. This design shifts the magnet and voice coil to the front of the cone-increasing the dispersion pattern and offer. ing wider distribution of sound. In addition, the speaker has efficlency and power-boosting dual-diameter design-resulting in increased economy in custom installations due to lower sound power requirements. Delivers twice the sound Der watt. Capacity, 6 watts. Impedance, 8 ohms. Size, $21 / 2 \times 121 / 2 \times 121 / 2^{\prime \prime}$. Handsomely styled in beige. Finish may be repainted to match any existing color scheme. Shpg. wt, 7 lbs .

## 57 DX 518.

57 D 568. Inverted Speaker Only. 3 ibs.


## Extra Thin wall baffle and SPEAKER

Utah's Exclusive Thin Profile Speaker-Baffle with Inverted, DualDlameter Speaker

## EXTRA-THIN SPEAKER-BAFFLE COMBINATION

Here's a streamlined, thin silhouette sloping baffle that can be hung anywhere. Excellent for olfices, dens, patios, and other extension applications. Features the remarkable $8^{\circ}$ inverted speaker designed b) Utah to glve twice the sound per watt. Comes complete with all hardware and instructions plus con-venient-screw terminal connections. Size, $9^{\circ}$ high, $12^{-}$wide, and $4^{\text {" }}$ deep. Power handling capacity is 6 watts. Impedance is 80 hms . Avallable In choice of three handsome woodgrain finishes, mahogany, blonde, or walnut. Finish may be repainted to match surrounding decorative motif. Grille cloth matches finish ordered. Shpg. wt., 31/2 lbs.
57 DX 501 C. Soecify Finish.
net 10.82


## LOW-COST EXTENSION SPEAKER-BAFFLE

- All-Metal Construction
- Use Indoors or Outdoors
- Handles 8 Watts of Power
- Simple to Install and Use

Compact and lightweight, this Utah all-metal baffle and $8^{\circ}$ speaker combination gives highly realistic reproduction of voice and music. Handy screw terminals for simple installation. For indoor or outdoor use. $91 / 2 \times 101 / 2 \times 31 / 22^{\circ}$. Capacity, 8 watts. Imped. ance, 8 ohms. Walnut vinyl finish. Shpg. wt., 5 lbs
57 DX 514.
NET 6.35


## "PRESTIGE" WALL-MOUNTED BAFFLES

New rectangular shape-ideal where extra air volume and larger appearance are needed. Give almost twice the internal volume with far better tone. Include "Speedy Mounting" cllps for easy hanging. Wood-grained pyroxylin covered with plastic grilles. Avallable in walnut or blonde-specify choice.

| Stock No. | Model | Size | For | tbs. | 1-5, EA. | 6-UP, |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 37 DX 527 C | PB-8A | 103/0x14x7 ${ }^{7}$ | $8^{\text {² }}$ | 4 | 5.73 | 5.42 |
| 57 DX 528 C | PB-12A | $131 / 4 \times 181 / 4 \times 9^{\circ}$ | $12^{*}$ | 7 | 8.09 | 7.65 |

## DELUXE WOOD WALL BAFFLES

Beautifully finished baffles for the finest surroundings. Of genuine birch with durable plastic grille. With all hardware and mounting cllps. Specify choice of walnut or blonde.
Stock No. Model Size For Lbs: 1.5, EA. 6 .UP, EA.


## LOW-COST WALL.MOUNTED BAFFLES

Wood, pyroxylin covered balfles. Can be washed or repainted. With hardware. Specify walnut or blonde finish

| 57 D 590 C | WB.4/5C | $6^{1 / 1 / x 61 / 4 \times 4^{4}}$ | 4-5" $11 / 2$ | 2.89 | 2.73 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 57 D 592C | WB-6C | $81 / 2 \times 77 / 3 \times 5^{7}$ | $6{ }^{*} 2$ | 3.53 | 3.34 |
| 57 D 591 C | WB-8C | 101/2x93/961/20 | $8^{8}$ | 4.22 | 3.98 |
| 57 DX 525 C | W8-10C | 123/9x11/4x ${ }^{1 / 4}{ }^{\text {m }}$ | $10^{* *}$ | 5.00 | 4.73 |
| $570 \times 526 \mathrm{C}$ | WH-12C | 14×135/8x0 | $12^{\text {x }}$ | 4.73 | 5.42 |

## SLANTING-FRONT CORNER BAFFLES

New "Clip-In" front goes on or off in seconds without front screws-entire cabinet mounts easily on wall with "Speedy Mounting" clips. Screw terminals; bass reflex; acoustic padding. Wood-grained pyroxylin covered-walnut or blonde, specify.


 | $570 \times 511 \mathrm{C}$ | SCB-12D | $20 \times 201 / 4 \times 10^{\prime \prime}$ | $12^{*}$ | 8 | 11.02 | 10.42 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## STRAIGHT-FRONT CORAER BAFFLES

As above, but straight-front. Specify blonde or walnut


## NEW THINLINE <br> BAFFLES WITH JENSEN SPEAKERS

Exira-ThinModern Looking and Heavy-Duty Profile Speakers

Modern-looking, space-saving baffles complete with ceramicmagnet speakers--optional L-pad and /or 70.7 volt transformerinstalled and wired. Screw terminals. Pyroxylin covering for lasting beauty. Speedy mounting clips for easy set-up. Series 208 are $8^{* \prime}, 15$ watt rating. Series 212 are $12^{\prime \prime}, 18$ watt. Type 108 is $8^{*}, 6$ watt, for background music. Letter L under model number indicates L-pad; T indicates 70.7 volt transformer. All speakers are 8 ohm impedance. Available in choice of walnut or blonde finish-specify when ordering.

| Stock No. | Model No. | Batfle Size | Wt., Lbs. | NET EACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1.5 | 6-Up |
| $570 \times 505 \mathrm{C}$ | WB-108AS | $91 / 2 \times 12 \times 41 / 4$ | 4 | 7.01 | 6.61 |
| 57 DX 506C | WB-208S | $91 / 2 \times 12 x+1 / 4$ | 5 | 10.19 | 9.68 |
| 57 DX 824 C | WB-208ST | $91 / 2 \times 12 \times 41 /{ }^{\prime \prime}$ | 5 | 12.59 | 11.97 |
| 57 DX 507 C | WB-208SL | $91 / 2 \times 12 \times 41 /{ }^{\prime \prime}$ | 5 | 12.59 | 11.97 |
| 57 DX 825C | WB-208SLT | 91/2×12 $\times 41 / 4$ | 5 | 14.99 | 14.24 |
| 57 DX 508C | WB-212S | $131 / 4 \times 16 \times 61 / 4$ | 8 | 14.85 | 14.10 |
| 57 DX 826C | WB-212ST | $131 / 4 \times 16 \times 61 / 4$ | 9 | 17.25 | 16.39 |
| 57 DX 509C | WB-212SL | $131 / 4 \times 16 \times 61 / 4$ | 8 | 17.25 | 16.39 |
| $57 \mathrm{DX} \mathrm{827C}$ | WB-212SLT | $131 / 4 \times 16 \times 61 / 4$ " | 9 | 19.65 | 18.67 |

New ''Petite" System
Ultra-compact 2 -way speaker system with Jensen-designed woofer/tweeter. Gives deep, rich bass, clean highs. Use anywhere-shelf, table, wall or floor. Has brass legs and wall hangers. Includes volume control recessed in side. Uses screw terminals, polarized for stereo. $18 \times 12 \times 33 / 4^{\circ}$. Hand rubbed olled walnut. Capacity, 6 watts. Impedance, 8 ohms. 10 lbs.
57 DX 828.
NET 24.40


## Selected Public Address Speakers and Line Transformers

## STANDARD SPEAKERS AT SPECIAL PRICES

A selection of low-cost, utility speakers ideally suited for indoor P.A. use and replacement. Impedance, 3.2 ohms. Made in U.S.

| Srock No. | Size | Watts | Mognet WI. | tbs. | 1-11, EA. | 12-UP, EA. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 570593 | $8^{\prime \prime}$ | 8 | 2.15 oz | 11/2 | 3.29 | 2.91 |
| 570594 | 8 | 10 | 3.16 oz . | 3 | 3.68 | 3.19 |
| 570595 | $8{ }^{\prime \prime}$ | 12 | 6.8 oz | 4 | 5.15 | 4.41 |
| 57 DX 533 | $12^{\prime \prime}$ | 12 | 3.16 oz | 4 | 4.97 | 4.32 |
| 57 DX 534 | 12* | 15 | 6.8 oz. | 5 | 8.31 | 5.46 |
| $570 \times 535$ | $12^{\prime \prime}$ | 25 | 10.0 oz . | 5 | 8.19 | 7.11 |

## LINE-TO-VOICE-COIL TRANSFORMERS

* 25 volt; 170.7 volt. Sec. Imp. 4, 8, 16 ohms. Av. wt. 1 lb .

| Stock No. | Watt Taps | Size | 1-11, EA. | 12-UP, EA. |
| :---: | :---: | :---: | :---: | :---: |
| 57 D 820 | 15. 2.5. 1.25, .62, .31 | 1/2x ${ }^{3} /{ }^{2}$ | 1.85 | 1.69 |
| 57 D 821 | 110, 5, 2.5. 1.25, . 62 | $5 / 0 \times 5$ | 1.99 | 1.85 |
| 57 D 822 | -5, 2.5, 1.25, .62, .31 | * | 1.99 | 1.85 |
| 57 D 623 | -10, 5, 2.5, 1.25. 62 | 1/8x\% | 3.10 | 2.59 |

## QUALITY P.A. SPEAKERS

Rugged speakers featuring Alnico $V$ magnets, heavy, baked aluminum enamel finish, Adjust-A.Cone suspension for precise voice-coil centering. All are 8 ohm Impedance. With transformer mounting bracket. 8A6PAOT is weatherproofed. *Ring-type magnet.

| Stock No. | Mfi' Typo | Sire | Wats | Mognet | Wr. | lbs. | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 57 D 650 | 8A21PA | $8{ }^{\circ}$ | 8 | 2.15 | 02. | 11/2 | 4.82 |
| 57 D 651 | 8.31PA | 8 " | 10 | 3.16 | oz. | 2 | 5.59 |
| 570654 | 8A4PA | 8 " | 12 | 4.64 |  | 3 | 6.47 |
| 57 D 655 | 8 A 6 PA | $8{ }^{\prime \prime}$ | 12 | 6.8 | oz. | 4 | 7.04 |
| 57 D 599 | 8 $\triangle 6$ PAOT | $8{ }^{\prime \prime}$ | 12 | 6.8 | Oz. | 4 | 8.06 |
| 57 DX 536 | 12A31PA | 12" | 12 | 3.16 |  | 4 | 7.03 |
| 57 DX 537 | 12A4PA | 12" | 15 | 4.64 |  | 4 | 8.38 |
| 57 DX 538 | 12A6PA | 12* | 15 | 6.8 | oz. | 4 | 9.38 |
| 57 DX 539 | 12A10PA* | $12^{*}$ | 25 | 10.0 | or. | 4 | 11.73 |


$57^{95}$
Pkg. of 5

BUY IN BULK AND SAVE!
Take advantage of lot-price savings on Soundolier ceiling/wall baffles.
MODEL 51-8 TRIM RING BAFFLE. Low-cost steel balfle tor extremely fast installation. Offers attractive flush appearance when installed-may be painted to suit any decorative motif. Requires $81 / 2^{*}$ hole in ceiling. For use with $95-8$ protective enclosure, right. Outer dia., $12 \frac{3}{4}$. Shpg. wt., per pkg., 1 lb .5 per package.
57 DX 502. PACKAGE OF 5
NET 7.95
(B) NEW MODEL $210-8$ WIDE-ANGLE SURFACE CEILING BAFFLE. Mounts in outlet box or celling. 18-gauge aluminum sieel grille; white outer finish. Acoustical horn design for wide response. Takes 8 speaker. $41 / 4 \times 141 / 8$ dia. Wt., 4 lbs
57 OX834. 5-Up, EACH .....11.00 1-4, EACH.
12.54

57 OX 835. Model $210-12$ Baffle. As above, for $12^{2}$ speaker. $6 \frac{1}{2} \times$
$18 \frac{1}{3}$ dia. $61 / 2 \mathrm{lbs}$ 5-UD. EACH .... 13.50 1-4, EACH ..... 15.39
MODEL 169-8 TRIM SQUARE BAFFLE. 24 -gauge steel; white Mtg. hdwe.: less spkr. Fits 193-8 below. $10 \frac{1 / 2}{2}$ sq. $11 / 4$ tbs.
57 DX 554. 5-Up, EACH
2.081 -4, EACH
2.37

MODEL 193-8 ENCLOSURE. All-welded, undercoated, rustresistant. 4 conduit knockouts. Less spkr. $93 / 8 \times 98 / 3 \times 33 / 4.31 / 4$ lbs. 57 OX 555. 5-Up, EACH
3.47 1-4, EACH
3.96

MONEY-SAVING SPEAKER-BAFFLE PACKAGES


Consist of baffle, $8^{\circ}$ speaker and transformer. Utah speaker has $3.16-02$. magnet; 40-15,000 cps response. Transformer has $2 / 1 / .5 \mathrm{ohms}, 70.7 \cdot \mathrm{v}$. taps.

| $\begin{aligned} & \text { Stoch } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { Mhr's } \\ & \text { Typo } \end{aligned}$ | Includes Baflle No. | We. Lbe. | NETEACM |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1-4 | 5-up |
| $570 \times 837$ | PK.51.8 | 51.8 | 31/4 | 4.18 | 5.05 |
| $570 \times 839$ | PK.61.8 | 61.8 | 3\% | 9.4 | 8.56 |
| $570 \times 838$ | PK-67.8 | 67.8 | 4 | 11.33 | 9.85 |
| 57 OX 830 | PK-68-8 | 68.8 | 31/6 | 13.72 | 12.04 |
| 57 OX 311 | PK.169-8 | 169.8 | , | . 18 | 8.05 |

(D) NEW MODEL 23-8 SURFACE CEILING B AFFLE. Low ceiling brushed aluminum baffle, designed to eliminate beaming. Ported body gives extended bass response. Jute lining undercoating and concentric reinforcement rings prevent mechanical and acoustical resonances. Mounts directly to ceiling with 4 toggle bolts. Takes $8^{-}$speaker. Size, $5 \frac{1}{2} \times 16 \frac{1}{4}$ diameter Shpg, wt., 4 lbs.
57 DX 836. 5-Up, EACH
14.00 1-4, EACH
12.54

E SERIES 95 PROTECTIVE ENCLOSURES. Protective enclo-
sures (cans) for installation in new or existing ceilings. To install in existing ceilings. enclosures are mounted through four holes in flange. For new construction, 4 straps allow use in any thickness of plaster. Have undercoating, jute lining. Less spkr.

| Stock No. | Model | For Ube With | O.D. | Deoth | Lbs. | 1-4, EA. | 5-UD, EA. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 57 DX 550 | 95.8 | 67.8.68.8 | 9\% | $46^{\circ}$ | 7 | 4.\% | . 28 | $\begin{array}{lllll}\mathbf{5 7} \text { DX } 551 & 95.12 & 61 \cdot 8.67 \cdot 8.68 \cdot 8\end{array}$

F SERIES 61 TRIM RING BAFFLES. Highly polished, 20-gauge steel trim ring baffles. Offer aftractive flush appearance when installed; will not buckle or "give" when bolts are driven in place. Less speaker. Hole size required: 61 -8, $81 / 2^{\prime \prime}, 61 \cdot 12,121 / 2^{\prime \prime}$.

| Stock No. | Mode! | Spenker | Enclosure | O.D. | Lbs. | 1-4, E魚. | 5-UD, EA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 57 \mathrm{D} \times 54 \\ & 37 \mathrm{D} \times 549 \end{aligned}$ | $\begin{aligned} & 61 \cdot 8 \\ & 61 \cdot 12 \end{aligned}$ | $\frac{8^{\circ}}{12^{\circ}}$ | $\begin{aligned} & 95 \cdot 8 \\ & 95 \cdot 12 \end{aligned}$ | 12\%/4 | $1$ | $\begin{aligned} & 2.85 \\ & 7.01 \end{aligned}$ | $\begin{aligned} & 2.59 \\ & 6.15 \end{aligned}$ |

6
MODEL 67-8 LOUVERED BAFFLE. Similar to air diffusers in appearance. Welded construction; vibration and rattle-free. For $8^{\prime \prime}$ speakers only. O.D. $12^{\prime \prime}$. Hole size required, $10 \frac{1}{4}{ }^{\prime \prime}$. Use with 95.8 enclosure, above. Snpg. wt., $11 / 2 \mathrm{lbs}$.

57 DX 546. 5-Up, EACH .........3.98 1-4, EACH
4.53

MODEL 68-8 LOW-CEILING BAFFLE. Attractive styling. Has satin-brushed aluminum sound diffractor to avoid beaming in low-ceiling use. For $8^{\prime \prime}$ speakers. O.D., $123 / 4^{\prime \prime}$. Requires $81 / 2^{* \prime}$ hole. Use with 95.8 enclosure, above. 2 lbs . 57 DX 547. 5-Up, EACH ......... 6.07

1-4, EACH
6.93


## THERMOSTATS

System includes four place-anywhere, U.L. Approved, fire detection thermostats. Three Type FB-2 thermostats trigger alarm at temperatures over $140^{\circ}$; one Type FB-3 thermostat triggers alarm at temperatures over 200 .

MODEL PC-12A. Security-convenience -fire detection-all at low costl Fiick a switch to learn the identity of calfers at your door; press a button to admit them. Add an extra indoor remote station for 2 way communication within the home, besides front door monitoring. Inconspicuous, U.L. Approved fire detection thermostats set off alarm signal through all stations at first sign of fire. System includes: transistorized Ampli-fler-Fire Oscillator: one 1R-6 Indoor Remote Station; one OR-1 Outdoor Remote Station; three FB-2, One FB-3 Fire Detecting Thermostats; 50 ft . of 6 cond. Wire; 150 ft . of 2 -cond. Wire. Any number of additional thermostats, or in. door /outdoor remotes may be added. System requires no power outlet; operates from your doorbell transformer. Intercoms may be surface-mounted with RH-4

- Front Door Communication from Any Room in Your Home - Fire Detection System-Sets Off Loud Alarm Through All Units - Completely Transistorized; Operates from Chime Transformer Mount, below. Gold anodized aluminum stations, $6 \times 4 \frac{1 / 2 \times 2}{}$; thermostats, $3 / 4 \times 15 / 0^{\circ}$ dia. System shog. wt., 9 Jbs. 58 RX 001.

NET 61.43
58 R 002. IR-6A Indoor Remote Station. Wt.. $11 / 2$ lbs........................ NET 10.26
58 R 003. OR-1 Outdoor Remote Station. Wt., 1 lb .

NET 6.56
58 R 028. FB-2 Thermostat. Trips at $140^{\circ}$ Wt. 3 oz.

NET 2.84
58 R 005. FB-3 Thermostat. $200^{\circ}$. . . . 2.84
58 R 006. EP-3 Emergency Power Supply. Includes battery-plugs into amplifier. Automatically activated if power fails; has trickle charge feature. 3 lbs.
33.95

58 R 007. RH-4 Surface Mount. $1 / 2 \mathrm{Ib} .1 .42$
58 R 008. AW-9 8-Cond. Cable. $150^{\prime} .5 .00$
58 R 009. AW-10 8-Cond. 500 ft .
Shpg. wt., 23 lbs.
NET 17.08

# Custom Built-In Radio-Intercoms for the Home 



MODEL 2031 5-STATION AM RADIO-INTERCOM SYSTEM. Plays music through any remote. Remotes can call each other. Inside stations have vol. control, privacy switch. Master has phono input. 8 station capacity. Includes: Master; three Model 2025 Inside Remotes; Model 2006 Door Remote; 200 ft . of Cable; Antenna. Master panel $16 \times 83 / \times 15 / 6^{;}$; box is $71 / 6 \times 143 / 4 \times$ $13 / 4$. Remotes described below. For $110-120$ v. . $50-60 \mathrm{cycle}$ AC Shog. wt.. 21 lbs
58 RU 038.
DELUXE AM "BROADCASTER"
MODEL 2053. Same as 2058 at right but. $A M$ only. Silver anodized panel. $91 / 2 \mathrm{lbs}$. 58 RX 037.

NET 55.65
58 RX 084. Model 2054. Same as above. but copper finish panel .......NET 55.65

(A)
2026 DELUXE INDOOR REMOTE Flush $\mathrm{mtg} .5^{\circ}$ speaker, vol. controf. privacy switch. Sand and gold. Panel. $89 / 16 \times 65 / 6^{\prime \prime}$; box. $81 / 8 \times 51 / 4 \times 11 / 4^{\prime \prime}$. Wt., $21 / 4$ tbs. 58 RX 034.

NET 5.67
58 RX 035. 2025 Economy Remote. As above, but $4^{*}$ speaker. Wt., $21 / 4$ Ibs. NET4.68
B NEW 2419 DELUXE HI-FI SPEAKER SYSTEM. 12" woofer. two 3 1/2" tweeters. For complete intercom and volume control, use with 2416 Remote Controt below. $2813_{1 / 6 \times 175 / 664} \times 4^{7}$. Oil wainut. 58 RX 081. Shpg. wt., 28 lbs... NET 59.97 58 RX 082. 2416 Inside Speaker Remote Control. For above; with rough-in box. 12 \%/847/8". Shpg wt.. 5 lbs. ....NET 19.84


MODEL 2058 DELUXE FM-AM BROADCASTER. Magnificently styled, this radio-intercom master station distributes FM of AM programs to up to 10 individually selected remotes. Remote stations can originate calls and converse with one another Automatically lowers music volume during calls. Transistorized intercom amplifier for silent, hum-free background: has phono inout, tone control. $4 \times 8^{\circ}$ speaker. Easy to install. Copper-anodized aluminum panel is $15 \% \times 10^{7}$, extends $211 / 16^{-1}$ from wall; box is $711 / 2 \times$ $14 \%^{\circ}$, fits new $2^{\prime \prime}$ walls. 8 tubes, 1 transistor. With antenna wire: less remote stations, below. For 110-120 v. 50-60 cycle AC. Shog. wt. 16 lbs
58 RX 032.
NET $\mathbf{1 0 0 . 9 7}$
58 RX 033. Model 2057. Same as above, but front panel of silver.
anodized aluminum
NET 100.97

C] 58 RX 041. 2020-B Hi-Fi Remote. $8^{8 \prime}$
Coax spkr. Walnut, gold. $51 / 2$ ibs. NET 13.17 [0] 58 RX 036. 2006 Door Remote. Listen. talk switch; $3^{3 *}$ speaker. Gold panel. $45 / 16 \times 5 \%_{6}^{\circ} ;$ box. $5 \% \times 45 / 16 \times 1 \% \%^{\circ}$ 1 $1 / 4$ lbs. 5.00 58 RX 042. 2411-A Rough-In Frame. For above. $121 / 2 \times 20^{\circ} .93 / 4 \mathrm{lbs}$. ....... NET 1.51 3-CONDUCTOR INTERCOM CABLE 58 RX 039. $200^{\prime}$ Roll. 2 lbs........... 4.48 58 RX 040. $1000^{\circ}$ Roll. $41 / 2 \mathrm{lbs}$....... 16.33 58 RX 085C. Door Chime. Walnut or Limed Oak finish-speclify. 6 lbs . NET 22.18 58 RX $083.50^{\prime}$ Roll of 8-Conductor Cable.


C
 Use with 2416 Remote. left .....NET 3.97

## TALK-A-PHONE All-Transistor Intercom System

## CENTRAL MASTER AND STAFF UNITS

Communicate with up to 8 stations. Each system requires a Central Master unit and either a 4 F 6 H 9 . Volt Battery or an HI-PS AC Power Supply. Other stations may be any combination of Staff units and Indoor or Outdoor Subs. Staffs and Master(s) can origi nate calls to and converse with any station. Subs do not orlginate calls, can talk with any station except another Sub. All feature private or non-private operation, except outdoor Subs, non-private. When set for private use, station must press switch to be heard: in non-private use, need not press switch. HI.9R Central Master lets any station except Outdoor Sub hear AM radio programs. Gold and satin-silver finished panels. Flush mounting. Central masters. Stafts include $43 / 8 \times 141 / 16 \times 31 /{ }^{\prime \prime}$ plaster rings. Mas. ters have $15 \% \times 5 \%$ tront panel HI-9 CENTRAL MASTER. 8-station capacity. 7 lbs . List, $\$ 99.50$

## 58 RX 078.

NET 58.00
HI-9R CENTRAL MASTER. Like HI.9, with AM radio. 8 IJs.
58 RX 079. List, $\$ 154.00$
NET 89.50
58 RX 080. HI-8 Staff. 8 station capacity. 7 los. List. $\$ 54.00 .31 .51$
CABLE REQUIREMENTS. Central Master and Staffs: Use 6226 cable. Measure from 1 st unit to 2 nd , 2 nd to 3 rd, etc., and total. Or, use a junction box, which may be placed anywhere, and measure from each station to junction box. Subs: Connect to nearest Staff or Central Master. Use 6206 cable for Indoor Sub, 6202 for Outdoor Sub. Battery or power supply: Connect to Central Master with 6202 cable.
49 W 615.6226 CABLE. 12 lbs. per $100^{\circ}$
NET PER FT. 28c 49W 621.6202 CABLE. 4 lbs. per $100^{\prime}$ 49W 622. 6206 CABLE. 3 lbs. per $100^{\prime}$

NET PER FT. $31 / 2 \mathrm{c}$ 49W 622. 6206 CABLE. 3 lbs per 100 NET PER FT. $81 / 2 c$


## SUB-STATIONS AND SYSTEM ACCESSORIES

HI-1 OUTDOOR SUB. Illuminated name plate, push-button. Fits $2^{-}$sa. $\times 2^{*}$ deep wall opening. $53 / x^{3} 3 / /^{\prime \prime}$. Wt., $11 / 2$ IDS. 58 R 127. List, $\$ 27.50$

NET $\mathbf{1 5 . 9 5}$ HI-2 INDOOR SUB. Mounts in $?^{\prime \prime}$ sa. $\times 2^{\prime \prime}$ deep wall opening. $5 \frac{5}{6} \times 35 /{ }^{6}$. Wt. $11 / 2$ lbs. 58 R 129. List, $\$ 27.50$

NET 15.95
NEW HI-4 WALL-MOUNT STAFF. Mounts in $61 / 2 \times 41 / 3 \times 2^{\prime \prime}$ wall opening. Can call or talk to any 3 indoor or outdoor stations in system. $73 / 16 \times 41 / 6$
58 R 135. List, \$29.95
NET 17.50

## T-SM-L SURFACE MOUNT ACCESSORY. For Hl. 4 above

58 R 136. List. $\$ 7.80$
NET 4.60
HI-SM HOUSING ASSEMBLY. Permits Central Master or 8 -station staff to be placed on table, mounted on wall, installed on cabinet. $6 \times 151 / 2 \times 4^{* *} .21 / 2 \mathrm{lbs}$
58 R 130. List, $\$ 19.00$
NET 11.00
58 R 131. 8-Station Junction Box. $1 \frac{3}{4} \times 8 \frac{3}{4} \times 8^{* \pi} 1 \mathrm{lb} . \ldots$. NET $^{2} .00$ 58 R 132. HI-PS AC Power Supply, For operation from 110.120 y $50-60$ cycle AC. $3 \times 5 \times 2^{*} .5 \mathrm{lbs}$. List, $\$ 27.50$

NET 1595

## FAJON-MASCO 



NEW! $552^{87}$

ALL-TRANSISTOR 2-STATION WIRELESS INTERCOR

FW-40. No wiring or warm-up time neces-sary-just plug each station into an AC outlet and begin talking. You can even communicate between nearby buildings on the same line transformer. Beige and gold piastic cases, $43 / 4 \times 83 / 4 \times 5 \frac{1}{4}$. For 110 . 120 v., 50-60 cycle AC. Wt., 7 lbs.
58 RX 106. List, \$89.95 . . . . . NET 52.87 58 R 107. Extra Station. 3 lbs . . NET 27.20 58 RX 108. FW-50B. As above, buthighpower. Tube type 7 Ibs. ............ 61.69 58 R 109. Extra Station. 3 Ibs. . . NET 31.61

NEW!


## FLUSH-WALL

 INTERCOM $552^{27}$ $\$ 5$ monthly
4404. Easily installed and transistorized, consisiting of: one 5 -station Master: 3 indoor and 1 outdoor remotes; complete installation package. Operates from one $9 \cdot v$. battery. Allows 2 -way conversations and monitoring. Wall space: Master, $47 / \mathrm{x}$ $10 \% \times 31 /{ }^{\circ}$; Remote, $37 / \times 51 / 4 \times 2^{2}$; Panel:
 Chrome. Less battery, below. 16 lbs . 58 RX 139. List, $\$ 89.95$...... NET 52.77 58 R 140. BC Extra Indoor Remote. For use with above. Shpg. wt., 1 lb
$80 \mathrm{~J} 666.9-\mathrm{v}$. Battery. 3 oz . . . . . NET 1.26


RB-1. Hear your child's voice from the bedroom or playroom through any $A M$ radio. Just plug "Baby-Com" into an out. let. Blue and pink case. $41 / 2 \times 6 \% \times 43 / 1^{\prime \prime}$. For $110-120 \mathrm{v}$., $50-60$ cycle AC-DC. 4 lbs. 58 R 134. Llst, \$24.95........ NET 14.65


## 2-STATION

 INTERCOM ${ }^{5} 23^{42}$

FX-28. Dependable, budget-priced Inter com system offering clear intelligibility and attractive styling. Consists of Master Remote and 50 ft . of 3 -cond. cable (add more if desired-see 47 W 362 , below right). Remote needs no power-place it anywhere. Two-tone beige and gold styrene
cabinets. Size: $83 / 4 \times 43 / 4 \times 53 / 4$. For 110.120 volts, $50-60$ cycle $A C$ or DC. U.L. Ap. proved. 6 Ibs . $\$ 5$ Monthly
58 RX 110. List, $\$ 39.95$
NET 23.42 FSB EXTRA REMOTE. With 50 -ft. 3 -cond. cable. Attach to Master. 2 lbs .
58 R 111. List, $\$ 13.25$
NET 7.79

## bswsush



ALL-MASTER SYSTEM. Up to 6 FX. 6 B (or $11 \mathrm{FX}-12 \mathrm{~B}$ ) Masters. Can handle up to 3 (or 5) simultaneous private conversations. FX-12B can call all stations at once, and can be made non-private. 7 -cond cable for FX-6B; 1 twisted pair for each FX-12B.

MASTER-REMOTE SYSTEM. An FX-6B Master and up to 5 Remotes, or an $F X \cdot 12 B$ and up to 10 Remotes. Remotes cannot call each other. FX.6B uses 3 -cond. cable to each Remote; FX-12B uses 1 shielded cable plus 1 conductor for each Remote. FX-6B, FX-128 and FC8 in two-tone beige. $83 / 2 \times 43 / 2 \times 5 \frac{1}{4}$. For $110-120$ v. 50.60 cycle AC. Less cable.

FX-6B 6-STATION MASTER. Shpg. wt. $31 / 2$ lbs. Order 6 and Save! 58 R 112. List, $\$ 39.95$...NET Each 23.42 FX-12B 12-STATION MASTER. ShDg. wt.. 4 lbs. List, $\$ 47.50$ 58 R los.

NET 27.83
MODEL FCB REMOTE. 2 lbs.
58 R 115. List, $\$ 13.95$
net 8.23
INTERCOM CABLE. Indoor-outdoor type.


## MULTI-CHANNEL TELEPHONE INTERCOM SYSTEMS



ALL-MASTER SYSTEM. Up to 11 phones. Full trunkage. Permits as many 2-way channels as there are pairs of phones. MASTER-REMOTE SYSTEM. Up to 1 Master and 10 Remotes. Has single, com-mon-talking line, but Master can set up conferences with Remotes.
INTER-MIX SYSTEM. Allows use of multiple Masters. Each Master takes up to 11 Remotes, less no. of Masters.
1010 MASTER. Coiled cord. Pearl gray case. $5 \times 7 \frac{1}{6} \times 5 \frac{1}{6^{\circ}}$. Requires $6-8 \mathrm{v}$.! DC (see power supply below). $31 / 2$ los.
58 R 098. List, $\$ 74.95$........ NET 44.05
101 REMOTE. Similar in appearance to above, but less dial. Wt., 3 lbs. 58 R 099. List. \$47.50.

NET 27.93
58 R 101. PSA Power Supply. Use one for every 6 phones. For $110-120$ v., $50-60$ cycle AC. 4 ibs. List, $\$ 29.95$......... NET 17.59

CABLE. All-Master: 1 twisted-pair, plus 1 pair per phone. Master-Remote: 3 conductors, plus 1 conductor per phone. Intermix: Comblnation All-Master and Master-Remote. CABLE FOR ALL-MASTER SYSTEM AND MASTER-REMOTE SYSTE㶾

| stock No. | Pairs | Lbs. Per 100 | $\mathrm{F}_{\mathrm{t}}{ }^{\mathrm{r}}$ | 100 or more. <br> Per $100^{\prime}$ | Cond. | 1 b b. <br> Per 100 | 100.Fi. Spool |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Stochno. | NET |
| 48 W 8922 |  | ${ }_{4}^{11 / 2}$ |  | 3.82 |  |  | 47 T 370 | 2.94 |
| 48 W893 | $6$ | $46$ | St | 4.26 5.98 | 5 | $21 / 2$ | 47 T 380 | 3.63 5.29 |
| 48 W894 | 9 | $6 \%$ | 91/2c | 7.94 | 7 | $11 / 2$ | 47 T 320 | 5.29 6.03 |
| 48w 49 W88 | 11 |  | 138 | 10.73 | 8 | $41 / 4$ | 47 T 330 | 6.27 |
| 49 W845 | 13 | 11 | 158 | 12.15 | 9 | 5 | 47 T 340 | 7.01 |

## Versatile Intercom Systems

ALL-TRANSISTOR "INTERCOMPACT" SYSTEMS
WI-60 MASTER-REMOTE SYSTEM. Consists of: one Remote and one Master (accepts up to 3 Remotes); 50 ft . 3 -cond. cabie: terminal box and hardware. Remote needs no outlet and can call Master. In pleasing Desert Sand finish. Master and Remote, $4 \times 6$ \%/4x $5 \% /{ }^{2}$. For 110.120 volts, 60 cycle $A C$.
WI-60 MASTER-REMOTE. 2 stations. Shpg. wt., 7 lbs. 58 RX 012. List, $\$ 50.75$. $\$ 5$ Monthly
IR-7 ADDITIONAL REMOTE. ShDg. wt., 2 lbs. 58 R 013. List, \$10.75
58 R 016. 3-Cond. Cable. Wt., $41 / 2 \mathrm{Ibs}$
58 R 017. 3-Cond. Cable. Wt., 15 Jbs.
WI-65 ALL-MASTER SYSTEM. For up to 7 stations Stat can be private or non.private and can call one or all others. Less cable, below. With terminal box and hardware. Powered by MA. 66 Power Supply (below). Desert Sand finish. $4 \times 6 \frac{3}{4} \times 5 \frac{1}{1 / 2}$.
WI-65 MASTER. Up to 7 for All-Master System. 3 lbs. 58 R 014. List, $\$ 25.50$ MA-66 POWER SUPPLY. For $110-120 \mathrm{v} ., 60$ cycle AC. Transis. torized. Size, $3 \times 5 \times 13^{\circ}$. One required per system. 5 lbs, 58 R 015. List, \$45.75
58 R 018. 9-Cond. Cable. Wt., 13 lbs.

## ALL-TRANSISTOR WIRELESS INTERCOM

- 2-Way Conversation
- Desert Sand Finish
- Monitorino Facility
- Minimum Interterence

CI-50 TWO-STATION INTERCOM. Draws less current than an electric clock. Accepts any number of extra stations (see below) on same line translormer. Has press-to-talk switch with lock control. Size of each station: $4 \times 6 \frac{1 / 4}{3} 55 / \mathbf{l}^{\prime \prime}$. For $110.120 \mathrm{v} ., 50 \cdot 60$ cycle AC. Shpo. wt., 5 lbs. $\$ 5$ Monihly 58 RX 031. List. $\$ 75.25$.
net 52.75
58 R 102. Extra Station. 3 lbs. List, $\$ 37.60$
58 R 103. Wall Mtg. Bracket. 3 oz . List, 50 C
CP-70 WIRELESS PAGING MASTER. Plugs into AC outlet to any number ol speakers (below) on same transformer line. For $110-120$ v., 60 cycles. $4 \times 63 / 4 \times 5 \%{ }^{\prime \prime}$. Shpg. wt., $21 / 2$ lds.
$\mathbf{S 8}$ R 010. List, \$43.25
NET 29.25
CP-71 HORN SPEAKER-AMPLIFIER. For use with CP-70 Mas ter. All-transistor. Has screwdriver-type volume control and bulltin squelch control. With $8 . \mathrm{ft}$. cord. Spun aluminum-swivels $360^{\circ}$. Mtg. plate space, $9^{\circ}$. Shpg. wt., 6 lbs
58 R 011. List, $\$ 60.75$

NET 34.20

NET 17.20

NET 30.80
PER 250 f. 21.40


NET 7.30 PER 150 H. 1.95 PER 500 ft .6 .50

MASTER AND MASTER-REMOTE

SYSTEMS


- Units Plug Into Any AC Outlet - No Warm-up Time


## Net

## TWO-STATION WIRELESS SYSTEM

T-LC-33. Just plug each station into any outlet on the same power company line transformer and you establish instant communlcations, "Uni-Trans" switch per. mits dictating or listening. Cabinets are beautifully linished in charcoal gray and brushed chrome-resist effects of liquids
and air. Each unit, $31 / 8 \times 101 / 2 \times 81 / \mathrm{m}^{\circ}$. For 110 . 120 volts. $50-60$ cycle $A C$ or DC. Shpg. wt., 16 lbs. $\$ 5$ Monthly 58 RX 056. List, $\$ 138.00$

NET 79.90 T-LC-17 ADDITIONAL STATION. Add any number-same as above units. 8 lbs. 58 RX 057. List, $\$ 69.00$

## T-LCM MASTER STATION. Any Master

 can call any other, or selectively, all together. Charcoal gray and chrome fin. Ish. Plug each into outlet on same transformer line. $31 / 8 \times 14 \times 8 \frac{1}{4}$. For 110.120 V .,50.60 cycle AC-DC. U.L. Approved T-LCM 8906. To 6 stations. 10 lbs. 58 RX 043. List, $\$ 136.00$. .... NET 79.50 T-LCM 8912. To 12 Stations. 12 Ibs. 89.80 58 RX 050. List, $\$ 154.00$.... NET 89.80

## NEW MASTER-AUXILIARY SYSTEM

T-LCS. Consists of one or more T-LCM Masters and any number of auxiliary stations, below. Auxiliary is on fixed channel -can reply but not originate. System offers selective area paging without ex. pensive instatlation costs. Place one or more channel 1 auxiliaries in one room, one or more channel 2 in another, etc. Master can then page any area. Last digit in type no. of auxiliary indicates chan-
nel. $31 / 6 \times 10 \frac{1}{2} \times 83 / 4{ }^{2}$." For $110-120$ v., 50.60 cycle AC-DC. Wt., 7 lbs.
58 RX 044. T-LCS-901. 58 RX 045. T-LCS. 902. 58 RX 046. T.LCS-903.
58 RX 047. T-LCS. 904.
58 RX 048. T-LCS-905.
$58 \mathbf{R X}$ 049. T.LCS-9015.

List Each,
$\$ 77.00$
NET EACH, 45.00



Your voice goes through while hum and line noise are screened out.

# Bogen <br> Versatile All-Transistor Intercom 



ALL-MASTER SYSTEM. An instant. operating intercom system, using up to six TIA-6, or up to twelve TIA- 12 Masters. Any Master can call any other and, in a TIA. 6 system, all simultaneously. Each Master has volume control, press-to-talk bar, and selector switch with "mute" position. All-transistorized. $3 \times 81 / 2 \times 6^{\circ}$. Less cable (below)-use cable with one more conductor than the number of stations. For 110-120 v., 60 cycle AC.
MASTER-REMOTE SYSTEM. CONsists of one TIA. 6 Master and up to five RIA-1 Remotes; or one TIA-12 Master and up to 11 Remotes. Master can call any Remote, and in a TIA. 6 system, all simultaneously. Remotes have press-to-talk bar, but can be used for non-private operation (controlled by jumper). Remotes can originate calls to Master. Size of Remotes, $3 \times 81 / 2 \times 6^{-}$. Less cable (below)-use 3 -conductor cable beiween Master and each Remote.
INTERMIX SYSTEM. TIM• 12 Intermix Master Stations are used in systems with a total of 12 stations in any combination
of Masters and Remotes. Use either TIA or RIM- 6 Remotes. RIM- 6 Remote can initiate calls to any one of six TIM-12 Masters: RIA Remotes, only to one Master.
TIA-6 6-STATION MASTER. Wt., 4 lbs. 58 R 019. List, $\$ 54.40$.

NET 34.45
TIA-12 12-STATION MASTER. 4 Ibs. 58 R 020. List, $\$ 63.75$......... NET 38.25
RIA-1 REMOTE. Calis only 1 Master. Called by any Master. $31 / 2$ Ibs. 58 R 021. List, $\$ 17.40$

NET 10.45
TIM-12 INTERMIX MASTER. Permits mixing any combination of Masters and Remotes up to 12. Wt., 4 lbs. 58 R 022. List. $\$ 78.40$

NET 47.00
RIM-6 REMOTE. Originates calls to any of 6 Masters. Wt., 4 lbs. 58 R 023. List, $\$ 39.00$

NET 23.40

## CABLE FOR INTERCOMS

48 W 825 . 3-cond 2 lbs 48 W 759. 8 -cond. $4 \frac{1}{2}$ lbs... Per $100^{\prime} 4.26$ 48 W 894. 18 -cond. 8 lbs. . . Per $100^{\prime} 7.94$


## SERIES TSD BOGEN-PHONES

An extremely flexible phone system adaptable to any need, and offering private (no eavesdropping), multi-conversation. Masters can converse with each other privately (up to 5 simultaneous private conversations in 10-phone system-10 in 20-phone system), or with others together (TSD. 10 can call up to 9 stations individually or together: TSD-20 up to 19). TSD. 1 Remote can receive calls from any Master but initiates them only to Master to which it is wired. Stylish phones can be used on desk or wall. Sizes: Masters, $3 \frac{1}{4} \times 91 / 2 \times 31 / 4$ ": Remote, $31 / 4 \times 9 \frac{1}{2} \times 31 / 4$. Use un shielded cable with 4 conductors more than the number of ohones. Connect Remote with 5 conductor cable. Only 1 PRS- 10 required for each system. Master's wl., $31 / 2 \mathrm{los}$
58 R 024. TSD-10 10-Station Master. List, $\$ 45.65$
net 34.25
58 R 025. TSD-20 20-Station Master. List. $\$ 53.25$
NET 39.95
NET 24.95
58 R 027. PRS-10 Power Supply. Size, $4 \times 7^{*}$. For $110-120$ v. $50-60$ cycle AC. 5 lbs. List, $\$ 44.35$.

# Deluxe TALK-A-PHONE Systems 

T-LR-2 Sub
Easy-to-use intercoms with a "Bullt-in Brain" for dozens of practical, cost-saving applications.


Mixed Masters and Subs up to a total of 10. Masters call; Subs only answer.

T-LR-3 Sub

One Master can communicate with up to total of ten Subs. Subs call Master, but not each other.


All Master-Station Systems. Each station can call and communicate with any other.

## COMBINATION SYSTEMS

MASTERS AND SUBS. Master calls can ye private or non private. Masters and r-LR-2 Suls have steel cases in leatherexture gray vinyl and chrome. T.LR-2M jub is finished in grained, baked enamel r-LR-2R, flush wall mounting Sub, has ;tainless steel front panel. Sizes: Masters, $31 / 6 \times 101 / 2 \times 83 / 4$; Desk Subs, $21 / 8 \times 71 / 2 \times 83 / 4$ " 3uilt-in Sub: wall opening, $41 / 641 / 6 \times 2$ leep: front panel, $413 / 16^{-}$sq. Less cable. selow. For $110-120$ v. $50-60$ cycle AC-DC. J.L. Approved
r-CL-5 MASTER. For use with 5-station :ystems. Shpg. wt., 7 lbs.
R $\mathbf{7} \mathbf{0 6 3}$. List, $\$ 72.00$
NET 42.00
T-CL-10 MASTER. For use with up to 10 ;tation systems. Wt., $81 / 2 \mathrm{lbs}$. i8 RX 064. List, $\$ 87.00$

NET 51.00 T-LR-2 SUB. Shpg. wt., 5 lbs . - RX 051. List. \$27.50 ........ NET 15.95 T-LR-2M SUB. Shpg. wt., 5 lbs . R8 065 . List. $\$ 21.00$..........NET 11.95 T-LR-2R BUILT-IN SUB. Wt., 4 los. 5 R 137. List, $\$ 21.00$

NET 11.95 HGH-POWER SUBS. See listings in $A C$. zessory Box, below.
工ABLE. Use 6210 with T.CL. 5 Masters, 5226 with T.CL-10 Masters. 6902. Sub to Maste:
49 W 617. 6210 Cable. Wt., 6 Ibs.
Per 100 ft
NET PER FOOT 14C
49 W 615. 6226 Cable. Wt., 12 lbs.
Per 100 ft .
NET PER FOOT 28c
49 W 613. 6902 Cable. Wt., 2 Ibs.
Per 100 ft .
NET PER FOOT 2c

## SYSTEM ACCESSORIES

HIGH-POWER SUBS. Answer Master: originate calls with special switch, below 5E RX 067. Model TC-20. 9- Trumpet Type. 15 watts. 5 lbs . List, $\$ 44.95$ NET 26.50 58 RX 066. Model THP-3. $8^{\prime \prime}$ Indoor Speaker. In charcoal giay metal balfle. $12 x$ $\times 12 \times 18^{\prime \prime}$. W1., 9 lbs. List, $\$ 28.00$. NET $\mathbf{1 6 . 5 0}$ 58 R 120. Model TS-100. Origination Switch. Wt., 2 lbs. List, $\$ 6.00$... NET 3.50 CF ADLE PHONE. Choose a Master and in place of Stock No., write "Special." Add "H" to Model No. Example: T-LM-5H, with cradie phone. Add $\$ 35$ to net price.
53 R 125. Wall Mounting Brackets. For all subs but T-C-20, T-HP-3. $1 / 2$ Ib. List, $\$ 1.25$

## MASTER-SELECTIVE SYSTEMS

STANDARD POWER. Subs can be private or not. T-LR.3M in baked enamel; others, leather-texture. Masters, $31 / 610 \frac{1}{2} \times$ $83 / 4^{\prime \prime}$ : Subs, $31 / 8 \times 71 / 2 \times 83 / 4^{\prime \prime}$. T-LR-3R: panel, $71 / 6 \times 43 / 16^{\prime \prime} \mathrm{w}$. Wall space, $61 / 2 \times 41 / 8 \times 2^{\prime \prime}$ d. For $110-120 \mathrm{v} ., 50-60$ cycle. AC-DC.
T-LM-5 MASTER. Accommodates up to 5 Subs. Shpg. wt., 8 Ibs.
58 RX 058. List. \$59.95
NET 34.95
T-LM-10 MASTER. Accommodates up to 10 Subs. Shpg. wt., 8 lbs .
58 RX 059. List. $\$ 75.00$....... NET 44.00
T-LR-3 SUB. Shpg. wt., 6 lbs. 58 RX 052. List, $\$ 27.50 \ldots$ T-LR-3M SUB. Shpg. wt. 6 lbs. 58 RX 062. List, $\$ 21.00$

NET 11.95 T-LR-3R BUILT-IN WALL SUB. 4 los. 58 R 138. List. $\$ 21.00$..........NET 11.95 HIGH-POWER MASTERS. Same as above. but 10 times the volume output. T-AC-5406 MASTER. Accommodates up to 5 Subs. Shpg. wt., 8 lbs . 58 RX 060. List, $\$ 75.00$.

NET 44.00
T-AC-5411 MASTER. Accommodates up to 10 Subs. Shpg. wt., 8 lbs.
58 RX 061. List, $\$ 89.95$.
NET 52.50
HIGH-POWER SUBS. See listings in Ac. cessory Box. lower left of oage
5303 3-COND. CABLE. 3 IDs. per $100^{\prime}$ 49 W604.

NET PER FOOT 3c

## SUPER-SELECTIVE SYSTEMS

SELECTIVE MASTER STATIONS. Highly versatile intercom systems consisting entirely of Master units. Any station can originate a call to any other station or stations-separate conversa. tions can be handled simultaneously, and conference calls set up. Each Master has light to indicate when unit is in operation. Also has press-to-talk bar, slide switch and volume control. Steel case is smartly finished in bonded, leather-texture gray vinyl and brushed chrome. Stations can be placed more than 1000 ft . a part. Less cable, below. Size, $31 / 8 \times 10 \frac{1}{2} \times 8 \frac{3}{4}$. For 110.120 volts. $50-60$ cvcle AC or DC. U.L. Approved Shpg. wt., 7 lbs
MODEL T-LS-5. Up to 5 stations.
58 RX 054. List. $\$ 59.95 \ldots . .$. NET $\mathbf{3 4 . 9 5}$
MODEL T-LS-10. Up to 10 stations.
58 RX 055. List, $\$ 75.00$........NET 44.00
CABLE. For T-LS-5, use 5506. For T-LS-10. use 9911 . To determine quantity, measure from 1 st station to 2 nd only, and to 3 ric only, etc., and total. Do not connect last station to first
49 W 605. 5506 6-Conductor Cable. 4 lbs per $100^{\circ}$ NET PER FOOT $71 / 2 \mathrm{c}$
49 W 603. 9911 11-Conductor Cable. 12 lbs. per $100^{\circ}$...... NET PER FOOT 14c


T-LC-2 TWO-STATION INTERCOM SYSTEM

A deluxe 2 -station intercom system for home, office or plant. Includes one Master, one Sub and 50 feet of interconnecting cable (up to 2000 leet more can be added -see below). Master and Sub can originate calls to each other and communicate both ways. Sub can be set for private or non-private operation. Only Master needs to be connected to AC outlet. Mas* ter has volume control and pilot light; has steel case attractively finished in charcoal gray vinyl and brushed chrome. Case resists effects of weather and liquids. Sub's resistant steel case is finished in
matching baked enamel. Sizes: Master. $31 / 8 \times 10 \frac{1}{2} \times 8 \frac{3}{4}$; Sub, $31 / 8 \times 71 / 2 \times 83 / 4$. For 110 . 120 v.. $50-60$ cycle AC or DC. U.L. Approved. 13 lbs. $\$ 5$ Monthly. 58 RX 053. Lisl. $\$ 62.00$

NET 36.00
T-LR-3M EXTRA REMOTE. WI.. 6 Ibs. 58 RX 062. List. $\$ 21.00$. ........ NET $\$ 1.95$ 5303 CABLE. Add up to 2000 ft . Shpg. wt., per 100 ft . 3 lbs
49 W 604.
NET PER FOOT 3c
WALL MOUNTING BRACKETS. 2 lbs. 93 R 049. List. \$1.25 NET PER PR. 75c

## ELECTRONIC GARAGE-DOOR OPENER

All-Transistor Remote Control

Net - Automatically Control Your Garage 54950 \$8 monthly - With All Hardware and Instructions


#### Abstract

Touch a button-your garage door opens and the light goes onl Press the button again, or use the wall-mounted pushbutton, and the door closes and locks-and after a few minutes the light automatically goes out. Power shuts off automatically if door-travel is obstructed. Door can be operated manually at any time. Choose from two all-transistor control units-a pocket-size portable transmitter, or an under.dash transmitter with a dashboard pushbutton. Both units are crystal-controlled on the FCC-authorized frequency of 27.255 mc . Use this easy-to-install system with any overhead, residential-type garage door up to $18-\mathrm{ft}$. wide and 8 - ft . high, using a horizontal or curved roller track. Requires only $21 / /^{*}$ clearance between high-arc of door and celling. Includes motor mechanism and receiver (for $110-120 \mathrm{u} ., 50-60$ cycle AC), 1 transmitter (for 12 VDC ), antennas, manual pushbutton, wire, hardware, and instructions. G-653 SYSTEM. With portable transmitter. 65 lbs. 89 CZ 007J. List, \$224.95.

NET 149.50


G-654 SYSTEM. With under-dash transmitter. 65 lbs
89 CZ 003 J . List, $\$ 224.95$.
NET 149.50
89 S 015 . Key Switch. With 2 keys. 9 Oz .
NET 4.20

## PORTABLE TRANSMITTER UNITS

G-340 EXTRA TRANSMITTER. Has built-in antenna and cllp for mounting on sun visor. 1 lb .
89 SX 098J. List, $\$ 27.95$
NET 19.50
G-653 ALTERNATE-FREQUENCY SYSTEM. Like G-653 above; use where neighbor already has door opener.
89 CZ 020J. List, $\$ 224.95$. .
NET 149.50
G-340 ALTERNATE-FREQUENCY EXTRA TRANSMITTER. 89 SX 021 J. List, $\$ 27.95$

NET 19.50
 Choose either or both of two transmitters. Under-dash unit offers easy hook-up, dashboard pushbutton. Portable unit fits purse or pocketideal foi g-cal tamilies?


## UNDER-DASH TRANSAPITTER UNITS

G-350 EXTRA TRANSMITTER. With hardware, dash-mounting pushbutton, installation instructions. 3 Ibs. 89 SX 022J. List, \$27.95.

NET 19.50
G-654 ALTERNATE-FREQUENCY SYSTEM. Like G-654 (above, left); use where neighbor already has door opener. 89 CZ 023J. List, \$224.95.

NET 149.50 G-350 ALTERNATE-FREQUENCY EXTRA TRANSMITTER. 89 SX 024. List, \$27.95.

NET 19.50


## "PROTECT-O-LITE" LIGHT CONTROL

Silent, dependable photoelectric control that automatically turns on lights at dusk. shuts them off at dawn. Delayed-action feature prevents car lights or flashlights from turning off lights at night. A snap to install-just place it near a window facing outside, natural light, plug unit into wali outlet, and plug lamp(s) into unit. Handles 600 -watt loads. Only $3 \times 2 \frac{1}{2} \times 1$. For $110 \cdot 125$ v.in $50-60$ cycle AC. Shpg. wt., 1 lo.

77 P 364.
NET 7.99

## WORNER "FOTOLECTRIC" UNIT

MODEL 61. Chime sounds when light beam is broken. Consists of "Fotolectric" unit, mirror and chime. Unit can be placed at any distance from $3.10^{1}$ from mirror. $81 / 4$ $\times 61 / 2 \times 23 /{ }^{\prime \prime}$. For operation from $110-120 \mathrm{v}$., $50-60$ cycle AC. Shpg. wt., 8 lbs .
71 P 028. $\$ 5$ Monthly. ........ NET 40.50
77 P 023. Extra Bulb. For Models 33 and 61. Wt., 502.

NET 66 C
77 P 035. Extra Chime. For above, or any 6 v . AC source. $2 \mathrm{lbs} . . . . . . . .$. . NET 4.80

## 

Automatic headlight-beam changer for automobiles. Aids night driving by automatically switching on "low" beam when cars are approaching-restores "high" beam within $1 / 2$ second after lights are passed. Can also be actuated by tall-lights of cars directly ahead. Can be overridden by foot switch. Unaffected by street lights. Has sensitivity control. With easy instruc. tions. For all vehicles with 12 VDC negative ground. 3 lbs .
77 P 365. List, $\$ 77.40$


8200K DUAL-HEAT SOLDERING KIT

- Gun, Solder-Aid, Brush, Solder
- Gun Has High/Low Heat Feature Everything you need for fast, prolessional soldering. Includes: Weller 8200 , U.L. Approved, duat-heat solder gun: solder aid tool; cleaning brush; coil of Kester "Res. in Five" solder. "Triggermatic" control selects high (125 wati), or low ( 90 watt) heat. Also has spotlght for illuminating work area. For $110-120$ v., 60 cycle AC. Shpo. wt., $21 / 2$ lbs.
50 N 280. List, $\$ 7.95$. ........... NET 5.83
3-11, EACH...5.19 12-Up, EACH ... 4.94


## 8250AK SOLDERING KIT

- Includes Gun, Solder, 3 Tips, Tip Wrench, Plastic Case Versatile, heavy-duty soldering kit for home or shop. Includes: Model 8250A 250. watt gun (with trigger-control dual spotlights for illuminating dark work areas); coll of rosin-core solder: chisel-polnt tip: smoothing fip; tip-wrench. Plastic carrying and storage case, $7 \times 10 \times 3^{*}$. For operation from $110.120 \mathrm{v} ., 60$ cycle AC. Shpg. wt., $7 \% / 4 \mathrm{lbs}$.
49 N 000. List, $\$ 14.95 \ldots . .$. NET 10.99
3-11, EACH. .9.77 12-Up, EACH . 9.28

(A) MODEL D-550 SOLDERING GUN

For service shops, production line, etc Has dual spotlights. Trigger switch selects 200 or 275 watt heat. U.L. Approved. For $110-120$ v., 60 cycle AC. 4 lbs. 46 N 641. List, $\$ 16.25 \ldots . .$. NET 11.71 3-11, EACH . 10.53 12-Up, EACH ... 9.96
C MODEL 8250 A SOLDERING GUN
Same as D. 550 above, but 250 watts only. Shog. wt., 4 lbs.
46 N 678 . List, $\$ 12.95 \ldots . .$. NET 9.52 3-11, EACH . 8.47 12-Up, EACH .. 8.04 CHISEL-POINT TIPS
2 per Pkg. Av. shpg. wt. per pkg., 3 oz.

| Stock No. | Type | Use With Models | PKG. |
| :---: | :---: | :---: | :---: |
| 46 N 574 | 7135 | WS.100, W0.135, S.400. |  |
| 46 N 573 | 7250 | 200, WD 250 |  |
|  |  | -50. 207 A | . 35 |
| 46 N 597 | 7300 | S. 107, D.207. Not inte | . 25 |
| N 209 | 8125 | 8700B, 8200 | . 35 |

(B) MODEL D-440 SOLDERING GUN Medium-duty, dual-heat gun. Trigger switch for 100 or 150 -watt heat. Twin spotlights. U.L. Approved. For 110.120 v., 60 cycle AC. 3 lbs.
46 N 644. List, $\$ 12.95 \ldots . .$. NET 9.52 3-11, EACH . 8.47 12-Up, EACH ... 8.04

## (D) MODEL $8100 B$ SOLDERING GUN

 High-quality 100 -walt, single heat gun. Long lasting tip, spotlight. U.L. Approved. 3-11. EACH ... 4.42 12-Up. EACH ... 4.20

## VERSATILE ACCESSORY TIPS

Average shpg. wt., 302. Stocik No. Tyoe Descrlp. For Models EACM 45 N 581 6110 Cuiting WS-100, WD.135. 46 N 6826120 Smeothing $8100(\mathrm{~B}), 22000^{2}$ 48 N 833. 6130 Culting WS.200, $\$ .500$, 46 N 684.6140 Smoothing D.550, 8250 A

## CREDIT FUND PLAN

- No Morey Muying Power - No Money Down Don't 24 Months to Pay you need now buying the tools cash. Allied's Creditf of ready lets you buy anythit Fund Plan cataloo for no mongey in this Minimum or no money down. of catalon for full details back.



## CONTROLLED TEMPERATURE

 "MAGNASTAT" SOLDERIRONS Lightweight, advanced design frons. "Magnastat" sensing devices in tips automatically maintaln correct temperature, never overheat. Provide rapid, constant heat transfer for soldering ease. Have rubber shock absorber at end of handle. Less tips and cords, below. Select one of each for your specific application. U.L. Approved. For $110-120$ v., 60 cycle AC. Stock Model Walt Wi. of Liet NET EACM 50 N 667 TC552 $\quad 55$


WELLERTIPS FOR "MAGNASTAT" SOLDERING IRONS
Premium iron-plated copper. Av. wt. $30 z$.
 50 N 6715 -DIN 30 Scewdver TC552 $\quad .56,49$. 4
 So 673 6.EAN I. SCowdver TCOO2 1.12.98 . 88



## CORDS FOR "MAGNASTAT"

 SOLDERING IRONS3-wire cord is industrial type; 2-wire cord is standard type. With plugs. Av. wt., 5 oz .

| Stock No. | $\begin{aligned} & \mathrm{Mir} \\ & \text { TyOe } \\ & \hline \end{aligned}$ | Describlion | $\begin{aligned} & \text { MET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 30 Mc 511 | CS40 | 2.wire for TC552. TCE02 | 3 |
| 50 N 512 | CS50 | 3-wire tor TC552, TCE02 | - |
| 50 N 677 | CS60 | 2-wire for TC120? | . 73 |
| S0 N 678 | CS70 | 3-wire for TC1202 | 147 |

## WELLER SOLDERING GUN PARTS REPLACEMENT

[^15]

## General-Purpose and Industrial Soldering Guns, Gun Kits, Irons

## 199K SOLDERING GUN KIT

Multi-purpose solder gun kit. Includes Model 199-130-watt gun; three tips; $5-\mathrm{ft}$. roll of rosin-core solder; plus metal storage box. Gun reaches temperature in just $21 / 2$ secondsI Well-balanced, has pistol-grip handle, spotlight, trigger switch. Tips are quickly Interchangeable-include Model 19-B.4 standard tip for household wiring; Model 19-F. 33 woodworking tip: Model 19 . C-1 tip for cutting plastic, rubber or asphalt tile. U.L. Approved. Gun for $110-$ 120 v.. 60 cycle AC. Shpg. wt., 4 Ibs.
46 N 319. List, $\$ 9.95$
NET 7.33
3 or More, EACH
.

100K SOLDERING GUN KIT
Features highly-efficient, transformertype, Model 100 gun. Develops full 100 watt heat in $2 \frac{1}{2}$ seconds. With two tips U.L. Approved. For $110.120 \mathrm{v} ., 60$ cycle AC Shipg. wt. $21 / 2$ lbs
50 N 191. List, $\$ 7.95$...........NET 5.83 3 or More, EACH

250K SOLDERING GUN KIT Includes Model 250 gun ( 250 -watt), that heats in 5 seconds; 3 tips; tip wrench: solder: metal case, $8 \times 9 \times 3^{*}$. U.L. Approved. For $110 \cdot 120 \mathrm{v}$., 60 cycle AC. 5 Ibs. 50 N 250. List, $\$ 15.95$........NET 11.72 3 or More, EACH NET 11.72


## (E) MODEL 199-130-WATT GUN

Extremely popular, low-cost soidering gun. Ideal for production line use. Heats in just $21 / 2$ seconds. Efficiency compares to guns of much higher watlage ratings. Long-llfe tip: spotlight. Lightweight, only $1 \frac{1}{2}$ Ibs. Heat and shock-resistant red plastic case. $5^{\prime \prime}$ long less tip. U.L. Approved. For 110.120 v., 60 cycle AC. $21 / 4 \mathrm{lbs}$. 46 N 358. List, $\$ 7.95$

NET 5.83 3 or More, EACH
REPLACEMENT TIPS. WI. 20 oz.

| No. | Type | Descripllon | NET |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & 45 \text { N } 359 \\ & 46 \text { N } 328 \end{aligned}$ | $\begin{aligned} & 19.8 .4 \\ & 19 . C-1 \end{aligned}$ | Standard Tip Plastic Cutting Tho | $\begin{aligned} & 35 c \\ & 42 c \end{aligned}$ |

## MODEL 288-200-WATT GUN

Economy-priced, heavy-duty soldering gun. Lightweight and baianced for fatigue free use. Ideal for all types of heavy soldering work. Tip is ideal for many delicate jobs-gets into hard-to-reach places. Bullt-in spotlight. Case of highimpact, ebony-black plastic. Length with tip, $912_{2}^{\circ}$. U.L. Approved. For $110-120 \mathrm{v}$. 60 cycle AC. $31 / 2 \mathrm{lbs}$.
46 N 324. List. $\$ 9.95$
NET 7.33
3 or More, EACH
6.51

EXTRA TIP. For above. Wt., 3 oz 46 N 339.

EACH 42C
(G) MODEL 100-100-WATT GUN

Efficient :00-watt gun. Reaches operating temperature in $21 / 2$ seconds. Has builtin spotlight, trigger switch. Black plastic case. $8^{-1}$ long with tip. U.L. Approved. For $110-120$ v., 60 cycle AC. 2 lbs 50 N 025. List, $\$ 5.95$

NET 4.66
3 or More, EACH
4.37

## MODEL 250-250.WATT GUN

Low-cost, heavy-duty 250 -watt soldering gun. Excellent for radio.TV repair work. Heats in 3 seconds; has built-in spotlight. Length, $61 / 2^{\prime \prime}$ with tip. U.L. Appoved. For 110.120 v.. 60 cycle AC. 4 lbs. 46 N 325. List, \$12.95

NET 9.52
8.47

REPLACEMENT TIPS. WI.. $20 \%$.

| $\begin{aligned} & \text { Siock } \\ & \text { No. } \end{aligned}$ | Mir's. Type | Descripition | $\begin{aligned} & \text { NET } \\ & \text { EA } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 46 N 376 <br> 46 N 327 <br> 46 N 330 | $\begin{aligned} & 25 \cdot \mathrm{~A} \cdot 4 \\ & 25 \cdot \mathrm{~A} \\ & 25 \cdot \mathrm{C} \cdot 1 \end{aligned}$ | Standard Tip Feraloy Tio Plastic Cuiting Tio | $\begin{aligned} & 17 c \\ & 35 c \\ & 35 c \end{aligned}$ |

## U-4 FINE-SOLDERING TIP KIT

Low-cost tip kit for soldering and desoldering. Includes radio tip for Wen Models 100, 199, 288 and 250; 2 couplers: 5- $10^{\circ}$ tip extensions. $80 z$
50 N 192.
NET 53c
3 or More, EACH
47c

## (A) BALL SOLDERING IRONS

Excellent for delicate work, yet built for production-line punishment. 18HD (Fig. A) is non-thermostatic: 14 T (Fig. A) and 38 T (Fig. B) have thermostatic action that gives the right heat for the job. Length: 18HD, $7^{\prime \prime}: 14 \mathrm{~T}, 8^{\prime \prime} ; 38 \mathrm{~T}, 121 /{ }^{2}$. U.L. Approved. For $110-120 \mathrm{v} ., \mathrm{AC}$ or DC. Stoch No. Typel Want Tip WI. M-5, EA M-UP.EA $50 \mathrm{~N} 394 / \mathrm{BMD} 25$

| 5.31 |
| :--- |
| 51 |
| 15 | | 46 | 852 | 14 T | 140 to 125 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 46 |  |  |  |

## REPLACEMENT TIPS

tWalloy-Red tips for production line use.


## [C] 863 "RADIOMAN" PENCIL

Slender 40-watt soldering pencil. Great for delicate printed-circuit work, etc. Has "Demon-Heet" element, $3 / 18{ }^{6}$ copper tip, stand. For 110.120 v, AC or DC. $60 z$

## 45 N 238. NET 1.98

 50 N 596. Extra Element. 202 ...... 56 c 50 N 597. Extra Tip. 2 oz EACH 27e
## (D) "TRIG-R-HEAT" GUNS

Feature thermostatic action, light-weight transformerless design. Squeeze the trigger-heats in seconds, provides correct wattage for job. Lightweight, balanced for fatigue-free operation. Narrow $61 / 2^{\prime \prime}$ barrel for close work. Have interchangable tip elements. Black plastic housing. U.L. Approved. For $110-120$ v., AC or DC. MODEL 212LT. $300-550$ watts, $1 / 2^{\prime \prime}$ steelclad tip. 7-watt spotlight has separate control. Shag. wt., $11 / 2$ lbs. 46 N 848.

NET 11.07
MODEL 214LTN. As above, but 150.400
 46 N 889.

NET 9.77

## TIP-ELEMENT ASSEMBLIES

*Fit 212LT, 214LTN; 4fit 238LT, 238 T.

| Stock No. | Watts | Tio | wi. | 1.5. EA | -Up, EA |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{46} \mathrm{~N}^{870}$ | - | \% | 12 |  |  |
| 16 N | + ${ }^{+}$ | 资 |  | 5.8.97 | S. |



MODEL 186P. Medium-duty 75 -watt soldering iron. Removable $3 / 16^{\circ}$ tip; temperature ranges to $860^{\circ} \mathrm{F}$. "Demon-Heet" element. $11 \mathrm{~s} / \mathrm{s}$ long. U.L. Approved. For 110. $120 \mathrm{v} . \mathrm{AC}$ or $D C .3 / \mathrm{lb}$.
50 N 226.
NET 1.45
50 N 227. Extra Tip
EACH 29C

Element Tips


## Ungar Soldering Pencils, Elements, Tips, Soldering Accessories

## ELEMENT TIPS

Fit Ungar 776 handle, 260 pistol. Types 533, 536, 539, 1233-copper tios; 1236, 1239. silver-plated iron; 4033, 4036, 4039-ironclad, silver-plated copper. Types 1233, 4033-1 $\% \times 1 / 4$ " tip: $1239,4036.4039-11 / \mathrm{x}^{\mathrm{x}}$
 3/r". U.L. Approved. For $110-120 \mathrm{y}$.. AC or DC. Av. shpg. wt., 2 oz.
$231 / 2$ WATTS- $650-700^{\circ}$ F. TIP TEMP.

| Stoch No. | $\begin{gathered} \text { Mr' } \\ \text { Tyde } \end{gathered}$ | Fig. | Oescription | NETEACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1.9 | $10-U_{0}$ |
| $\begin{aligned} & 50 \times 400 \\ & 45 \sim \mathbf{N} 58 \\ & 46 \text { N } 585 \end{aligned}$ | $\begin{aligned} & 533 \\ & 5356 \\ & 539 \end{aligned}$ | $\begin{aligned} & \text { B } \\ & \text { A } \\ & \text { C } \end{aligned}$ | Long Chisel Pyramid Chisel | 98c | 81 c |
| 371/2 WATTS-750-800 F. TIP TEMP. |  |  |  |  |  |
| 50 M 49 46 N 592 46 N 593 | $\begin{aligned} & 1233 \\ & 1236 \\ & 1239 \end{aligned}$ | $\begin{aligned} & B \\ & A \\ & C \end{aligned}$ | Long Chisel Pyramid Chisel | 1.18 | 98c |
| 471/2 WATTS-850-1000 F. TIP TEMP. |  |  |  |  |  |
| $\begin{aligned} & 46 \text { N } \mathbf{4} \mathbf{4 7} \\ & 46 \mathrm{~N} \\ & 46 \mathrm{~N} \\ & 46 \end{aligned}$ | $\begin{aligned} & 4033 \\ & 4036 \\ & 4039 \end{aligned}$ | $\begin{aligned} & \mathrm{B} \\ & \mathrm{~A} \\ & \mathrm{C} \end{aligned}$ | Long Chisel Pyramid Chisel | 2.35 | 1.95 |

## ELEMENTS AND TIPLETS

[- THREAD-IN ELEMENTS. Fit all Ungar handles and 260 pistol: itiplet threads into element. 1235, 4035, 4045-nickel-plated steel; 535-nickel-plated iron shanks. 535, 1235, 4035 elements for 300 , PL-300 Series tiplets, below. 4045 for 800 . series de-soldering tiplets, right. U.L. Approved. For $110-120 \mathrm{v}$. AC or DC. 2 oz.

| Stoch No. | Mir's <br> Type | Tip Temp. | Watte | NETEA. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $1-9$ | 10.4p |
| 65 N 605 | 535 | $600.650^{6} \mathrm{~F}$ |  | 91 | . 8 |
| 45 N 609 | 1235 | $700.750^{\circ} \mathrm{F}$ | 37 | 1.18 | . 98 |
| 46 N 622 | 4035 | $800-850^{\circ} \mathrm{F}$ | 471/2 | 2.35 | 1.95 |
| 50 N 105 | 4045 | 800. $8500^{\circ} \mathrm{F}$ | 47\% | 2.35 | 1.85 |

PL-300 PLATED TIPLETS. For sub-miniature work. Thread into 535, 1235, 4035 elements above. Silver-plated, iron-clad copper. $1 /{ }^{\prime \prime}$ O.D. $1^{\prime \prime}$ lang except $\$ 11 / 6^{\prime \prime}$. $+1 / 0^{\prime \prime}+1 / 10^{\prime \prime}, \$ 3 / 44^{\prime \prime}$ point. Wt., 2 oz.

Siock Mir' Fig Description NETEACH No. TYPE Fig. Description 1-9 10-Up | 46 N 495 | PL.331 | D Pencil |
| :--- | :--- | :--- |
| 48 N 496 PL.332. | K | OfIset |

46 N $496 \mathrm{PL} .332{ }^{\circ} \mathrm{K}$ Ofiset Pencil


300 UNPLATED TIPLETS. Same as PL300 series above, but unplated copper.

| 46 N 606 | 331 | D | Pencil |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 46 M 607 | 332 | K | Olise! Pencil | 16 c | c |
| 46 M 600 | 333 | G | Chisel |  |  |

PL-800 PLATED TIPLETS. For generalpurpose work. Use with 4045 element above-thread into end. Silver-plated ironclad copper. $1 / 16^{\circ}$ O.D. for high heat transfer. PL. 823 and PL-824 have $\mathrm{i}^{\prime \prime}$ unthreaded length; PL. 833 and PL-834 have $13 / 4$ unthreaded length. Av. wt., 2 oz.

| 50 N 410 | PL. 823 | $J$ | Pramid | 47 c | 39 c |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 50 N 411 | PL. 824 | G | Chisel | 47 c | 39 c |
| 50 N 412 | PL. 833 | G | Chisel | 7 Ec | 65 c |
| 50 N 413 | PL 834 | K | Oflset Chisel | 78 | $65 c$ |

## ELEMENTS, "MINI-TIPS"

For industrial use. Element shanks nickel. plated copper. PL tips silver-plated, ironclad copper; others unplated copper. For 110.120 v ., AC or DC. U.L. Approved. Av. wt.: tips, 4 oz . per 10; elements, 2 oz

| Sloch No. | Mir's. | Tip Temp. |  | Watt | PIET EACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Type |  |  | 1.9 | $10-\mathrm{Up}_{0}$ |
| 50 N 402 | 1231 |  | $800^{\circ} \mathrm{F}$ |  | $371 / 1$ | 1.18 | . 98 |
| 50 N 403 | 4037 | 350 | 900 ${ }^{\circ} \mathrm{F}$ | 47\% | 12.35 | 1.95 |
| "MINI-TIPS" |  |  |  |  |  |  |
| Stoch No. | MIr's Type | Fig | Tip Shape | L. :Ole. | NET EACH |  |
|  |  |  |  |  | 1.9 | 10.4p |
| 50 N 406 | PL.111 | M |  |  | Ssc | 49 c |
| 50 N 405 | PL-113 | L | Chisel | 3/4x ${ }^{\circ}$ | 59 c | 49 c |
| 50 N 406 | 111 | M | Pencil |  | 20 c | 17e |
| 50 N 497 | 113 | L | Chisel |  | 20 c | $17 e$ |

## [P] THERMO WIRE STRIPPERS

Attach to element tips 4033, 4036 and 4039, at left, and Imperial No. 6200 series heat cartridges. 2 oz .

| Stock No. | Type | Description | NETEACH |
| :---: | :---: | :---: | :---: |
| 50 N 600 | 7951 | U. Slot |  |
| 50 N 601 | 7952 | Siandard Hole | $\mathbf{6 O C}$ |
| 50 N 602 | 7953 | Hole.and.Slot |  |

## DESOLDERING TIPLETS

For printed circuit work. Thread into 4045 element. Cups melt solder on socketsuse 854 for 8.9 - pin; 855 for 7.8 -pin; 856 for 5 -pin. Slotted unit for tabs and leads: off. set for close-to-Doard work; bar is for straight-line melting: triangle for electroistics. Drilled cube removes center pins of sockets, harness leads. 1 lb . per 10.

| Stock No. | Mir's Type | Fig. | Description | NET EACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1.9 | 10-U3 |
| $50 \mathrm{Nat4}$ | 854 | $x$ | $1{ }^{\circ} \mathrm{Cup}$ | 59c | 49c |
| 50 N 415 | 855 | x | \%/4. Cun |  |  |
| 50 N 416 | 856 | X | $\%$ Cuo |  |  |
| 50 m 108 | 857 | $\gamma$ | Slotted |  |  |
| 50 N 417 | 858 | W | Bar |  |  |
| 50 N 418 | $861$ | $\triangle A$ |  |  |  |
| 50 N 419 | 862 | $z$ | Otiset Siotten | 59c | 49c |
| 50 N 420 | 863 | BB | Dralled Cube |  |  |

## [CC No. 270 desoldering kit

For printed circuit parts. Consists of 776 handle, 3 cups, 1 stotted tiplet, 1 bar tiplet. Metal case, $1 \frac{1}{2} \times 7 \frac{3}{6} \times x^{7 / 7}$. $11 / 1 \mathrm{lbs}$. 50 N 109. 6 -Up. EA, 4.76. 1-5, EA... 5.24

## DO SOLDERING IRON HOLDER

TYPE 8000. Makes soldering lobs sater and more efficient. Guard protects opera. tor against burns. Adjustable, fastens to wall, bench, etc. 802
47 N 024.
NET 1.57

## EE NO. 400 "KLEEN-TIP" KIT

Removes oxides and excess solder. Includes special sponge. phenolic tray and bench bracket. 2 oz .
50 N 421.10-Up, EA. 81 c...1-9, EA. 98c NO. 455 REFILL SPONGES. 2 oz .
50 N $422.10-$ Up, EA. 33c. 1-9, EA.
39c

## COMPLETE SOLDERING PENCILS

For subminiature work. With 776 handle and cord (listed below), and an element tio. $231 / 2$-watt Type 536 heats its copper pyramid tip $650-700^{\circ} \mathrm{F}$. Type 1236 is $371 / 2$ watts, heats silver-plated iron, pyramid tip 750 $800^{\circ} \mathrm{F}$. $471 / 2$-watt Type 4033 delivers 850 $1000^{\circ} \mathrm{F}$. to a long chisel tip of silver-plated, iron-clad rodoer. U.L. Approved. For 110. 120 v., AC or DC, b oz.

| Stock No. | Fio. | Includes: | NET EACH |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1.9 | 10.Up |
| 50 N 302 | R | 536 Element.Tip | 2.16 | 1.79 |
| 50 m 303 | T | 1236 Element-Tlo | 2.35 | 1.96 |
| 50 Nm 305 | S | 4033 Element-Tip | 3.53 | 2.83 |

## NO. 776 HANDLE AND CORD

For exacting industrial soldering requirements. Takes wide selection of thread-in elements and tiplets. Ideal for work on printed circuitry and sub-miniature systems. Durable, light-weight and fatiguefree: has stainless steel heat deflector, "Soft-Touch" cork grip, cord protector and phenolic housing. With 6 - ft . cord. $5^{\prime \prime}$ overall length. Less tip and element. see listings at left. U.L. Appr. 4 oz . 50 N 304. 1-9................EACH 1.18 10-UD, EACH
$97 c$


# Selected Soldering Irons, Kits And Accessory Equipment . . . 



## AMERICAN BEAUTY SOLDERING IRONS

Fit any soldering application. Special iron-plated tips, available for all models, greatly reduce pitting and redressing. Casing and body are one-piece seamless steel. Lightweight, shatterproof rubberoid-coated handles. 6.ft. cords. U. L. Approved.

## MODEL 3128-60 WATTS

For light work. $1 / 4$ " copper tip. With stand. Length, $12 \%{ }^{*}$. For 110.120 volts.
## $A C$ or DC. Shpg. wt., 1 lb. <br> 46 N 674. 6 or More <br> NET 5.53

REPLACEMENT TIPS, ELEMENT

For above. Type 9272 has mica insulation; with spring, tube, terminal assembly. Stook No. Type Detcrliption Ox. NET 46 N 675328 Copper-Lip 3 | 46 N 820 | $3728-1 P$ | Iron-plated tip | 3 | .75 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 46 N 67019272 | Element | 6 | 2.80 |  |

## MODEL 3438-100 WATTS

(8) An excellent general purpose iron. \% dia. copper tip. Chrome plated meta parts. Has cooling baffle; stand, $12 \%{ }^{* *}$. For 110-120 v., AC.DC. $21 / 4 \mathrm{lbs}$.

## 46 N 655.

NET 8.47 or More . . . . . . . . . . . . . . . . EACH 8.05


## MODEL $3158-200$ WATTS

[C] For medium-heavy work. $8 / 8$ " copper tip. With stand. Length, $135 /{ }^{3}$. For 110 . 120 volts AC or DC. Wt., 3 lbs.

## 46 N 650. 6 of More <br> NET 10.15 <br> EACH 9.65

## REPLACEMENT TIPS, ELEMENT

For above. $5 / /^{\prime \prime}$ tips. Element is chrome nickel wire on mica insulated steel rod Stock No. Type Descripiton LLbs. NET 46 N 6523758 Copper tip 1.08


## MODEL 3478-300 WATTS

(D) For service and heavy-duty work. Length, $143 / \mathrm{m}$; tip dia., $\mathrm{y} / \mathrm{m}^{\prime}$; net $w t ., 2 \frac{1}{2}$ lbs. With cord, stand and tip. For $110-120 \mathrm{v}$. AC or DC. Wt., 4 lbs.
46 N 671.
NET 13.51 6 or More

EACH 12.83

## REPLACEMENT TIPS, ELEMENT

 Stook No. Typo Description Lbs. NET $46 \mathrm{~N}_{673} 9277$ Element $\quad 11 / 26.00$


## NEW LIGHT.DUTY

## 125-WATT SOLDERING KIT

MODEL KSG-125B-1. Includes: Model SG-125B 1.3 amp-gun with $5^{\prime \prime}$ Iong barrel• cleaning brush, wire twister, joint cleaner, roll of all-purpose solder. Transformer. type gun heats in $21 / 2$ seconds; ideal for reaching inaccessible spots. Has prefocused "sight-light", full-length soft-pull trigger. White, hi-impact, flame-resistant plastic housing. Length, $101 / 6^{\circ}$ with tip. Weighs $1 \%$ lbs. For 115 v., 60 cycle AC. Shpg. wt., 4 lbs.
49 N 250.
NET 5.67
MODEL SG-125B GUN ONLY. Above gun, with conical tip. Wt., 3 lbs.
49 N 251.
NET 5.00

## TIPS FOR 125-WATT AND 250-WATT GUNS

Screw on in a jitfy-you need no tools.

| Stock No. | Type | Description | Oz. | NEY |
| :---: | :---: | :---: | :---: | :---: |
| 49 N 252 | 47.83 | Conical Point | 1 | 40 |
| 49 N 253 | 47.84 | Chisel Point | 2 | . 40 |
| 49 N 254 | 47.91 | Needle Point | 1 | . 80 |

## NEW HEAVY-DUTY

## 250-WATT SOLDERING KIT

MODEL KSG-250-1. Includes Model SG. 250 heavy-duty gun, conical tip. chisel tip. tile cutting and putty removing tip, roll of rosin core solder, heavy-gauge steel case.

SG-250 gun has all features of gun described at left, but is rated at 2 amps , has $5^{\circ}$ long barrel, and black plastic housing. Positive pistol grip with soft-pull finger trigger. Weighs $2 \%$ lbs. Length, $111 /{ }^{\prime \prime}$ with tip. Wt. 5 lbs .

## 49 N 255.

NET 9.97
MODEL SG-250 GUN ONLY. Above gun, with conical solder tip. Wt., 3 lbs. 49 N 256.

NET 8.64

## BARRELS FOR 125-WATT AND 250-WATT GUNS

| Stock No. | Type | Length | wt. | NET |
| :---: | :---: | :---: | :---: | :---: |
| $40^{\text {N }} 257$ | ETS 1 | 3\% | 2 oz . | 1.00 |
| 40 N 258 | ETS-2 | $6^{*}$ | 202. | 1.34 |
| 49 N 259 | ETS. 3 | $8{ }^{\circ}$ | 3 oz . | 1.67 |
| 49 N 260 | ETS-4 | $10^{\circ}$ | 4 oz. | 2.00 |
| 49 N 261 | ETS. 5 | $12^{\circ}$ | 502. | 2.33 |



## SOLDERING ACCESSORIES

E MILLER MODEL 80 HEAT SINK. High heat absorbing copper jaws. Soft plastic handles. Wt., 2 oz. 49 N 378. List, $\$ 1.25$

NET .95
(F) G-C MODEL 9077 HEAT SINK. Protects parts from heat. Aluminumsolder will not stick. Wt., 3 oz.
49 N 377.
NET . 35 G KORMAT SOLDER DISPENSER. Avoid finger burns! Feeds wire solder from size $.028^{\circ}$ to $.074^{*}$ through probe. Reloads in 30 seconds. $7^{\circ}$ alloy handle. In metal case. Wt., 12 oz.
50 N 459.
NET 4.49

## ANTEX C-115 MINIATURE IRON



- No Transformer Required
- Constant $626^{\circ}$ F. Temperature
- Ideal for Minlaturized Circuitry

Precision iron weighs less than 1 oz. Heats in 45 seconds. Insulation between element and tip permits work around semiconductors. Requires plug below. Length 61/2". Made in England. Wt., 3 oz.
SO N 427.
NET 4.75
6 or More
EACH 4.26
EAGLE MODEL 209 3-WIRE AC PLUG. For above. Shpg. wt., 3 oz.
50 N 316.
NET . 38
NICKEL-PLATEDREPLACEMENTTIPS.
For Antex C- 115 iron. *Special heavy-duty type. Wt.. 2 oz.

| $\begin{aligned} & \text { Stook No } \\ & 50 \times 474 \end{aligned}$ | Type | 15120 | 1-49, Ea | 50-Up, EA. |
| :---: | :---: | :---: | :---: | :---: |
|  | Suade | $3^{61}$ |  |  |
| 50 N 297 | Chimel | , |  |  |
| 50 N 283 50 N 288 | Spade Chiwel | 绘" | 54 | . 49 |
| 50 N 284 | Spade | 80. |  |  |
| 50 N N 289 | Spade | \% | 54 | 49 |
| 50 N 286 | - Spade | 鲌 |  | 4 |

## - Suchit

## LENK PENCIL-TYPE IRON

MODEL 251 25-WATT IRON. ideal for precision soldering-weighs only 2 oz . Has $1 / \mathbf{" t}^{\text {t tip: plastic handle with cooling }}$ fins. Stainless steel; $7 \frac{1}{2}$ " long. For $110-120$ v. AC-DC. Wt., $1 / 2 \mathrm{lb}$.

46 N 940.
NET 4.47
MODEL 256. As above, but 40 watts.
46 N 941.
NET 4.47
REPLACEMENT TIPS. Either fits both lrons above. Shpg. wt., 302.
46 N 942. $1 / 0$ " Tip.
NET. 41
46 N 946. $1 / 40$ Tip.
NET . 45


## HEAT-REGULATING STAND AND SOLDER POTS

AMERICAN BEAUTY MODEL 475 STAND. Thermostat maintains iron temperature. Iron cradle of copper alloy; plastic body. Has heater cord and plug-In receptacle. For 80 to 660 -watt irons; up to 240 volts. AC only. Shpg. wt., $21 / 2 \mathrm{lbs}$.

## 46 N 658.

NET 8.40
LECTROHM SOLDER POTS. Dipping pots for tinning wires, leads, etc. With 6 -ft. detachable cord. For 110 v. AC.DC

| Stock No. | Type | Capac. | Wate | Size | Cup Depth | Wt. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 46 N 880 | SP | 1\% | 200 | 2 | \% | 31/ | . 98 |
| 46 N | SP. 25 | 2 lb | 250 | $3 \% \times 2{ }^{\circ}$ | 1\% | $3 y_{2} \mathrm{l}$ | 4.98 |

NICKEL-CHROME REPLACEMENT ELEMENTS. Wt., 3 oz
46 N 882. Type A. For SP-200.
NET 1.42
46 N 883. Type B. For SP- 250
NET 1.42


SOLDERING AIDS AND TOOLS
(a) CHEMALLOY ALUMINUM SOLDER. Joins surfaces without cleaning. $500^{\circ}$ for thin metal; $800^{\circ}$ for heavy work.

| Sto | ( No. | Unit | Tomp. | Wt. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 50 | N OB3 | 2-2 oz. bars | 500 ${ }^{\circ}$ | $60 \times$ | 59 |
| 50 | N 314 | $2-2 \mathrm{oz}$. bars | $600^{\circ}$ | 6 oz. | 59 |
| 50 | N 085 | 2-2 oz bare | $800^{\circ}$ | 6 oz. | 59 |
| 50 | N 086 | 1-1b. bulk | $500^{\circ}$ | $11 / 9 \mathrm{lbe}$ | . 39 |
| 50 | N 087 | 5-1b. bulk | $500{ }^{\circ}$ | $5 / / \mathrm{lbs}$ | 5.95 |
| 50 | N 315 | t-lb. bulk | $800^{\circ}$ | $11 / 4 \mathrm{lbs}$. | 1.49 |

(B) G-C MODEL 9088. Has wire brush and holding end. Solder will not stick to chrome-tipped end. Wt., 4 oz .

## 42 N 001.

NET . 98
(C) G-C MOOELS 9075 AND 9076. Double ends ream, hold or pry. Heat-treated tool steel. Chrome-platedno solder sticking. Wt., 4 oz.
49 N 358. Straight End. (Fig. C). NET . 68 49 N 359. Angled End. (Fig, D).... NET . 68G-C MODEL 9093. For printed circults. Stainless steel hardened-solder will not stick. Shpg. wt., 4 oz.

## 49 N 363.

NET 1.00G-C MODEL 9094. Stainless steel brush, hardened scraper. 4 oz.
49 N 364.
NET .98UNGAR ANTI-SEIZE COMPOUND -TYPE 8001. Lubricates solder-tip threads. 2 oz. can. Wt., 3 oz.
47 N 025.
.NET .54


## KESTER SOLDERS

"RESIN FIVE" CORE SOLDER. Non-corrosive, non-conductive-for printed cir. cuits. Coil $1 / a^{\circ}$ dia.; spool $3 / \mathbf{R}^{\circ}$ dia. $40 \%$ lin, $60 \%$ lead. $60 \%$ tin, $40 \%$ lead.


PRINTED CIRCUIT SOLDER, $60 \%$ tin, $40 \%$ lead. $1 / \mathrm{n}^{2}$ dia. Wt., $13 / 4$ lbs.
46 N 926. i-lb. Spool.
NET 1.63
ROSIN-CORE SOLDER. Plastic rosin-fill B/2" for general work; $1 / 6^{\circ}$ for delicate. $40 \%$ tin. $60 \%$ lead, except ${ }^{50-50}$.

| ook No | Size | Ner We. | Shog. W | NET |
| :---: | :---: | :---: | :---: | :---: |
| 46 N 901 | ${ }^{1 / 2}$ | 1 lb | $11 / 4 \mathrm{tbs}$ | 1.19 |
| 46 N 902 |  | 5 lb . | $51 / 4 \mathrm{thn}$. |  |
| 46 N 930 |  | 1 lb . | $1 / \mathrm{l}$ lb. | 1.21 |
| 46 N 931 |  |  | S1/4 ths. | 5.88 |
| 6 N 919 |  | $1 \mathrm{tb}$ | $11 / 8 \mathrm{lbs}$ | 6.41 |

ACID-CORE SOLDER. For general soldering other than electrical connections. $1^{\prime \prime}$ dia. $40 \%$ tin and $60 \%$ lead.
46 N 905.1 -oz. Coil. Wt., 3 oz... NET . $\mathbf{2} 1$ 46 N 906. $1-\mathrm{lb}$. Spool. $13 / 4 \mathrm{lbs}$.. . NET 1.19

SOLDER PASTE. 2 oz. cans. Wt., 5 oz. 46 N 915 . 10-Up, EA... 13 i-9, EA.... 15

KESTERTINNING BLOCK.Wt., $1 / 1 / 1 \mathrm{Ibs}$. 46 N $922 . . . . . . . . . . . . . . . . . . . . .$. . NET .65


Ersin Multicore Solders Feature Separate Cores of Flux.
"Dry Joints" Are Totally Eliminated

## ERSIN SOLDERS

RESIN MULTICORE SOLDER. 5 cores non-corrosive flux $-40 / 60$ tin-lead. 1 lb. spools. Wt. per spool, $11 / 2 \mathrm{lbs}$.

| Stock Mo. | Gawge | EA.. 1-27 | EA., 2d-UD |
| :---: | :---: | :---: | :---: |
| 48 N 995 | $14\left(.080^{\circ}\right)$ | 1.42 | 1.28 |
| 46 N 991 | $16\left(.064^{7}\right.$ | 1.45 | 1.30 |
| 50 N 313 | $18\left(.048^{\circ}\right)$ | 1.48 | 1.33 |

46 N 997. Service Pak. 18-gauge, $60 / 405$. core solder. Wt.. 12 oz. ...........NET . 48 PURE TIN/LEAD SOLDER. NON-corrosive Ersin flux is $60 \%$ tin and $40 \%$ lead.

| Stock No. | Gauge | Spoal WL | Shpg. Wt. | NE |
| :---: | :---: | :---: | :---: | :---: |
| 49 N 368 | $\overline{16(.064)}$ | 1 16. | 12/4bs. | 2.07 |
| 49 N 309 | 16 (.0647) | 710 | 81/ | 14.21 |
| 49 N 370 | 18 (.048) | 116. | 1\% | 2.12 |
| 49 N 371 | 18 (.0480) | 7 lbs . | 8\% 1 | 14.56 |
| 49 N 372 | 20 (.036 ${ }^{\circ}$ ) | 110. | 1\% 1 | 2.28 |
| 49 N 376 | 20 (.036 ${ }^{\circ}$ | 7 lbs . | 8\%10 |  |

"SAVBIT" SOLDER. Copper-tin-lead alloy. Reduces copper tio wear by $90 \%$.

| Stock No. | Gauge | Spool | g. | NET |
| :---: | :---: | :---: | :---: | :---: |
| N 121 | 14 (.080) | 1 lt . | 1\%, Ibs. | 72 |
| 50 N 122 | 14 (.080) | 7 lbs. | 8 | 12.11 |
| 50 N 123 | 16 (.064 ${ }^{\circ}$ ) | 116. | 1\%/bs. | 1.76 |
| 50 N 124 | 16 (.064 ${ }^{\circ}$ ) | 7 lbs . | 8\%/8bs. | 12.32 |
| 47 N 086 | 18 (.048 ${ }^{\circ}$ | 1 tb . | 1\%/ Ibs. | 1.81 |
| 47 N 057 | 201.036 | 1 lb. | 1\%/6 lbs. | 2.0 |



BLONDE TAPE SOLDER

40/60 tin-lead solder-rosin flux. Melts with heat of match. $28^{*}$ long. Wt., 2 Oz . 46 N 979. List, \$0.25.


THOR "SUPER" COMPLETE 42-PIECE $1 /{ }^{*}$ DRILL KIT
S 9095 Saws, Grinds, Drills, Sands, Buffs, Etc.

- Drill, 2 Saw Attachments, Accessories
- Burnout-Proof Motor; Ball Bearing

Complete home workshop. Ideal for home, shop, garage or farm. Poweriul $21 / 2$ amp, $1 / 4$ power drill and attachments handle hundreds of do-it-yourself projects. Drills, grinds, saws, sands, polishes, bufts, mixes paint, etc.
Thor No. 20 drill has self-aligning oilite bearings-husky motor will not burn out. Steel gear-type chuck takes $1 / 4$ shanks. No-load speed, 2400 rpm ; full-load, 1500 rpm. Trigger switch has locking pin. Drill is $7^{\prime \prime}$ long.
Kit contains: Thor No. 20 drill: 9 drill bits; drilt-press stand; circular saw and jlg-saw attachment; steel saw table: 10 sanding discs; grinding wheel; wool polishing bonnet; cloth buff; rubber backing pad; 6-piece arbor set; paint stirring tool; steel post for use between saw table and bench; rugged steel carrying and storage box with 4 saw blades.
Drill also has 3 -wire cord and plug, 2 . prong plug adapter. U.L. Approved. For operation from $110-120 \mathrm{v} ., 60$ cycle AC. Shpg. wt., 20 lbs.
50 NU 537. List, $\$ 42.50$. . . . . NET 29.95
Specially Designed for Allied - Thor-Speedway $\frac{1{ }^{\prime \prime}}{4}$


THOR $1 /{ }^{*}$ 38-PIECE HOME DRILL KIT
You'll find hundreds of uses around the home or workshop for this popular power drill kit. Consists of a powerful $1 /{ }^{/ 2}$ drill. a versatile jig.saw attachment, accessories and a sturdy steel carrying and storage case.
Thor No. 20 drill has $21 / 2$-amp burn-out proof motor-plenty of power for driving attachments. Jig-saw attachment can be used for fancy scrollwork or rip cuts. Also: 3 jig-saw blades; 6 woodboring bits, $3 / 4-1^{\prime \prime} ; 7$ drill bits, $1 / 1 s^{-1 / 4} ; 7$-piece arbor set; polishing bonnet; $4^{*}$ rubber backer; 10 sanding discs; metal case. U.L. Approved. For 110.120 v., 60 cycle AC. 9 los.
50 NX 867. List, $\$ 33.95$...................................... 19.95


LOW-COST THOR $1 / 4$ * 31 -PIECE HOME DRILL KIT
Economy 31-piece drill kit. Ideally sulted to the requirements of the home handyman, hobbyist and others who desire a dependable electric drill. Kit consists of a powerful $1 / 4$ drill, accessorles and a sturdy steel case.
Thor No. 20 drill has $21 / 2$-amp burn-out proof motor. Offers 1500 rpm speed under load, long-life ball thrust bearings, geared chuck with key. Kit includes: drill assortment of 9 drill bits; $41 /{ }^{\prime \prime}$ wool polishing bonnet: $4^{-}$rubber backer; 10 sanding discs; adapters and flanges; steel case. $105 / 8 \times 63 / 4 \times 35 / 8^{2}$. U.L. Approved. For 110-120 v., 60 cycle AC. 9 lbs. $50 \mathbf{N X}$ 536. List $\$ 19.95$ Feature Burnout-Proot Motors

Breeze through the toughest drilling, grinding, sawing, sanding, polishing and buffing jobs. Excellent for the home, shop, garage, etc., these three power tools feature burn-out proof motors. Husky Thor 813SS drill has $21 / 2$-amp motor, $1750-\mathrm{rpm}$ no-load speed, bronze alloy bearings, "Speed-Sight" tor all-angle drilling; ball-thrust bearing. Thor 821 orbital sander is lightweight, easy to handle; has self-oiling bearings, $41 / 2 \times 5 \frac{1}{2}$ sanding area.
Thor No. 805 jig saw cuts curves, scrolls, straight and rip cuts in wood up to $2^{-}$ thick, $1 / \mathbf{B}^{\circ} \mathrm{in}$. steel. Adjustable plate permits accurate angle cuts up to $45^{\circ}$. No-load speed 3000 strokes per minute. Kit includes: drill: sander; jig saw; 6 chrome steel drill bits, $1 / 1$ to $3 / 8 ; 6$ wood bits, $3 / 6$ to $1^{\prime \prime}: 7-\mathrm{pc}$. arbor set; drill press; 7 jig-saw blades-5 wood blades, 2 metalcutting blades; 18 sandpaper sheets: $10-4^{*}$ sanding discs; $41 / 1^{*}$ lambswool bonnet; $4^{\text {" }}$ rubber backer; 1 paint mixer; $3^{\prime \prime}$ grinding wheel. U.L. Approved. For $110.120 \mathrm{v} . \mathrm{AC} .32 \mathrm{lbs}$.
50 NU 865. List, $\$ 88.50$
NET 49.95


## and $\frac{3^{\prime \prime}}{8}$ Complete Home-Workshop Power Drill Kits



## THOR-SPEEDWAY 28-PIECE HOME DRILL KIT

Complete 28 -piece "Work-Saver" $3 / 8$ power drill kit. Perfect for the handyman and the "do-it-yourselfer". Contains drill. accessories, and handy steel carrying /storage case.
Thor No. 813 drill has heavy-duty $21 / 2$ amp burn-out proof motor, ball thrust bearings-provides 1150 rpm under load. Gear-type chuck-no slippage. Kit includes drill, 5-5 $5^{\circ}$ sanding discs: $51 / 2^{\circ}$ lambswool bonnet; $5^{*}$ rubber backer; paint stirring tool; 7 drill bit, $1 / 6$ to $\%$ "; 6 wood bits, $3 /$ to 1 "; 5 -piece arbor set; and steel case. U.L. Approved. For operation from $110-120 \mathrm{v} ., 60 \mathrm{cycle}$ AC. Wt., 11 lbs.
50 NX 866. List, $\$ 30.95$
NET 19.95


THOR-SPEEDWAY 43-PIECE HOME DRILL KIT
All-purpose $3 /{ }^{*}$ drill kit. Features Thor 813SS drill with handy "Speed-Sight" that lets you drill angles accurately-just set the angle and level the bubble. Industrially rated, has geared chuck with key, ball thrust bearing.
Includes: drill; 7 drill bits, $1 / 16$ to $3 / 3$ "; drill stand; circular-saw attachment with blade and work-table; jig-saw attachment with 3 blades; horizontal speed stand; 6 wood-boring bits, $3 / 6$ to $1^{\prime \prime}$ : $3^{\circ}$ grinding wheel; 10 sanding discs; wool polishing bonnet; rubber backer; 7-pc. arbor assembly. U.L. Approved. For 110-120 v., 60 cycle AC. Shpg. wt., 20 Ibs.
50 NU 872. List, $\$ 71.35$.
NET 34.95


## MOST POPULAR $1 /{ }^{\prime \prime}$ POWER DRILL THOR MODEL 20 SUPER.VALUE DRILL

sg90

- Burn-Out Proof Motor: 11-Bar Commutator
- Smooth, Self-Aligning Ball-Thrust Bearing
- Die-Cast Aluminum Housing; Geared Chuck - Precision-Made, Hobbed Steel Gears

An outstanding value in a highly-efficient $1 / 4$ " power drilf Ideal for a wide variety of jobs around shop, home, garage and farm. Husky $21 / 2 \cdot a m p$ motor has plenty of power for driv. ing drill attachments. Rugged gear-type chuck takes drill shanks to $K_{i}^{\prime \prime}$. Drills holes in steel to $Y_{4}$ dia., $1_{2}^{\prime \prime}$ in hardwood. Self-aligning ball-thrust bearing assures smooth operation. Momentary-contact switch has locking pin. No-load speed, 2400 rpm ; full-load, 1500 rpm . Die-cast aluminum housing. Overall length, $9^{\prime \prime}$. U.L. Approved, industrially rated. Includes chuck key: 6 -ft., 3 -wire cord and 3 -prong plug. For $110-120 \mathrm{v}$., 60 -cycle AC. Shpg. wt. $31 / 2$ Ibs.
50 N 538. List, $\$ 15,00$.
NET 9.90

## Selected Values in Popular ${ }^{1} / 4^{\prime \prime}$ and ${ }^{1} / 2^{\prime \prime}$ Drills...



## (A) SKIL MODEL 503 ECONOMY $y^{\prime \prime}$ ORILL

- Cool-Running, $21 /$-Amp Motor: Self-Adjusiting Brushes - Helical Gears Dellver Full Power, Greater Torque

A low-priced, basic power tool for any workshop, the indus. trially rated 503 has self-adjusting armature brushes, helical gears, trigger switch and geared chuck. No-load speed, $2500 \mathrm{ppm} .9^{*}$ long. With key, 3 -wire cord and plug, 2 -prong adapter. U.L. Approved. For $110-120$ v. AC only. Wt. $41 / 2 \mathrm{lbs}$. 50 N 522 . List, $\$ 19.95$.

NET 13.97
[B] NEW THOR MODEL 222 LOW-COST $1 / 4^{*}$ DRILL

- Design Features Heavy-Duty Ball Bearing on Spindle
- 22-Bar Commutator; Burn-Out Proof Motor; Geared Chuck

Perfectly balanced, rugged duty $1 / 4^{\prime \prime}$ drill for all around use. $21 / 2$-amp motor; ball and bronze bearings; die-cast aluminum housing. No-load speed, 2400 rpm ; full-joad speed, 1500 rpm. $7 \% /{ }^{*}$ long. Has trigger switch and locking pin, 3 -wire cord, key. U.L. Approved. For $110-120 \mathrm{v} .4 \mathrm{AC}$. Wt., $41 / 2 \mathrm{lbs}$. 50 N 836. List, $\$ 18.95$

NET 14.50

## C. NEW SKIL MODEL 550 HEAVY-DUTY $1 / 4 *$ DRILL

- More Powerful 3-Amp Motor Develops Up to $1 / 4 \mathrm{HP}$
- 20-Bar Commutator; Multi-Ball Thrust Bearing on Spindle For more powerful, extra-duty contihuous operation; for driving larger drill attachments. Precision helical gears, large cooling fan. Has trigger switch, lock pin. No-load speed, $2500 \mathrm{rpm} .8 \frac{1}{4}$ " long. With 3 -wire cord, plug; 2-prong adapter. key. U.L. Approved. For 110.120 v. AC or DC. Wt., $41 / 2 \mathrm{lbs}$.
50 N 972 . List, $\$ 39.95$.
NET 27.97
D) NEW THOR MODEL 503 HEAVY-DUTY $1 / 4$ DRILL - Has 22-8ar Commutator; Burn-Out Proof, 3-Amp Motor - Double Reduction Alloy Steel Gears; Aluminum Housing Has all ball and needle bearings; geared chuck; oversize switch. No-load speed, 2200 rpm ; full-load, $1400 \mathrm{rpm} .83 /{ }^{\prime \prime}$ long. $10-\mathrm{ft}$. 3-wire cord, plugi 2-prong adapter, key. U.L. Approved. For 110-120 v., AC or DC. 5 lbs. 50 N 845. List, \$49.95

NET 35.75
[E NEW THOR-SPEEDWAY MODEL $8141 / 2$ DRILL

- Burn-Out Proot 4-Amp Motor; 14-Bar Commutator
- Special, Self-Olling Bronze Alloy Bearings; Steel Gears An outstanding value in an extra-power, ruggedly designed $1 / 2$ drill. Has $600 \cdot \mathrm{rpm}$ no-load speed, 400 rpm under load. Ball thrust bearing; polished aluminum and black crackle case; 2-position rear and removable top handles. $14 \frac{1}{2} /$ long. With key, 6 -ft., 3 -wire cord. U.L. Approved. For $110-120$ v., 60 cycle AC or DC. Shpg. wt. 11 lbs.


## 50 NX 844. List, $\$ 31.95$

NET 21.95

## (F) SKIL MODEL 541 COMPACT $y_{2}$ DRILL

- Gives Big Drill Performance. Small Drill Handling Ease - 3-Amp Motor; Double Reduc. Gears: 10-Bar Commutator Husky, compact pistol-grip drill. Double-reduction gears develop high torque from 3 -amp motor. Geared chuck-spindle has multi-ball thrust bearing for heavy use. Removable side handle. Trigger switch, lock pin. $93 / 4^{\prime \prime}$ long. No-load speed, 750 rpm . With key, 3 -wire cord, plug; 2-prong adapter. U.L. Approved. For $110-120 \mathrm{v}$. AC only. Wt., 5 lbs. 50 N 543. List, \$36.95

NET 25.87

## BEST SELLING $\%$ " POWER DRILL THOR-SPEEDWAY MODEL 813 DRILL

- Powerful 2112-Amp MotorWon't Burn Out - 14-Bar Commutator; Locking Trigger Switch $12^{50}$ - Ball-Thrust Bearing; "Speed Sight"
- Polished Aluminum Housing; Geared Chuck

Amazingly low price for this industrially-rated, $3 / 0$ drill. Ideal for all-around use; drilis holes in wood up to 1 " thick, up to $3 /{ }^{\circ}$ thick steel. Carefully designed, $21 / 2$-amp motor with 11 -bar commutator, won't burn out. Has special alloy self-oiling bronze bearings, gear-type chuck that holds tioht-no bit slippage. No-load speed, 1750 rpm ; full-load speed, 1150 rpm .

Trigger switch has locking pin for continuous operation. Polished aluminum housing. $8 \frac{1 / 4}{}$ long. With 6 -ft., 3 -wire grounding-type cord, key, etc. U.L. Approved. For operation from $110-120 \mathrm{v},$.60 cycle AC only. Shpg. wt., 5 lbs. 50 N 832. List, $\$ 18.95$.

NET 12.50



## ... ${ }^{3} / 8^{\prime \prime}$ and ${ }^{1} / 2^{"}$ Power Drills for Home and Industry

## ( NEW THOR-SPEEDWAY 811 -BT $3 / 3^{\circ}$ DRILL

- Husky, Burn-Out Proof 3-Amp Motor; 11-Bar Commutator - Double-Reduction Steel Gears; Ball-Thrust BearingLow cost, but with extra power for tough jobs. Drills holes to $3 / 0^{0}$ in steel: $34^{0}$ in wood. Has oilite bearings, geared chuck, aluminum housing. No-load speed, 928 rpm ; full-load, 610 rpm. $81 / 2^{\prime \prime}$ long. With 6-1t., 3 -wine cord, plug; chuck key. U.L. Approved. For 110.120 v .60 cycle AC. 5 lbs .
50 N 846. List, $\$ 22.95$.
NET 14.95


## [B] WEN MODEL 808 2-SPEED $3 / 3^{*}$ DRILL

- Has Two Power Takeoffs- 3000 and $1000-\mathrm{rpm}$ - Full $1 / 3^{*}$ Capacity in Steel; $3 / /^{*}$ Capacity in Wood Versatlle 2-speed $3 / 3^{\prime \prime}, 2$-amp drill- 3000 rpm for wood, metals; 1000 rpm for heavy metals, concrete. Geared chuck has ballthrust bearines; high-torque motor. Also trigger switch; lock button; removable handle. $121 /{ }^{1 / 2}$ long. With $6-\mathrm{ft}$., 3 -wire cord, plug: 2-prong adapter; key. U.L. Approved. For 110-120 v., AC or DC. 5 lbs.
46 N 947. List, \$29.95.
NET 19.97
(C) NEW THOR MODEL 322 BIG-VALUE $3 / 3^{\circ}$ ORILL
- 3.1-A mp Motor is Burn-Out Proof; Has 22-Bar Commutator - Heavy-Duty Thrust and Spindle Ball Bearings

A real buy that offers balanced armature: precision steel gears; 3 -jaw geared chuck with key; etc. No-load speed, 925 rpm ; full-load, 610 rpm . With $6-\mathrm{ft}, 3 \cdot$ wire cord, plug. $8 \frac{1}{2}$ e long. U.L. Approved. For 110.120 v ., AC or DC. Wt., 5 lbs . 50 N 838 . List, $\$ 29.95$.

NET 21.50
[0] SKIL MODEL 560 DELUXE $3 / 3^{\prime \prime}$ DRILL

- 3-Amp Motor; Double-Reduction, High-Torque Gears
- Removable Side Handie for Drilling in Tight Spots

Rugged and reliable, with oversize fan for effectively cooling motor. Drills holes to $3 / /^{\circ}$ dia. in steel, $3 / /^{n}$ in wood. No-load speed, 1000 rpm ; geared chuck. Trigger switch, lock pin. $9 \frac{1 / 4}{\prime \prime}$ long. With key, 3 -wire cord, plug; 2-prong adapter. U.L. Approved. For $110-120 \mathrm{v} ., 60 \mathrm{cycle}$ AC. Shpg. wt., $41 / 4 \mathrm{lbs}$. 50 N 542 . Llst, $\$ 34,95$

NET 24.47

## NEW THOR 1419R REVERSIBLE $1 / 2$ D DRILL

- Burn-Out Proof 51/2-Amp Motor; 28-Bar Commutator
- Reversing Switch in Handle; Removable Top/End Handles A solld value! Capacity: $1 / 2^{\prime \prime}$ in steel; $11 / 1^{\prime \prime}$ in hard wood. Heavyduty, special bronze spindle bearing: rotatable end-grip handle, removable end and top hañdles. Has reversing switch, safety lock, quick release. No-load speed, 550 rom: full-load, 400 ppm . Length (with end handle), $143 / 3^{*}$ : without handle, $111 /{ }^{\prime \prime}$. With 3 -wire cord, geared chuck and key, etc. U.L. Approved. For $110-120 \mathrm{v}$., AC or DC. Wt., 12 ibs. 50 NX 869. List, \$49.95.

NET 36.50
(6) NEW THOR 1435R REVERSIBLE $1 / 2^{*}$ DRILL

- Similar in Design and Features to Above, But With $6 \frac{1}{2}=$ Amp Burn-Out Proof Motor, 28-Bar Commutator
Has all the desirable features of Thor's Model 1419R, but for heaviest duty jobs. All ball and needle bearings, oversize switch with locking pin, etc. Size, etc., as above. 50 NX 870. List, $\$ 74.95$.

NET 54.95
NEW THOR MODEL $14351 / 2^{\prime \prime}$. ORILL. Same as 1435 R above, but without reversing feature.
50 NX 871. List, \$69.95.
NET 49.95


# Selected Power Saws-Circular, Rip, Jig, Sabre 



## (D) SKIL MODEL 524 JIG SAW

Lightweight, economy, orbital-action jly saw. Crosscuts, rips, scrolls, notches and bevels up to $45^{\circ}$. Cuts Intricate patterns; makes its own starting hole for pocket cuts. Cuts soft woods up to $2^{\prime \prime}$ at $90^{\circ}$; $11_{10}{ }^{\circ}$ at $45^{\circ}$; soft metals to $1 / 2^{\circ}$ : mild steel to $1 /{ }^{\prime \prime} .2$. 3 amp motor provides 37005 strokes-per-minute, no-load. Anti-friction self-lubricating bearings. $71 / 2$ " long. With 3 wood cutting blades, wrench, 3 -wire cord and adapter. U.L. Approved. For $110.120 \mathrm{v} ., \mathrm{AC} \cdot \mathrm{DC} .51 / 2$ lbs.
50 N 519. List, $\$ 34.95$.
NET 24.47

## BALL-BEARING SAWS

## A SKIL 554 HEAVY-DUTY $81 / 4^{*}$ CIRCULAR SAW

- Extra-Power Motor Has Plenty of "Bite" for Every Job
- Employs 3 Ball Bearings, Needle Bearing, Hellcal Gears Has the power and cutting capacity for continuous or professional use. Huge 13 -amp ball-bearing motor develops over? hp. $81 / \mathrm{m}^{\circ}$ blade cuts vertically from $1 /$ 化 to $27^{*}$ at $90^{\circ}$; maximum depth. $211^{\prime \prime}$ at $45^{\circ}$. No-load speed, 5200 rpm . Has exclusive blade lock for fast, easy blade changes. $12^{\prime \prime}$ long. With hardtooth combina. tion blade; blade wrench; 3-wire cord, plug: 2-prong adapter. U.L. Approved. For $110-120 \mathrm{v}$., AC or DC. Shpg wt., 17 lbs

NET $\mathbf{7 4 . 5 0}$

## (C) SKIL 553 HEAVY-DUTY $714^{*}$ CIRCULAR SAW

Utilizes same features as Model 554 above, but has 12 -amp, 2-ho motor; cuts from $1 / 16$ to $23^{\circ}$ at $90^{\circ}$. maximum depth, $11^{\circ}$ at $45^{\circ}$. Has depth control, protractor for angle cuts, blade guard. Noload speed, 5200 rpm. $12^{2 \prime}$ long. 3 -wire cord, plug; 2-prong adapter. U.L. Approved. For $110-120 \mathrm{v}$., AC or DC. Wt., 16 Ibs 45 NX 222. List, \$89.95

NET 67.95

## B SKIL 552 HEAVY-DUTY $61 / 2^{\prime \prime}$ CIRCULAR SAW

Similar to above models, but with $6 \frac{1}{2}$ blade and 10 -amp motor that develons over $11 / 2 \mathrm{HP}$. Cuts vertically from $1 / 66^{2}$ to $23 / s^{\circ}$ at $90^{\circ}$; maximum depth, $13 y^{\circ}$ at $45^{\circ}$. No-load speed, 5800 rpm . Has blade lock, guard, combination blade, etc. $101 / 4 /$ long. With 3 wire cord, plug, 2-prong adapter. U.L. Approved. For $110-120 \mathrm{v}$, AC or DC. Wt., 15 lbs .
50 NX 533. List, $\$ 74.95$
NET 56.95

## E SKIL MODEL 537 DELUXE 71/" CIRCULAR SAW

Lower cost $71 / /^{\circ}$ saw, with $10 \cdot \mathrm{amp}$ motor that develops $11 / 2 \mathrm{HP}$. Handles even toughest rip cuts. Has all the top Skil features: anti-kickback clutch, sawdust blower, blade lock, easy-setting depth control, etc. Cuts vertically from $1 / 6$ to $2 \%$; maximum depth of cut at $45^{\circ}, 11^{\circ}$. No-load speed, $5150 \mathrm{rpm} .12^{\prime}$ long. With combination blade, wrench, 3 -wire cord and plug, 2-prong adapter. U.L. Approved. For 110-120 v., AC or DC. Wt., 17 lbs . 50 NX 486. List, $\$ 64.95$

NET 49.95

## (f) SKIL MODEL $536 \mathbf{6} 1 / 2^{\prime \prime}$ CIRCULAR SAW

Tops for the shop, home, etc. 9-amp, 1-hp motor has power to spare. Makes vertical cuts from $1 / x^{\circ}$ to $23 / 6^{\circ}$ at $90^{\circ} ; 13 /^{\prime \prime}$ at $45^{\circ}$. Has safety clutch; depth and angle controls, sawdust blower; bind-free lower blade guard. No-load speed, 6300 rpm . Length, $912^{2}$. With combination blade, blade wrench; 3-wire cord, 2-prong adapter. U.L. Approved. For $110-120 \mathrm{v} ., \mathrm{AC}$ or DC. WI. 12 lbs. 50 NX 534. List, \$49.95.................................. NET 38.95

## G SKIL 577 "RECIPRO-SAW" WITH 3 BLADES

Totally new kind of power saw. Cuts anything-6" logs to thin plastic sheeting. Makes rip, miter, bevel, straight, flush cuts. Has double reduction gears, adjustable foot, 3 -position side handle. 3 -amp motor gives $2000-3 / 4$ strokes-min. $113 / 4 /$ long With 3 blades (1-Type 25922, 1-Type 20538, 1-Type 20541, described at right); 3 -wire cord, plug; 2-prong adapter. U.L. Approved. For $110.120 \mathrm{v} .$, AC or DC. Wt., $61 / 2 \mathrm{lbs}$. 50 NX 789. List, $\$ 49.95$.

NET 36.95


## ACCESSORY BLADES FOR SKIL 577 SAW

50 N 790. Type $236086^{\circ}$ Metal Cutting Blade. 2 oz...... NET 67 C 50 N 793. Type $236066^{\circ}$ Plaster Cutting Blade. 2 oz..... NET 27c 50 N 795. Type $205384^{*}$ Wood Scroll Blade. 1 oz. $.60 c$ 50 N 796. Type 20541 4- Multi-Purpose Blade. For last roughingin cuts in wood with nails, soft metals, etc. $4^{-}$long. 1 oz..... 20c 50 N 797. Type 20543 12" Multi-Purpose Blade. 2 O2.....NET 47c 50 N 875. Type $259229^{\prime \prime}$ Wood Cutting Blade. Special design for heavy wood cutting. Wt., 3 oz...

NET 73c

## .and Router - by Skil, Thor-Speedway, Weller, Wen

(c) WEN 505K SARRE SAW KIT

For home or shop. Cuts any material; makes starting holes, inside cuts. 1.8 amp motor gives $2650-5 / 6^{\circ}$ strokes/ minute under load. Includes: saw; tine, medium, coarse blades; metal cutting blades: case. $71_{4}{ }^{\circ}$ long. With 3 -wire cord, 2 -prong adapter, U.L. Approved. For $110-120$ v., AC.DC. $6 \frac{1}{2}$ lbs. List, $\$ 29.95$.
50 N 541. 3-Up
EACH 19.57 1-2 EACH 21.99 46 N 362. Model 505 Saw Only. With fine, medium, coarse blades. List, $\$ 26.95 .4 \mathrm{lbs}$



F NEW WELLER MODEL 88 ELECTRIC SABRESAW
Features ultra-high speed and 3" stroke. Blade retracts on down stroke. Makes its .own starting hole. Has powerful 4.8-amp, air-cooled reciprocating motor that needs no lubrication. Easy to handle-doesn't buck. Excellent for cabinet and finish work $113 / 4$ long. With 4 wood cutting blades, blade wrench and $8 \cdot \mathrm{ft}$. cord. For $110-120$ v. 60 cycle AC. U.L. Approved. Wt., 6 lbs.
50 NX 880. List, $\$ 22.95$. 3-Up, EACH 15.38. 1-2, EACH 16.87

## A NEW WEN 920 ALL-PURPOSE ZIPP SAW

- Powerful $1 / 13$-HP Motor; Heavy-Duty Roller, Oillite Bearlngs - Accurately Cuts Curves, Straight Cuts. Fine Pattern Work Fast-cutting unit that saws up to $6^{\circ}$ timbers, $2^{* *}$ pipe. Delivers $3200,1^{\text {² }}$ strokes per min. Cuts scrolls, curves, straight cuts in wood, metal, plastic, etc. Starts its own hole. Has full $1 / 3-h p, 41 / 4$ amp motor with heavy-duty bearings; hardened gears. Air stream clears dust from work-you get full cutting-blade vistblity. Conventional saw grip; auxiliary grip handle; safety release switch. Includes 7 blades-one for every cutfing job. Pol ished aluminum housing. With 3 -wire, $8-\mathrm{ft}$. cord, plug. U.L. Approved. For $110.120 \mathrm{v}, 50.60$ cycle AC. $81 / 2 \mathrm{lbs}$ 50 N 873. List, $\$ 44,95,3-U p$, EACH 29.37

1-2, EACH 33.05

## B WEN MODEL 909 "ALL-SAW"

For straight cuts, arcs, circles, fine-pattern work in bakelite, wood, metal, tile, etc. Cuts $1 /{ }^{\prime \prime}$ metals, $6^{\circ}$ wood; $90^{\circ}$ cuts in $6 \times 6^{\prime}$ 's $45^{\circ}$ cuts in $4 \times 4^{\prime}$ s. Makes inside cuts. $1 / 2 \cdot \mathrm{hp}, 6$ - amp motor has oilite bearings, hardened gears. $3400-1^{-1}$ strokes per min. Sawdust blower; adjustable rip guide. 3 -wire cord, 2 -prong adapter. $71 / 2 x$ $7 \times 8^{\circ}$. U.L. Approved. For $110-120 \mathrm{v} ., \mathrm{AC}$-DC. Wt., $81 / \mathrm{lbs}$
50 N 236. List. \$44.95. 3-Up. EACH 29.37 … 1-2, EACH 33.05 50 N 237. Model 900 Replacement Blade Set. For Models 909 and 920 , above. 7 assorted blades. $1 / 2 / \mathrm{lb}$.

NET 2.50

## D THOR-SPEEDWAY MODEL $8007^{*}$ CIRCULAR SAW

Industrially rated-has powerful 8 -amp motor with burnout proof motor. Developsfull 1.2 HP; has self.lubricating bearings. Cuts $1 / 6^{\prime \prime}$ to $21_{1 / \prime}^{\prime \prime}$; at $45^{\circ}, 11_{1}^{\prime \prime}$. Has safety-slip clutch that eliminates blade "kick-back." Blade guard retracts as blade enters work. No-load speed, 5000 rpm . With rip fence; guiding handle; protractor for angle cuts; 3 -wire cord. U.L. Approved. For 110-120 v., AC or DC. ShDg. wt., 15 lbs
50 NX 809. List, $\$ 30.95$
NET 21.95

## E THOR-SPEEDWAY MODEL 805 JIG SAW

Burnout-proof 3 -amp motor with no-load speed of $3000-5 /{ }^{*}$ strokes per minute. Uses helical-cut steel gears. Cuts up to $2^{\circ}$ in şoft wood; $1 /^{\prime \prime}$ in steel. Adjustable plate for cutting $45^{\circ}$ angles on either side; also curves, scrolls, circles, straight cuts and rips. Self-oiling, bronze alloy bearings. With 2 wood-cutting blades; 1 metal cutting blade; wrench; rip fence; circle cutter; gutding handle. U.L. Approved. For 110.120 v ., AC or DC. Wt., 5 lbs 50 N 830. List, $\$ 19.95$

NET 13.95

## G SKIL MODEL 297 HEAVY-DUTY ROUTER

Powerful $61 / 2$-amp. $3 / 4-\mathrm{hp}$ router for routing, trimming, cove-cutting, rabbeting and decorative cutting. Also mortises, trims, dadoes, grooves and beads. No.foad speed, 23,000 rpm. With $1 / 1$, collet and wrench; 3 -wire cord and plug. Overall ht., $6 \frac{1 / 2}{2}$. U.L. Approved. For $110-120 \mathrm{v}$., AC or DC. Wt., 8 Ibs .
50 NX 54
NET 59.50
ROUTING BITS FOR ABOVE. Straight bits; 2 flutes; $1 / 4$ shank dia.: "1/is" cutting length; "S5/6" shank length. 2 oz
50 N 545 . With $1 /{ }^{*}$ " tlp diameter
NET 1.75
50 N 546. With $3 / 1 /$ tip diameter
NET 2.40
50 N 547. With $1 / 2^{\prime \prime}$ tip diameter


## DREMEL MOTO-TOOL KITS

(A) MODEL 2 MOTO-TOOL KIT. Pocket-sized precision "machine shop". Enoraves, routs, sands, polishes, saws, grinds, drills, etc. Includes: Model 221, $27,000-\mathrm{rpm}$ Moto-Tool; chuck; 3 collets; finger-grip; 4 emery wheel points; dressing stone; 8 steel cutters and steet saw; 5 bristle brushes; 1 steel brush; shoulder mandrel with sanding disc; screw mandrel with felt wheel; drum sander; case. U.L. Approved. For $110-120 \mathrm{v}$. AC or DC. Wi., 4 lbs.

46 N 378. List, $\$ 29.95$ NET 22.95
50 N 598. Model 221 Moto-Tool Only
NET 45.75
[B MODEL $60^{\text {"F FLEX-O-TOOL" POWER UNIT. Powerful porta- }}$ ble $3450 \cdot \mathrm{rpm}$ motor with $36^{\circ}$ ilexible shaft for driving grinding. drilling, sanding, engraving, polishing tools. Plastic handpiece has steel orip. Motor case $61 / 2 \times 43 / 4 \times 61 / 2^{*}$. With extra collet. U.L. Approved. For $110 \cdot 120$ v. 50.60 cycle AC. Wi, $61 / 2 \mathrm{lbs}$.
45 N 237. List, $\$ 34.50$
NET 23.00
45 N 234. Model 574 12-Piece Tool kit. For above. Includes: 1 steel cutter; 1 drill; 2 whee! points; 2 brushes; 1 sander, 3 bands; 2 collets. Plastic box. 2 lbs. List, $\$ 5.15$..................... NET 3.49
[C] MODEL 572 DELUXE MOTO-SHOP KIT. Features $15^{\circ} \mathrm{jig}$ saw with power takeoff and disc sander attachment. Handles all jobs around the home and hobby shop. Rocker-action saw has tilting table, 3450 rpm ball-bearing rotary motor, blade guard. Flexible shaft drives accessories. Includes: jig saw with 4 saw blades; rubber backer; adapter; 3 sanding discs; grinding wheel; cloth buffing wheel; wire brush wheel; wheel guard; polishing compound stick; and 12-plece set of abrasive wheels, collet adapters, router, brush and drill. U.L: Approved. For $110-120 \mathrm{v}$., 60 cycle AC. Shpg. wt., 17 lbs .
46 NX 952. List. \$49 95
NET 38.95

## Precision Power Tool Kits and Spraying Equipment



## [0] new atlas professional paint sprayer

Improved compressor-type sprayer at an extremely tow price Gives you a much faster, more professional spraying job with various types of paint, enamel, varnish, insecticides-even multicolor liquids. Compressor has precision-machined piston, honed cast-iron cylinder. Internal-mix, pressure-type gun gives wide, uniform fan spray. Complete with 1 -quart aluminum con tainer; 3 spray nozzles for all types of work: $10-\mathrm{ft}$. hose; and fancooled, universal $1 / \mathrm{e}^{-h p}$ motor. For operation from $110-120 \mathrm{v}$. $A C$ or DC. Shpg. wi., 10 lbs.
50 NX 813. List, $\$ 29.95$
NET 22.95
47 N 089. Extra 1-Quart Contalner. Wi., $3 / 4 \mathrm{ib}$.
47 NX 085. Metal Carrying Case. Wt., $21 / 2 / \mathrm{lbs}$

## B BURGESS MODEL VS-850 ELECTRIC SPRAYER

Deluxe unit with 3 sapphire nozzles on rotating turret. Sprays paint, varnish, enamel, light oils, etc. Handy "dial-a-spray" produces fan-shaped spray for walls, floors; round spray for furniture, etc.; fogger for garden sprays, insecticides. Foolproof, trouble-free and easy to clean. Reciprocating motor is housed in shockproof head. With 24-o2. container and 8 -ft. cord. For 110-120 50.60 cycle AC. 4 lbs.

50 N 584. List, $\$ 19.95$
NET 14.63
50 N 502. Extra Container. 24 fl . O2. For above. $1 / 2 \mathrm{ib}$.
NET 1.12

## F BURGESS MODEL 73 DELUXE VIBRO-GRAVER

Engraves steel, glass, aluminum, plastics, ceramics, brass, stone wood, etc. Handles like a pencil-vibrator motor delivers 7200 strokes per minute for fast, clean, permanent engraving. Excellent for factories, labs, homecraft and hobby shops. Compact and easy to operate-anyone can use it skillfully with just a few minutes experience. Includes tantalum carbide point. For 110-120 v., 50-60 cycle AC. Shpg. wt., 1 lb . 50 N 556. List, $\$ 12.95$

NET 9.69

## G] THOR IMPACT WRENCH/DRILL KIT

Powerful 4 -amp impact tool for shop, garage and farm. Reversible wrench drives nut-driver sockets, provides powerful torque. Easily converts to $1 / 2$ drill; with attachments, use as power screwdriver, sander, atc. Includes 6 most-used hexagon sockets
 carrying case. With 3 -wire, 10 -ft. cord and 2 -prong adapter. Case $101 / 2 \times 113 / 4 \times 16 \frac{1}{4^{\circ}}$. U.L. Approved. For $110-120 \mathrm{v} ., A C$ or $D C$. Wt., 21 lbs.
50 NU 878. List, $\$ 89.50$
NET 66.82
50 NU 879. Impact Wrench Only. 9 lbs.
. NET 55.59
(A) NEW WEN MODEL 910 DELUXE $3^{\circ}$ BELT SANDER - All Gear Driven; Permanently Lubricated Gears, Bearings - Polished Aluminum Housing, Ventilated for Cool Running Professional-quality, industrial-duty unit at home workshop pricesI Handles toughest sanding jobs; has powerful $1 / 3-h p, 41 / 4-$ amp motor. Free belt speed $850 \mathrm{ft} . / \mathrm{min}$. Sawdust blower; quick, easy belt changing; contour prip. With coarse, medium and fine sanding belts; and 6 -ft., 3 -wire U.L. approved cord and plug. $51 / \times 51 / 2 \times 10 \frac{1}{2} 2^{\circ}$. For $110-120$ v., $50-60$ cycle AC. WI., 9 lbs . 50 N 805. List, $\$ 44.95$ NET 33.05 50 N 806. Extra Coarse Sanding Belt. 60 grit. 3 oz. .......... 52c 50 N 807. Extra Medium Sanding Belt. 80 grit. 3 oz 52c
50 n 808. Extra Flne Sanding Belt. 120 grit. $202 . . . . . . . . .5$. 52c
[8] SKIL MODEL 405 PROFESSIONAL BELT SANDER Features powerful 7 -amp motor, ball and sleeve bearings. Motor drives $4 \times 211 / /^{\circ}$ belt at 1350 ft . $/ \mathrm{min}$. Sands up to vertical edges. $63 / 4 \times 61 / 4 \times 121 / 2^{\circ}$. With belt, 3 -wire cord, 2 -prong adapter. U.L. Approved. For 110-120 v., AC or DC. 15 lbs. 50 NX 328. List, $\$ 89.95$ NET 66.99
50 M 078. Box of 10 Assorted Belts. $11 / 2 \mathrm{lbs}$. NET 6.60
[C SKIL MODEL 592 DELUXE ORBITAL SANDER Sands, beffs, polishes-full 25 sq . in. pad. Sands to vertical edges and into corners. $2 \frac{1}{2}$-amp motor; 5000 strokes $/ \mathrm{min}$. With 3 assorted $3 \% \times 9^{\circ}$ sanding sheets, 3-wire cord, 2-prong adapter. $61 / 2 \times 9 \% \times 3 \%$. U.L. Approved. For 110.120 v ., AC or DC. 7 lbs . 50 NX 520. List, $\$ 39.95$
50 N 096. Lambs' Wool Polishing Pad. 1/4 lb.
7.9

## Quality Power Sanding and Grinding Equipment


#### Abstract

(D) WELLER MODEL 77 RECIPROCAL POWER SANDER Easy-to-use sander desloned for long, trouble-free life under hard usage. Reciprocating 4.8 -amp motor is fan-cooled, drives unit at 14,400 strokes $/ \mathrm{min}$. Stroke length, $1 / \mathrm{si}^{\circ}$; sanding area 26 square Inches. Removable side handle. Uses $35 / 1 \times 9^{\circ}$ sanding sheets (not included). 9" long. With 8 - t . cord. U.L. Approved. For 110-120 v., 60 cycle AC. Shpg. wt., 61/2los. 50 N 570. List, $\$ 19.95$

NET 14.66 [E] NEW THOR-SPEEDWAY 821 ORBITAL SANDER Improved. low-cost version of Thor's famous No. 1 sander. Features $41 / 2 \times 51 / 0^{\circ}$ sanding area and a $1 /{ }^{\circ}$ orblt that duplicates professional hand-sanding. Uses $4 \frac{1}{2} \times 6 \frac{1}{2}$. sandpaper sheets (1 sheet Included). Mirror-finished housing. With 3 -wire cord, 2 . prong adapter. U.L. Approved. For $110-120$ v. $50-60$ cycle AC. $51 / 2 \mathrm{lbs}$. 50 M 829. List, $\$ 16.95$ NET 11.99


## THOR HIGH QUALITY "SPEEDGRINDERS"

(F) THOR MODEL 118B LOW-COST BEMCH GRINDER

Light to medium duty, bench-type grinder. Burn-out proof motor; no-load speed, 3450 rom. Has lightweight aluminum body, watercooling tray, tool rests, dust shields, eye shields. With 2 grinding wheels ( 40 and 70 -grit), $4 \frac{1}{2} \times 11_{2}^{2}$. $3 / 1^{\circ}$ holes; 6 -ft. 3 -wire cord. Length, $91 / /^{\prime \prime}$. U.L. Approved. For $110-120 \mathrm{v},$.60 cycle AC. Wt., 7\% lbs.
50 NX 850 . List $\$ 21.95$
NET 15.95
[G] THOR *ODEL 1288 MEDIUM-PRICED GRINDER
improved "Speed Grinder" for heavier jobs. Burnout-proof $1 / 4$-hp, shaded-pole motor gives $3450 \cdot \mathrm{rpm}$ no-load speed, has selfallgning bearings. Tool rests, angle guides, reinforced eye shields. 2 grinding wheeis ( 46 and 75 -grit), $6 \times 31^{\prime \prime}, 1 / 2^{\circ}$ holes. Length. $16^{\circ}$. 3 -wire cord. U.L. Approved. For $110-120 \mathrm{v} ., 60$ cycle AC. Wt., 25 ibs.
${ }_{50}$ NU 851 . List, $\$ 35.50$
NET 24.95

## [H. THOR MODEL 330 DELUXE BENCH GRINDER

For heaviest lobs. Full $1 / 3 \mathrm{ohp}$, ball-bearing motor won't burn out, gives 3450 -rom no-load speed. Offers removable plastic quench tray. die-cast tool rests with angle guides, parts tray, reinforced eye shlelds, adjustable spark arresters. High-strength, die-cast aluminum alloy housing. With 2 grinding wheels ( 46 and 75 -grit). $6 \times 3 / 4,1 / 2^{\circ}$ holes. Length. $16^{\circ}$. Heavy duty 3 -conductor lead cord. U.L. Approved. For $110-120 \mathrm{v}$., 60 cycle AC. Wt., 27 Ibs 50 NU 868. List, $\$ 47.50$


## Selected, Highly Useful Power Drill Accessories



(A)ARCO 460 CIRCULAR SAW, Slidelock fits any $1 / 6^{\circ}$ drill. Detachable DadoArbor swivels blade to cut grooves to $1 / 2$ wide, $1^{*}$ deep. Cuts $2 \times 4$ 's. Depth and bevel gauges-cuts to $134^{\circ}$, bevels to $45^{\circ}$. Right angle steel gear drive. Self-lubricating bearings. With rip adlustable gauge, yoke, $5^{\circ}$ blade. Shpg. wt., 4 lbs.
50 N 840 . List, $\$ 12.95$.
$\because$ NET 8.63
(B) ARCO 560 JIG SAW. Attaches to any $1 / 4$ drill. Has adjustable circle cutter and rip gauge. Cuts circles to $20^{\circ}$ dia., rips to $10^{\circ}$ wide. Cuts $2 \times 4^{\circ} \mathrm{s}$, plastic, metal, etc. Alr blower clears sawdust. Right angle drive; self-lubricating bearings. With blade. Shpg. wt, $21 / 2 \mathrm{lbs}$.
50 N 231. List, $\$ 9.95$.
NET 6.63
6 EXTRA BLADES. 2 each-coarse, me. dium and fine-tooth blades. $1 / 2 \mathrm{lb}$.
50 N 232. List, \$1.95.
NET 1.39HUOT DRILL CASES. Sturdy-made of durable heavy-gauge steel. Handy index shows drill sizes at a plance.
60 DRILL CAPACITY. Holds standard drill sizes 1 to 60 . Decimal equivalents and machine screw tap data are on inside of case. Size, $31 / 4 \times 41 / 2 \times 11^{\prime \prime}$. Wi., 1 lb .
46 N 790
NET 1.84
29 DRILL CAPACITY. As above, but takes 29 bits from $1 / 1 e^{\prime \prime}$ to $1 / 2^{\prime \prime}$ in steps of $1 / 54^{\prime \prime}$. Size, $4 \times 7 \times 13 / 4$ ". Wt., 3 lbs.

## 50 N 084

. NET 2.18

D AERO "ROTO-PLANE." Fits $1 / 4^{\circ}$ and $3 / 0^{"}$ drills. $0.1 / 10^{*}$ cut; $13 / 4$ " cutting width. Guide edge for planing at true $90^{\circ}$. With clamp ring. Wt., 3 lbs.
50 N 954. List, $\$ 11.95$
. NET 6.75
( ERWOOD 355 DIAL SAW. For use with electric drilis, lathes, etc. Dial adjusts for hole sizes from $11 / 8$ to $31 / 2^{\prime \prime}$. Cuts, metal, wood, plastic, etc. $3 / 8$ shank. Metal cutting blades: ${ }^{2 / 10^{*}}$ pilot drill. Shog. wt., $11 / 2$ lbs
50 N 373. List, $\$ 10.50$.
NET 7.39

BEAVER SAW DRILL BITS. High speed bits for $1 / 4 \cdot 1 / 2^{\prime \prime}$ drills. Abrasive resistant steel; non-clog flutes. Wt., 3 oz. 46 N 795. All-Purpose. 46 N 796. Wood. 46 N 797. Heavy-Metal Bit. . . EACH 1.65

G BABCO 30 SANDER KIT. Vibrationfree sanding with $5^{\prime \prime}$ foam rubber backing pad; "Rubber-Flex" swivel drive. Fits all $1 / 4{ }^{\prime \prime}$ drills. 6 sanding discs for wood or metal. Shpg. wt. 8 oz.
50 N 238. List, $\$ 2.25$. $\qquad$ NET 1.65
BABCO 509 REPLACEMENT DISCS. Package of 6. Shpg. wt., $1 / 4 \mathrm{lb}$.
50 N 239 .......NET PER PACKAGE 37

[H)
NEW ARCO 750 SCREW-NUT DRIV. ER SET. 15-piece outfit fits any drill. Non-slip industrial-type clutch idies until pressure is applied, disengages automatically when work is driven home. Special holders prevent bits from slipping off screwheads. Includes: 2 flat bits with bit holders for $\$ 4-8$ and $\$ 8-14$ slotted screws; $\$ 2$ Phillips head bit; 6 hex socket wrenches ( $1 / 4,6 / 14,11 / 32,3 / 6,7 / 18,1 / 2{ }^{*}$ ); 2 square socket wrenches ( $1 / 4,9 / 10^{\prime}$ ); and holder with ball lock. Complete instructions are included. Shpg. wt., 13 lbs .
50 N 955. List, $\$ 7.95$
NET 4.95

## (J BABCO KNIFE-SCISSORS SHARP-

ENER. Fits any $1 / 4^{\prime \prime}$ drill. Beveled groove between grinders sharpens knives. Cup guide on end of shaft holds scissors at proper sharpening angle. 5 oz.
$\mathbf{5 0} \mathbf{N 3} \mathbf{3 7}$. List. $\$ 1.00$
NET .75

## K 1/6" GEAR CHUCK KEY. Wt., 4 OZ. 50 N 195 <br> NET .7

[1] BABCO 912 HORIZONTAL DRILL STAND. One-piece metal stand clamps or screws on bench. Converts $1 / 4{ }^{\circ}$ drill into a bench tool for sanding, buffing, grinding. Heavy-duty clamp; has adjustable nut for leveling. Wt., $1 / 4 \mathrm{lbs}$. 50 N 379. List, $\$ 2.95$
(M) G-H 825 DRILL GRINDING AID. Holds drill in correct position. For $1 /{ }^{* \prime}$ to $3 / 4$ drills-Nos. $30-1$-Millimeter sizes, 3-19. Shpo. wt., 2 lbs.
46 N 106. List, $\$ 6.60$
NET 5.17
(N) AERO SA-2000 ORBITAL SANDER.

Fits $1 / /^{\prime \prime}$ and $3 / 3^{\circ}$ drills. Orblts at twice the drill speed. Holds $35 \times 9^{\prime \prime}$ sand paper ( $1 / 3$ std. size). 3 sheets Included. $71 / 4 \times 3 \% \times$ 31/4". Shpg. wt., 2 Ibs.
50 N 607. List, $\$ 10.95$
NET 6.40
AERO ASA-200 SANDER. As above, but orbits at the same speed as drill. 50 N 956.

NET 3.20
BABCO 825 5-1 SPEED REDUCER. Fits $1 / 4$ drills. Drives up to 114 screws. Reverses-taps up to 5 holes a minute. $1 / 4^{*}$. $1 / 2^{\prime \prime}$ adapters; $1 / 4^{\prime \prime}$ adapter sleeve; screwdriver bit, sleeve. 3 lbs
50.N 005. List, \$13.95.

NET 10.25
R BABCO 742 RIGHT-ANGLE DRIVE. For $1 / 4^{\circ}$ drilis. Fits $3 / 1^{\prime \prime} \cdot 24$ threaded spindle (male or female). 2 speeds-halves drill speed for polishing. doubles speed for sanding. Wt., $3 / 4 \mathrm{lb}$.
50 N 375. List, $\$ 4.49$.
NET 3.31
[S] NEW ARCO 1252 ROTO-FORM. $1 / 4 *$ shank fits any drill. Shapes, cuts, forms and mills-never clogs or needs sharpening. Hardened, tempered steel. Has $17 /{ }^{\circ}$ diameter drum. $1 / 2 \mathrm{lb}$.
50 N 957. List, $\$ 1.98$
NET 1.45
1251 ROTO-FORM. Above, $11 / 4$ dia. drum.
50 N 959. List, \$1.49.
NET .98
1250 ROTO-FORM. Above. $3 / 4$ " dia. drum.
50 N 958. List, $\$ 1.00$. . . . . . . . . . NET .75
MILLER FALLS 710 COUNTERSINKS.
High-speed steel. Five ground-edge flutes cut at $82^{\circ}$ angle. $1 / 4$ shank; $2 \frac{5}{6}$ long. $1 / 2^{\circ}$ dlameter. Wt., 4 oz .
46 N 156.
NET 1.29
50 N 960. Above, with $5 / 8^{\circ}$ dia... NET 1.33 50 N 961. Above, with $3 / 4$ dia... NET 1.50
(A) CHICAGO SAW UNIV. CIRCU LAR BLADES. Fit diamond, $1 / 2$ 5/8 ind. arbors. *Chisel tooth. 1 lb Stock No- Type Dia. Style EA 50 N 563 C-612-UN $6 Y^{\circ}$. Combination* 1.51 50 N 564 C-714-UN 7-7/4 Combination* 1.51 50 N 964 C-814UN $8-81^{\prime \prime}$ Combination* 1.80 50 N 565 L-612-UN $61 /{ }^{\circ}$ Cut-otf

| 50 N 566 |
| :--- |
| 50 N 963 | 50 N 567 A-812-UN $0 \%$ Rip 50 N 568 A. 714 -UN $17.71 / \mathrm{Ri}$ 50 N 962 A-814-UN B-81/ Rip $\qquad$ $\frac{1.51}{1.80}$


| 1.51 |
| :--- |
| 1.51 |
| 1.80 |

(B) SKIL UNIV. JIG SAW BLADES.

Replace $1 / 2 / 3$ shank blades.

| Stock No. | Use for | BIade | Lbs. | Per |
| :---: | :---: | :---: | :---: | :---: |
| 50 N 965 | Heavy metal |  | \%/4 | 4.24 |
| 50 N 966 | Light metal |  | $8 / 4$ | 4.24 |
| 50 N 445 | Heavy wood | Cosrse | 2 | 3.72 |
| 50 N 446 | Wood \& plastic | Fine | 1/2 | 3.72 |
| N 447 | Thin wobo | Fine | $1 / 3$ | 3.72 |
| O N448 | Roughing culs | Coarse | $1 / 3$ | 2.16 |
| 50 N 449 | Roughing cuts | Fine | 1/2 | 2.16 |



COASTAL WHEELS, BRUSHES
(c) WIRE WHEELS AND BRUSHES.
(D) For electric drills and grinders that will accept a $1 / 4=$ shaft. Type num. bers ending with "' C " are coarse. Those ending in " $F$ " are fine. "Similar to Figure C. but has $1 / 4$ shank.

| Stock No. | Fig. | Type | Ola. | Mio | Oz. | AC |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 50 N 711 | $\cdots$ | P81F | 2 | 1/0 Shank | 4 | . 65 |
|  | * | P81 | $2^{\circ}$ | 1\%-Sh | 4 | . 59 |
|  | - | P83F | $3^{\circ}$ | han | 6 | . 81 |
| 50 N 709 | * | P83C | 3= | ha | 6 | . 74 |
| 50 N 028 | 0 | 92 C | $2^{\text {- }}$ | ha | 4 | 89 |
|  | D | 92 F | $2^{\circ}$ | hank | 4 | . 99 |
| N 200 | C | PG4F | $4 *$ | 12-Bore | 8 | 89 |
| N 201 | C | P94C | $4{ }^{\circ}$ | 崖 | 8 | . 69 |
| 50 N 202 | C | P96F | $6^{\circ}$ | Bote | 12 | 1.25 |
| 50 N 203 | C | P96C | $6^{*}$ | 1/2 Bore | 12 | 1.03 |

E
MUSLIN BUFF. Quality $6^{\circ}$ muslin buffing wheel and bar of jewelers rouge. Has $1 /{ }^{\prime \prime}$ bore. Use with arbor listed below. Shpg. wt., 4 oz. 50 N 204.

NET . 81

F725 ARBOR. For wire and bulf wheels above. Has $1 / 4{ }^{\prime \prime}$ shank; $1 / 2$ machined, nickel-plated body. Wt., $80 z$. 50 N 206.

NET . 32
5* ASSORTED SANDING DISCS. Bag of six discs. Shpg. wt. 802 . 50 N 207.

NET . 23

## Power Drill and Saw Accessories



## CENTURY DRILL BITS FOR WOOD, PLASTIC, METAL OR MASONRY

## SPECIAL-PURPOSE DRILL BITS

 G 4-PIECE MASONRY DRILL SET. $1 / 4$ ", "/10", $3 /{ }^{\prime \prime}$ and $1 / 2{ }^{\prime \prime}$ drills. All have $1 / 4^{\prime \prime}$ shanks. Carbide tlps for drilling concrete. bricks and plaster. Comes in plastic roll. Shpg. wt., 5 oz.46 N 718. List, $\$ 5.12$
..........NET 2.95
CHROME STEEL DRILL BIT SET. 5 chrome alloy bits for electric drills. For use on aluminum and other solt metals. Sizes, $1 / 6^{\circ}, 3 / 18^{*}, 33^{\circ}, 1 / 14^{\prime \prime}$ and $1 / 2^{\prime \prime}$. All have $1 / 4$ " shanks. Shpg. wt., 1 lb.
46 N 787.
NET 3.69
(H) 6-PC. HIGH-SPEED POWERBIT SET. $36^{\prime \prime}, 1 / 2^{\prime \prime}, \%^{\prime \prime}, 3 / 4^{\prime \prime}, 7 / 6^{\prime \prime}$, and $1^{\prime \prime}$. All have $1 / 4^{\prime \prime}$ shanks. In plastic pouch. Wt., 12 oz . 50 N 350. List, $\$ 8.90$.

NET 5.35

## HI-SPEED POWER DRILLS

For wood, piastlc, thin aluminum sheets, etc. Have $1 / 4 /{ }^{\prime \prime}$ shanks. Wt., 302.

| Stock No. | Slze | EACH | Stock No. | Size | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 50 N 351 | $36^{\circ}$ | . 74 | 50 N 356 |  | . 93 |
| 50 N 352 |  | . 7 | 50 N 357 |  | 96 |
| 50 N 353 | $\%{ }^{\circ}$ | . 89 | $50 \sim 358$ 50 $\sim$ | 1/ | . 96 |
| 50 N 354 |  | . 89 | 50 N 359 |  | 1.00 |

12" BIT EXTENSION. For $1 / 4$ shanks. in. cludes hex key. Shpg. wt., 702.
50 N 360. List, $\$ 2.00$.
NET 1.20

## BLACK MAGIC HI-SPEED DRILLS

13-DRILL SET. Includes 13 drills from $1 / 10^{\circ}$ to $1 / 4^{\prime \prime}$ in $1 / \mathrm{ma}^{"}$ graduations. Packed in Huot Index Drill Case. Every drill is instantly accessible. Case, $43 / 4 \times 2 \times 3 / 4$. Shpg. wt., 9 oz.
46 N 782. List, \$9.77
NET 5.85
(15-DRILL SET. $1 / 10^{\circ}$ to $1 / 2^{\prime \prime}$ in $1 / 32$ nds.
Sizes over $1 / 3$ have $1 / 4$ shanks. Case, $7 \times 4 \times 1 \mathrm{~s} / \mathrm{s}^{\prime}$. Wt., 3 lbs. 46 N 786 . List, $\$ 31.67$

NET 18.95
17-DRILL SET. $1 / 10^{\prime \prime}$ to $1 / /^{\prime \prime}$ in $1 / 64$ ths; to $3 / 6^{\prime \prime}$ in 32 nds. Sizes over $1 / 4$ "have $1 / 4$ " shanks. Huot Index Case, $6 \times 11 / 4 \times 4^{\circ} .2$ lbs.
50 N 967. List. \$19.70.
NET 11.95
60-DRILL SET. Sizes 1 to 60 in handy steel Huot Index Drill Case. Opens like a book for quick selection. Case, $43 / 8 \times 3 \frac{3}{6} \times$ $21 / 4$ ", Shpg. wt., $11 / 4$ lbs.
46 N 717. List. $\$ 39.33$.
NET 23.60
K 10-DRILL SET. Ten drills from $1 / 1{ }^{*}$ to $1 / 2$ with $1 / 4$ diameter shanks on sizes over $1 / 4^{\prime \prime}$. Transparent plastic container is indexed. Shpg. wt. 902.
50 N 968. List, $\$ 12.83$.
NET 7.95

(1)
MECHANICS' LENGTH. High-speed drills $1 / 4$ " $^{\text {" }}$ to $1 / 2 ", 1 / 4^{\prime \prime}$ and larger drills have $1 / 4$ " shanks. Av. wt., $30 z$.

| Stock No. | Size | EACH | Stock No. | Slze | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 49 N 856 | 1/40 | . 22 | 49 N 567 | "14.0" | . 61 |
| 40 N 657 | $40{ }^{2}$ | . 22 | 40 N 688 | $\%^{\circ}$ | .65 |
| 49 N 658 | \%3" | . 23 | 47 NO 02 | Ine | . 89 |
| 40 N 559 | $1 /$. | . 26 | 47 N 027 | "190 | 1.10 |
| 49 N 880 | \% | . 30 | 47 N 028 | 11/10* | 1.33 |
| 49 N 661 | \% $0^{\circ}$ | . 30 | 47 N 029 | 36 | 1.36 |
| 49 N 662 | $1 / n^{\circ}$ | . 35 | 47 N 031 | 19* | 1.83 |
| 49 N 663 | "1/as* | . 38 | 47 N 032 | 160. | 220 |
| 49 N 684 | \%18* | . 44 | 47 N 033 | "190 | 2.70 |
| 49 N 665 | 11/0* | . 50 | 47 No 03 | 4* | 2.74 |
| 49 N 666 | 1/2" | . 56 |  |  | .... |

## LONG-SHANK MASONRY DRILLS

M. TYPE L-56. $18{ }^{\circ}$ carblde-lipped-for $1 / 4{ }^{\circ}$ hole. Wide flute. $11 / 4 \mathrm{lbs}$.
47 N 007. List, $\$ 5.33$.
NET 3.20
TYPE L-56. As above, for $3 / 6^{"}$ hole. 47 N 008. List, \$6.48.

NET 3.89

## RELIABLE SKIL SAW ACCESSORIES

## (N RIP FENCES, CIRCLE CUTTER.

- 50 N 278.17984 Rip Fence. For 536 saw. Wt., 4 oz . List, $\$ 1.95$

NET 1.37
50 N 969. 20271 Rip Fence. For 552 (Type 6-9), 553 (Type 3-6), 554 (Type 3-6). Shpg. wt., 4 oz. List, $\$ 2.50$

NET 1.75
50 N 970. 25174 Rip Fence/Circle Cutter For 524 saw. 4 oz. List, $\$ 1.85$.... NET 1.30
(P) 26099 SAW CARRYING CASE. Dura. ble heavy gauge steel case withstands rough handling. Special brackets hold saw snugly in place-protect it from damage and unnecessary wear while not in use. Brackets also protect extra blades from dulling and bending. For $5 \frac{1}{2}$, $6 \frac{1}{2}$ ", $71 /{ }^{\prime \prime}$ and $81 / 6^{"}$ saws. Wt., 12 Ibs. 50 NX 827 . List, $\$ 14.95$

## Kraeuter Top-Quality Pliers, Cutters and Snips



## JEWELERS' PLIER SETS

- Cushion-Grip Handles
- Machined From Tool Steel TYPE CG90. CG81 diagonal cutters; CG82 end cutters; CG83 chain-nose pliers; CG84 flat-nose pliers; CG85 round-nose, roundjaw pliers. Case, $11 / \mathrm{lbs}$.
46 N 423. 1-5, EA. 14.34 6-Up, EA. 13.00
TYPE CG89. One each: CG84 flat-nose pliers: CG81 diagonal cutting pliers; CG83 chain-nose pliers. Zip case. I Ib.
46 N 435. 1-5, EA. 9.19 6-Up, EA. 8.34


Forged steel; polished heads. "CG" prefix-vinyl cushlon-grip handles. Av. wt., 1 lo.

| Stock No. | Fig. | Type | Description | 1-5, EA. | 6-Un, EA |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 50 \mathrm{~N} 110 \\ & 50 \mathrm{~N} 433 \end{aligned}$ | A | CCG4625 | 5. Needle. Point Diagonal Cutters with Spring | 3.45 | $\frac{6.13}{3.13}$ |
| 46 N 402 | 8 | CG4501 | ${ }_{5}$ "Narrow Head Diaponat "Oblique" Cutters | 2.17 | 1.96 |
| 46 N 403 | 8 | $\mathrm{CG4501}$ | $6^{-}$Narrow Head Olagonal "Oblique', Cutters | 2.35 | 2.14 |
| 46 N 414 | ${ }^{8}$ | CG2612 | ${ }^{5} \mathrm{\%}$ - Wire.Strigplng Diag. Cutlers (with spring) | 2.72 3.39 | 2.47 |
| 50 N 113 |  | CG5827 | $5 \%^{*}$ Resistor Terminal End Cutting Pliers | 3.63 | 3.08 3.30 |
| 49 N 023 | 0 | $056$ | 6. "Ni-Brite" Combinallon Pliers | . 62 | . 57 |
| 49 N 025 | D | 156 | $10^{*}$ Pliers as Combination Pllers | . 22 | . 75 |
| 50 N 330 | E | CG1641 | 5* Short. Chatn Needle.Nose Pluers (with cutter) | 1.44 | 1.31 |
| 46 N 401 | E | CG1661 | $6^{\text {- }}$ Long-Chain Needle- Nose Pliers (wlth cutter) | 2.46 2.68 | 2.24 2.44 |
| $46 \mathrm{~N}+04$ |  | CG1671 | $6{ }^{\text {6 }}$ Lono.Chain Needle-Nose Pliers (no cutter) | 2.09 |  |
| 50 N 331 | E | CG1781 | $7{ }^{7}$ Lono. Chain Neede - Nose Pliers (with cutter) | 3.23 | 2.83 |
| ${ }_{46} \mathrm{~N}$ O52 | F | CCG141 | $6^{\text {6 }}$. Radio and Needie Nose Pliers (no cutter) | 2.30 | 2.17 |
| 50 N 112 | G | CG1650 | $6^{-}$- Lonio and End. Cuting Pliers (with sorin | 4.48 | 4.00 |
| 46 N 113 | H | CG1741 | 6 Long Flat - Nose Pliers (no cutter) | 3.56 8.28 | 3.23 2.05 |
| 50 N 332 | $J$ | -CG1801 | $6^{*}$ Linemen's Side Cutting Pliers | 3.12 | $\begin{aligned} & 2,05 \\ & 2.84 \end{aligned}$ |
|  |  | CG1001 | 8\%- Linemen's Side Cuting Pliers | 3.79 | 3.43 |
| 46 N 400 | , | CG1830 | 6\%. Electrician's Side Cutting Pliers | 2.43 | 2.20 |
| 49 <br> 48017 <br> 6 | J | CG1830 CG4610 | $8^{8 \prime}$ Electrician's Side Cutting Pliers | 3.06 | 2.77 |
| 50 N 118 | L | CG71 | $8^{\circ}$. Long. Reach Shori. Jaw Nose Cutting $P$ | ${ }^{2.62}$ | 2.38 |
| 49 N 012 | - | CG61 | $8^{\circ}$ Long.Reach Snort-Jaw Nose Pllers (no cutter) | 3.66 2.87 | 3.32 2.60 |



Forged steel; vinyl cushion-grip handles and full polished heads. Av. shpg. wt., 1 lb .

## $41 / 2{ }^{\prime \prime}$ JEWELERS' PLIERS

Fine precision pliers whth resilient vinyl cushlon grips-will not crack or peel. Smooth pollished, high-quality tool steel. Type CG81 is for close cutting of small, soft wires. CG82 is for end cutting as in printed circuit assemblies. CG83, 84 and 85 have smooth jaws. Av. wt., 502.

Slock No. Fie Type Description $\mid 1$ 1-5, EA. |6-Up, EA 46 N 418 M Casi Diae Cuttine 2.50 2.27 \begin{tabular}{llll|l|l}
50 N 333 \& N \& CG82 \& End Cutling \& 2.91 \& 2.67 <br>
46 N 415 \& P \& CG83 \& Chain-Mose \& 2.35 \& 2.13

 

46 N 415 \& P \& CG83 \& Chain- Nose \& 2.35 \& 2.13 <br>
46 N 416 \& S \& CG84 \& Ilat.Mose \& 2.35 \& 2.13
\end{tabular}




| Stock No. | Fig. | Type | Descriplion | 1-5, EA. | 6-UD, EA |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $49 \mathrm{~N} 009$ | T | CG1631 | $5 \%^{\prime \prime}$ Curved Needle or Snipe-Nose Pliers (no cutter) | 2.87 | 2.60 |
| 49 N 010 | W | CG1821 | $6^{\circ}$ Long. Needle or Snipe Nose Pliers (no cutter) | 2.50 | 2.27 |
| $49 \mathrm{No14}$ | $\stackrel{\text { r }}{ }$ | CCG160 | $7^{5}$ Long. Nose Electronic Pliers--1/ns Tio (with spring) | 3.12 | 2.83 |
| 49 N 015 | Z | CG3850 |  | 2.61 | 2.37 |
| 49 N 016 | $z$ | CG3850 | 8- End Cutting Nippers | 2.21 | 2.64 |
| 49 N 018 | AA | CG4206 | $6^{\circ}$ Hard Whre Diagonal Cutling Pll |  | 3.40 |
| 49 N 019 | B8 | CG4502 | 7- Dlagonal Cutting Pilers-Full Fashioned Handle | 3.53 | 3.20 |
| 49 N 020 | CC | OG5601 | 5" Diagonal Cutting NeedlewPolnt Plters | 3.15 3.12 | 2. ${ }^{\text {c }}$ |
| 49 N 021 | DD | CCG101 | 4)" Solt Wire Needle-Polnt Diagonal Cutling Electronic Pliess | 3.12 | 2.83 |
| 49 N 022 | EE | CG643 | 5 - Blue Tamper Finish Ignition Pllers |  |  |
| 49 N 036 | FF | CG3601 | $6^{-}$Short-Nose Diagonal Cutting Pilers | 1.65 3.05 | 1.50 2.76 |

G6 CG710 SLIP-JOINT PLIERS. 5-pcs. $1 / 16^{\circ \prime}-1 \%^{\prime \prime}$. Cushion grips. $10^{\prime \prime}$ long. 10 oz .

## 46 N 421

1-5, EACH 2.57 6-Up, EACH 2.33
49 N 026. CG707. Above in $61 / 2$ length. Wt., 7 oz...1-5, EACH 2.79 $\quad 6$-Up, EACH 2.53
HH COMPOUND LEVERAGE CGS3 AVIATION SNIPS. Cuts 18 -gauge metal. Ser-

50 Nated , drop forged blades. Cushion-grips. Stralght $11 / 2^{\prime \prime}$ cut. Length, $10^{\prime \prime}, 1 \mathrm{lb}$.
40 N 334. © CGL1. For left cut
49 N 028. CGR2. For right cut
1-5, EACH 3.23 6-UD, EACH 2.94
1-5, EACH 3.23 6-Up, EACH 2.94
1-5, EACH 3.23 6-Up, EACH 2.94

## Knight Precision Hand Tools

Knight hand tools-Allied's answer to your demand for quality tools at lowest cost. Alt are made by a leading domestic manufacturer to meet Allied's rigid standards. Indus trial plants, shops and schools are invited to take advantage of quantity prices.


## QUALITY HAND TOOLS -INDIVIDUALLY TESTED FOR PERFORMANCE

- One Year Guarantee
- Durable High-Grade Tool Steel
- Made by a Leading Manufacturer

Popular pliers. snips and nippers listed at right are used in service shops. labs and production lines. Rigid quality control assures reliability. Drop forged from highgrade tool steel and carefully heat treated for optimum temper. Resist abrasion and wear-built for years of service. Precision machined, fitted and adjusted for smooth action and maximum ease of handling. All have easy-on-the-hand plastic cushion grips except tin snips Av. wt.. 1002.


## JEWELERS' PLIERS

- One Year Guarantee
- Comfortable Plastic Cushion Grips
- Selected Tool Steel for Strength Precision pliers made by a leading mannfacture for work on miniaturized assem. blies and delicate mechanisms. Feature plastic cushion grips for fatigue -free use.

Drop forged from high.quality tool steelheat treated for durability. Accurately machines for smooth action. *Chain, flat and round-nose pliers have smooth jaws with no cutters. Chain and flat-nose have $11 / 32^{2}$ inside length; round-nose has $\%$ " Chain and round-nose taper to $1 / 2^{2}{ }^{-2}$ point: flat-nose to $1 / 32^{\prime 2}$. Av. wt., 502



## 15.PC. NUT-SCREWDRIVERKIT

Roll pack holds: molded plastic handle: $6^{\circ}$ extension; 7 nutdrivers- $1 / 16^{\circ}, 1 / 6^{\circ}, 3 / 10^{\circ}$. "/ss". 3/". $1 / 1 \mathrm{~m}^{\prime \prime}$, and $1 / 2$ "; No. 1 and No. 2 Phillips, and $1 / 0^{-1}$. $1 / 0^{4}$. $1 / 4$ slotted screwdrivers. Precision ground blades for accurate fit. WI., $11 / 2$ lbs.

## 50 N 788

ONLY 7.95

## 8-PIECE NUTDRIVER KIT

 and $1 / 2$ in rack. Molded, color-coded pastic handles. Nickel-chrome plated drivers. Steel shafts are $6 \% / \%^{\prime \prime}$, except $6 \%$ on $7 / \%^{*}$ and $1 / 2$ " drivers. $11 / \mathrm{lbs}$.
50 N 787
ONLY 5.75


## SQUARE BLADE SCREWDRIVERS

[2] Extra blade strength for heavy-duty use. Chrome vanadium steel shaft con thins about $25 \%$ more steel than conven. tional round bladed screwdrivers.


## REGULAR STUBBY

Rugged Amber colored handle Chrome vanadium steel $1 / 4 \times 11 / 4$ shaft. Length is only $3^{*}$. Shag. wt., 2 oz. 49 N 048 ...1-5, EA. 51 6-Up, EA. 45

## PHILLIPS STUBBY

BBFor close quarters. Chrome vanadium steel blades. Amber handles. No. 1 has $1 / 16 \times 11 /{ }^{\prime \prime}$ shaft; $3^{\prime \prime}$ length. No. 2 has $1 / 6 \times 13 / 4$ shaft; $37 /{ }^{3}$ length. Wt. 2 oz .
49 N 049. No. 1.1-5, EA. . 58 6-Up, EA. . 52 49 N 051. No. 2. 1-5, EA. . 60 6-Up. EA. . 53

## Famous Xcelite Quality Screwdrivers and Nutdrivers



## 99SM SERVICE MASTER KIT

Meets almost every radio－TV servicing need．Set contains：long－nose pliers；diag onal pliers； $6^{* \prime}$ adjustable wrench；nine regular nutdrivers in sizes from $3 / 5^{\circ}$ through $1 / 2^{\prime \prime} ; 1 / 4^{\prime \prime}$ stubby nutdriver：5／16＂ stubby nutdriver； $3^{*}$ ．stubby nutdriver； 1／6＂slotted screwdriver；$\% / 2^{\circ}$ slotted screwdriver；No． 1 Phillips screwdriver： $110 "-1 / 0^{\prime \prime}$ reamer； $1 / 4-11 / 2$＂reamer； $8^{\prime \prime}$ exten－ sion；repular handie and stubby handle． Roll－up kit with pockets． $23 / 4$ lbs．
43 N 884．List，$\$ 38.15$.
NET 22.89
49 N 006．99－30 Allen Hex Screwdriver Blade Set．Not illus． $4^{*}$ shafts fit handles of 99SM and 99PR sets．Sizes，1／5．5／6，3／2， 1／6．542．1／6＂． 602.





HEX NUTDRIVER SETS

## 

## 99PR NUT \＆SCREWDRIVER SET

Versatile，chrome－plated 13 －piece set in durable，plastic roll－up kit．｜ncludes $3 / 16^{\circ}$ ， $7 / 2^{\prime \prime} .1 / 4^{\prime \prime}, 9 / 2^{\circ}$ ， $5 / 66^{\prime \prime}, 11 / 3{ }^{\prime \prime}, 3 / 6^{\prime \prime}, 7 / 6^{\circ}{ }^{\circ}$ and $1 / 2^{\circ}$ nut drivers； 2 combination screwdrivers （ $3 / 16^{\prime \prime}$ and $9 / 3{ }^{\prime \prime}$ standard，No． 1 and No． 2 Phillips）；plastic handle．Wt．， 2 lbs．
45 N 738．List，\＄14．45
NET 8.67
45 N 787．Model $99 \times 108^{\circ}$ Extension．For 99 series． 5 oz ．List，$\$ 1.45$

NET 87c

## 127 NUTDRIVER SET

Sockets are deep enough to handie two nuts．Depth of shaft hole， $11 / 4^{\prime \prime}$ ．Includes 7 wrenches，sizes $3 / 0^{*}$ to $3 / 0^{\prime \prime}$ in $1 / z^{\prime \prime}$ steps． Blades are nickel plated．Metal holder． $71 / 8 \times 71 / 4 \times 11 / 4$ ．Shpg．wt．， $21 / 4$ 1bs． 45 N 735．List，$\$ 10.75$ ．

NET 6.45

## 137 NUTDRIVER SET

7 color－coded nutdrivers with self－support－ ing rack．Colors and sizes：black－ $3 / 1 \mathbf{w}^{\prime \prime}$ ， red－ $1 / 44^{\prime \prime}$ ，yellow－5／16＂，green－ $11 / 2^{\prime \prime}$ ，blue $-3 / 6^{\prime \prime}$ ，red－ $1 / 2^{\prime \prime}$ ，and brown－$\% 6^{\circ}$ ．Polished steel shanks．The $1 / 2 "$ and $\% /$＂＂d drivers have $^{\prime \prime}$ hollow shafts．Shpg．wt．， 3 lbs．
45 N 734．List，\＄11．95
NET 7.17

## 17 NUTDRIVER SET

Seven nutdrivers in commonly used sizes for radio－TV work．Sizes and colors：black － $3 / / 4 "^{\prime \prime}$ ，brown－7／2＂，red－1／4＂，orange－ ＂$/ 2$＂，amber－ $5 / 6^{\prime \prime}$ ，green－ $11 / 3^{2}$ and blue－ $3 /{ }^{*}$ ．With metal rack．Wt．， $2 \frac{1}{2}$ lbs． 45 N 733．List，$\$ 10.50$ ．

NET 6.30 MODEL 147 NUTDRIVER SET．As above， but with hollow shafts．Wt．， 2 lbs．
47 N 092．List，\＄13．30
．NET 7.98

（A）ROUND SHAFT SCREWDRIVERS．Winged design prevents furning of blade in handle．In lengths from $41_{4}^{\circ}$ to $12^{\prime \prime}$ ．

| Stock No． |  | $\begin{aligned} & \text { Mrr's } \\ & \text { Type } \end{aligned}$ | Shaft Size |  | Overall <br> Length | Shpg． We． | Lise | $\begin{array}{\|l\|} \text { NET } \\ \text { EACH } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Dla． | Length |  |  |  |  |
| 43 | N 845 |  | R－182 | \％＂ | ${ }^{\circ}$ | $41 / 8$ | 3 oz ． | \＄． 55 | ． 33 |
| 43 | N 846 | R－184 | \％＂ | ${ }^{\circ}$ | 61／2＂ | 3 oz ． | ． 65 | ． 39 |
| 43 | N 847 | R－186 |  | 6 | $81 /{ }^{\circ}$ | 4 oz ． | ． 70 | ． 42 |
| 43 | N 848 | R－188 | \％＂ | 8 | 101／2＊ | 4 oz ． | 90 | ． 54 |
| 45 | N 795 | R－144 | 1／8． | $4{ }^{\circ}$ | $8{ }^{\circ}$ |  |  |  |
| 45 | N 796 | R－146 | \％ | $6^{\circ}$ | 10 | 6 oz ． | 1.40 | ． 84 |
| 45 | N 797 | R－148 | 1\％＊ | $8 *$ | $12^{*}$ | 7 oz． | 1.50 | ． 90 |

［B］SET－SCREW TYPE SCREWDRIVERS．Narrow－blade screw drivers fit standard set－screws．Have pocket clips

［C］SQUARE－SHAFT SCREWDRIVERS．Avallable in a variety of lengths from $7 \%{ }^{*}$ to $18^{\prime \prime}$ ．

| Stock No． |  | Shaft Size |  | OverallLength | Shpg． We． | List | ENET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Type | Dia． | Length |  |  |  |  |
| 43 N 829 | S－3164 | $3{ }^{\circ}$ | $4^{\circ}$ | $7{ }^{3}$ |  | \＄1．15 |  |
| 43 N 832 | S－144 | $1 / 40$ | 4 － |  | 6 oz ． | 1.45 | 7 |
| 43 N 833 | S－146 | 14 | $6^{\circ}$ | $10^{\circ}$ | 6 oz ． | 1.55 | 寿 |
| 43 N 834 | S－148 | $1 /{ }^{\circ}$ | $8{ }^{8}$ | $12^{\circ}$ | 7 oz | 1.70 |  |
| 43 N 837 | S－388 |  | $8^{\prime \prime}$ | 1210 | 1 ib ． | 2.30 |  |
| 43 N 838 | S－3812 | $\%$ | $12^{\circ}$ | $18^{\circ}$ | $11 / 4 \mathrm{ib}$ ． | 3.30 | 1.98 |

［0］PHILLIPS SCREWDRIVERS．\＃Stubby type．tWith pocket clip．

（E）CLUTCH HEAD SCREWDRIVERS．Fit clutch head screws used in sheet metal assemblies，electronic gear，etc．

$\square$
STUBBY SCREWDRIVER． $1 / 4$＊square shaft，polished blade． Ideal for work in cramped space．


G）COMBINATION－BLADE SCREWDRIVERS．With handle．

| $\begin{gathered} \text { Stock } \\ \text { No. } \end{gathered}$ | Mer＇s <br> Typo |  | Blad． Combination | Size | Shpg． We． | List | EA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 45 N74 | CR1 | \％＂ | Regular 11 Phillipe | 7 |  |  |  |
| 45 N 747 | CR2 |  | Regular 12 Phithios | $7{ }^{\circ}$ | 5 oz． | 2.30 | 1.38 |
| 45 N748 | CR3 | 8 | Rexular 13 Phillipe | $7{ }^{\circ}$ | 0 oz． | 2.30 |  |



## HEX NUTDRIVERS FOR FASTER SERVICING

Fig．K has hollow shaft for tightening nuts on long screws．Fig．$J$ is stubby type for limited space．Fig．H is pocket－style nut

| Slock Mo． | $\begin{aligned} & \text { Mris } \\ & \text { Type } \end{aligned}$ | Fig． | $\begin{aligned} & \text { NuI } \\ & \text { Size } \end{aligned}$ | Handie | Length | $\begin{aligned} & \mathrm{MET} \\ & \mathrm{EACH} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 45 N 324 | P－3 | H | 3 | Amber | 34 | 48 |
| 45 N 325 | P－4 | H | 年 | Red | 3\％ | 8 |
| $45 N 326$ | P－5 | H | ＂加＂ | Amber | 3\％＇ | 48 |
| $50 \mathrm{Ni41}$ | P． | H H | 1 | Red | 3\％ | 8 |
| 50 N 142 | P－10 | H | 1／60 | Amber | 3\％ | 48 |
| 50 N 143 | P－12 | H | K＂ | Blue | $3 \%^{\prime \prime}$ | 48 |
| 45 N 857 | 5－8 | 1 | ¢ ${ }^{\circ}$ | Red | 31／ | 63 |
| 45 N 858 | S－10 | J | $5 / 4{ }^{\circ}$ | Amber | 3\％ | 63 |
| 45 N 859 | S－12 | J | 4 | Bive | 3\％${ }^{\text {c }}$ | 63 |
| 49 N 007 | HS． 6 | $k$ | 1／80． | Blach | $6^{\circ}$ | 3 |

driver．Type HS－18 fits $\%_{6}$＂volume control nuts．Shpg．wt．， 6 oz．，except Models S－B， $\mathrm{S}-10, \mathrm{~S}-12$ ，wh ich are 5 oz ．

| $\begin{gathered} \text { Stoch } \\ \text { Mo. } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Mfr's } \\ & \text { Typs } \end{aligned}$ | Fi | $\begin{aligned} & \text { Not } \\ & \text { Sige } \end{aligned}$ | Handie | Congth | $\mathrm{EACH}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9 N | HS－7 | K | 7／9＊ |  |  | ． 93 |
| N | HS－8 | ${ }^{k}$ |  |  | 6 |  |
| 7N093 | HS－9 | K | \％ | Oranke | 65 |  |
| 45 N 780 | H3－10 | K |  | Amber |  |  |
| 45 N 781 | HS－11 | $k$ | ， | Green | 6. | 93 |
| 45 N 782 | HS | ${ }^{*}$ |  | 8lue | $6^{\circ}$ | ． 93 |
| 5 N | HS． 14 | K |  | Brow |  | 1.0 |
| 5 N 784 | HS－16 | ${ }^{k}$ |  |  | r | ． 1 |
| SN 785 | HS－18 | $k$ |  | Orange | r | 1.1 |
| SN 786 |  | K |  | Amber |  | ． |

# Assorted Hardware for Servicemen and Builders <br> (4) <br> B <br> (a) 20 O <br> (1) 

## G-C ASSORTED RADIO AND TV HARDWARE

An excellent selection of high-quality hardware for radio-TV construction and repair. Available in 35 c quantities packed in handy, reusable, hinged plastic boxes or in lots of 100 and
ROUND HEAD SCREWS. For electronic repair and construction jobs. Plated steel. Shpa. wts.: 3 oz .; 14 oz .; and 5 lbs .

| Size | 35c contalner |  | Part No. | 100-Let Prg. |  |  | 1000-Loz Pke. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Cusn |  |  | No. | NET | No. | NET |
| 4-36x ${ }^{1 / 4}$ | N 502 | 40 | 01005 |  | N 700 | . 47 | 4 N 742 | 3.79 |
| 4-36x1/ | 44 N 503 | 35 | 6006 | 42 | N 701 | . 51 | N 745 | 4.10 |
| 4-36x ${ }^{\text {/ }}$, | 44 N 504 | 35 | 6097 | 42 | N 702 | . 60 | N 748 | 4.76 |
| $6-32 \times 1 / 4$ | 44 N 505 | 40 | 6006 | 42 | N703 | . 52 | $144 \text { N } 704$ | 4.16 |
| $6-32 \times 1 /$ | 44 N 506 | 30 | 6009 | 42 | N 704 | . 61 | 14 N 712 | 4.8 |
| $6-32 \mathrm{x} / 4=$ | 44 N 507 | 30 | 6010 | 42 | N 705 | . 71 | 44 N 717 | 5.68 |
| 6-32 ${ }^{1}$ ' | 44 N 508 | 30 | 6011 | 42 | N 706 | .82 | 44 N 722 | 6.53 |
| 6-32x1 $1 /$ | 44 N 509 | 30 | 7141 | 42 | N 707 | . 90 | 44 N 727 | 7.83 |
| 32x | 44 N518 | 30 | 6013 | 42 | N 708 | . 69 | 44 N 739 | 5.43 |
| $8-32 x$ \% | 44 N 519 | 25 | 6014 | 42 | N 709 | .73 | 14 N 754 | 5.8 |
| $8.32 \times 1 /{ }^{\prime}$ | 44 N 529 | 2.5 | 6015 | 42 | N 710 | . 79 | 44 N 757 | 6. |
| $8.32 \times 1 / 4=$ | N 535 | 25 | 6016 | 42 | N711 | . 91 | 44 N 762 | . 27 |
| 8-32 $\mathrm{Il}^{\prime \prime}$ | 44 N 546 | 20 | 6017 | 42 | N712 | 1.0 | 4 N 769 | 2 |
| 10.3221/ | 44 N 548 | 20 | 6020 | 42 | N 713 | 93 | 44 N 778 | 7.48 |
| 10.32x ${ }^{\text {/ }}$ | 44 N 549 | 20 | 6021 | 42 | N7t4 | . 10 | 44 N 781 | 8.75 |
| $10.32 \times 1 *$ | 44 N 553 | 17 | 6022 | 42 | N715 | . 22 | 144 N784 | 9.84 |

BSELF-TAPPING SCREWS. Flat-slotted type. Ideal for panel and rack mounting. Plated steel. Hex head. Shpg. wts.: 401 .i 1202 ., and $4 \frac{1}{2} \mathrm{lbs}$.

[C] HEX NUTS. Plated steel. Shpg. wts.: 4 0z.: 80 z.: 3 lbs .

| 4.36x $/ 1{ }^{\circ}$ | 30 |  | 44 N 907 | 8 |
| :---: | :---: | :---: | :---: | :---: |
| 6.32x |  | 7233 42 N 730 | 7244 |  |
| 0.323 ${ }^{10}$ | 44 N 58530 | 604442 N 7 | 67 |  |
| \%.32x ${ }^{6.32} \times$ | 44 N 586 <br> N 587  | 6042 6043 42 42 | 2 | 3 |

D BINDING HEAD MACHINE SCREWS. Plated. 4 oz.i 7 oz.; 21/2 lbs.

| 6-32 ${ }^{1 / 4}{ }^{\circ}$ | $144 \times 576$ | 35 | 71 | 2 N723 | . 52 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6-32x | 44 N 577 | 35 | 7153 | 42 N 724 |  |  |  |  |  | 1 |
| 32x |  |  | 7118 | 42 N 725 | . 63 |  |  |  |  |  |
| 32x |  |  | 7119 | 42 N 726 | . 71 |  | N |  |  |  |
| -32x |  |  | 7120 | 42 N 727 | . 77 |  | N |  |  | 6.1 |

1000. Nuts, screws and washers are nickel-plated. *G-C part number applies to 100 and 1000 lot packages only. Stock up now at iowest prices.
(E INTERNAL STAR LOCKWASHERS. WIs: $202 . ; 402 . ; 11 / 4 \mathrm{lbs}$.


SOLDER LUGS. Sturdy, tinned units. Accommodate the screw numbers given below; No. 8 holes alsotake No. 6 screws. "Part no. for 100, and 1000 lot pkgs. only. Shpg. wts.: 2 oz.; 4 oz.; 1 lb.
 - 8 Fig m 44 N $608 \quad 3017451$ R2 N 7501.8544 N 6496.85

N RUBBER GROMMETS. Soft, black stock. Sizes shown are mtg. hole required and inner dia., respectively. Shpg. wts.: 2 oz.; 8 oz.; 4 lbs


P RUBBER FEET. Take screws, nails, etc. For wood or metal cabinets. Shpg. wts.: 3 0z.; 9 0z.i; $41 / 4 \mathrm{lbs}$.



## Selected High-Quality Hand Tools



X-ACTO NO. 1 KNIFE. For light to medium work. $5^{\circ}$ aluminum handle; $5 / 16^{"}$ dia. With No. 11, blade. Shpg, wt., 3 oz .
50 N 608.
NET . 53
NO. 11 BLADES. 5 per pkg. 2 oz.
50 N 610......... Per Package of 5.53
NO. 10 BLADES. 5 per pkg. $20 z$
50 N 609.
Per Package of 5.53
ULSTER K-29W ELECTRICIANS' KNIFE. Two $2 \frac{1}{2}$ blades: screwdriver-wirescraper; spear shape. Overall $33 /{ }^{*}$. 5 oz

## 45 N 843.

NET 1.49
MILLERS FALLS UTILITY KNIFE. Cuts veneer, etc. $5^{\prime \prime}$ long. 5 blades. $1 / 2 \mathrm{lb}$.
46 N 308.
NET .75
50 N 171. Pkg. of 5 Blades. 2 oz. NET . 37
A) MILLERS FALLS 170 AUTOMATIC DRILL. Quick-actlon chuck. Handie can store 12 bits. Includes $5 / 64^{*}, 7 / 50^{\circ}, 7 / 60^{\circ}$ and " $1 / 00^{\circ}$ d drills. $101 /{ }^{\circ}$ long. $3 / 1 \mathrm{lb}$.
46 N 307. List, $\$ 4.25$
NET 3.19
MILLERS FALLS 1425 HAND DRILL Double pinion gears. 3 -jaw chuck takes drills to $1 / 9^{\circ}$. Nickel-plated frame, chuck Handie stores drills. 2 lbs.
50 N 174. List, $\$ 5.50$
NET 3.99
MILLERS FALLS 29 SPIRAL RATCHET SCREWDRIVER. $1 / 4{ }^{\prime \prime}$ bit; steal blade. $10^{\circ}$ long. Wt., $1 / 2 \mathrm{lb}$.
50 N 189. List, $\$ 3.50$.
NET 2.63
MILLERS FALLS 10 AWL. $23 / 4$ " steel blade. 4 $^{7 / 6}$ long. 3 oz .
50 N 190. List, 45 c .
NET . 30

E G-H 79 CENTER PUNCH. Pressure on handle triggers spring which drives punch. Tension adjusts for light or heavy punch. $5^{\prime \prime} \times 1 / 2^{*}$ dia. 5 oz.
46 N 195.
NET 3.10
46 N 196. Exira Polnt
NET . 44
F G-H 806 CENTER PUNCH. For hardware with countersunk mounting holes. Tap pin and work is marked. 2 oz . 46 N 218.

NET. 38
G SKIL "PERMA-GRIT" FILES. Tung-sten-carbide abrasive. 1 coarse, 1 fine size. $14^{\prime \prime}$ overall. Wt. 8 oz .

| Stock No. | Typa | Deseription | EACH |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & 50 \mathrm{~N} 062 \\ & 50 \mathrm{~N} 063 \\ & 50 \mathrm{~N} 064 \end{aligned}$ | $\begin{aligned} & 18730 \\ & 19859 \\ & 19660 \end{aligned}$ | Fiat File Contour, Coarse Comtour, Fine | 7 |


(1) VLCHEK HM-16 SOFT-FACE HAMMER. Plastic-face. Steel head, hickory handle. Length, $123 / 4^{-} 1 \mathrm{lb}$.
50 N 161
NET 2.73
J VLCHEK X-164 BALL PEIN HAMMER. Drop forged; black baked enamel Hickory handie. $14^{\circ}$ long. $11 / 2$ lbs.
50 N 577.
NET 1.33
(K) GREAT NECK R-16C CLAW HAMMER. 1-piece steel construction; rub ber-cushioned handle. $13^{-}$long. $11 / 2$ lbs. 45 N 848.

NET 3.53
(L) VLCHEK X-167A NAIL HAMMER. Octagon neck, handle; claw back. Black baked enamel. $13^{*}$ long. $11 / 2 \mathrm{lbs}$.
50 N 576
NET 1.42
(M) PERBER HACK SAW. Adjusts for 10 . $12^{2}$ blades. $5 / 3^{*}$ tubular steel frame. With $10^{\prime \prime}$ blade. Wt., $1 / 2 / 2 \mathrm{lbs}$.
47 N 009.
NET 1.49
N
FORSBERG V-35 4-WAY KEYHOLE HACKSAW. $71 / 2^{*}$ blade. 6 oz.
46 N 341.
NET . 34
EXTRA BLADE. Shpg. wt., 2 oz.
46 N 342.
NET . 14
P) COPING SAW. Hardwood, lacquered handle. Ratchet locks blade. With $61 / 2^{\circ}$ blade. Throat depth, $41 / 4.43 / 4 \mathrm{lbs}$.
45 N 878.
NET .45
EXTRA BLADES. 2 per pkg. 3 oz.
45 N 876.
.Per Pkg. of 2. . 10
(R)

UTICA 91 ADJUSTABLE WRENCHES.
Drop forged alloy steel. Chrome finished heads. "Tip thickness.

| Stock No. | Thicknes: | Six. | $\begin{aligned} & \text { JAW } \\ & \text { Opon }^{2} \end{aligned}$ | Shpo. We. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 46 N 481 | $10^{\circ}$ | 4" | 1/2* | 2 oz . | 1.93 |
| 46 N 482 46 N 483 |  |  |  |  |  |
| 46 N 483 |  | $10^{8}$ |  | 8 oz . | 2.22 |
| 46 N 485 | $1{ }^{12}$ | $12^{\circ}$ | $1 \%$ |  | 2.78 4.10 |DIAMOND DB-76 ADJUSTABLE WRENCH. $6^{\circ}$ double end- $1 / 2^{\prime \prime}\left(1^{\prime \prime}\right.$ at tip) and $3 / 4$ ( $7 / \mathrm{K}^{\prime \prime}$ at tip) jaw capacitles. Drop forged tool steel. 6 oz. 45 N 770.

NET 2.74
T TRU-CUT 10-DC LOCK WRENCH. Up to 1000 lbs. pressure. Fingertip release. Opens to $1 \frac{1}{2}, 10^{\prime \prime}$ long. $1 / 1 / 4$ lbs. 46 N 434.

NET 1.72
(W) MILLERS FALLS 1434 CHISEL SET. 4
wood chisels have high-carbon steel blades; $31 / 4$ " plastic handles. $1 / 4^{\prime \prime}, 1 / 2^{\prime \prime}, 3 / 4$ ", $1^{\prime \prime}$ blade widths. Overall, $6 \%{ }^{\%}$. With case. Shpg. wt., $1 / \frac{1}{2} \mathrm{lbs}$.
50 N 217. List, \$7.25
NET 5.44
X. KNEISLEY MINIA TURE KS-1115 DRILL SET. 20 drills from No. 61 (.039") to No. 80 (.0135"). Highest-grade carbon steel. 4•jaw chuck with $1 / 0$ shank. Transparent lucite case. 6 oz .
46 N 799.
NET 6.29
MASTER HAND REAMER. $1 / 0^{\circ}$ tip. Plastic handle. 8 long. 6 oz 46 N 244.

NET . 88
(7) HENRY HANSON 120 HAND REAM-

ER. $1 /{ }^{*}$ " tip, $51 / 2$ " long. 9 oz.
46 N 243.
NET 1.19
VLCHEK X2567 OPEN-END WRENCH SET. 5 wrenches- 10 openings: $3 / 6^{\prime \prime}-1 / "^{\prime \prime} .3 / 4^{\prime \prime}$ and $7 / 6^{\prime \prime} ; 1 / 2^{\prime \prime}$ and $2 / 6^{* \prime}$; $19 / 32^{\prime \prime}$ and $11 / 16^{\circ} ; 5 / /^{\prime \prime}$ and $3 / 4^{*} ; 11 / 16^{\prime \prime}$ and $7 / 0^{\circ}$. Chrome plated. $11 / 4$ Ibs.
46 N 266.
NET 1.79
VLCHEK X 3412 OPEN AND BOX-END WRENCH SET. (Not illus.) 5 wrenches-
 and $3 / 8{ }^{\prime \prime}$. Chrome plated. $3 / 4 \mathrm{ib}$.
50 N 120.
NET 2.10
BB VLCHEK 3256 PUNCH AND CHISEL
SET. High-carbon tool steel. Contains $1_{2}{ }^{\circ}$ and $\%^{\prime \prime}$ edge chisels; $1 /{ }^{\prime \prime}$ and $1^{\prime \prime}$ solid punches; $1 / 8$ " center punch. Brightly plated. Plastic pouch. $3 / 4 \mathrm{lb}$.
50 N 125.

# Time-Saving Workshop Tools 


(B)

GREENLEE CHASSIS PUNCHES

(D)

(6)


RATCHET KNOCKOUT PUNCH
DRIVER. Lightweight punch driver is 6 to 8 times faster than wrench methodl For use with standard punches $12^{\prime \prime}$ to $3^{\circ}$ and 730 punches $11 / 3^{\circ}$ and larger. Fast cutting action in 10 -gauge or lighter material. includes knockout driver assembly: leverage handle; ratchet handie; 3 adapter screws for $11^{\circ}$ to $3^{\prime \prime}$ punches and round punches $11 / 16^{\circ}$ to $225 / 2^{\circ}$. In metal carrying case. Less punches. 13 lbs .
47 N 017. $\$ 5$ Monthly.
NET 48.51
730 ROUND PUNCHES. For sockets, controls, panel lights, etc. Cut through sheet metal, bakelite, hard rubber, etc. Cut through metals up to 16 -gauge thickness. Operate with ordinary wrench-no reaming or filing is necessary. Meter cutout. Av. shpg. wt., $1 / 2 \mathrm{lbs}$.

| Stook No. | Hole Sixe | $\begin{aligned} & \text { Lead } \\ & \text { Size } \end{aligned}$ | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 46 N 169 | $1{ }^{1 / 2}$ | $1 / 8$ | 2.29 |
| 46 N 177 | \% | 1/4. | 2.29 |
| $47 \mathrm{NOI4}$ | 御 | 1/4. | 2.29 |
| 46 N 000 | 31/4 ${ }^{3 / 4}$ | 10, | 2.29 2.29 |
| 46 N 001 | 12, | $1 /{ }^{\circ}$ |  |
| 46 N 171 | $10^{\prime \prime}$ | \% | 2.29 |
| $47 . N 015$ | \% 10 | ${ }^{\circ}$ | 2.51 |
| 46 N 172 | $1 \cdot$ | \%" | 2.51 |
| 46 N 178 | 114* | 120 | 2.65 |
| 46 M 173 | 11/0 | \% ${ }^{\circ}$ | 2.65 |
| 46 N 179 | $1{ }^{10}$ | ${ }^{\circ}$ | 2.65 |
| 461N 174 | $1 \%$ |  | 2.65 |
| 46 N $17{ }^{46}$ | $11 / 0$ | \% | 2.65 |
| 46 N N 180 | $11 / 2$ | $1 \%$ | 3.62 |
| 46 NO11 |  | $1 / 2$ | 4.28 |
| 46 N 110 | $11.4{ }^{*}$ | 1/4, | 4.84 |
| 46 N 116 |  | 3/: | 6.52 |
| 47 N 016 | $2 \%$ | 4\% | 11.47 |
| 46 N 209 | ${ }_{2} 1$ | 4, | 11.02 |

## ADEL METAL "NIBBLING" TOOL

"Nibbles" holes; slots or openings in 18 -gauge steel, aluminum or other soft metals up to
 smooth, flat edges. Minimum hole size is $7 / s^{0}$ diameter. Shpg. wt., 8 oz .
43 M 863.12 -Up. EA. 3.60 1-11. EA. 3.85
REPLACEMENT PUNCH FOR ABOVE. Easy to install. Shpg. wt., 2 oz. 50 N 130.

NET 1.87

## WALSCO HEX SPLINE KEYS

7 Allen and 4 Bristol key-type, L-shaped wrenches fit screws ranging in size from No. 2 to $\%^{*}$. Packed in leatherette case. Shpg. wi., $1 / 2 \mathrm{lb}$.
46 M 166.

## H. H. SMITH WRENCH SET

6 Allen wrenches fit screw numbers $4,5,6,8$ and 10 as well as $1 / 4^{\prime \prime}$ and $3 / 16^{\circ}$ size. Leatherette case has individual pockets for each wrench. Wt., 302. 46 N 072.

1-11, NET EACH .71
12 Sets or More
46 N 713.

46 N 24.

46 N 025.


- Deluxe Set-39 Pieces
- 17 Tap and Die Sizes

MODEL 614 V TAP AND DIE SET. 1 each tap and die: $4.36,6.32,8.32,10.24,10-32$ and $12-24$ (Machine Screw Standard). $1 / 5$ $20,3 / 6 \cdot 18,3 / 16 \cdot 16,7 / 6 \cdot 14$ and $1 / 2 \cdot 13$ NC (U.S. Standard), $1 / 4-28,5 / 6-24,3 /-24,7 / 6-20$ and $1 / 20$ NF (S.A.E. Standard), $1 /{ }^{\prime \prime}$ pipe. Includes die stock, tap and reamer wrench. "T" tap wrench, screwdriver and screw pitch gauge. 4 lbs .
46 N 245. $\$ 5$ Monthly.
NET 25.70
INDIVIDUAL TAPS AND DIES. Tough carbon steel. Right-hand thread. 2 oz.

| Size | T曾p | EACH | Dio | EACH |
| :---: | :---: | :---: | :---: | :---: |
| 4-36 | 46 N 700 | 30 | 46 N 706 |  |
| 6-32 | 46 N 701 | 30 | 46 N 707 |  |
| $8-32$ | 46 N 702 | 30 | 46 N 708 |  |
| 10-32 | 46 N 704 | 34 | 46 N 710 | 4 |
| 10-24 | 46 N 703 | 34 | 46 N 709 |  |
| $1 / 4-20$ | 46 N 705 | 38 | 46 N 711 |  |

TAP WRENCH. " $T$ " handle unit for above taps. Shpg. wt., 2 oz.

NET . 45
MODEL 20 SCREW EXTRACTOR SET. 4 extractors remove broken screws $5 / z^{\prime \prime}$ to $5 / 10$, bolts, studs, $1^{\prime \prime}$ and $1_{4}^{\prime \prime}$ pipe. Heattreated alloy steel-practically unbreak. able. In hardwood box. 1 lb.

NET 1.88
MODEL 21 RADIO TAP-DIE SET. 1 each plug tap and die: 6.32, 8.32, 10.24, 12.24, $1 / 4-20$. Solid dies, $1^{\prime \prime}$ dia. High-carbon tem. pered steel. Includes tap-reamer wrench. In mahogany box. 3 lbs.

NET 7.05


E Top Quality TV-Radio Alignment Tool Kits


TYPE 9200 PANEL KIT. Convenient, wal mounting kit of 27 most needed radio-TV alignment tools. Each toot has separate slot. Made of finest materials-low-loss plastics, tips of hardened spring steel, extra-hard bone fiber. Includes: various length alignment screwdrivers, special short tools, alignment wrenches, channel tuners, core aligners, oscillator adjustment tools, trimmer and IF aligners, solder probe, nylon replacement tip, hex tools, etc. 3 -color steel panel for quickly reaching the immediately-needed tool. 2 -hole mtg. Shpg. wt., 3 lbs.
42 NX 341
NET 17.15

TYPE 8283 MASTER DELUXE TV TOOL KIT. Complete 25 -piece alignment tool kit. High-quality tools, none over $9^{\prime \prime}$ long. Includes: K-Tran tool, core allgner, longreach alignem, flexible wand, short tool, etc. Roll case. Shpg. wt., 1 lb.
42 N 005
NET 13.88
TYPE 8280 DELUXE TV ALIGNMENT TOOL KIT. Roll case of 16 specially engineered tools. Tins are hardened spring steel. Includes: "Shorty," duplex aligner. tuning wand, core aligner, oscillator tool, long,reach aligner, etc. 8 oz .
42 N 006.
NET 8.45


| Stock No. | Typb | Frg. | Description | Or. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 42 N 378 | 8276 | A | Short duplex aligner | 3 | . 50 |
| 42 N 381 | 8275 | ${ }^{\mathbf{B}}$ | Zanith universal mligner | 3 | . 50 |
| 42 N 383 | S497 | C | K-tran and 1F aligner | 3 | . 76 |
| 42 N 391 | 8274 | D | $9^{-}$nested core aligner | 3 | . 81 |
| 42 N 382 | 8271 | E | Stackpole stud-type core aligner | 3 | . 56 |
| 42 N 393 | 8722 |  | 7 7 duplex if and t6 stut aligner | 3 | . 65 |
| 42 N 395 | 8277 | G | 21/4* duplex alizner | 3 | . 50 |
| $42 \times 386$ | 8007 | H | $121^{\circ}$ nylon cip aligner | 4 | 1.47 |
| Stock No. | Type | Fig. | Destription | Oz. | NET |
| 42 N 387 | 800k-E |  | Replacement nyion tip for above |  |  |
| 42 N 397 | 8273 | k |  | 3 |  |
| 42 N 348 | 9298 | $k$ | $2^{\prime}$ blade ulignment tool | 5 | . 47 |
| 42 N 394 | 8195 | L | Channel tuning tool | 3 | .71 |
| 50 N 585 | 8278 |  | Exurathin TV tuning wand |  |  |
| 49 NOOI | 9096 | N | 12* Slum Retriever | 4 | 2.53 |
| $49 \mathrm{NOO2}$ | 9097 | N | 15. Slug Retriever | 5 | 2.94 |
| $49 \mathrm{N003}$ | 9399 | N | $19^{\circ}$ Slug Retriever | 6 | 4.09 |

Equipto Steel Stands and Trucks


## STURDY STEEL TRUCKS

Rugged steel trucks with round beaded edges for strength and rigidity. Rubbertired $5^{\circ}$ wheels; rear wheels swivel, $4^{\circ}$ deep trays hold 600 lbs . Top tray inverts to become table top. Olive-green finish.

| Stock No. | $\begin{aligned} & \text { Mrr't } \\ & \text { Type } \end{aligned}$ | Six. HWD | We., Lbs. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 86 NZ 090 | 150 | $36 \times 24 \times 36^{6}$ | 70 | 39. |

86 N 093. Type 146 Shelf. Attaches to above trucks, $81 / 2 \times 11^{-}, 5 \mathrm{lbs} . . .$. . NET 2.50

## CHASSIS STANDS

For moving or working on radio-TV chas sis, heavy test equipment, etc. Rugged steel construction; $21 / 2^{*}$ solid rubber-tired wheels. Lower shelf for tools, parts, etc: $34 \times 18 \times 24^{\prime \prime}$.

| Seock No. |  | $\begin{aligned} & \text { Nfr's } \\ & \text { Type } \end{aligned}$ | Description | We. Cbs. | $\begin{gathered} \text { NET } \\ \text { EACM } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 86 | NZ 087 | 710 | Metal top | 55 | 16.3 |
| 86 | N2 088 | 711 | Wood lop | \$7 | 17.80 |

## Chassis Holders



G-C Chassis Cradle

G-C CHASSIS CRADLE. Adjustable cradle holds chassis securely, rotates $360^{\circ}$. Size, $24^{\circ}$ long, $14^{\circ}$ high, $1211^{-6}$ wide. Shpg. wt. 7 los.
86 NX 034.
NET 7.35
JFD "REPAIRACK." Unusually sturdy cast-iron rack. Chassis clamps hold any radio or television chassis up to 200 lbs. in weight and $32^{\circ}$ in length. Rotates $360^{\circ}$. Overall size, $143 / 9 \times 32 \times 15^{\circ}$. Shpg. wt., 18 lbs.
86 NX 058.
NET 29.40
(1)

4


## Moody Miniature Wrench and Screwdriver Sets

(A) JS-6 JEWELER'S SCREWDRIVERS.

A Six precision drivers. Steel blades, knurled handles. Sizes, $.025^{\circ}, .040^{\circ}, .055^{\circ}$, $.070^{\circ}$, $080^{\circ}, .1^{-}$. Case, $1 / 4 \times 4 \frac{1}{2} \times 3 \frac{1}{4}$. Wt., $1 / 2 \mathrm{lb}$.
50 N $384 \ldots \ldots . .$. NET PER SET 2.89 12 Sets or More, PER SET
2.69

PA-5 SET. Not illus. Nos. 0, 1 Phillips drivers: Nos. 4, 6, 8 Allen wrenches; handle, stand and cover. 702.
43 N 857
NET PER SET 1.64
12 Sets or More, PER SET
1.47
[B] NEW SH-2 SCREW-HOLDING
SCREWDRIVER SET. Includes: lock-ing-chuck handle; $21 / 2^{\prime \prime}$ and $11 / 4^{\prime \prime}$ biades; screw clip; plastic case 5 oz .

## 49 N 004

NET PER SET $81 c$
12 Sets or More, PER SET
C] NEW TS-5 TINY TAP SET. 5 steel laps; knurled chuck handle. Sizes: 0 80; 1-72: 2-56; 3-48: 4-40. Case. 5 oz.
49 N 005
NET PER SET 3.20
12 Sets or More, PER SET

DBW-5 MAGNETIC SOCKET WRENCH
KIT. Five tiny steel hex wrenches with magnetized swivel top handle. Sizes $5 / 64^{\circ}$. $1 / 2^{\circ}$. $7 / 4^{4} .1 / 0^{*} .5 / 2^{\circ}$. Nickel-plated handle has screwtype chuck. Transparent plastic contalner 5 oz.

## 43 N 862

NET PER SET 2.61
12 Sets or More, PER SET
2.39

E
OE-5 OPEN END WRENCH SET. Five tiny oftset wrenches. Made of tough, heat-treated steel Sizes: $5 / \mathrm{A}^{\circ}$, $3 / 2^{\circ}$, $7 / \mathrm{m}^{\circ}{ }^{\circ}$, $1 / 6^{\prime \prime}$ and $5 / 2^{\circ}$. Chuck-type handle. Plastic contalner. Wt., 502
43 N 804
NET PER SET 1.64 12 Sets or More, PER SET
1.47

SC-5 SCREWDRIVER SET. Contains 4 interchangeable steel blades in sizes $.001^{\circ}, .005^{\circ}, .070^{\prime \prime}, .080^{\prime \prime}$, plus $1^{\prime \prime}$ awl. Handle has'screw.type chuck. In plastic container. Shog. wt., 8 oz
43 N 859 NET PER SET 99C 12 Sets or More, PER SET


## R Qhigh-Quality All-Purpose Servicing Tools $^{\text {St }}$

(G) G-C 5090 INSPECTTION MIRROR. $8^{*}$ long. Mirror is $1^{\circ}$ dia. 502 42 N 121 C 875 ILLUMINATED INSPECTHON MIRROR. Anod aluminum; $6^{-}$ lucite rod, $1^{*}$ hinged mirror. With bulb, less penlight cells. $121^{\circ}$. 602 .

## 42 N 130

NET 1.97
55 J 020 . Burgess " $Z$ " Cell, $11 / 2$ volt cell for above. Uses two 3 oz...... EACH 10c

(J)G-C 5089 PICK-UP TOOL. Press button to open claws-release to close. Flexible $14^{\prime \prime}$ shaft. Wt., 402.

## 50 N 741

G-C 9093 SOLDERING PROBE. For printed-circuit work. $8^{\text {". }} 3$ oz

## 50 N 586

1) G-C 9094 P.C......NET 96 C

SCRAPER. Stainless steel AND 50 N 587

NET 96c
MG-C 705 TROUBLE-LIGHT. Illuminates dark corners. With bulb. $5 \frac{1}{2} / 2 \mathrm{ft}$. cord. For 145 v ., AC.DC. $1 / 210$.
42 N 120
net 1.32
(H) G-C TYPE 5092 TUBE PULLER. Scis-sors-type. Rubber tips. 12 oz.
46 N 092
NET 96c
P G-C 9130 TUBE GADGET. 3 tools in one. Straightens 7 or 9 -pin min. tube pins; pulls tubes. $30 z$.
42 N 016
NET 90c
R G-C 5093 TUBE PULLER.
For 7.pin miniature tubes. 2 oz.
46 N 094
NET 1.27
46 N 155. G-C 8106 Tube Puller. Same as 5093, for 9-pin. min. tubes. . . . . . NET 1:27
[5] G-C 5191 PIN STRAIGHTENER. For 7.pin min. jubes. Steel die. 60 . 46 N 227 46 N 228. Type 8105 . Same as 5191 , but for 9. pin min. tubes

NET 73c 46 N 230. Type 8655. As above, but dual service for 7 and 9 pin min. lubes.
7 oz
NET 1.47
(T) KNOB-PULLER. For push-on knobs. 4 02.

46 N 077 NET 32c
(W) G-C 7946 TWEEZERS. Precision, selfclosing crossover action. Serrated blunt points. $61 / 2=10 n g$. Wt., 4 or 50 N 737

NET $76 c$
50 N 738. Type 7947. As above. but with slide lock. $61 / 2{ }^{\prime \prime}$ long...............NET ESc 50 N 739. Type 7948. As above, but with narrow pointed ends, $41 / 2^{-}$long. NET 50c 50 N 740. Type 7950 Tweezer Kit. One each of above in case. $702 \ldots \ldots$. NET 2.23
(X G-C 9309 COLOR TV VIEWER. 3 optical filters allow adjusting color phase and matrix without scope. 202

## 45 N 663

NET 1.47
G-C 8885 PRES-TO-OILER. Press plunger to release one drop. Also for adio.TV chemicals. Containsoil. 3 oz .
46 N 065
NET 81 c
7 XCELITE 42H "SEIZER." Straightnose "third hand." 3 oz .

## 45 N 666

NET 4.27
45 N 667. Type 43 H . As above, but with curved nose.

NET 4.42
AA G-C 8872 C-RING TOOL. Removes,
inserts "C" washers, retainers. 2 oz.
NET 1.84
45 N 661


## G-C 9525 TOOL CADDY

88 End tool clutter in the shop, lab, garage etc. Holds twelve tools of all sizes and shapes-hammers to tweezers. Sim. ple to mount and use. Tools are held by spring-locked brackets. Just snap in and out-tools are always held tirmly in place. $10 \%$ Iong. $3 / 4 \mathrm{lb}$.
45 N 665
NET 1.46

## G-C 8943 TOOL HOLSTER

CC]
Perfect for servicemen, electricians, etc. Attaches to belt by two metal loops. Two narrow compartments and one full-sized compartment securely hold most-needed tools. Made of tough, flexible polyethylene plastic that holds its shape. Shpg. wt., 6 oz.
46 N 345
NET 2.43

## G-C 9280 CONTROL GUN

00
Handy device for cleaning and lubricating noisy volume controls. $71 / 4 x$ $3 / 4$. Less fluid. Shpg. wt 80 oz . 43 N 045

NET 3.67
43 N 06t. Type 9282 Adapter. For extra long shanks. Wi., 2 oz............ NET 4sc

## Staplers, Tapewriters, Cutters, Strippers

JT-21 JR. ECONOMY STAPLER. Has staple extractor, lock. Loads 100 staples. $3 / 4 \times 61 / \times 3^{\circ}$. Less staples. 1 lb .
45 N 653. List. \$4.95.
NET 3.97
T-25 CABLE STAPLER. For round objects to $1 / 4$ dia. Jamproof. Loads 85 staples. $51 / 2 \times 71 / 4^{\circ}$. Shpg. wt., $21 / 4 \mathrm{Ibs}$.
46 N 491. List, $\$ 15.00 \ldots . .$. NET 12.49
46 N 493. T-75 Stapler. As above, for $1 / 2 *$ dia. Loads 53 staples. $5 \frac{1}{4} \times 7 \times 1 / 8$
21/3 lbs. List, \$18.00. .......... NET 14.99
STAPLES FOR ARROW GUNS

| ock No | For Mod |  | Le |  | Los. | Nel |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 45 N 654 | JT-21 | 130 | \% | 1000 |  |  |
| N 65 | 1T.21 |  | 3/40 | 1000 | \% |  |
| 7 N 096 | T-32 |  |  | 5000 |  | 1.8 |
| 06 | T. 32 |  | $1 / 8$ | 5000 |  |  |
| 793 | T-50 |  |  | 5000 | 1 | 2.08 |
| 45 N 789 | T. 50 | 4 | 5 | 5000 |  |  |
| 45 N 792 | T-50 | 4 |  | 5000 | 1 | 2.2 |
| 46 N 294 | T.50CT | \%' |  | 5000 | 1 |  |
| 45 N 790 | T-25 | \% |  | 5000 | 1 |  |
| 46 N 492 | T. 25 | \% | 746 | 5000 | 1 | 3.3 |
| 45 N 791 | T.25 | $5{ }^{\circ}$ |  |  |  |  |
| $45 N 798$ | T. 75 | $1{ }^{\circ}$ |  | 1000 | 1\%/ | 1.8 |
| 45 N 799 | T. 75 | \% | ${ }^{\circ}$ | 1000 | 1\% | 1.6 |
| N 494 | T. 75 | \% | ${ }^{1}$ | 1000 | , | 2.0 |

T-50 GENERAL-PURPOSE STAPLER. Heavy duty gun takes $1 / 6^{\circ}$ to $9 / 66^{*}$ staples for use in any tacking job including ceiling tiles. Double leverage action for powerful drive with minimum squeeze pressure. Patented non-jamming mechanism. All steel, chrome finish. Loads $85-.050^{\circ}$ sta. ples. $5 \frac{1}{2} \times 7 \frac{1}{1} \times 3 /{ }^{\prime \prime \prime}$. Wt. 2 lbs.
46 N 292. List, $\$ 12.50$
NET 10.41
T-50MP KIT. Includes T-50 gun. 5000 staples (assorted, $1 / 4$ to $\% / 6^{*}$ ), and 4 attach. ments (listed below). $51 / 2 \mathrm{lbs}$. 50 N 466. List, $\$ 17.50$

NET 14.57

## T. 50 ATTACHMENTS

| Stock No. | Trpe | Description | 102.1 NET |
| :---: | :---: | :---: | :---: |
| S2N 701 | T. 50 | Screen Altachment | 385 |
| 52 N 702 | T. 50 | Wire Allachment | 385 |
| 52 N 703 | T.50 | Window Shade Attachment | 3 85 |
| 52N 704 | \$L. 50 | Staple Lifter | 65e |

T-32 MEDIUM-DUTY STAPLER. Non jamming double leverage action. All-steel, chrome Safety-lock handle. Loads 150$032^{4}$ staples. $5 \times 7 \times 3 / 4$. Wt. $1 \frac{3}{4}$ Ibs.
46 N 062. List, $\$ 10.50$
NET 8.74

NEW DYMO TAPEWRITERS MODEL M-22. Heavy-duty tool makes raised-letter labels on $1 / 2^{\prime \prime}$ plastic tape. Straight cutoff; "Delrin" plastic em. bossing wheel; $5 / z_{2}$ " letters. Chrome-plated. $105 /{ }^{\prime \prime}$ Iong. Less tape, below. 3 lbs.

## 50 N 849.

NET 39.95
PLASTIC TAPE. $1 /{ }^{\prime \prime}$ vinyl pressure tape. 12 -ft, rolls. For M. 22 only. 5 oz .
Type 158-1 Clear. Type 158-6 Blue
Type 158-2 Red. Type 158-8 Brown.
Type 158-4 Orange. Type 158-9 Black.
Type 158-5 Green
50 NN 903. NET PER ROLL
1.65

MODEL M-5. Economy version of M-22, above, but uses disposable $1 /{ }^{*}$ tape magazines. 81 1/" long, Less tape, below. 1 lb .

## 50 N 853.

NET 24.95
"THROW-AWAY" TAPEMAGAZINES. For use with M-5 Tapewriter, above. Each magazine has $120^{\circ}$ roll of $3 / 3^{\circ}$ vinyl. adhesive tape. 4 oz .

| Type | Color | Type | Color |
| :---: | :---: | :---: | :---: |
| 5201-2 | Red | 5201-7 | Yellow |
| \$201-4 | Orange | 5201-8 | Brown |
| $5201-5$ | Green | 5201.9 $5201-13$ | Black |
| 5201.6 | Blue | 5201-13 | Goid |

50 NN 984. Specify Color.....EACH 1.25 MODEL $\mathrm{M}-11$. For embossing $1 / 2^{\approx}$ metal tapes. Straight cutoff $3 / 12$ hole puncher. $103 / \mathrm{m}$ " long. Less tape, below. 3 lbs .
50 N 885.
NET 49.95
METAL TAPES. For $M-11$ only. $1 / 2^{*}$ wide; adhesive backed. Type $317-9$ is black with aluminum stripe. Wt., 6 oz.


## Measuring Tools, Scissors, Cutters, Vises


general hardware circle cutTERS. Round shank types for drill press: square shank for hand brace. Removable pilot drill and cutter blade. Av. wt. 8 oz.
Stoek No.FTg. Shank HoleSire NET

 45 N $350 \mid A$ Round $1 / 21^{\circ} 100^{\circ}{ }^{2} 2.10$ 45 N 610 . Extra Biades. 4 oz NETEA. 444 B CLARK TYPE 100 CIRCLE CUTTER. Cuts holes $5 / /^{\prime \prime}$ to $11 /{ }^{\prime \prime}$ in dia., in metals up to $1 /{ }^{\prime \prime}$ thick. $1_{4}^{\prime \prime}$ pilot dritt with $1 /{ }^{\circ}$ round shank, 502
45 N 620.
NET 3.67
CLAUSS INDUSTRIAL SCISSORS.
Type 925 (Fig. D) are electrician's scissors. Type 925C ( Fig . E) same, but has wire stripping notches on back of blade. Type 4217 (Fig. F) Is industrial shears; Type 4218 is identical but larger.

(G) MULTI-PURPOSE RULE. $4^{*}$ scale in -32nds and 64ths, plus millimeters: square: protractor: center finder; drill. point gauge; tap-drill table. Stainless Steel. With case, $40 z$
46 N 453.
NET 1.34
[H] $6^{*}$ RULE AND WIRE GAUGE. Graduated in 32nds and 64ths. Has B8S wire gauge; decimal equiv. 2 oz 46 N 061.

NET 44c
$12^{\prime \prime}$ STAINLESS STEEL BENCH RULE (Not illus.) Has two sides praduated in 8 ths, 16 ths, 32 nds , and 64 ths. $3 /{ }^{\prime \prime}$ wide. Shpg. wt., 2 oz

## 46 N 088.

NET 75 c
(J) LUFKIN WHITE CLAD "MEZURALL" STEEL TAPE RULES. For construc. fion and general home use. Easy-to-read jet black markings against a durable. white background on tempered stee blade. Self-adjusting end hook for accu rate butt end and hook-over measure ments. Marked on both edges, one side First 12 inches of upper edge graduated to 32 nds; balance to 16 ths.

| Stock No. | Type | Feet | Oz | List | HET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 50 N 175 | 4.926 | 6 | 4 | \$1.10 | 80 |
| 50 N 176 | W928 | 8 | 5 | 1.38 | 93 |
| 50 N 177 | W9210 | 10 |  | 1.69 | 1.13 |
| 50 N 178 | W0212 | 12 | 71/2 | 1.98 | 1.32 |

K LUFKIN "MEZURAMATIC" TAPE RULES. Ball.bearing rewind, heavy. duty end hooks, non-slip cases. Foot and inch graduations to 16 ths of an inch on both edges, first $12^{\circ}$ graduated to 32nds on one edge. Have black markings on a white background, except *which ape chrome-plated
Stoch No. Type Feat Oz. List |NET 50 N 179 50 N 180 $50 \mathrm{~N} \mid 81$ 50 N 82

(1)$6^{*}$ STEEL DIVIDERS. Bow-spring and tapered fulcrum for accuracy. Replaceable points. Adjusting nut. Length, 6 inches. Shpg. wt., 602.

## 46 N 089.

NET 2.74DRILL AND STEEL-WIRE GAUGE
Gauges and gives decimal equivalents -drill number and wire sizes 1 to 60. Lists tap and drill sizes, $1 / 2 \cdot 28$ to $2-56$. Shpg. wt., 502

## 46 N 060.

NET 1.34
(W) $12^{\circ}$ COMBINATION RULE. Etched steel. Graduated in 8ths, 16ths, and 32 nds. Head locks on $1^{\circ}$ blade. Scriber in head. $11 / \mathrm{lbs}$.
50 N 308.
NET 84 c
P CENTRAL 1" PRECISION MICROM-
ETER. High-quality, moderately priced micrometer. Easy to read, has positive lock. Meets gov't spec. GGG-C-105. Polished spindle and anvil. $80 z$. 50 N 060 . List, $\$ 14.00$

NET 10.95

## (R) HANSON ECONOMY 1" MICROM-

ETER. Precision micrometer has . $0005^{\circ}$ accuracy. Employs screw-type anvil to permit simplified zero adjustment. Springfriction stop for improved accuracy. Frame, thimble and ratchet are fully chromed to inhibit rust. Factory-ad justed. 7 oz.

## 46 N 249.

NET 3.37
MILLERS FALLS NO. 217 VISE. $23 /{ }^{\prime \prime}$ wide jaws open to $31 / 8^{\circ}$. Removable swivel jaw. 5 lbs.

## 46 N 064.

NET 8.90
BRINK \& COTTON NO. 149 VISE.
Clamps to any bench up to $2^{\circ}$ thick. Jaws open to $13 /{ }^{\prime \prime}$. $23 / 4$ lbs.
46 N 015.
NET 1.50
[W ${ }^{9}$ - SCRIBER. Two-point machinist's scriher, knurled tinger-hold. 3 oz.
50 N 309.
NET 44 c

EXACT MODEL A-9 ALUMINUM "HANDYLEVEL.". For the professional craftsmen and home hobbyists. 3 indicators for vertical, horizontal, and $45^{\circ}$ use. Grooved base. $9 \times 13 / 16 \times 3 / 4.802$.

## 50 N 440.

NET 1.50

YLUFKIN WHITE-CLAD TAPE. Accurate 50 -ft. steel tape. Has highly legible jet-black figures and graduations on snowwhite background. Hard, triple baked finish. Hook ring for "walk-away" measuring. Folding flush handle. Vinyl-covered steel case. 1 1
50 N 184. List, $\$ 5.49$
NET 3.67
50 N 185. As above, 100 ft .2 ibs
5.00

## WILTON VISES

2) MODEL 665A VISE. Three vises in one -woodworking. metalworking and pipe vise. Removable fiberboard law faces clamp wood without marring. $5^{\prime \prime}$ wide steel jaws provide powerful grio for metal jobs. Pipe jaws hold pipes of $1 / 0^{\prime \prime}$ to $2 \frac{1}{2}{ }^{\circ}$ dia. Jaws are $31 / 4$ deed. Max. Jaw opening. $51 /{ }^{\prime \prime}$. Swivel base, 35 lbs.
46 NU 953. List $\$ 24.30$.
NET 16.20
MODEL 1125. Removable steel jaws open to a maximum of $21 / 4^{\prime \prime}$; jaw width, $21 / 4$. Swivel base. $51 / 4 \mathrm{lbs}$. 46 N 896. List, $\$ 5.30$.

NET 3.67

B8MODEL C53 $1 / 2$. Economy 31/2" jaw vise. Features removable steel insert jaws, built-in pipe jaws, precision-machined screw. Swivel base allows unit to be swung instantly to any desired position. Base locks securely in place. Large anvil with forming horn. 12 Ibs. 50 N 487. List, $\$ 9.90$

NET 5.30
MODEL C54. As above, $4^{*}$ jaw. 15 Ibs. 50 N 488. List. $\$ 11.60 \ldots . . . .$. NET 6.25 MODEL C55. Same as C53 $1 / 2$ above, but $41 / 2{ }^{\prime \prime}$ jaw width. Wt. 19 lbs.
50 N 489. List, $\$ 13.60$.
NET 7.30
MODEL 364 VISE AND POSITION
ER. Ruggedly-built utility vise mounted on famous PowRarm positioner. Excellent combination for work on small elec. tronic assemblies or parts. Single-handed release of positioner level-bar permits rotating or tilting work to any desired angle. Positioner is cadmium-plated steel. Capacity, 15 lbs. Vise jaws are smooth steel. $21 / 4^{* \prime}$ wide; open to $21 / 4{ }^{\circ}$. Wt., 5 Jbs. 50 M 149.

NET 13.93

G－C＂EPOX＂CEMENT KIT 2－Tube
Kit $\$ 91$ For Strong－As－New Repairs
－Fast，Easy to Use
Super－strong adhesive．Ex cellent for cementing cer－ amics，metals，any Resists porous materials，etc． 4 Oz． 1.91 50 N 574

G．C Radio－TV Chemicals


An extensive listing of chemicals for simplifying servicing of radio＇s，TV sets， record changers，tape recorders，etc． Available in sizes to meet the require－ ments of any service shop．

## LUBRICANTS

| Stock No． | $\begin{aligned} & \text { Mrr'曰 } \\ & \text { Type } \end{aligned}$ | \＄1ze | Shpg． We． | Description | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 43 \mathrm{~N} 046 \\ & 47 \mathrm{NO} 041 \end{aligned}$ | $\begin{array}{r} 65-16 \\ 9+02 \\ \hline \end{array}$ | $\begin{aligned} & 16 \mathrm{oz} . \\ & 1 / 4 \mathrm{oz} \\ & \hline \end{aligned}$ | $\begin{aligned} & 11 / 6 \text { ibs. } \\ & 2 \mathrm{oz} . \end{aligned}$ | Control cleaner and lubricant Kadio－TV oil；vial dispenser | $\begin{array}{r} 1.91 \\ .38 \end{array}$ |

## CEMENTS AND THINNERS

| $43 N 456$ | 30－2 | 20 oz | 6 oz ． | Radio and Simaker Service Cement | 47 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 43 N 166 | 30－8 | 8 oz ． | $11 / 4 \mathrm{lbs}$ ． | Radio and Speaker Service Cement | 1.23 |
| 43 N 451 | $31-2$ | 2 oz | 5 ox． | Radio Service Solvent | ． 44 |
| 43 N 163 | 31－8 | 8 oz ． | 11／6 1bs． | Radio Service solvent | ． 79 |
| 43 N 296 | 32.2 | 2 oz ． | 6 oz | Hakelite Cement | ． 68 |
| 47 NO 3 | 32－2A | 207. | 6 oz | All－Purpose Plastic Cement | ． 47 |
| 43 N 466 | 35－4 | 4 oz ． | $1 / 2 \mathrm{lb}$ ． | Rubber－to－Metal and Jhono Drive Cement | 78 |
| 43 N 210 | 4．3－2 | 2 oz ． | 6 oz ． | －Pli－0－Bond＂Plastic Cement | ． 52 |
| 43 N 211 | 43－8 | 8 oz ． | $11 / 4 \mathrm{the}$ ． | ＂Pli－O－Bond＂E＇lastic Cement | 1.34 |

## CLEANERS

| $43 N 127$ $43 N 128$ $45 N 203$ | 19.1 <br> 19.2 <br> $53-1$ | $\begin{aligned} & 1 \text { oz } \\ & 2 \mathrm{oz} \\ & 1 \mathrm{oz} . \end{aligned}$ | $\begin{aligned} & 4 \mathrm{oz} \\ & 6 \mathrm{oz} \\ & 4 \mathrm{oz} \end{aligned}$ | 1）e－Ox－1d＂Contact Cleaner ＂De－Ox－Id＂Contact Cleaner Recording Head Cleaner | 65 94 56 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 43 N 463 | 127－4 | 40 Oz | $1 / 2 \mathrm{lb}$ ． | Contact and Crystal（clean | 5 |
| 43 N 160 | 210.2 | 2 oz ． | 6 oz ． | Electronics Contact Cleanes |  |
| 47 N 044 | 211－4 | 4 Oz． | 1／2 1 b ． | Carbon Tetra－Chloride | 53 |
| 43 N 453 | 8400 | 2 oz． | $1 / 2 \mathrm{lb}$ ． | ＂De－Ox－Id ${ }^{\text {Coit－Contact }}$ | 8 |

MISCELLANEOUS CHEMICALS

| Stock No． | Mir＇＊ Type | Slize | Shpg． Wt． | Description | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 43 N 472 \\ & 50 N 732 \\ & 43 N 145 \\ & \hline \end{aligned}$ | $\begin{aligned} & 37-2 \\ & 37-16 \\ & 47-2 \\ & \hline \end{aligned}$ | $\begin{array}{r} 2 \mathrm{oz} \\ 16 \mathrm{oz} \\ 2 \mathrm{oz} \end{array}$ | $\begin{aligned} & 6 \mathrm{oz} \\ & 2 \mathrm{y} / 4 \mathrm{lbs} . \\ & 6 \mathrm{oz} . \end{aligned}$ | ＂Q－Done＂（Coil Dope） Q．Dope＂（Coll Dope TV High Voltake Corona Dope | $\begin{array}{r} .47 \\ 2.14 \\ .71 \end{array}$ |
| $\begin{aligned} & 43 N 474 \\ & 43 N 455 \\ & 47 N 046 \end{aligned}$ | $\begin{aligned} & 49-2 \\ & 50-2 \\ & 56-2 \end{aligned}$ | $\begin{aligned} & 2 \mathrm{oz} \\ & 2 \mathrm{oz} \\ & 2 \mathrm{oz} . \end{aligned}$ | $\begin{aligned} & 6 \mathrm{oz} . \\ & 6 \mathrm{oz} . \\ & 6 \mathrm{oz} . \end{aligned}$ | TV Tube Kuat＂（recoats blictise tubes） Red－X＂TV High Voltage Corona Dope Insulating and Dipping Varnish | $\begin{aligned} & .71 \\ & .71 \\ & .53 \end{aligned}$ |
| $\begin{aligned} & 43 N 460 \\ & 43 N 461 \\ & 50 N 720 \\ & \hline \end{aligned}$ | 90－2 90.8 101－2 | $\begin{aligned} & 2 \mathrm{oz} \\ & 8 \mathrm{oz} \\ & 2 \mathrm{oz} \end{aligned}$ | $\begin{aligned} & 6 \mathrm{oz} \\ & 1 \mathrm{ibs} .4 \mathrm{ibs} . \\ & 6 \mathrm{oz} . \end{aligned}$ | Red Giyptal Insulating Varnish Ked Clyptal Insulating Varnish Mahogany Touch Up Stain | $\begin{array}{r} .56 \\ 1.62 \\ .47 \end{array}$ |
| $\begin{aligned} & 50 \text { N } 721 \\ & 50 \text { N } 593 \\ & 50 \\ & \hline \end{aligned}$ | $\begin{gathered} 161-2 \\ 16.3-16 \\ 176-2 \end{gathered}$ | $\begin{array}{r} 2 \mathrm{oz} \\ 16 \mathrm{oz} \\ 2 \mathrm{oz} \end{array}$ | $\begin{aligned} & 6 \mathrm{oz} \\ & 21 / 4 \text { Ibs. } \\ & 6 \mathrm{oz} . \end{aligned}$ | Walnut Touch UD Stain Rubbing Oil <br> Liquid Tape | $\begin{array}{r} .47 \\ 1.40 \\ .97 \end{array}$ |
| $\begin{aligned} & 47 N 048 \\ & 43 N 009 \end{aligned}$ | $\begin{aligned} & 1215 \\ & 8101 \end{aligned}$ | $\begin{aligned} & 2 \mathrm{oz}, \\ & 1 \mathrm{oz} \end{aligned}$ | $\begin{aligned} & 6 \mathrm{oz} \\ & 2 \mathrm{oz} . \end{aligned}$ | Lifuid Non－Slip（drive rables，belts） Transistor 25 Silicone Comumund | $2.07$ |



## DIETZGEN SLIDE RULES

A MODEL 1734 L DECIMAL TRIG－TYPE LOG LOG．Precision $10^{\circ}$ rule．Teflon grooves permit smooth，effortless settings． Scales on one side：LL02，LLO3，DF，CF， CIF，L，CI，C，D，LL3．LL2．Other side：LL01， $K, A, B, T<45, T>45, S T, S, D, D I, L L I$ ， S，ST，T scales divided to read degrees， decimals of degrees．Leather case，in－ structions．Wt．， $1 / 1 / \mathrm{lb}$ ．
24 RC 637．List，$\$ 25.50$ ．．1－5，EA． 21.68 6－Up，EACH
20.40

24 RC 638．Model 1734．As above，but with simulated leather case． $11 / 4 \mathrm{lbs}$ ．
6－Up，EACH $18.00 \ldots . .1-5$, EACH 19.13

## ACU－MATH

（D）MODEL $12115^{\prime \prime}$ POCKET SLIDE RULE．
Precision，easily readable pocket rule． White vinyl plastic sheet face；lucite cur－ sor；inlaid calibrations．Scales on one side： K，A，B，CI，C，D，L；S and T on other． Leather sheath and instructions．Shpg． wt．， 5 oz ．
24 RC 636．List，$\$ 3.95$ ．
NET 2.99

B MODEL N1725L VECTOR－TYPE LOG LOG．As 1734L，left，plus Sh1，Sh2，Th scales．Leather case． $11 / 4 \mathrm{lbs}$ ． 24 RC 633．List，$\$ 27.50 \ldots 1-5$ ，EA． 23.38 6－Up，EACH
22.00 24 RC 639．Model Ni725．As above，but with simul．leather case． $11 / 4$ lbs．
6－Up，EACH $19.60 \ldots . .1$－5，EACH 20.83
C MODEL $17765^{*}$ POCKET SLIDE RULE．
Scales：DF，CF，CIF，CI，C，D，L，K，A， B，T，ST，S，DI．Leather case，pocket clip instructions．Wt．， 5 oz. 24 RC 634．List，\＄6．45

1－5，EA． 5.48 6－Up，EACH
5.16

## SLIDE RULES

［E MODEL 1311 PROFESSIONAL $10^{\circ}$ SLIDE RULE．Deluxe version of Model 1211，left．Trig and Log Log numerals in red．Scales on one side：LLO1，L，K，A，B， T，ST，D and LL1．Other side：LLO2，LLO3， DF，CIF，CI，C，D，LL3 and LL2．With sheath and instructions． 1 lb ． 24 RC 635．List，$\$ 13.95$.

NET 9.95


## G－C MISCELLANEOUS PAINT KITS

［F］TYPE 901 CABINET REPAIR KIT In－ cludes shelfac sticks，stains，varnish， polish，scratch remover，alcohol lamp，al． cohol．spatula，brushes，steel wool，sand－ paper，and cloth．Metal box． 3 Ibs．

## 43 N 115

NET 6.34
TYPE 184－0 LUMINOUS＂LITE－
KOAT＂KIT．Long life，non－toxic c at－ ing glows in the dark．Contaịns powder． thinner and protective compound． $21 / 4$ lbs．
43 N 111
NET 3.18
［H TYPE 66－5＂OIAL－LITE＂COLORING
KIT．For dials，bulbs，etc．Instant dry－ ing；bright，long lasting．Kit includes：red， green，blue，amber，solvent．Bulbs may be dipped or brushed． $40 z$.

## 43 N 110

NET 1.20
J．EIA COLOR CODING KIT．Fast－dry－ ing enamels－all 10 standard ElA Code colors．With brushes． $1 \frac{1}{2}$ Ibs．

## 43 N 112

NET 1.44
＂LABELON＂＇LABELINGTAPES


K ACETATE＂WRITE－ON－IT＂TAPE． Border and writing color：＊black，tred， Sblue． $400^{\circ}$ roll． 5 oz

| Stock No． | $\begin{aligned} & \text { Mifr's } \\ & \text { Type } \end{aligned}$ | Widit | $\begin{aligned} & \text { 1-11, } \\ & \text { EACH } \end{aligned}$ | $\begin{aligned} & 12.23 \\ & \text { EACH } \end{aligned}$ | $\begin{array}{r} 24 \text { or } \\ \text { More. EACH } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 52N772 | 315 | $318 *$ | 1.52 | 1.39 | 1.31 |
| 52 N 751 | ${ }^{335}$ ¢ | 5／90 | 1.52 | 1.39 | 1.31 |
| 52 N 753 | ${ }^{415}$ | \％ | 1.71 | 1.57 | 1.48 |
| 52 N 755 | $435{ }^{4}$ | 策。 | 1.71 | 1.57 | 1.48 |
| 52 N 757 | $515 *$ | \％ | 1.91 | 1.75 | 1.6 |
| 52 N 773 | 5251 | \％ | 1.91 | 1.75 | 1.65 |
| 52 N 774 | $535+$ | \％＇ | 1.91 | 1.75 | 1.65 |
| 52 N 761 | 615＊ | \％${ }^{\circ}$ | 2.11 | 1.93 | 1.82 |

［］＂MYLAR＂MC LABELS．Resist mols． ture，heat，acids，etc． 2 oz．per box．

| Slue | No．Per Bos | Stock No． |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Black | Red | Blue |
| \％ $3^{3}{ }^{\circ}$ | 56 |  | 50 N 362 | 50 N 363 |
| ， 1 x $1^{\circ}{ }^{\circ}$ | ${ }^{100}$ | $50 \times 364$ |  | 50N366 |
| $\begin{aligned} & 1 / n \times 2 \\ & 1 \times 22 \end{aligned}$ | 66 40 | 50 N 367 $S 0 \mathrm{~N} 370$ | 50 N 368 50 N 371 | 50 N 369 |
| 1.11 Boxes，PER BOX |  |  |  |  |
| 12－23 Boxes，PER BOX |  |  |  |  |
| 24．Up | Soxes， | PER BOX |  | ． 1 |

## DEVCON ADHESIVES



LIQUID ALUMINUM．For fast repairs，just squeeze from tube．Bonds，seals， fills，mends all materials． Hardens to metal；fixes pipe，furniture，etc． 8 oz List，98c．

NET 75C
＂REAL RUBBER．＂Seals，waterproofs， and insulates．Hundreds of uses in the shop or home．Shpg．wt．， 8 oz.
50 N 578．List， 98 c
NET 75c
＂STEEL＂ADHESIVE．Paste form．Bonds metals，plastics，wood，etc． 8 oz．
50 N 580 ．List， $98 \mathrm{c} . . .2 . . . . .$. NET 75 c


Selected Servicing Chemicals

[A] RAPID "ELECTROPLATER." 1 oz. A cleaner, 1 oz. polish, plating compound, $5 /{ }^{\prime \prime}$ brush wires and clips, polishing stick. Requires $2 ; 611 / 2 \mathrm{v}$. cells. 1 lb .

| Stock No. | Type | Compound | NET |
| :---: | :---: | :---: | :---: |
| 43 N 080 | 200 | Nicke? |  |
| 43 N 081 | 202 | Cadmium | 67 |
| 43 N 082 | 204 | Copper | 07 |
| 43 N 083 | 205 | Brass |  |
| 43 N 084 | 206 | Silver | 2.66 |
| 43 N 085 | 207 | 24 K Cold | 4.61 |

[B] 'NO NOISE' SOLUTION. Cleans and - lubricates controls, switches, etc. In 6 oz. spray can. 2 oz. bottle with dropper. WIs., can, 10 oz .; bottle, 6 oz .
43 N 142.6 oz.
NET 2.20 43 N 143.2 oz

## NET 9ec

C QUIETROLE CLEANER AND LUBRICANT. Eliminates noises from controls. etc. Non-flammable. Wts., 2-oz. bottle. 7 oz .; 4.0z bottle, 14 oz .
43 N 102. 2-oz. with dropper..
1.35

43 N 103. 4-oz, bottle
NET 2.03
QUIEYROLE SPRAY PACK. As above, in handy spray can. 10 oz.
50 N 719
NET 2.73

(D) CHEMTRONICS "NO-ARC." Migh voltage insulator in a spray can. 20,000 v. breakdown. 8 fluid oz. 1 lb.

50 N 694
NET 2.79
[E INSL-X TOOL DIP. A red liquid plastic that hardens into insulating coating when applied to handles of pliers. wrenches and other tools used in electrical work. Corrosive resistant. Dries in 24 hours. Remove cap from container and dip handle of tool into liquid: may be dipped repeatedly.

| Stock <br> No. | Contents | Shpg. <br> Wt. | NET <br> EACH | $24-$ UP. <br> EACH |
| :---: | :---: | :---: | :---: | :---: |
| 42 N 400 | 6 oz | 10 oz. | 1.25 | 1.12 |
| 42 N 401 | 32 oz | $21 / 4$ Ibs. | 3.40 | 3.06 |

INSL-X E-26 INSULATING SPRAY. (Not illus.) Clear-plastic electrical insulation in spray-can. Use for insulating electronic components, terminals, circuit wiring and tools. Tough and durable. Has dielectric strength of 800 to 1200 volts per mil. In 12-oz. can. $1 \frac{1}{2} \mathrm{lbs}$.
42 N 402.1 to 23.
NET EACH 1.19
24 or More
EACH 1.07


G-C MISCELLANEOUS PAINTS AND CHEMICALS

F"SPRA-KOAT" WRINKLEVARNISH. Can be air dried or baked-gives a professional-looking wrinkle finish. Makes composition boord and bakelite panels look like wrinkle-finish steel panels. 16 fl . oz. In convenient spray can. $11 / 4 \mathrm{lbs}$.
Stock No. Type Color 1-5, EA. 6-Up.EA.

TELEPHONE BLACK AND GRAY. (Not illus.) A satin finish enamel. Black for control panels. Gray gives protessional appearance to test equipment, etc. For wood or metal. 16 fl . oz. $11 / 4 \mathrm{Ibs}$.

Stock No. Type Color 1-5, EA. E-UD, EA. \begin{tabular}{l|l|l|l|l}

\hline 43 NO 03 \& | $62-12$ |
| :--- |
| $\mathbf{N} 034$ | \& \(\begin{array}{c}Black <br>

Gray\end{array}\) \& 2.25 \& 2.02 <br>
\hline
\end{tabular}

HAMMER FINISH. (Not illus.) For applying professional hammer flnish to panels and instrument cases. Moisture-proof. Airdries quickly. $16 \mathrm{fl} .02 .11 / 4 \mathrm{lbs}$.

| Stock No. | Type | Color | 1-5, EA. | 6-UD, EA. |
| :---: | :---: | :---: | :---: | :---: |
| 43 N 035 <br> 43 NO 06 | $\begin{aligned} & 83-12 \\ & 84-12 \\ & 85-12 \end{aligned}$ | Brown Blue Silver | 5 | 2.02 |

"ZERO-MIST" SPRAY. (Not illus.) Locates intermittents caused by temperature changes. Spray suspected components one at a time-cools immediately. Pinpoints faulty capacitors. Cold solder joints, etc. $16 \mathrm{fl} .02 .11 / 2 \mathrm{lbs}$.
50 N 099
NET 2.37
"SPRA-KLEEN" CONTACT CLEANER. (Not illus.) Efficient cleaner-simply spray and work mechanism. 6 fl . oz. 10 oz

## 43 N 025

NET 97c
G] NO. 60 "RUF-KOAT" VARNISH. Air" $G$ drying wrinkle varnish for amplifiers; test equipment, chassis, etc. Gives a pro-fessional-looking appearance. Can be airdried or baked.

| Black | Brown | Gray | Sixe | Lbs. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 50 N 722 | 0 N 723 | $50 \mathrm{~N} 24$ | $211.02 .$ | $13$ | . 6.20 |

SILICONE RESIN SPRAY. Forms protective coating which insulates, waterproofs, and provides barrier against dust. 6 oz . spray can. Wt., 10 oz

## 43 N 027

.NET 2.37
[J] NO. 21 SILVER PRINTED CIRCUIT PAINT. Use to repair or design printed circuits. 1 Troy oz. Shpg. wt., 4 oz.
43 N 159 . . . . . . . . . . . . . . . . . NET 4.56
43 N 079. No. 20 Copper Paint. As above, but copper. 2 fl. oz. Wt., 4 0z......... 1.40 K GUN TYPE SPRAY CAN HANDLE. Attaches to any spray can-converts it to a spray gun. Wt., 3 oz .

## 45 N 201

NET 87c
SPRAY CAN EXTENSION. For directing spray. Fits any spray can. $9^{\prime \prime}$ long. Wt., 2 oz.
45 N 202. $\qquad$ NET 66c

Sprays any liquid. No cords, no hoses. Power gas cartridge. Sprays up to 32 oz . of paints, etc. Includes head assembly, 4-oz. glass jar, 15-oz. power unit. $11 / 2 \mathrm{lbs}$.
47 N 086
47 N 097. 15-oz. Refill. 1 lb 1.98
47 N 088. Extra 4 -02. 1.20
NET 13e


CLEAR PLASTIC SPRAY. Can sprays a crystal-clear acrylic that dries in minutes. Forms hard, waterproof coating of high dielectric strength. Eliminates corona and arcing. Dielectric strength: 400 volts per mil. 16-oz. spray can. $11 / 2 \mathrm{lbs}$.
43 N 133. 1-11
NET EACH 1.27
12 or More
EACH 1.17
ENAMEL SPRAYS. Attractive, non-fading. Wide variety of colors. Dry in 3 minutes. Non-clogging spray valve. 16 oz . can. Shpg. wt., $11 / 4 \mathrm{lbs}$.

| No. | Colo | No. | Color |
| :---: | :---: | :---: | :---: |
| 43 N 134 | Bright Silver | 43 N 109 |  |
| 43 N064 | Bright Copper | 43 N 107 |  |
| $43 \mathrm{NO59}$ | Flat white | 45N208 |  |
| 43 NI 37 | Glossy White | $43 \mathrm{NOS4}$ | Chrome Yollow |
| 45N206 | Antique Ivory | 43N384 | Champion Blue |
| 43 N 106 | Flat Black | 43N055 |  |
| 43 N 138 | Glossy Black | $43 \mathrm{NOS6}$ | Cherry Red |
| $43 \mathrm{NOS3}$ | Light Gray | 43 NO 44 | ki |
| 43 NIOB | Machine Gray | 43 NO | Or |
| $45 N 207$ | Dove Gray |  |  |

1-11... ЕАСН 1.17 12-Up... EACH 1.07
"RUST MAGIC PRIMER" Phenolic resin, anti-rust primer. Pierces existing rust and prevents further corrosion. Dries in 20 minutes. Cover with nearly any finish. 16 02. aerosol spray-on can. $1 \frac{1}{2} \mathrm{lbs}$. 43 N 385. 1-11 ......... NET' EACH 1.17 12 or More

EACH. 1.07
ZINC-CHROMATE PRIMERS. Metal primer dries rapidly to form a strong bond with metal. Resists peeling or cracking. Retards rust. Accepts finish coats readily. Ideal for priming melal gutters, masts, etc. $16 \cdot 0 \mathrm{O}$. spray can. $1 \frac{1}{2} \mathrm{lbs}$.
45 N 210. Yellow Primer.
45 N 210. Yelow Primer. . EACH 1.27
12 or More.
EACH 1.17

## WALSCO PROTECTO-TUBE

TYPE 18-K. Plastic high-voltage insulating tubing. Expanding solution swells tubing: shrinks after application. $12^{\prime}$ of tubing, expanding solution. 12 oz.
43 N 132
net 1.17

## Workshop Storage Equipment, Workbench

POPULAR EDSAL WORKSHOP EQUIPMENT



Use Singly or In Rows


Units Can Be Mounted Side-by-Side "Kwik-Klip" Shelves Hold Up to 500 Lbs.

## DELUXE HEAVY-DUTY STEEL STORAGE RACKS

Provide compact storage facilities. Units are complete and in dependent. Easy to assemble-bolt tops and bottoms; shelves held by unique "Kwik.Klip" fasteners. With 5 shelves; extra sheives, below. Posts punched at intervals for shelf adjustment. $75^{\circ}$ high, $35^{\circ}$ wide. Gray enamel finish.
88 NZ 087. With $12^{\circ}$ Oeep Shelves. 47 lbs 88 NZ 088. With $18^{\circ}$ Deep Shelves. 60 lbs 88 NX 085. 12" Extra Shelf. 6 lbs
 NET 8.95 NET 11.45 NET 1.39
ECONOMICAL STEEL STORAGE RACKS. Low-cost shelf and rack units. Each has 5 shelves; 4 -bolt construction. Shelves hold up to 275 lbs
50 NZ 801. Type 7230. Size, $73 \times 30 \times 12^{*} .23$ lbs.
50 N2 802. Type 7218. Size, $73 \times 36 \times 18^{\circ}$. 29 lbs.
50 NU 803. Extra $12 \times 30^{\circ}$ Shelf for 7230 Unit. 3 Ibs.
50 NU 804 . Extra $18 \times 36^{-}$Shelf for 7218 Unit. 5 Ibs.

NET 5.95
NET 8.45
NET 1.10
NET 1.60

"No-Mar" Table Top Withstands Rough Usage

- 8 Square-Foot Work Area - Large, Relnforced Pegboard Tool Rack


## ALL-STEEL FRAME WORK BENCH

All-steel frame hobby and work bench for the home workshop or industrial shop. Durably constructed to provide years of reliable service. Features include: $48 \times 15^{\circ}$ reinforced pegboard tool rackplenty of storage space for a complete tool assortment; 48x24* table top of mar resistant $11 /{ }^{n}$ thick, high-impact compressed board that withstands even the roughest usage; holds two allsteel parts-storage drawers (below). Gray oven baked enameled steel parts are rust resistant. Less drawers. below. $34 \frac{1}{3^{\prime \prime}}$ high. Shpg. wt., 83 liss.
50 NZ 523.
NET 15.95
50 NX 524. STEEL STORA GE DRA WER. For above. Size, $3 \times 12 x$ $20^{*}$. Shpg wt., 15 lbs.

NET 2.98


## OUR-O-PEG PEGBOARD KIT

NEW MODEL 1102. Provides con. venient storage space for tools and parts. Four $18 \times 24^{*}$, perforated $1^{\circ}$ thick hardboard panels provide 12 square ft . of storage area that can be adapted to changing needs in seconds. Kit in. cludes: 4 panels; 6 lar holders; 4 storage jars; 3-5* double hooks; 2 small-loop hooks; 20 smatl straight hooks: 20 medium loop hooks; $2-8^{\circ}$ shelf brackets; 3 large loop hooks: 3 medium straight hooks; 16 mounting screws with spacers; 1 multiple tool rack. 12 tbs.
50 NX 900. List, \$7.98 .... . NET 4.55
HARDWARE KIT. Contains 64 hooks and fixtures llsted above, less per. forated panels. Shpg. wt., 41 los .
50 NX 901 . List, $\$ 3.95$...... NET 2.25

GLASS STORAGE JAR Ideal for small parts. Metal screw cap keeps out dust. $21 / 2^{*}$ high: 2 dla. 7 oz .
44 N 500 .
12 or More,
EACH 6c
EACH 5 C
 Cabinet


Dixie
Interiocking
Aluminum
Drawers


## DIXIE INTERLOCKING DRAWERS

Economical aluminum storage trays provide excellent storage for a wide variety of radio and TV small parts and hardware. Lock together on tops, bottoms, and sides. Drawer dividers (below) may be added to make individual storage compartments. Slize, $2 \frac{1}{6} \times 21 / 1 / \times 5^{\prime \prime} .10$ oz.
86 N 023 . 1-9.
EACH 46c
10 or More,
EACH 38 c
DRAWER DIVIDERS. For Dixle drawers, above. 4 oz. 3 per package. 86 N 179.

PER PACKAGE IOC

## VIS-A-PART STORAGE RACKS

ideal low-cost storage for screws, nalis, resistors, capacitors, any other small parts. Contents always visible, yet remain clean, dry. Jars slide out easily, already open. Masonite board has 4 mtg . holes.

| Stock No. | Type | Size | Lbs. | NET |
| :---: | :---: | :---: | :---: | :---: |
| $86 \mathrm{NX} 246$ | 12-Jar | $\begin{aligned} & 81 / 4 \times 18^{\circ} \\ & 18 \times 18^{\circ} \end{aligned}$ | $41 / 2$ | 1.91 |


| 86 | NX 245 | 24 -Jar | $18 \times 18^{\circ}$ | $9^{2}$ |
| :--- | :--- | :--- | :--- | :--- |

REPLACEMENT JARS. 2 oz .
46 N 207.
NET EACH 8c
HOLDER CUPS. Same as jar holders in Vis-A.Part boards above. 2 oz . Pkg. of 2.
46 N 204...... NET PER PACKAGE 20c

# Parts Cabinets and Tool Storage Chests 

## HB-SERIES CABINETS

Compact "Handy-Bin" plastic cabinets. See-thru, spillproof styrene plastic drawers, $11 / 4 \times 23 / 4 \times 53 /{ }^{*}$. Each drawer has one divider and index labels. Styled in beige colored frames. All are $9 \%$ wide, $61^{\prime \prime}$ deep.

| 5tock | No. | Type | Orawers | He. | Lbs. | NE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 86 N | 262 | 9 HB | 9 |  | 2 | 1.99 |
| 86 NX | 225 | 15HB | 15 |  | 4 | 2.9 |
| 86 NX | 23 | 21HB | 21 | 10\%** | 6 | 3.9 |

## AKRO-MILLS SMALL-PARTS CABINETS



Series

## J-SERIES CABINETS

Space-conserving deluxe steel cabinets. Stand, stack or hang on wall. Clear plastic drawers, $11 / m \times 23 / 4 \times 5 \%$, are separated into 3 sections by removable dividers. with index labels. Gray hammertone fin: ish. All are $6^{\circ}$ deep.





## HBA "HANDY-BIN" CABINETS

Rugoed welded steel frame cabinets. Pro. vide convenient and economical storage for small parts and supplies. Clear styrene plastic drawers are $2 \frac{3}{4} \times 5 \frac{3}{4} \times 11 / 4{ }^{\prime \prime}$; have adjustable divider that locks tiontly in place; safety tab that prevents accidental spilling. Stack neatly and securely, may be hung on the wall. Baked on sllver-gray hammertone finish won't chip or rub off. With labels and one divider per drawer. All are $6^{\circ}$ deep.

## MAB-SERIES METAL SMALL-PARTS CABINETS

Features large $2 \times 11 \times 4^{\prime \prime}$ plastic drawers; snap-in dividers; index labels. Gray finish cabinets; $17 \%^{\prime \prime}$ wide, $11^{\circ}$ deep.



Sturdy steel chest with 3-compaitment removable tray. Has 2 heavy-duty drawbolts plus center padlock eye. Continuous hinge welded to cover and case. Carefully balanced with steel handle for easy carrying. Blue enamel interior; silver-gray hammertone exterior. $7 \times 19 \times 7^{\circ}$. 8 lbs .
86 NX 017.
.NET 5.45
86 NX 018. Type 6116. Above, with 2 comb partments. $7 \times 16 \times 7$ ". 7 lbs.

NET 5.10

## 410 4-DRAWER STEEL CHEST

Rugged ali-steel chest. Four easy-slide drawers. $2 \times 9 \times 11 \frac{1}{2} 2^{\circ}$, have label holders and removable dividers to make up to 12 compartments per drawer. Silver finish. $10 \times 10 \times 11 \frac{1 / 2}{2} .101 / 2 \mathrm{lbs}$.
86 MX 019.
NET 5.25


Rugged all-plastic hinged-top storage boxes with from 1 to 24 compartments. Ideai for storing small parts, resistors, capacitors, fuses, hardware, etc. Boxes are light, rigid, strong, scratch-resistant and easy to clean. Type P250 has removable cover. *Indicates total number of compartments.

4313 ALL-PURPOSE CHEST
A low-cost steel chest with a single-cantilever 3 -compartment tray. Has full-drawn leakproof seamless body and snap eatch with provision for padlock. Hardware fittings are machine riveted. Has $12^{\circ}$ rule embossed in cover. Blue enamel finish. $41 / 2 \times 131 / 2 \times 61 /{ }^{\prime 2}$. Wt., $21 / 2 \mathrm{lbs}$.

## 91 NX 234.

NET 1.40 91 NX 233. Type 4013. As above, but without tray. Wt., 2 Ibs............. NET 1.15

5413 2-TRAY UTILITY CHEST
Maximum-capacity utility chest at low cost. Has 5 compartments in upper tray: plain lower tray, spill-proof drawbolt. seamless construction, returned edges, embossed 12 rule, etc. Green baked enamel. $61 / 2 \times 131 / 2 \times 61^{\circ}$. 2 lbs. 91 NX 232.

NET 2.60

Stock No. Type Dromere Maw Lian NET



## VLCHEK CLEAR PLASTIC STORAGE BOXES

| Stock No. | MPr" Type | - Comp | Slue of Compartmente | Overall Slie. H.W.D. | We. Lbs. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 44 N 362 | P250 | 1 | 5\%x310. | 61/4x4x1194 | \% | . 38 |
| 44 N 363 | ${ }^{\text {P22 }} 21$ | 4 | 19/421/ | 41/3x ${ }^{11} 10$ | $1 /$ | .22 |
| 44 N 356 | ${ }_{\text {P203 }}$ | $\begin{aligned} & 5 \\ & 6 \end{aligned}$ |  | $\begin{aligned} & 7 x 31 / 4=1 / 4^{\circ} \\ & 81 / 4 \times 41 / 2 \times 130 \end{aligned}$ | $1 / 4$ | . 51 |
| 44N355 | P210 | 9 | $8-11 / 6 \times 11^{\circ} ; 1-11 / 8 \times 31 / 0^{\circ}$ | 7231/4x11/4 | $1 / 9$ | . 37 |
| 44 N 358 | ${ }^{2} 201$ | 12 |  | $81 / 8{ }^{4} 1 / 3 \times 13$ |  |  |
| 44 N 354 | P612 | 12 |  | $11 \times 81 / 414{ }^{\circ}$ | $11 / 2$ | 1.22 |
| 44 N 366 | P200 | 18 | $11 / 6 \times 1 / 4{ }^{\text {a }}$ | $81 / 4 \times 41 / 2 \times 13 / 0^{\circ}$ | 12 | . 51 |
| 44 N 367 | P618 | 18 | $15 \times 1{ }^{180}$ | $11 \times 61 / 813 / 4{ }^{\circ}$ | $1^{1 / 4}$ | 1.28 |
| 50 N 614 | P818 | 18 |  | 13, $13 \times 9 \times 2 \%$ \% |  | 1.95 2.03 |
| 50 N615 | P824 | 24 | $2 \times 2{ }^{\circ}$ | $13129 \times 274$ |  |  |

# It's Easy to Learn the Code With These Low-Cost Aids! 



REC-4 NOVICE COURSE, (0-3 wpm). 3 LP recorde. 47 carde, and book. Wt., 2 lbs.
895558.

NET 9.50
REC-920 ADVANCEO COURSE. ( -20 wpm ). 3-10 LP recorde, cards, book. Wi., 2 lbs.
895564.

NET 8.95
REC-020 COMPLETE COURSE, (0-20 wpm). 6-10 LP records, cards, book. Wt., 8 lbs. 895565.

NET 15.95


## ALLIED CODE COURSES

COMPLETE TO-LESSON CODE COURSE ON SINGLE $12^{\sigma}, 33 \%$ RPM RECORD. Learn to send and veceive in order to pass Novice or General Class Amataur examinations - with this alnole record. Hae 5 leasona der side: lakes you from start up to 15 wom. Back ol record lacket contalnes international Morse Code table. Includes 20-page Allod Intruction book. Shpg. w. 1 lb.
89 S 573.
nET 4.49
ALLIED'S S-RECORD CODE COURSE. "Eye-Ear'" mothed of learning code at home. Eye followa the letters as the ear hoars the sounds. Five 10 ', 78 rpm records recorded on each side. From 2 to 15 wam in 10 lesaona. Comes complete with album and Alliod instruction book. Shpg. wt.0, 6 lbe. 89 S 585.
.nET 5.95

## A ${ }^{\text {BIA }}$ ECO CODE COURSES

JUNIOR COURSE: five 45 or 7erpm records or one $331 / 2$ LP; from starl to 713 wpm. ADVANCEO: sir 45 of $78-\mathrm{rpm}$ recorde or one 33 K LP: $81 / 2$ to 18 wpm. SENOR: eleven 45 or $78-\mathrm{rpm}$ records of two $331 / 3$ LP's; from tat to 18 wpm. All courises Include 29-page manual with FCC-type exame.

| Stack No. | Course | Speed |  | Wht. |  | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 895590 | Junvar | 18 | rpm |  | lbe | 6.95 |
| 89 S 591 | Junior | 45 | rpm | 13/ | Ibs. | 5.95 |
| 895592 | Junior | 331/1 | rpm | 1 | ib. | 4.95 |
| 895593 | Advane ed | 78 | грпи | 4 | tis. | 5.95 |
| 895594 | Advanced | 45 | ¢рm | 11/2 | tbs. | 4.95 |
| 895596 | Advanced | 33\% | rpm | 1 | tb. | 4.95 |
| 895598 | Senter | 78 | rpm | 7 | libs | 11.50 |
| 89 S616 | Serior | 45 | rpm | 4 | libs. | 10.50 |
| 895617 | Senior | 331/2 | rpm | , | libs. | 9.50 |

NEW

(A) 562-B

## EICO CODE OSCILLATOR

New Model 706 portable transietor unit has speaker, adjustable pitch, phone lack. chalce of tone Alashing Hoht/both. 81/x 31/4214., With battery, 2 lom. 89 S 621. Factory Wired.... NET 12.95 89 S 627. Kil Form . NET 8.95

(A)JACKSON 562-B CODE PRACTICE OSCILLATOR. Trantistor code onclifator for use with external magnetle phonet and ker. Varlable tone. $61 / 233 / 12^{2}$. Lese battery, below. Wi., 2 lbs. 895628.

NET 9.95
55 J 005 . BATTERY. $1 \% \mathrm{v} .8$ oz.
NET 13c



[C] 3022


## CODE PRACTICE OSCILLATORS AND KEYING MONITORS

(8) BUD MODEL CPO-ISST TRANSISTORIZED CODE PRACTICE OSCILLATOR AND MDNITOR. A low-Cost unit for use with headphones. Liohtweight and compact in size-only $11 / 2 \times 41 / 821 / 2$, Reaulres 2 penllght batterdes, below. Wt., 2 lbs. 89 S 629.

NET 5.76
55 J 340. PENLIGHT CELL. 2 oi....... EACH 10c
(C) GONSET MODEL 3022 "MONITONE" KEYING C. MONITOR ANO CODE PRACTICE OSCILLA. TDR. Learn the code with thie inexpensive unitthen use il to monitor your sending after you get your Kam Hcenael Monitor-oecillator unil hae bulltIn speaker, provition for headphones, separate tone and volume controle. Uses RF plekup link placed near wansmitter's Anol tank coll to monitor transmitter keying. Case size is lust $6 \mathrm{k} 7 \mathrm{E}^{\circ}$. For 110-120 volte, AC or DC. WL. 4 lbs.
89 S 718. \&s Monthly
NET 32.80
(D) AMECO MODEL CPS-WT CODE PRACTICE OSCILLATOR. Deluxe oscllator has $4^{\circ} \mathrm{PM}$ speaker for loud, clear tone; click filter, Doubles as keying monltor, Size, $61 / 35 \times 31 / 90$. For operation from t10-120 volts. AC or DC. Shpo. wt., 3 tbs 89 S 72.

NET 14.95
E BUO MODEL CPO-128B "CODEMASTER." May be used as CW monitor, Has 4" PM speaker; volume and plteh controle. External epeener may be plugged into bulit-in heedphone jack. Several heade phonet and heve may be paralleted for group code
 or DC. Shpg. wt., 5 bes.
89 S 901 .
NET 18.75
41 H641. STD. PHONE PLUG. For attaching keys and headphones to nbove. 3 oz.............NET 45c 48 W 205. CABLE. Extension cord for keym. Shpe. wt. 2 ox..

NET PER FOOT $21 / 2 \mathrm{c}$

## CODE PRACTICE SETS AND ACCESSORIES

F DOW-KEY "KEY-MUNICATOR" CODE PAACTICE SET. Practice set of unusual quality, efficlency and durability. Two of more can be wired logether (with any 2 -conductor cable) to form a prlvate telegraoh Hine-can be miles apart. Has bulltIn translator oscillator. Suppolied with key on 9x12board that lists cods, earphone, message pad. and battertes. Wl., 2 lbe
895902.

NET 9.95
JOHNSON MODEL 114 -31O STANDARD KEY. A top-quality, moderately priced key tine for both beginner and erpertenced operntor. "Cushion contact" dealan offere emooth leying action. Heavy dlocast bene is finished in black wrinkle onamel. All mochanical parte are nickol-plated. Ko eliver contacte. Adjustable tension, confact apacing and bearings. Wt., 2 lbs.
895903.

NET 3.25
[H JOHNSON MODEL 114,300 PRACTICE KEY 1 Low-cost general-purpose hey. Brown phenolle base and knob. Adjustable key arm, apring and bear-ings-easily adjusted tension and contact epacing. \%' silver contacts. With code card. a oz.
89 S 904.
NET 2.25
[J JOHNSON MODEL 114-450 BUZZER CODE (1) PRACTICE SET. Consleta of key and constant Migh-trequency buzzer on brown bakallie base. $\$ 11$ ver contacts. Can be used eingly or in palre. Rogulres $2-1 / 1 / \mathrm{v}$, betteries. WL. 2 Ibw.

## 89 S 910

NET 4.95
(R) JOHNSON MODEL 114-400 BUZZER. HIghhequency buzzer alone (as used on set sbove). Use with any hand key. Provide: enough volume for aeveral Hateners. Screw adjustmant varies tone. Reaulres $2-\$ 1 / 2 \mathrm{~V}$. befterles. Wh., 5 oz. 89 S 911.

NET 1.85

## MARSAN <br> CLOSED CIRCUIT TV COMPONENTS



High-quality unit for use with TC-2 TV camera, at right. Utilizes $8^{\circ}$ rectangular aluminized $90^{\circ}$ kinescope. Contains horizontal and vertical sweep circuits, high and low-voltage power supply. Requires video sync input of -0.3 to -2.5 v . peak-to-peak through rear-panel SO-239 connectors (2 bridged). Video response: 600 lines $(8 \mathrm{mc} \pm 1 \mathrm{db}$. High voltage: 14 kv . Front Panel Controls: On/Off-Brightness, Contrast, Horiz. Hold, Vert. Hold, Height, Vert. Linearity. Rear Panel Controls: Horiz. Drive, Horiz. Stability. Centering control on yoke. Fused. Metal case, $81 / 2 \times 101 / 4 \times 101 / 2^{\prime \prime}$ with knobs. For operation from 110.120 v . $50-60$ cycle AC. Shpg. wt., 20 Ibs.
89 SU 057-J. $\$ 10$ Monthly.
NET 189.00

## MODEL TC-2 TV CAMERA

New, low-cost, completely self-contalned portable TV camera. Finds many uses in schools, factories, warehouses, banks, hospitals, homes, etc. Provides excellent resolution, has high light sensitivity. Transmits picture to any TV set, monitor such as TM-2 Monitor at left, or master TV cable system. Provides crisp, clear images of any object or scene.

Produces tunable RF output on Channels 2 to 6 as well as vidpo signal output. Features automatic light level compensation circuit. Has resolution of 400 lines on video output and 300 lines on rf output. Hand-wired chassis utilizes six tubes. Output: RF channels, 0.1 volt; video, 1.5 volts peak-to-peak. Lens is $48 \cdot \mathrm{~mm}$ coated f 1.9, auxiliary lenses listed below. Compact, only 61/1x $45 \times 10^{\circ}$. For $110-120$ v., $50-60$ cycle AC. 14 Ibs.
89 SC 059-J. $\$ 20$ Monthly
.NET 449.00
89 SX 060. Model P-1 Tripod. Three sections, opens to $70^{\circ}$, closes to $27^{\circ}$. Has elevator, pan head, quick-release nylon locks, no-slip rubber tips. Gray finish. 10 lbs . $\qquad$ NET 17.95

89 SX 061-J. W-1 Wall Mount. With pan head. 5 tbs. . NET 14.95 89 SC 062-J. $15-\mathrm{mm}$ Coated F 1.9 Lens. 1 lb . NET 41.25

89 SC 063-J. $\mathbf{2 5}$-mm Coated F 1.9 Lens. 1 lb. . . . . . . . . . NET 29.25
09 SC 064-J. $3^{\boldsymbol{*}} 75$-mm Coated F 1.9 Lens. 1 lb........ . NET 37.50
89 SC 065-J. $6^{\circ} 150-\mathrm{mm}$ Coated F 3.5 Lens. $1 \mathrm{Ib} . . . .$. . NET 67.50

## INDUSTRIAL, PUBLIC SAFETY, AND AIRCRAFT RECEIVERS



MR-10 (152-175 MC) MR-33 (30-50 MC)

MODELS MR-10 and MR-33. Monitor 152 174 and $30-50 \mathrm{mc}$ bands. Adjustable squelch, $5^{\circ}$ speaker. $4 \mu \mathrm{v}$. sensitivity. 7 tubes, $6 \times 4$ rectlfier. $7 \% \times 111 / 4 \times 61 / 3 /$. For 110 120 VAC. 18 lbs.
90 SX 667-J. MR-10. 152-174 mc. NET 90 SX 668-J. MR-33. 30.50 mc EACH 72.50 MOBILE MODELS $\mathrm{M}-40$ and $\mathrm{M}-160$. For 30.50 and $152-174 \mathrm{mc}$. Tuned RF stage, $4^{\prime \prime}$ speaker, squelch. $41 / 2 \times 61 / 2 \times 83 / 4^{\prime \prime}$. For 12 v . DC only. Wt., 12 lbs .
90 S 669-J. M-40. $30-50 \mathrm{mc}$. . NET
90 S 670-J. M-160.152.174mc.EACH103.55 Crystal-controlled Models MRC-10 and MRC-30 at $\$ 79.95$, and Models MC-40 and MC. 160 at $\$ 122.95$ available on special order. Specify frequency desired.

MODEL PR-35. Moderately-priced FM receiver for the 30.50 mc range. Features a temperature compensated superhet circuit for drift-free reception. Ratio detector circuit minimizes noise under "no signal'" conditions. Provides 100 kc selectivity with $10 \mu \mathrm{~V}$ sensitivity. $4^{*}$ PM speaker. 5 tubes plus rectifier. Plastic cabinet. $6 \times 91 / 2 \times 5 \frac{1 / 2 \prime}{}$. For $110-120$ v., 50.60 cycle AC, or DC. Shpg. wt., 6 lbs.
905 664-J. NET 54.40 5 665-J. PR-155. $152-174 \mathrm{mc} . . . .54 .40$

MODEL DR-200 2-BAND FM RECEIVER. Frequency ranges: 30.50 mc and 152.174 mc. Dual-conversion; provision for one crystal-controlled frequency in each range (less crystals). Has squelch. Sensitivity for 20 db quieting: $30-50 \mathrm{mc}, 1 \mu \mathrm{v}$; 152-174 mc. $2 \mu \mathrm{v} .14$ tubes; 5 Y3GT rect. $8 \times 141 / 4 \mathrm{x}$ $91 / 2^{\prime \prime}$. Less speaker (below). For 115 VAC. 21 lbs. Crystals available on special order for $\$ 11.95$ each. Soecify frequency. Allow 3 weeks for delivery.
90 SU 6e6-J.

## .....

NET 169.50

## RECEIVER ACCESSORIES

MODEL M-20 WINDOW MAST ANTENNA. Whip for DR-200 and MR-33 receivers (above) in $30-10-50 \mathrm{mc}$ range. $96^{\circ}$ telescoping brass assembly having $90^{\circ}$ mounting adjustment for window sill or vertical surface. With mtg. bracket. Shpg. wt., $21 / 4 \mathrm{lbs}$.
90 SX 671-J.

MODEL DRS-1 METAL-ENCLOSED 6* SPEAKER. For DR-200. Size, $8 \times 71 / 2 \times 71 / 2^{\prime \prime}$. Shpg. wt., 6 lbs.
90 SU 672-J. . . . . ...................NET 14.95
MODEL M-7A GROUND-PLANE AN. TENNA. With 4 radials. For $152-174 \mathrm{mc}$. Shpg. wt., 1 lb. 90 SX $873-\mathrm{J}$.

NET 5.29

HALLICRAFTERS CRX-2 FM MONITOR RECEIVER. Receives $151.174 . \mathrm{mc}$ split-channel NBFM communications. Triple conversion 10 -tube circuit. Vernier tuning or 2 fixed channels (less crystals). $1.5 \mu \mathrm{v}$. sensitivity. Bullt-in speaker. $57 / 3 \times 131 / 2 \times 8 \frac{3}{4}$. For $110-120$ v., 50-60 cycle AC. 15 lbs .
90 5x 674-J. $\$ 5$ Monthly.
NET 109.95
GONSET 3156-8
(108-135 MC)


90 SX 675-J. CRX-1. Above, for 30.50 mc 9 tubes. . NET 99.95 $90 \mathbf{5 x}$ 676-J. CRX-3. AM Aircraft Monitor Receiver. As above, for 108-135 mc band. Dual conversion. 7 tubes

NET 84.95

GONSET 3156-8 AIRCRAFT MONITOR. Receives 108 -135 mc $A M$ communications. Features variable squelch, AGC, and noise limiter. Has built-in speaker, external speaker output, muting contacts. 8 tubes plus rectifier. $41 / 2 \times 61 / 2 \times 10^{\prime \prime}$. For $110-120$ v. $50-60$ cycle AC, 11 Ibs .

90 SU 677-J. $\$ 7$ Monthly.

# ALLIED 

KING-SIZE TRADES. We speciallze in glant trades, so why not modernize your station? Write today-describe your trade-in and tell us what gear you need. You'll get a terrific deal at Allied l

EASY TERMS. With our Credit Fund Plan, you own any gear you need right away... for no money down, low monthly payments, and up to 24 months to pay. You get more buying power, tool

## Selecting a Communications Receiver

Receivers are classified into two (some also tune longwave); (2) groups: (1) General-Coverage types funing the broadcast band and Amateur types covering Ham bands only. Two stars, *, indicate Genshortwave, including Ham bands eral-Coverage; one $\star$, Ham types.

## famous Hallicrafters EQuIPMENT



## NO MONEY DOWN

150 Watts PEP Input on 80 Through 1041 Transistors Plus 3 Tubes and 49 Diodes

## MODEL FPM-200 SSB TRANSCEIVER

work, aleo features: Ilnear callbratione eccurate to 1 kc ; 100 -kc callbrator; CW monitor; USB/LSB eelection: plug-in modular construction; cryatal fitsers for maxlmum recelver selectivity and unwanted sideband suppreesion; 1 uy recelver seneltivity; many other highilghte. With eeparate AC power supply (not llfus.), sm7xit', that contains epeaker, hey lack. Transcatver, 5x16511". For 105125 v.. AC or 12 v. DC. Wt., 62 lbs.
90 SZ 063J. No Monev Down..... NET 2650.00

FREE HOME TRIAL. Try out any new equipment in your home. Then, if you're not fully satisfied, return it to us. We'll promptly refund the purchase prlce, less only transportation charges.

## A genulne advancement in transistorized communtcations equipmentl The cempact, $24 \mathrm{~K}-1 \mathrm{~b}$. FPM-200 operates on all bande from 80 through 10 meters on SSB, CW or AM. 41 tranelatore, 49 dlodes and 3 tubes; recelver and low-level tranemititer circuits are fully transistorized. Tubes: $128 y 7$ drlver and 2 -6146s final. Has 2 separate 128 P P's-siver and $2-1465$ inal. Has 2 separate Independent or simultaneoue tracking frequency control. Desioned for fized. portable and moblie



## COMPLETE PERFORMANCE-MATCHED SSB/CW/AM STATION

## * SX-101A SSB RECEIVER

Delure dual-converalon recelver offerlng excellent mechanical and electrical stability, 1 uy eensitivity throughout, and 5 step of selectivity from 500 to 5000 epa. Ranges are 3.5-4.0, 7.0-7.3, 14.0-14.4, 21.0-21.5, $28.0-30.0 \mathrm{mc}$-ll Hàm bands from 80 through 10 meterte, and 10 me position for WWV. Dial also calibrated for 6 and 2 metera;- requires 6 or 2 -moter converter with $30-34$ me output. Dual scato Illuminated S meter, with zero point indoDendent of senstivity control, functions with AVC off. Individually Hghted band-in-use scalet.
Also Includes: upper and lower sideband selection: crystal-controlled $2 n d$ conversion onclitators; teparate AM and SSB/CW detectore; Tee-notch filter; bullt-in 100 -kc marker cryatal; direct-coupled serles nolse Mmiter; 40-10-1 tunlng knob ratlo; band-toband gain equalization; fatt and slow AVC switch; antenna trimmer: and many other extras. IFa are 1650 and 50.5 mc . Hes is tubes; rectifter and VR qube. Rugged ateel cabinel, $10 \% \times 20 \times 16^{\circ}$, Lous apeaker (see R-47 and R-48 on appoalte page). For $105-125 \mathrm{v}$., $50-60$ cycle AC. Wh. 75 lbe.
90 SZ 032J. spo monthir.
NET \$45.00

## HT-32B TRANSMITTER

An extromely efficient and vertathe table-too transmitter-arciter for SSB, CW and AM operation on $80,40,20,15$ and 10 meters. Incorporites ? spectal SS8 generatlon technilques: beam-deflection high-ievel modulator for low-nolse, high-stablilty elgnal; excluelve 5-mc quartz cryetal filter with unwanted aldeband relection of 50 db or more. Geardriven CTO permits direct reading of trequeney within 1 itc. Two 6146 tubes in final run up to 144 watte input (PEP wo-tone). Both sidebends are transmitted on AM. Distortion productu. at leset 30 db down; carrler suppresslon, 50 db down.
Clean keying aystem for break-in CW, puah-to-talk and full voice control syetem bullt-In. Logarithmle panel meter permita accurate funing and carrier levei adjustment. Also ha meparate phone patch input, 52 -ohm pi-network output, Halleraftere exclustve stdeband solection, and rear-Chasele fich for RTTY frequency-shit koying circult. In ruggedly dewigned gray and bleck ateol cabinet with brushed Chrome trim. Size, $10 \% \times 20 \times 16^{\circ}$. For $105-125$ v., $50-60$ cycle AC. Shpg. wt., 86 lbs.
90 SZ 033J. No Moner Down. . . . . . . NET 725.00

## HT-33B LINEAR AMPLIFIER

Run the maximum legal inputwith this conservatively rated 1 thw linowr ampliflet. A matching unlt for the HT-32B at left, the HT-338 gives you rellable bandawtiched coverage of the 80 through 10 -moter Ham bande. Employs a single PL-itz pentode tube in "zero drive" Cless AB1 operation for extended tuba ilfo and trouble-tree service. Panel meters for RF output and cathode current permit almple, fatt and precise tuning. Varlable pl-network leading for maximum harmonic suppresalon. 3rd and 5th order distortion products are down 30 db or more.
Stable passivi grid input circult matches 50 to 75 ohme and reguires no grid tuning or nautratizationuse with any 100 -watt exclter. Bulit-in power supply has exceptional regulation: screen voltage is controllod by six OA2 regulator tubes; vartable blas supply has front-panel control for malntaining proper tdling current. Fliament, blaz and blower clrcults, and PL-1 72 act een are fused. CIrcult breaker protects high-voltage supply. Octal plug to apply cut-off blas. Steel cabinet, 10\% $\times 20 \times 16^{\circ}$. For 105-185 v., 50-60 cyele AC. Wi., 130 Ibs.

90 SZ 034J. No Money Down.
NET 995.00

## New Ideas in Communications Are Born at . . . Hallicrafters

## POPULAR MODEL HT-37 SSB/CW/AM TRANSMITTER

A carefully designed; moderately priced transmilter that bringe SSB within everyone's reach. Ollers 70 to 100 watt PEP output on SSB and CW. and 17-25 watts output on AM. Retalns the characteriatics which made its "blg brother"-the HT-32A - Famous Covers the so through 10 -meter bands. Inctudes: high stability VFO; sideband suppreasion of 40 db ai 1000 eps ; calibration systom permitting instan CW CAL from any tranemlssion mode; full vox; 2-6i46a in thal; ldeal CW keying; dual-range meter; 52 -ohm pi-networl output, $\mathrm{SIze}, 9 \times 191 / 6 \times 17 \%$ for $105-125 \mathrm{v}$., $50-60 \mathrm{cycl}$ AC. WI., 82 Ibs. 90 SZ 035J. 521 Monthly.

NET 495.00


## VHF TRANSVERTERS

MODEL HA-E TRANSVERTER. EASHI Converts your present 10 -meter SSB. AM or CW equipment to tranamit/receive on 6 meters. Can be driven by 10 to 100-watt enciters; has 5894 -tinal for 50 watts PEP output, 12.5 watt $A M$ output. Nuvistor in receiver front end for ercellent nolse and senaltivity Houres. fBultion coaxial amtenna relay. Lest power supply, below, $8 \times 17 \times 8$ 府". Wt., 23 the
90 SU 040J. $\$ 17$ Monthly.
NET 349.50
MODEL HA-2. Above, for 2 meters. 23 Jbs
90 SU 050J. 517 Monthly......NET 349.50
MODEL P-26. Power supply lor HA-2/HA-6. 1 KR B $3 / 6 \times 81 / 4^{-} .105-125 \mathrm{v} ., 60$ cycie AC. 29 Ibe
90 SU 056J. 55 Monthiy. .......NET 99.50


## -SX-111 RECEIVER

An outstanding SSB/CW/AM duat-converelon selectable-shdeband feceiver with the performance characterletics of the renowned SX -101. Covers 80 through 10 -meter Hem bande in 5 band with 6 th liou funable to 10 me for wwy Features high and tunable to teblity; $1-\mu v$ sensitivily; 5 steps of selectlvity from 500 to 5000 eps; crystal-controlled 2nd conversion oscllator; Beparate delectors for SSB/CW and AM: Tee-noteh filter; bulls-in 100-kc crystal callbrator: 48:1 tuning ratio; S meter. With 12 tubes plus. VR tube and rectifler, $8^{12 / m p 18} 18^{1 / 1 / 4} 10^{3 /} / 10^{\circ}$. Less speaker (sece R-47 and R-48 below). For $105-125 \mathrm{v}, 50-80 \mathrm{cycl}$ AC. Wt., 42 lbs.
90 SU 038 J . $\$ 14$ Mónthly.
NET 279.50

## HT-41 LINEAR AMPLIFIER

Besultutly engineered tineat at a modest priceAthe companion for the HT-37 (tefl. above), or can be dilven by any SSB exciter dellvering 20 to 100 watte. Provides bandswitched coverage of 80 through io meters. SSB power input is 1000 warts PEP through 20 meters. slightly less on 10 metert. AM ohone input, 300 wit CW Input, 800 w . Uses groundedogid Clases amplifter with 2-709 tetrode lubes. Has adjustable pi-networh, RF output meter for easy tuning, standby bias supply, overioad prosection, blower and builloin nower supply. Conx input/Output: so- 75 ohms. $9 \times 191 / 417 \%$. For $105-425$ v. $50-60$ cyele AC. Wt., 97 lbs.

9052039 J . $\$ 18$ Monthly.
NET 395.00


\author{

+ SX-100 RECEIVER
}

Popular dual-conversion general-coverage communtications receiver covering 538 hc to 1590 kc and 1720 kc to 34 mc in 4 ranges. Has adjustable 50.5 ke 2nd If with 4 high-O permeability-tuned circults for high selectivity-Tee-notch fliter reduces heterodynes. Also has upper and lower sldeband selection, delayed AVC, CW operation wilt AVC on or off, S meter, phone jack and 100 -kc crymal cellbralor. Elecriteal bandspresd for Ham bande ao through 10 meters. Temperature-compensated MFO and eryetal-controlled and conversion oscillator lor outstanding stabllity. With 12 tubes: VR, rectilter $81 / \mathrm{x} 1 \mathrm{~g} 1 / \mathrm{K} 10 \mathrm{~s} / \mathrm{m}^{\text {. }}$. Lese apegher, below. For $105-125$ y., $50-60$ cyele AC. Wt. 43 lbe .
90 SU 057J. \$10 Monthly
NET 325.00

$\star$ © $\boldsymbol{\text { SX-110 RECEIVER }}$
A tine value in a medium-prlced general-coverage communicatione recelver, the $S X-110$ tunes the $A M$ broadcast band from $540-1680 \mathrm{kc}$ plus 3 shortwave bands from 1680 Mc to 34 mc . Sllde-rule bandspread dial is calibrated for the 10, 15, 20, 40 and 80-meter Amateur bandn, the 11 -meter Citizena band, and lagoing scale. S meter is cellibrated in units of 6 db to Sg and in db above. So. Has erystal litter, RF stage, 2 IF stages, BFO with piteh control, automatic nolse Mmitter, fone control and antenna frimmer. IF Is 455 kc . With 7 tubes; rectiller. Silverfrimmed $81 / 318 \% \times 1 t^{7}$ gray steel cabinet. Lass speaker (use R-48 below with this unit). For 105-125 V. $50-60$ cycle AC. Wt., 35 tbs.

90 SU 058. s9 Monthly.
NET 169.95

## HALLICRAFTERS MATCHING SPEAKERS

MODEL R-47. Communicatlons speaker designad speciflcally for speech and CW reproductionextremely effective on SSB. Has estentially flat response from 300 to gese cos with rapld droo in output above and below eutoff trequencles. For use with all Hallicratters recelvers on these pagesideal for moblle Installations. too. impedance, 3.2

905059.

NET 12.95

MODEL R-48. Matching $51 / 2 \times 71 /{ }^{\circ}$ apeaker for Hallicratters receivers on these pages of ather recelvers with 3.2 -ohm audlo output. Swilch at rear permits selectlon of full-fidelity response for music, or voicefrequency response for communleations roception. 3.16 -oz, magnet produces fuliy saturated alr gap and distortion-tree reproduction. Gray steel cablnet. $6 \% \times 131 / 48 \%$. Shog, wt. 1 its
$90 \mathbf{S X} 060$. 55 Montnly
NET 19.95


NEW!

## *SX-117 DELUXE HAM-BAND RECEIVER

Allonew trible-converston communicatlons recelver lor deluxe reception of SSB, CW and AM signals. A high order of mechantcal and electrical stablity is achleved-has cryatal-controlled HFO plus crys-tal-controlled ist and 3rd conversion oscillators and transmiller-type VFO. Cryetals supplled cover $3.5-4.0,7.0-7.5,14.0-14.5,21.0-21.5$ and $28.5-29.0 \mathrm{mc}$. (Cryetals for 28.0-28.5, 29.0-29.5, 29.5-30.0. WWY and non-Ammieur ranges avallable on apecial order). Sencluvity, at least $1 \mu v$ AM and $1 / 2 \mu \mathrm{CW}$ tor 10 db $\mathrm{S} / \mathrm{N}$. Selectivity varlable in 3 steps from $500-5000 \mathrm{cpe}$. Also: T-notch filter; selecinble AVC and USB/LSB; product/envelope detectors: IF Aype ANL; audio inverse feedback; backiash-free tuning: etc. $7 / 5 \mathrm{x} 15 \mathrm{~s}$ $13^{\circ}$. Less 100 -kc crystal collibrator (below) and speaker (left). For $105-125 \mathrm{v}$. AC. 2 t Ibs. 80 SU 061 J . \$18 Monthiy. ..........NET 379.95 MODEL HA-7 CRYSTAL CALIBRATOR. FOr SX117, above. Shog. wt., $1 / 2 \mathrm{lbs}$. 90 S 062 J .

NET 19.95
Allied

# Popular Communications Equipment by hallicrafters 

5-120 4-BAND REGEIVER for GHORTMAVE and AM


## ** DELUXE SX-62A

## FM-AM-SW RECEIVER

Remarkably Wide SixRange Coverage Includes Standard AM Broadcast, 3 Shortwave Ranges, Plus 2 FM-AM Bands Covering from 27 to 109 mc .

## Separate With 3

An ercellent cholce for the SWL, this low-cost recelver brings in worldwide shortwave, ehlps. planes, Amateura, time signais, and all your lavorlte AM programs. Tunes the $550-1600$ ke broadcast band plus 3 shortwave bands from 1600 ke to 30 mc . Has 3 separate anternas: ferrito toop for broadcast band, adjuatable whip for ahortwave, and wire ontenne. Avletton and shortwave broadcast trequencles arienty marked. Electrical bandspread with separate caDacitor spreads out stations and simpliftes tunInc. Front-panel headphone jack automatically disconnects bulll-tn speaker. Steel case, $5 / 1 \mathrm{x}$ $13 \% \times 8 \%$. Whith 4 tubes; fectifler. For $105-125 \mathrm{v}$. $50-50$ grete AC or DC. WL., 12 tos.
90 SX 064 . $\$ 5$ Monthiy
NET 69.95

Unlque, beautifully atyled recelver offering peak pertormance on AM broadceat, shortwave and FM -continuously tunes from 550 he through 109 mcl Precision bult to eracting standards, the SX-62A covers these 6 ranges: $550-1620 \mathrm{kc} ; 1620 \mathrm{hc}-4.9 \mathrm{mc}$ : 4.9-15 mc: $15-32 \mathrm{mc} ; 27-56 \mathrm{mc}(F \mathrm{M}-\mathrm{AM}) ; 54109 \mathrm{mc}$ (FM-AM). Push-pull ev6 tubes in output stage provide to watts of full-irequency audlo. Has 4-position tone control; phono-Input Jack: Whuminated, widevision slide-rule dial; 60-to-1 funing ratio: 500 kc calibrating cryatal; AVC and nolse fimiter. SIn-
position ciystal filter circult, 3 If and 2 RF atapes give high sensitivity and selectivity, Other highlights Inctude: separate RF and AF oaln conirols; temperature compensated, volsage-regulated osclilator; BFO for code receptlon; front-panet headphone jach: 14 tubes piun recilitar and VR tube. Antenna input, 300 ohma. $3.2,8$ and 500 -ohm apeaker outpute. in sturdy, attractive cabinst, $101 / 3 \times 80 \times 15^{\circ}$. Lese speaker (uses R-48, precedling page). Fot $105-125$ y., $50-60$ cycle AC. Wt., 66 lbs.
90 SZ 065 . $\$ 19$ Monthly.
NET 430.00

## * MODEL Si18 LW-AM-SW RECEIVER

All new Irom Halilicrefters- 5-band reculver with extended coverape of the low Irequenctes. Hear FAA weathercasts, beacons, consolen, aeronautical moblies. The soa-ke distress frequency, plus AM broadcest and worldwide shortwave. Cover these ranges; $185-420 \mathrm{kc} ; 495-1620 \mathrm{kc} ; 1.6-4.95 \mathrm{mc} ; 4.85-18 \mathrm{mc} ; 14.8-31 \mathrm{mc}$. Festures silde-rule dials with eiectrical bandspread, nolse limiter, BFO for code reception, bulthin speaker and ferrite Ioop antenna, sockel for external DC power. phone fack, phone input/audio output jack, etc. IF, 455 kc . Amtensa Impedence of $50-75$ ohms for shortwave bande. Has 5 tubes; 2 siltcon diodes. Cave, $54 / 4 \mathrm{z}$ $141 / 488 / \mathrm{hi}^{\circ}$. For $105-825 \mathrm{vo}, 50-50$ cycle AC. Wi., 19 ibs. 90 SX 066 . $\$ 5$ Monthiy

MET 99.95

## * MODEL S-108 SW-AM RECEIVER

A fine general-coverage reculver superseding the renowned S-85 serles-completely restrled for improved oparating ease and greater tuning accuracy. Junes standard broadcast and ahortwave continuously from 540 kc to 34 mc in 4 ranges Silde-rule bandepread diel calibrated for $90,40,20,15$ and $10-$ meter Ham bande, and logging scale. One RF atape, 2 IF atages and separate bandepread capacitor. Other inghlithte Include: varlabie BFO; tiable, femperature-sompensated osclliator: automatic noltee limiter; 3-position tone control: bulli-in $5^{\circ}$ PM apeaker; AVC; troni-panel headphone jach; standby-receive switch. Has 7 tubes plus rectifier. $8181 / 48101 / 4^{\circ}$. For $105-125 \mathrm{v} .050-80$ eycle AC. Wt. 35 lbs . 90 SU 067. 87 Monthly.

NET 139.95

BEGINNER'S SPECIAL! SKY-8MDDY IIRADIo

## ${ }^{5} 49^{95}$

 ${ }^{5} 39^{95} \underset{\substack{\text { krim } \\ \text { form }}}{ }$MODEL S-119. A dandy "Inrat set" for the newcomer to shortwave Itsteningl He'll hear ships. planes. Hame, forelon brosdcests and AM programs on thte inexpentive radio. Superhet cliccult tunes standard AM from 535-1620 he, and thortwave from $2-5.5$ and c- 86 mc . Hal smooth-tuning planetary dial drive, BFO for code recepllon. buttitin speaker, frenstormer power supply, bandewitch control, phone tip jacks. etc, Steel case, $5 \times 10 / 1 / 27 \mathrm{~K}_{\mathrm{K}}, 3$ tubes; dlode detector. For 115 v., 60 cycle AC.Wt. $g$ lbe. \$5 Manthly. 90 SX 068 . Factory WIred. .... NET 49.95 $90 \mathbf{5 X} 069$. Kit form. ,NET 39.95

## HT-40 TRANSMITTER

Carefuliy designed 6 -band CW and AM tranmitter - Hine companion for the SX-140 (rignt), Gives eryatal-controlled, bandewithed coverage of the so through b-meter Mam bands with 75 watte peak Input to 6DOS Hinal (allghtly lest on 6 -meter AM). Provislon for external VFO ( 52 -ohm pi-network output, TVI fliterling, dual-sange
 AC. WL. 19 Jbe. 86 Monthly. 90 SU 085. Fectory Wired.

NET 109.95 $90 \mathbf{S U} 086$. Kit Form \$5 Monthly.

NET 89.95

## - SX-140 RECEIVER

Sensitive, selective Ham-band receiver for 80 through 6 metors-matche MT-40 (left) in size, styling. quility and bands covered. Ha* S metor, ANL, BFO, electrical calibration reset, phone Jack, antenna trimmer, etc. Illuminated ellde-rule dial with $25-10-9$ tuning ratio. Internal ultching for tranamitter and antenna change-over, 713 偱 $13 \% \times 81 / 4^{\circ}$. Lass speaker (see R-47, R-48, preceding page). For $105-125$ Y., $50-60$ cycle AC $14 \mathrm{ibs}, 37$ monthly. 90 SU 088. KIt Form $\$ 6$ Monthiy.

MET 139.95
NET 114.95

## HA-5 DELUXE HETERODYNE-TYPE VFO

A selfopowered and extremoly stable heterodynetype VFO. Ilfuminated diel is calibrated for all Mam bands from Bo through 2 metere. $5.0-\mathrm{to}-5.5 \mathrm{mc}$ varlable oscillator ma, be directly zero-beated with WWV. A so-to-1 tuning fatlo allows preche funing.

Cathode of mixer fube to hoyed for excelfent CW. Output: $3.5-4.0_{2} \quad 7.0-7.5,7.8-8.3$, $8.333-8.833 \mathrm{mc}$. 3 tubes; VR, silicon rectifiert. $5 x$ 万xiki, W/atale for 20-10 mirs. $405-125$ y., 60 cycle AC. 8 tbs. $\$ 05070$. Factory Wired. $\qquad$
NET 79.95

# : 

I NEW!
FOR BOTH 6 $\& 2$ METERS

# (2) 

MODEL. KWM-2 SSB/CW 5-BAND TRANSCEIVER

## MODEL 62S.1 VHF CONVERTER

New- 6 and 2 meter transmitting and recelving converter more then doubles your frequency coverage of the present " 5 " Hne. Providen lult 8 and 2-meter operation at the flich of a switch-and with no cabte changing-when moving from HF to VHF. Using yout present faciter" high voltage, the 62S-1 supplies a to 5 -db nolse lloure on recelve and 160 watt PEP input to $7034 / 4 \times 150$ final amplliter on transmit. Power output is 65 watts PEP minlmum.
Deslgned primarity for use with the "S" line. KWM 2 and KWM-1, the VHF adapter will convert most other equlpment operating in the 14.0 to $14.2-\mathrm{mc}$ range. Transmite and recelves on SSB. CW, AM or RTTY, ae determined by the exciter and receiver used. Receiving sensitivity, 4.2 yy maximum on 2 meters end $1.3 \mu \mathrm{v}$ maximum on 6 metert (for 10 db 5 fin using 3 kc audio bandwidth). Imege refectlon. greates than 100 db on 6 meters; grester than 60 db on 2 motera. IF rejection, greater than 90 db . Other apurlous responsee, at least 50 db below $1 \mu v$ destred stonal level. Minimum recelver radiaflon.
Frequency range is 49.6 to 54.2 and 143.6 to 148.2 mc; prectision $0.005 \%$ cryatals furniahed cover $50-54$ and 144-148 me. Panel meter reads PA grid/plate current and output. input /output Imp., 50 ohme. Regulres $100 \mathrm{v} . \mathrm{DC} @ 220 \mathrm{ma}$ and 275 v . DC 630 mm from external source. Gray case. 7\%/414\% $1 / 13 / /_{4}$. For $110-120$ y., $50-60$ cycle AC. W4. "26 tbs.
90 SU 089 . No Money Down 895.00

Compact transcelver reflecting the modern concepl of mobility, veratility and atyling in Ham Rado SSB yyaleme ideal for moblle. fized-atation, sero neutical and marine use, unit covere the 80 through nautical and marine use, unit covert the 80 through 10 -moter Ham bands plus 14.8 to 15.0 mc Ior WWV. Input is 175 watte PEP on SSB and 160 watte on CW. Provides uppet or tower sideband emisstion on SSB and break-in CW keying (with sidetone) free of chirps and cllens. Effelent filter-type SSB generation gives cartier suppression of 50 db ; unwanted sideband suppression, 50 db . Crystal-controlled dual-conversion recelver has sensitivity of $\% \mu v$ for 10 db $\mathbf{S} / \mathrm{N}_{\text {; }}$ cholce of any $14-200 \mathrm{kc}$ eegments by fromt-
panel crystal witheh. Also has ALC. permeabllity luned vaslable osclilator, vox and seaker antltrip clrcuits. RF thverse feedback for excellent linearity, etc. Size, $7 \% \times 14 \frac{1}{2} \times 13 \%$, Less power oupplies below. Wi., 21 lbe.
90 SU 090. ........................ 1150.00
MODEL MP-1 12-VOC POWER SUPPLY. (Not Hhue.) 5\%/11\%n73". WI., 13 lbe
90 SU 091. 510 Monthty
NET 198.00 MODEL 516F-2 $115 . \mathrm{V}$. 50-60 CYCLE AC POWER SUPPLY. $7 \% \times 10 \times 12^{\circ}$. Wt. . 29 lbs. 90 SU 092. \$6 Monthly

NET 115.00

## KWM-2 AND "S" LINE ACCESSORIES (Not llius.)

MODEL 3128-5 SPEAKER CONSOLE AND EX TERNAL PTO: For KWM-2 transcelver. Combines KWM-2 and accestortas into a complete fired-statlon operating syblem. With speaker, RF directional wettemeter, phone patch and function controls. Has wettmeter, phone patch and function controls. Ha VOX and recelver disabiling. Provides following combinations of Irequency controf; trenscetve on KWM-2 PTO; transceive on 312B-5 PTO; recelve on KWM-2 PTO and trenemit on 312B-5 PTO. 736x10n $12 \frac{1}{9}: 10$ lths.
90 SU 093. 17 Monthly.
NET 350.00
312B-4 CONSOLE. Above. lete external tuning dial and PTO. For "S" line or KWM-2. 10 lbe
90 SU 097. s10 Monthly............ NET 195.00

MODEL PM- 2 PORTABLE POWER SUPPLY. COR-
 $115 / 280$ y., $50-400$ cycle AC. Wi., 15 las. 90 SU 098. s Monthiy................. 150.00 MODEL $136 \mathrm{~B}-2$ NOISE BLANKER. Mounts on top cover of KWM-2. Effectively euppresies pulac-type interference from motors, ignition iystems. etc. Powered by KWM-2. WI.. 4 lbs.
90 S 099. 87 Monthly.
NET 124.00
 90 SX 100, $\$ 5$ Monthly
351D-2 MOBILE MOUNT. For KWM-2. 18 lbs. 90 SU 101. $\$ 6$ Monthiy.


## NEW MODEL 325-3 SSB TRANSMITTER-EXCITER

Thie new, improved version of the popular 32S-i Includes a hoss of new features for the uitimate In CW operation as well al better-that-ever SSB. A pertect comanlon tor the 305-1 linear and 75S-3 of 75S. 1 pecelvers, the 32S-3 provides UD to 175 watte PEP inout on SSB and 180 watit input on CW. New features include: arrier Insertion keying, frequency spotting control, keying-hardness control, idetone level adjust, and stmplifled oscllator patch disconnect. Mechanical Iller-type SSB generator. PTO, RF inverse feedback, etc. have been retained. Frequency control system conslats of VFO with cryatai oscillator that accommodates 13 heterodyno crystals, permiting toversoe of any $13200-\mathrm{kc}$ ranges from 3.4 to 30 mc . The 11 crytals supplied cover 80 through is meters, and 28.5 to 28.7 mc . Overall frequency stablity atter warm-up is within 100 cps . Provides 50 db auppression of carrier, unwanted aldeband, and oscllistor feed-through mid mixer producte. Audio frequency response, nominal $300-2500 \mathrm{cpl}=3 \mathrm{db}$, Panel meter montors final plate current, artd curfent and ALC voliage. Approximately 10 db of RF feedback around PA and driver tor Improved linearity. Ha』 600 -ohm phone-patch Input. Requires high-impedance mlike. Outputimpedance, 50 ohms.
 90 SU102. No Money Down
MODEL 516F-2 POWER SUPPLY FOR 3253 Hansimer
 90 SU 092 . Monthly

With cables.
NET 115.00


## MODEL 75S-3 SSB RECEIVER

Latest addition to the "S" line of precistion Mam-band recelvers, the" $75 \mathrm{~S}-3$ offers new versatlity in $\$ \$ 8, C W$ and RTTY receptlon, If combines the qualities ol the well-known $755-1$ with these new fentures: single-control O multipliter for 50 db relection of unwanted heterodynes and carfleas; cholce of variabie or crystal BFO; harp $200-\mathrm{cos}$ crystal fitter for CW ; 2.1 -kc mechanical filter for $\mathbf{S S B}, \mathrm{CW}$ and RTTY: cholce of two AGC decay time constants. Concentelc RF.AF gain controls and soinner tuning knob add increased operating convenience. The 75S-3 may be used alone, or with the $32 \mathrm{~S}-3$ and $312 \mathrm{~B}-4$ console to make a comolete. compect station; receiver will control both units for transcelver operation. Tuning system employs PTO with crystal oselliator that accommodates 14 crya sals. The 12 supplied fully cover-In 200 -kc segments $-80,40,20$ and 15 meters. WWV on 15.0 mc , and $28.5-20.7 \mathrm{mc}$. (Two open crytal positions cover 2 more ranges on 10 meters.) CW ensitivity is $0.5 \mu \mathrm{~V}$, measured with $50-\mathrm{hm}$ dummy antenna and $10 \mathrm{db} \mathrm{S} / \mathrm{N}$ rallo. Other highlighte: crystal-controlled dual conversion, product defector, 100 -kc cryatal callbralor, LSB-USB selection, 5-ke IF translormer for AM recedtion. recelver muting. etc. Lese speaker (sae " $S$ " Ine
 90 SZ 164. No Money Down. MODEL T5S-1 RECEIVER. Earllet version of the 7SS-3, with crystals tor same renges as above. Slze, 6 K $\times 14 / 1 / \times 11 \%$. Shpg. wt., 21 lbs. 90 SU 109. 522 Monthiy

## MODEL 30L-1 LINEAR AMPLIFIER

A fine medlum-powered prounded-grld linear ampiltier for SSB and CW emiedion. Can be driven by the $32 \mathrm{~S}-3, \mathrm{KWM}-2$ or moat $70-10-100$ watt enciters. Oper* ates at 1000 watts PEP input ( 500 watts nominal output). Covers the $80,40,20,15$ and 10 -meter Ham bands with sutticlent overlap for general coverage from 3.4 to 30 mc . (Onput clrcull requires trimming at frequencle far from Mam bands.) Features Inciude: RF Inverse feedback; automatic load control; high-low power swith; bulli-In Dower supply with sillicon rectllters. Tube complement conelsts of 4 - $\sin$ A triodes. Panel meter readi final plate current, phate voltaoe and tuning circult. Antenne is automatically transterred to exciter when the 30L-1's swith is in "Ofl" position. Entrely self-contained and dealgned lor table-top use-ali controle are conveniently accesslble on the front panel. Unit hate 50 -ohm output. 512 e 69/4x14 $/ 6 \times 137^{\circ}$, For $115 / 230 \mathrm{v} ., 50-400$ cycle AC. Wi, 39 lbs. 90 SU 107. $\$ 22$ Monthiy.

NET 520.00

## MODEL 30S-1 LJNEAR

Eficient arounded-urld IInear amplifier-a matehing unlt for the 32S-3 or other excltor dellverling 0 - $10-100$ watts drive. Runs full egal input limit on SSB (1 kw average) or hw CW input to 4 ACXI000A power amplitier Covers Ham bands 80 through 10 meters. incorporates Inverte feedback for better linearlty. ALC, up to 12 db . Bullf-in power supply. Space for $516 \mathrm{~F}-2$ tupoly for $32 \mathrm{~S}-3$. Qulet, orced-alr blower. Attiactive gray floormounied cabinet, jo $\%$ a17a16\%". For 115 ;230 , $50-60$ cycle AC. We., 100 lbs.
90 SZ 110.
NET 1556.00


## - NC. 155 RECEIVER

个 19995

- Dual Conversion on 80-8 Meters
- $1 \mu \mathrm{v}$ Sensitivity
- 3-Step Selectivtly

Performance engineered for relaxed Ham-band work This recelver beings vou dual conversion and 1 uv sensitivity (for 10 db signat-10-noise) on all bands 30 through 6 meters. Variable If selectlvity with "Ferrite Filter" Drovides 3 -position selectivity: 600 cos for CW, 3 ke for SSB. 5 kc for AM. Mas tull SSB / CW AGC and separate product detector; 60 -to-1 "Velvet Vernier" main tuning dial; collbrated USB/LSB BFO control; $S$ meter: ANL: voltage. requiated oscillators; "Filo foot": etc. $83 / \times 15 \% \times 9$ ", Less speaker and crystal calibrator, below. For 105 $125 \mathrm{ve} .50-60$ cycle AC. Wt. 28 lbs.
90 SX 173. s10 Monthly.
NET 199.95
NTS-38 MA TCHING SPEAKER. FOR NC-155, NC-190 and NC. 140.3 .2 ohms. $8 \% \times 5 \% \times 4 \%$. 5 lbs. 90 SX 174. is Monthly.

NET 18.45 XCU-109 1-MC CRYSTAL CALIBRATOR. FOR NC.
140 NC. 155 and NC. 190 . Wi. 1 lb.
90 S 000. 35 Monthly.
NET 20.ss

## NEW

## for Discriminating

 Listeners and Hams
## * *NC-140 RECEIVER

## '18995

- Dual Conversion - $1 \mu \mathrm{v}$ Sensitivity - Q Multiplier - Product Detector All-new from National-an outstanding value In a medium-priced communications receiver. Features 1 av sensitivity for 10 db S N. dual conversion above 4 mc , and continuous coverage from 540 kc to 31 mc in 5 ranges. Dial selector permits instant choice of callbrated bandspread for the 80 through 10 -meter Harn bands plus the 5 most popuiar SW broad. cast bands. Active deaking $Q$ multioller for continuously variable selectivity on $A M / C W$ / SSB. Has RF stage, 30:1 tunlng ratio. SSB CW product detector, BFO, ANL, AGC, "FIID Foot ${ }^{\prime \prime}$. etc, $8 \% \times 15 \% \times 9^{\circ}$. Less NTS-38 sDeaker and XCU- 109 calibrator (see above). For 105 $125 \mathrm{v} . \mathrm{H}^{50-60}$ cycle AC. Wt., 28 lbs. 90 SU 004. 310 Monthly.... NET 189.95


## $\star$ * NC-190 RECEIVER

An economically priced general-coverage receiver offering double conversion and a host of other important features for both Hams and listeners. Tunes 540 kc to 30 mc with 5 callbrated bandspreed ranges for the 80-10 meter Amateur bands, plus 6 calitrated bandspread ranges for the 49, 31, 25. 19. 16 and 13 -meter infernational shortwave bands. "Ferrlie Filter" and dual-converslon circuit provide true varlable if selectivity. instant sideband selection and optimum image relection-selectivity: 600 cps CW. 3 ke SSE, 5 kc AM,
Sensitivity is better than $1 \mu \mathrm{y}$ for 10 do signal-to noise, If's are: 1st, $2215 \mathrm{kc} ; 2 \mathrm{id} .230 \mathrm{kc}$. Vothage. regulated oscillators and ceramic coll forms for moximum stabillty. Also has: 60-to-1 bandspread vernier; seDarate product detector and full SSB/CW AGC: nose limiter: $\$$ meter: standby-recelve switch; calibrated USE /LSB BFO control: "Flip Foot"; efc. $81 / 2 \times 15 \% \times 9$. Less speaher (riaht) and crystal calibrator (left). For $105-125 \mathrm{v}$., $50-60$ cycle AC. Wt.. 28 Ibs. 90 SU 001. sif Monthir... NET 219.95


Well suited for a "hirsl recelven" ut thls low price, the NC-60B tunes worldwide shortweve and standard bpoadcast from 540 kc to 31 mc in 4 band-switched ranges. Clear markings on large, sllde-rule dlal show where marine, sircraft, WWV. Amateur, standara and foreign broadcasts are to be found. Electrical bandspread with $0-100$ looging scale, plus selectlvity of 5 kc at 6 do down, help to separate crowded shortof 5 kc at 6 db
wave signals.

Also has Dullf.in $5^{\circ} \mathrm{PM}$ speaker, front-panel headphone jach. BFO for code reception, and 5 tubes olus rectifier. Controls: funing, bandspread, off / on-volume, band selector. AMiCW switch. and standby/receive switch. 50.300 ohm antenna input. $7 \% \times 131 / 283^{\prime \prime}$. For $110.120 \mathrm{v}, ~ A C$ or OC. 14 lbs. 90 SX 005 . $\$ 5$ Montily.. ...........NET 59.95

## - NC-270 RECEIVER

Fine dual-conversion receiver for deluxe recediton of SSB/CW/AM on the 80 -through- 6 meter Ham bands. Surorisingly low orlced, it has bullt-in 100 ke crystal calibrator: "Ferrite Fifter" for instont side. band selection end 5 degrees of varlable If selectivity from 600 CDS to 5 kc : better than $1 \mu \mathrm{~V}$ sensltivity for 10 db $S / \mathbb{N}$ on all bands. Includino 6 meters; sedarate oroduct defector for SSB and CW; distortion.free ANL: S meter: etc.
More than 50 db rejection of unwanted heterodynes obtainable with bifitar T.Notch and Depth controis. Excellent stability from seramic coil forms, solid Y"-steel panel. full ventilation and "High Zero" temperature compensation. "Flld Foot" fior easy panel viewing. $8 \% \times 15 \% \times 99^{\circ}$. Less speaker, below. For 105.125 v. $50-60$ cvele AC. 28 lbs. 90 SU 002. Sif Monthy

NET 279.95
NTS-3 MA TCHING SPEAKER. FOR NC 270. 3.2 ohms. $8 \% \times 5 \% \times 4 \%^{\circ} .5$ lbs.
90 SX 003. 55 Monthhy.
NET 93.95


## H NC- 303 RECEIVER

Deluxe double-conversion recetver ottering superb sensitivity, stabillty, and SSB/AM/CW versatility for its price class. Covers the 10 -through. 160 meter Ham bands plus 11 meters. Has 5 selectivity positions -sharp down to 400 CDS , to 8 hc at 6 db down: instant USB $I$ SB selection; 0 muliplier with 60 db tunable noten: separate CN ISSB product detector: AGC; etc. $111 / 4 \times 191 / 2 \times 15^{\circ}$. For 110.120 v.. $50-60$ evele AC. Wi., 64 lbs. VHF converters avalable on special order write for details.
90 SZ 006. s20 Monthiy
NET 449.00
905 007. MODEL XCU-300 CRYSTAL CALIBRATOR. For above. 116 . $\$ 5$ Monthly. ....... NET 23.25
90 SX 017. NTS-2MATCHING SPEAKER. FOR NC.



COST RECEIVER
$\$ 1195$ - Covers $550 \mathrm{kc}-30 \mathrm{mc}$

- llluminated S Meter - Q Multiplier; AGC An economical peneral coverage recelver for SWLS and new Hams. O multiplier offers if selectivity varisble from 7 kc .500 cos . AGC, S meter, 0 multi. aller operate on all modes. Separnte product detector/8FO, bandspread dlal, series-gate limiter, $5^{\circ}$ spoaker, phone iack. etc. Steel cablnet, $73 \times 13 / 1 / x$ $8 \%^{\circ}$. For $105-125$ v. 60 cycle AC. Wh. 27 Ios.
90 SX 190 . ss Monthly.
NET 119.95
90 SX 191. MODEL NC-105W. Above, In oilled wal nut cabinet. For hiving room or den ..... NE N 139,95


# GONSET. . . Noted for Pace-Setting Design 

## LATEST BUDGET-PRICED RECEIVERS


$\star$ *GR-212 RECEIVER

- Double Conversion
- 6 Bandswitched Ranges
- "Big Set" Sensitivily

The only dual-conversion superhet eqvallable at this low price, the GR-212 really separates crowded signals! Senshlivity: at least $1 \mu \mathrm{v}$ for $6 \mathrm{db} S \mathrm{~N}$ on hloh. Tretuency bands. Covers: 2 to 30 mc in 5 ranges. plus 540 to 1800 kc . Separate callbrated bandspread for 10.80 meter Ham bands. Silderule dials and welghted bandspread knob for easy tuning; varlable BFO; S meter: bullt-in speaker; etc. $8 \times 12 \times 10^{\circ}$, for 115

NET 109.95


VFO FOR $6,2,11 / 4$ METERS MODEL 3357 COMMUNICATOR VFO. Use with Gonset Communicalor, I, II, III, IV (right: GC-105 (riaht): any 6, 2 or $1 \%$-meter transmitter using $8-\mathrm{mc}$ crystais: elc. Separate dial callbration for each band. Highly stable oscilistor operates continuously. Has $8-\mathrm{mc}$ outout. mine connector for NBFM. and 3 tubes plus sticon rectifter. $5 / 1 / \times 6 / 2 \times 81 / 70$. For $110-120$ v, 50-60 cycle AC. Wt., 12 lbs.
of SX 169. 55 Monthly.
.NEJ 74.95


3261 "SUPER-12" MOBILE CONVERTER. COVETS 75, $40,20,15,10-11$ meters plus 19 and 49 -meter SW bands. ODerates from 12 v . DC (G) 1.2 a.)-attach it in minutes. Has RF stage, antenna trimmer, low.noise triode mixer. 1430 kc output, etc. Wilh cables. Only $3 \% \times 51 / 251 / 40$. Wt. , 51 bs
905011 . 55 Monthir
NET 89.95
3163 MOBILE MARINE CONVERTER. EAslly installed unit for monitoring the 8.6 to $3.0-\mathrm{mic}$ marine range. Tunes shlp-to-shore, ship-to-shlp. marine weather, Amateur and police communications. Requires only 12 -v. DC - no internal connections to car radio needed, With cables. 3 Kx4x4. Wi., 5 Ibs.
90 S 012 . 15 Monthly
NET 39.95
3001 NOISE CLIPPER. Serles gate type. Reduces ignition noise. Connects easily to 2nd detector circuit of car radio. $2 \times 4 \times 11 / 9^{\circ}$. Wh. 2 lbs. 90 S 013.

NET 13.30


## $\star$, GR-211 RECEIVER

A low-cost general-coverage receiver for quality reception of both phone and CW stations. Tunes standard AM and world wide shortwave from 540 kc to 34 mc in 4 bandswitched ranges. Also has calibrated andspread for the $10,15,20.40$ and 80 meter Ham bands. plus $\mathbf{~} 11$-meter Cllizens Band. Two llluminated full-vision, slide rute dials furnish instant Identifica. tion of frequency calibrations. Also has bult in speaker, antenna trimmer, vernier tuning, high.Q permeability-tuned coils, etc. Size, 8x12x10 . For 115
v., 60 cycle AC. WL. 27 ibs.
90 SU 158 . $\$ 5$ Monthly..

NET 69.95


## G.76 6-BAND TRANSCEIVER

MODEL 3338. Compact transceiver ottering excedlional operating Ilexibillty on 80.6 meters. Controls at tingertio-ideal for mobile. Inputs are 100 w . AM and 120 w . CW with stable VFO (all bands but 50 mc ), 6005 final, pl-network, push-to-tath. Dual-conversion receiver has $1 \mu \mathrm{v}$ sensitivity for $6 \mathrm{db} \mathrm{S} / \mathrm{N}, 3-3.5 \mathrm{kc}$ band width at 6 db down. S meter, ANL, etc, $5 \% / 212 \% \mathrm{k}$ 11 K ". Less supply, below. 20 lbs.
$90^{\circ} \mathrm{SU} 008$. $\$ 19$ Monthly.
NET 429.95
90 SU 009. 3350 12.VDC POWER SUPPLY. With cable. $31 / 8 \mathrm{~K} 1 / 6 \times 61 /{ }^{10} 5 \mathrm{lbs}$................. 149.95 90 SU010. $3369117 . V A C P O W E R$ SUPPLY. Bullt-In speaker. $5 \% \times 32 \% \times 11$ 底. 25 lbs. NET 149.95


COMMUNICATOR IV '38995

- Triple Conversion
- 24 Watts Input
- For117VAC/12VDC

MODEL 3312 2-METER TRANSCEIVER. For rellable moblle, portable and fised communications on 2 meters: Has buitt-in supply for $110-120 \mathrm{v}$., $50-60$ cycle $A C$ plus transistorized supply for $12 \vee$. DC. Jusit $5 \times 12 \% \times 11^{\circ}$. Selective triple conversion receiver has crystal-controlled ist converter; 0.4 sensitivity; low noise: ANL: squelch. Transmitter, runs, 24 watts input to 6360 tinal; provision tor 6 crystals; tuning meter-high-level speech clipping and to watts of audio assure full talk power. Slide-rule dial. Panel speaker, With cables. 29 lbs.
90 SU 014. s18 Manthly. ............NET 389.95 MODEL 332 GMETER TRANSCEIVER. Similar to above, but lor $60-54 \mathrm{mc}$. 29 lbs .
90 SU 015 . 18 Monthly.
NET 389.95

## GC-105 COMMUNICATOR

 $\$ 25995$ - 6 Watts Output2-METER TRANSCEIVER. The latest in the tamous "Gooney.Bird" VHF tine, the GC-105 is a tully self. contained 2 -meter AM-phone station with buill-In cower supoly for 110-120 v., 60-60 cycle AC and $6 / 12$ V. DC. Ekcellent for Under-dash mtg. or home station use. Tumable recelver utilizes low noise s878-RF tube in sensitive "cascode" clrcult' also has squelch. AVC and gang-tuned circuits for high image rejection. Meter reads both relatlue RF output and sional strength to +30 db over $\$ 9$. Broadband exclter stages simpilly transmitter lune up: nominal output. 6 wattis. Modulator has high-level clipoling. Front-panel sockets accept 6 crystals. Builtin speaker. $6 \% \times 351 / 2 \times 8^{\circ}$, with cables. 29 Ibs. 90 SX 104. 113 Monthly. ..........NET 259.95

## GSB-201 LINEAR AMPLIFIER

A too-Quality 5 band tinear amplifier providing high power in true tabie-top almensions. Only $8 \times \times 12 \% \mathrm{x}$ ip the GS8-201 covers the 80 through 10 -meter Ham bands with power inputs of 1500 watts PEP on SS8. 1000 watts CW. and 400 watts AM. Fully bandswitched, it uses 4 low cost 811 A tubes in stable. grounded-grid circuit with ol-network oustout. Can be eastly driven by any commercially manufactured or home-built exciter in the 66 -to- 150 watt categry $\rightarrow$-re. quires 100 watts PEP drive for maximum of 1000 walts PEP outbut. Switchable full-viston meter reads plata current or relative power output. Antenna changeover relay and blas supoly are built-In. Long-life stificon rectiflers in high-voltage power supply. Attractively finished cabinet. 'For $110-12 \mathrm{v} ., 50-60$ cycle AC. Wt.. 92 jbs .
90 SZ 016. \$19 Monthly
NET 419.95


## $419^{95}$

$\$ 19$ monthly
1500 Watts PEP Input on 80 Through 10 Meters


MOOEL 240-305.2. Just out. a titier-type SSB adapter quality-enolneered in the Vhing tradition I ideal for use with the Vaitant II (rlaht), adaoter consists of 2 compact units-a matching table-100 RF unit and separate power supply with connecting cables. OHers positive-acting vox/anti-tilo with anti-frlp matching franstormer and adjuatsble VOX time-delay; batanced audio response: 40 to $50 \cdot \mathrm{db}$ suppress, instanty selectable USB/LSB; 50 ohm pi-net output. Built-in multiplter requires VFO input only-Valiant or Valiant II provides trequency control. High stablity and sharp response obtained by HF bandpass crystal filter.
 For $105-125$ y. 50.60 cycle AC. 31 lbs.
90 SU 502 J . Factory Wired. 517 monthly. NET $\mathbf{3 6 9 . 5 0}$


NEW VALIANT II

MODEL 240-105-2. An all-new version of the renowned vallant. this 6-band fransmitter has the features of its predecessor plus many more-including coax ittings for pluggling in accessory SSB unlts, differential temoerature compensation in VFO for extreme stabllity, and low lovel audio clipplng for increased 10 -meter bands. Delivers 275 watts input bandswitching on the 160 through excite; or new Viking SSB Adapter, left) and 200 watts AM phone. VFO operales In the 1.752 .0 and $7.0-7.45 \mathrm{mc}$ ranges for superb stability. Efticlent pl-network clrcuit, with silver-plated final tank coil, matches 50.600 ohm loads.
Fully TVI suppressed with electrically sealed cabinet: shielded meter leads, bypassed harness leads and filaments: filtered power line, relay jack, auxlliary socket leads, etc. Also has fime sequence keying: bulit in fused power supply with regulated screen voltages on modulator and VFO (also on final amplifier in SSB operation): 3 bridoe-neutralized 6146 in final: bullf-in low-oass audio Ilter; many other extras. Bands divided into orecise lake increments, May be crystal controlled. Less crystal. mike and hey. 2 -tone metalitic gray sleel cabinet. 50 SZ 500 J . Factory Wired. 60 eycle AC. 83 lbs.

NET 495.00 90 SZ 504 J . Kit Form. $\$ 18$ Monthly. NET 375.00

"RANGER $\|$ " TRANSMITTER MOOEL 240-162-2. Lalest model of this famous AM/CW bandswitched transmitter covers the 160 through 6 meter Ham bands with crystals or built in VFO. Pi-network final runs 75 watts input on CW and 65 watts AM. Has time-sequence (Orid block) keying for clean break-In. Temperature-compensated VFO callbrated for each band. $100 \%$ modulation: $250-3000$ cps response. Full meter switching. Takes high. impedance mike. TVI supDressed. 8.50 cycle AC. Wt. 54 lbs. $\$ 17$ Monthly. 90 SZ 124. Factory wired. $\qquad$ NET 359.50 90 SZ 125 J. Kif Form. 813 Monthiy. . NET 249.50

"CHALLENGER" TRANSMITTER MOOEL 240-182-2. Ideal for lixed or portable use, the Challenger features 6 -band operation on CW and AM phone. Inouts: 70 watts phone on 80.6 meters. 120 watts CW on 80.10 meters, and 85 wats CW on 6 meters. Efficient, "straight-ltrough" final uses 26006A tetrodes, bridve neutralized. Has ol-network outout for 40600 ohm antennas, and 1 ront-panel socket for plugging in crystal or external VFO. Instam bondswitching. EHectively shielded and filtered to
 $\$ 9$ Monthit. 110.120 v. 90 SU 503J. Factory Wired. NET 109.75 90 SU 504J. Kit Form. 57 Manthiy... NET 124.75


240-181-1

"ADVENTURER' TRANS解TTTER MODEL 240-18t-1. This low cost CW iransmitter runs 50 watts inout to an 807 tinal on the 80 through 10 meter bands. Easy to assemble sad ooerate, it has single-knob bandswitching. TVI shielding and filter. ino, wide range pi-network, grid/plate metering and simultaneous heying. Crystal or dixternal VFO control. Less crystal and key. 81/1010 $6 \times 7 \%$. Fused power 5 supply for $110-120$ v., $50-60$ cycle $A C$. Wh.. 19 Ibs. $\$ 5$ Monthly. $90 \mathbf{S X 5 0 5 J}$. Kil form NET 69.95 MODEL 250.40 SPEECH AMPLIFIER/MODULA. TOR. For above or similar transmitters. Screen mod.
 $90 \mathbf{5} 506 \mathrm{~J}$. Kit Form.


AW/CW-5 Bands

## " 500 " TRANSMITTER

MODEL 240-500-2. Bandswitched 500 -to-600 watt ransmitter covering the 80 through 10 -meter bands. Consists of two compact units: an RF section with built-in VFO and efliclent 4-400A final; and rugeged power supply /modulation unlt (not illus.). Inputs: 600 watts CW, 500 watts AM phone, 500 watts PEP on SSB (with any 3 -watt exciter-not supplled). All operating controls are conveniently located on the RFunit's front panel.

Exelter stapes are gang-tuned to the highly stable VFO-transmitter also may be crystal controlled. Widerange pl.L output circuit with silver.plated final tank coil provides excellent harmonic suppres. sion: toads virtually any antenna. Effectively TVI suppressed and filtered. Two panel meters oermit monttoring of alt transmitter functions. Timesequence keying for clean break-in work.

Other highlights: high-gain push-to-talk audio system with low-level clippling: phone pateh input; fused filament/plate supplies. excitation /blas failure protection. etc. VFO has 6:1 planetary drive-calibrations for each band are dlvided into 10 kc increments. Sizes: RF unit. $11 \% \times 21 \times 161 / 1^{\circ}$ : Dower subply $/$ med. $15 \% \times 20 \% \times 10 \%$. For 115 or $230 \% ., 50-60$ cycle AC. 200 los. No Money Down.
90 SZ 511-2J. Factory wired..... NET 1050.00


## "THUNDERBOLT" LINEAR

MODEL 240-353-2. A toD-quality, bandswlitchino linear amplitier providing 2000 watts PEP InDut on SSB, 1000 watts CW, and 800 watts AM linear. Offers continuous coverage from 3.5 through 30 mc . Completely self-contained-an efficient, tlexible tabletoD unit. Drive requirements: 10 watts in class $A B$, linear, 20 watts CW.
Employs 2 parallel $4-100$ A tetrodes, bridge neutralized. Pi.network matches 40 to 600 ohm loads. Fully TVI suppressed. Has 2 cooling lans, 2 panel meters. voltage-regulated screen and blas supplies, and plate power supply. Sturdy maroon and gray steel cabinet. $11 \% \times 21 \times 16^{7}$ /f. For 115 or 230 v., 50.60 cycle AC. 40 lbs . No Money Down.
09 ST 512 -
0 SL $12-3$. Factory Wired
90 SU 120. For 6 and 2 meters...... NET 549.50

## WE'RE TRADING HIGHI

Yes, we're making bigger and better trades on used gear. Write todaytell us about your trade-in and what new equipment you require. You'll get a tervific deal from Allied!

## "INVADER" TRANSMITTER

MODEL 240-302-2. Popular transmitter lexciter for SSB, CW and AM work on $80,40,20,15$ and 10 melers. Delivers 200 watts SSB /CW InDut and 90 watts AM. Special high-frequency bandpass crystel fliter proidas more than 60 db unwanted sideband suppres tion and 55 db carrier suppression. Instant band switthing. Stable. calibrated VFO is differentially compensated. RF-controlled audio AGC and ALC (limiter type) give extra speech power-has reserve aali, for crystal and dynamic mikes. Mixer-tyoe shaped keying is sharp and click.free. Internal relay ontrols antenmeralay, receiver, built-in VOX push-to thlk and anti-tilp. Single.hnob wide-range pl-network. TVi suppressed. Easy to operate-just tune for maximum RF output. $11 \%$ m $21 \times 171_{5}$. Bullt-in supply for operation from $105.125 \vee .50-60$ cycte AC. Shpg. wt., 67 Ibs. No Money Down.

NET 619.50 0 SZ 513J. Factory Wired

NET 619.50
MOOEL 240-300-2. "HIIPOWER CONVERSION" UNIT. Converts Invader to 2 -kw PEP desk-tod transmitter. With power supply. $111 / 4 \times 19 \% / 4 \times 141^{\circ}$. Wh. 116 lbs . No Money Down
90 SZ 514 J . Factory Wired
NET 619.50
MODEL 240-304-2 "INVADER-2000." Consists of both units above. 183 lbs . No Money Down. 90 SZ 143J. Factory Whred ......... MET 1229.00


A VIKING "6N2" CONVERTERS. COmpact VHF converters for efficient 6 and 2 -meter reception with any communications receiver. Provide instant. front-canel bandswitching trom normal low.fre. quency receiver operation to either 6 or 2 -meter operation. Crystal controlled broadband tyoesimply tune receiver to cover VHF bands. All provide full band coverage, except " $50-52$ and 144146 mc coverage.
Uses GESB dual-Ariode RF amplitier in neutralized cascode circuit. tor maximum sensitivily and low noise. Excellent image and IF rejection due to doubletuned, overcoupled interstage circuits on both 6 and 2 meters. Manual RF gain control, plus mixer gridleak self-regulating action. prevent overloading. Minimum cross-modulation. Cabinet, $5 \times 2 \% \times 12^{\circ}$. Fused, transformer-type power supply for $110-120 \mathrm{w}$., $50-60$ cycle AC. Wt.. 5 lbs .

| MODELS IN KIT FORM |  |  |  |
| :---: | :---: | :---: | :---: |
| Stoct No. | Model No. | For Receivers Covering: | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| 905515 J | 250-43.1 | 26 to 30 Mc . |  |
| 905516 J | 250 43-2* | 28 to 30 M |  |
| 90 \$517J | 250-43-3 | 14 to 18 M |  |
| FACTORY-WIRED MODELS |  |  |  |
| 905518 J | 250-43-12 | 26 to 30 Mc . |  |
| 905519 J | 250-43-22* | 28 to 30 Mc . | 89. |
| 52 | 50-4.3-32 | 14 to 18 Mc . |  |

B ROTARY INDUCTORS. Permit extreme flexibllity in RF ampliflers. In single ended types, will fune all frequencies from 1.5 to 30 mc . In anterna loading or phasing clrcuits, furnish large value of continuously variable inductance. $1 \% \mathrm{l}$ las.

C. MODEL 250-37 DIRECTIONAL COUPLER. MONIfors SWR /relative power in 52 .ohm lines. Rated $1 \mathrm{kw} .1 .7-\mathrm{t} 50 \mathrm{mc}$. Use with multimeter, or indicator be. low. 50.239 fittings. $61 / 4 \times 294^{\circ} .2 \mathrm{lbs}$. $90 \mathbf{S} 51$.

NET 11.75
(D) MODEL 250-3: INDICATOR. 0.100 ma meter

(1) MODEL 250-12-1. ATTENUATOR. T-pad providE ing 6 -db attenuation. Max. disslpation. 45 watts 120 w . with 75 -w. bulb); max. input. 60 w . 350 -ohm SO. 239 sockets, $31 / \mathrm{x} 41 / 2 \times 91 /{ }^{\prime \prime} .2$ lbs. $90 \$ 523$. $\$ 5$ Monthly.

NET 21.50
MODEL 250-42-3. Similar to above, but handles 70 w . input. $50-\mathrm{ohm}$ impedance. Wt. 2 Ibs . 905 524. 25 Monthyy.

NET 21.50

IF
MODEL 250-20 LOW-PASS FILTER. TVI filte with 4 shlelded sections. Handles over 1 kw 75 -db attenuation of harmonics and spurlous signals above 54 mc . Insertion toss less than $1 / \mathrm{db} .52$.ohm impedance. \$0-239 littlings. $9 \times 2^{5} \mathbf{h}^{6}$. 3 lbs.

## 90 S 525.

NET 14.95

(G)MODEL 250-2B CRYSTAL CALIBRATOR. Tiny frequency standard to produce 100 kc check points up to 55 mc . Has trimmer lor zero-beating WWV. with 68M6 tube, erystal, cable, extension leads. $31 / 821 / 2 \times 11 / 20$. Requires 6.3 v . at .15 amp and $150-300 \mathrm{v}$. at 2 ma Wt.. 1 lb
90 S 526 . Factory Wired.
NET 18.95

(H)
MODEL 250-23-3 275-WATT "MATCHBOX." antennes and $25-3000$ ohm unbal anced antennas. Has directional coupler and indicator. Continuously monitors incident or reflected (SWR) power. Coax indut: 52 - hm imp . Handles to 750 w . PEP input. Transmitreceive relay. $7 \times 9 \%$ x10\%". 13 tbs.
90 SX 527 J . ss Manthly
NET 94.95
250-30-3. Above, for 1 kw CW /AM and 3 kw PEP indul. Takes balanced lines from 50,1500 ohms, unbalanced from $50-2000$ ohms. $10 \% \times 171 / 2 \times 12 \%$ ". 27 lbs.
90 SU 528.J. 58 Monthly
MODEL 250-23. Same as 250-23-3, but less directional coupler and indicator. Wh., 11 los.
90 SX 529 J . 55 Monthly.
NET 64.95

MODEL HX-50 FILTERTTYPE TRANSMITTER

# 3995 

- 130 W. PEP Input
$\$ 18$ monthly - 80-10 Meters
- 3-Element Pi-Net
- Highly Stable

Loaded with design extras, the comoact HX - 50 offers coverage of the Mam bands $80-10$ metere at modest cost. Rated at 130 waris PEP and CW input. Output Is $50-85 \mathrm{w}$. with 90 w . DC Input on SSB /CW; AM Is $25 \%$ of above vatues. Overisp of Internal VFO ranges provided by cryatal of external VFO operation. Stsblity, luse than 250 cps after warmup. Internal VFO range, $5050-6550 \mathrm{kc}$; other oacillatore cyystal controlled. At least 50 db suppression of currler and uldeband. Bandpase couplers in tow-level ateges. Bandwidth: 2.7 ke ot 6 db down. Antenne changeover. VOX. anti-trip, many other features. $5120.9 \% \mathrm{x}$ $171 \times 9^{\circ}$. For operation from $105-125$.. $50-60 \mathrm{cycl}$ AC. Shpo. wt., 45 lbe
90 SU 539-J. $\$ 18$ Monthly
NET 399.50


## NEW! <br> MODEL HXL-1 <br> LINEAR <br> AMPLIFIER

## '3750 <br> $\$ 18$ monthly <br> - 1 Kw PEP Input <br> - 80-10 Meters <br> - 3-Element Pi-Net

Extreme almplicity of design, rugoed conatruction and peak-power performance combine to keynote this outstanding new IInearl A splendid mate for the HX-50 at lett, the HXL-1 gives full SSB /CW /AM coverage of the 80 through 10 -meter Mam bande, with prowision for 160 meters when used with accessory kit. Effictent grounded-grid cirevit uses high-diseipetion output tube and adjustable 3 -etement plenetwork. Panel meter reads PA orid/plate and reletive RF power output, Has atandby blas supply for complete cut-olf buring recelve; relayz tor "exciter only" of amplifter operation; power supply, with silicon rectifiers. for $105-125$ y.y $50-00$ cycle AC. Size. $8 \% \times 17 \% \mathrm{~m}$ $9 \mathrm{~K}^{\circ}$. Shpg. wt. 105 lbs.
90 SU 541-J. $\$ 18$ monthly
NET 375.00

SLOT-FILTER SELECTIVITY PLUS 6-STEP CRYSTAL FILTER


## * *HQ-145XC RECEIVER

A quality recelver for the Amateur who wante tine generat-coverage and Ham-band reception, and for the critical shortwave Histener who demande top performance. Sensitive superiet circull covers 540 to 30 me in 4 bande, with dual conversion from 10 to 30 mc tor high Image rajection. Callbreled electricsi bandepread for 80 through 10 -meter Ham bande with CB channal markinge and $0-100$ logging scale.
Six-position cryatal filter plue adjustable $60-\mathrm{db}$ siot filter. Sensitivity, $1.73 \mu \vee \mathrm{AM}$ and $.6 \mu \mathrm{~V}$ CW for 10 db $\mathbf{S} / \mathrm{N}$. Provislon lor cryatal-controlled recepllion on 1 frequency for WWV, CB channel, etc. (Leses eryetel.)
Has ANL, automatic audio passband control, $S$ meter, temperaturo-compensated variable BFO, crye-al-controlled ind converter, AVC, clock-timer. 10 Y/k19x13. Lesa S-200 apeaker (rlght). For 105-125 Y., $50-80$ eycle AC. Wi. . 42 Ibs.

90 SU 550-J. $\$ 14$ Monthly.
NET 279.00
MODEL HO-145X. Above, less clock-timer
90 SU 551 -J. 514 Monthly.
NET $\mathbf{2 6 9 . 0 0}$
MODEL XC-100 PLUG-IN CRYSTAL CALISRATOR. Provides 100 -ke markers. For above. 12 or.
905552 .


## 100 Watts PEP. on 5 Bands

## HX-500 TRANSMITTER

An excelient example of careful engineering, the HX-500 transmitter provides complete faclilitas for SS8, CW, NBFM, DSB (AM), and FSK for RTTY and heying identification. Power output it 100 wetts on SSB (PEP) and CW, 25 watte on AM. VFO covere all Amatour bands 80 through 10 metere in $8-500-\mathrm{ke}$ segments; dial callbratione readeble to 200 cps or better. Ahter warmi-up, stability is better than 100 cpe .

All modutation is accomplished at 60 cpe for superlor stability and rejection of unwanted aldoband. Spectal ferrite tuning core ellminates need for tem-peraturo-compensefing components in osiclilator circult. Carrier suppression and unwanted sldeband euppression are 50 db or better. Spurtous frequencles are down 50 db or better, 3rd and 5th ordes dletortion down 30 db or better.

Also has automatic audio level control, antenna changeover relay. 2-5146s in firal with $50-\mathrm{hm}$ pinetwork, VOX and anti-trlp. efc. Completely TVIprooted. WIth 18 tubes, i rectiliers, VR, and hat-
 $* \cdot 50-60$ cycle AC. Wi. 95 lbs.
5 SZ 553-J. No Money Down
NET 695.00

\$ 4 - Triple Conversion $\begin{aligned} & \text { - } 160 \text { to } 6 \text { Meters } \\ & \text { - } 60 \text {-db Slot Filter }\end{aligned}$
Just-announced model of thle lenowned Ham-band receiver with improved electrical /mechanical stabllity, socket for 8-meter preselector, and 144-me catlbretions for any 2-meter converter having $50-54$ mc output. Covers $160-8$ meter Ham bande with 7 selectivity positions, slot filter, product detector, selectable AVC and USB A.SB, 100-ke callibrator, "AutoResponse," clock-timer. Dual conversion, 160 /he meters. 10 K (19x13*. Lese speaker. For $105-125 \mathrm{v}$. . $50-$ 60 eycle AC. Wt., 45 Ibs.
90 SU 543-J. \$18 Monthly.......... NET 379.00
MODEL HQ-170A. Above, less clock-timer.
90 SU 548-J. 317 Monthiy ............NET 369.00
ACCESSORY NOISE SHENCER. For MO-170 and MO-180 aerle receivers. 2 Ibe .
90 S 549. 26 Monthly
NET 33.50

## "TRADE UP" TO THE RIG OF YOUR CHOICE

Why wait longer? Write today and tell us about your trade-in. You'll get a terrific deall


## - HMQ-180C RECEIVER

Prectolon communicallona recelver combining true SSB reception with general coverago-has overy reHioment for tuperb SSB. CW and AM performance. Covere 540 kc to 30 me in 8 ranges with 10 through $8 a^{-}$ meter Ham bandspread. Triple conversion, 7.85 to 30 mc; dual conversion below. Average enelifivity, $11 / \mu v A M$ or $1 / u v C W$ for $10 \mathrm{db} \mathrm{S} / \mathrm{N}$.

Doluxe fostures include: $\mathbf{3 0 3 5}-\mathrm{kc}$ crystal filher; crye-tal-controlled ist converter; 7 eelectivity positlone: $60-\mathrm{db}$ olot fllter; eolectable USB /LSB and AVC action: llinear groduct/diode detectors: 100-ke callbrator; "Auto-Response"; ANL; cloch-timer; is tubes, rectither, VR. $10 \frac{1}{2}$ ri9x13-. Lese zpeaker, For 105-125 v. $50-60$ cycle AC. WL, 45 lbs.
90 SU 554-J. $\$ 19$ Moninly. ......... NET $\mathbf{4 3 9 . 0 0}$
MODEL HO-180. Above, less clach-timer.
90 SU 555-J. $\$ 19$ Moninly .......... NET 429.00
MODEL HO-180XE. Unlvertal model with provision for 11 Hzed-frequency eryatals. 6 interchangeable trom front. For $115 / 230$ v.. $50-60 \mathrm{cycle}$ AC.
90 SU 573-J. 321 Monthly
NET 499.50
MODEL S-200 SPEAKER. Matchos HO-145, HO-170 and $\mathrm{HQ}-180$ series receivers. $11 \times 12 \times 9^{\circ} .9 \%$ tbs.
90 SX 656 -J. 35 monthly
NET 19.95

## of Quality Equipment <br> HQ-110AC Quality SSB/CW and AM Reception on the Ham Bands 160 to 6 Meters <br> HQ-100AC Independently Controlled, Continuously Variable BFO - Multiplier

## HHQ-110AC 7-BAND AMATEUR RECEIVER

Newest model of thle popular, dualeconveralon receivet designed Just for the Ham. Now features Improved electro-mechanical ulability, accessory aocket for 5-meter preselector, and calibrated 2-meter scule for any 2-meter converter having $60-54 \mathrm{mc}$ output, Recelves S SB, CW and AM with full ceilbrated covernge of the $160,80,40,20,15,10$ and $6-m e t e r$ bande. Hes "Auto-Responae" clrcult, $Q$ mulUipller, 100 -kc cryatel cullbrator, meparate llnear detector for SSB/CW, crystalcontrolled 2nd converter, voltage-regulated and temperature-compensaled HFO, ANL, clock-timep. Seporste stable BFO for SS8 and CW. Dual conversion. 6-40
 FCOA. No. R-16. Lets speater. For $110-120 \mathrm{v}, 50-60 \mathrm{cycle}$ AC. 31 ibs. 90 SU 657.J. S13 Montinty.
90 SU 658-J. MO-110A. Above, lase slock-timer. \$13 Monthly. . NET 249.00 90 SX 659-J. S-100 SPEAKER. For MQ-110/Mg-100 merles. 10 lbs .. NET 14.95

## * *HQ-100AC GENERAL-COVERAGE RECEIVER

This letest veraton of the femous MO-100C receiver bringa you Marmariund qualIty at moderate cost. Covers 540 Hc to 30 mc in 4 ranges with outstanding senstivity, selectivity end stablity for lis class. "Auto-Response" clrcult automalleally adjusts nudio bandwidth to suit receiving conditions. Independently controlled. conthnously veriable BFO and O multipller-mermit simultaneous use of both. Selectivity varlable from 100 cps to 3 kc . Calibrated electrical bandspread for 8 B through to-meter fiam bands, with CB channel markings and logging acale. Sensitivily, 1,73 v for 10 dD S/N. Voltage-reguleted, temper atur P-comoentaled MFO for extra stability. Includes $S$ meter reading to 40 do over S-9, serles-type ANL,
 R-16. Less S-100 speaker, above. For $105-125 \mathrm{v}$. $50-60$ eycle AC. 31 tbis.
90 SU 660-J. 510 Monthly.
90 SU 661-J. MO-100A. Abovo, lese clock-flmer. 110 Monthly NET 199.00


Complete 6-Band Mobile/Portable/Fixed Station MELTTELMAE WORKS CW and AM PHONE ON 80 THROUGH 6

## MR-8

## *MODEL PMR-8 RECEIVER

A perfect mate for the AF-68 Trans-elter (right), the PMR-s double-conversion superher others standout receptlion at home or awayl Covere the same 6 Mam bands $-80.40,20,15,10$ and 6 metera (so-52 me)plus atandard AM broadeast from 540 to 1650 ke . Mae cryatal-centrolled 2 and converter for high stability. Fine skint eslectlvity achloved from $282-\mathrm{kc}$ high-O IF transformers-selectivity is 6 db down an 3 kc and 60 dt down at 12 kc . $1 \mathrm{st} \mathrm{IF}, 2238 \mathrm{kc}$.

Outstanding sensitivity and low-nolse performance: sensitivity is $1 / \frac{\mu v}{}$ tor 10 db quleting and 500 mw output. The space-conserving PMR-8 abo includes: calibrated varlable BFO with upper and lower aldeDand eelection; delayed AVC; tuned RF stape; automatic nolse limilter: illuminated alide-rul dial: headphone jack: and antenna input for 52 or 72 -ohm cable. Drth hept to minimum via temperature compensation and regulated oscillator plate and filament voltegee, Fuament string for 6 or 12 volte.
Controls: maln tuning; BFO-sideband selector; RF gain: audio gain: bandewlech; antenna trimmer; AMSSB ICW swltch: ANL switch. Tubes: 60K8 RF amp; 6BE tat converter; 0C4 local ascillator; 6BE6 2nd converter herystal ose; 6B J6 IF amp; 68J7 detector/AVC /holse IImiter; 6A We BFO hat sudio: 6A Q ${ }^{3}$ audio outpul. Just $41 / 1 \mathrm{Re} 1 / 1 / 17$. Lens M-1070 or M-1071 power tupply (right), spenker. 11 lbs.


Equipment Operates on 115 VAC at Home.

AF-68

## MODEL AF-68 60-WATT "TRANS.CITER"

Compact unit which can serve as an excher, epeech amplltier. VFO. driver, or a complete low- powered 6 -band transmitter- uperb compantion for the PMR-s and M-1070. One control bandswitches all atages for convenlent and complete coverage of all Ham bands from 80 through 6 metert. Runs 60 watt mailmum Inpurt to a 6146 power amplitier on both CW and phone Bulltan temperature-compenated nd AM phone. Bilh FFO operstes on 1.75 mc for 80 meters. and on 3.5 mc for the othar 5 band covered. Five-clicult meter provides liluminated rendinge of PA orid current (oHon), plate voltage, modulator plate eurrent, and linal pate current, Uses coaxial connector and universal
ol-network output clicult to match a wide varlety ol mpedance. VFO dial has seonate callbration for each band. Uniuned cryatal oscllastor takes eny crystal that will work straight through, double or quadruple to desired operating Irequency. Socket for $?$ erystals. (8 or $12-\mathrm{mc}$ erystals recommended for 6 meters). Has ewitchess for VFO/erystai, VFO apotting. bande. meter lunctlons. AM/CW, and hlgh or low-impedance milhe. Many other extrasi Attractively styled cabinet, in charcoal with chrome trim. Is only 6 Y 1 xt3 $1 / 2 \times 7 \mathrm{~K}^{\prime \prime}$. Lean power supply, cable and connectors, below. Wh., 20 lbs.
90 SU' $663-\mathrm{J}$. \$17 Monthly
NET 205.00

## MODEL M-1070 POWER SUPPLY AND CABLES

M-1070 POWER SUPPLY. Rugoed, factory-wired ult tor moblle, Dortable and tised use-will easlly power both the PMP-8 and AF-68. Has vibrator, elllcon rectlifers, hash supprestlon, OC Iltiening, bullim In primary and tranamit /recelve relays. AC-OH-DC which. Fully fused. $6 \mathrm{n} 8 \times 5^{\circ}$, For 6 or 12 v , OC and $110-$ $120 \mathrm{y}$..60 cyclo AC. Wh., 15 lbm. 90 S 204-J. $\$ 5$ Monthiry

NET 69.50

90 S 249-J. M-1071 POWER SUPPLY KIT.. Same at M-1070, but in wit form.

NET 49.50
905252 . WH-G POWERCABLEAND CONNEC. TOR ASSEMBLY. 9 feel long. Connects PMR-8 end AF- 68 to M-1070 /M-1071.Wi., $2 \mathrm{lbe} . .$. NET 16.00 90 S 255. WH-20. Id entical to above, but 23 feet in length. NET 24,00

## Amateur Equipment Values by knight-kit, R. L. Drake,



## DRAKE 2-B COMMUNICATIONS RECEIVER

- Superior Ham-Band Reception at a Modest Price
- Passband Tuner-.5/2.1/3.6 kc Switchable Bandwidths
- Stabillty Plus-Drift Under 100 cps After Warmup

Oniy pecently Introduced, this improved version of the prectstion Drake 2-A has already earned tremendous accialm from critical Amsteurs everywhere! Has all the quallties of lis predecessor plus many moro--Including selective movable-passband tunet with 3 switchable bandwidths, apeeded-up AVC for CW monitoring and tant break-In operation, eelles-diode nolse llmitel for AM, and power supply for $120 / 240 \mathrm{v}$. AC. Steep-sided bandwidthe of 0.5. 2.1 and 3.6 he at 6 db down offer peak SSE, AM and CW reception wlth full RF gain, complele AVC action and accurate S-meter readings- welectivity oniy 2.75 kc at 60 db down. Covers 3.5-4.1, 6.9-7.5, 13.9-14.5, 20.8-81.5 and 28.5-29.1 mc with 3 crystals supplied. Low-frequency VFO and triple-conversion circult with erystat-controfled tit converter maintuln superb stablity. Drift le leas than 400 eps from coid atart, lese than 100 cp after warmup. Sensitivity, 1/mu for 10 db S/N. Contlinuous sideband selection without retuning. Cholce of slow of inst AVC and product or diode delector. A compact 7x12x0\%. Less speaker, callbrator, 9 multipller. Available on special order: crysials for 88.0 28.6, 29.1.29.7 and any other 600 kc non-Ham ranges from 3.51030 mc . For $120 / 240$ ve, $50-60 \mathrm{cycl}$ AC, 15 lbs. 90 SU 450-J. $\$ 14$ Monthiy.

NET 279.95


## MODEL DI-I RF DISTORTION INDICATOR

Quality scope to chech linearty and carfier hideband suppression of SSB exciteri, linear ampliflers, etc. Oisptays rrapezoid and envelope patterns. Usefut as $A M$ percentage Indicator. His $3^{\circ}$ CRT with fult mu-metal shield, green Iltier, sealed bezel. Hendies up to $2 \mathrm{kw}, 160$ through 6 meters. Bullt-ln low and highvoltage hum-free power supply. Rear connections for $50-70$ ohm coax and all functions. Model TT-1 (Optiona! accessory, betom) suppltes signal for iwo-tone ilmearty test. For $\$ 15$ v., 60 cycle AC. Wi., 13 los.
90 SX 183-J. Ss MOnthly........................................................ 99.95
90 S× 187-J. TT-I TWO-TONE OSCILLATOR. Plugs into above. 2 los.

NET 19.95

## MODEL LA-400-C LINEAR AMPLIFIER

popular grounded-grid tinear amplifier offering up to 800 wath pep Input at minimum cost. Uilizes straightlorward design, modem styilina and highent quality components throughout. May be driven up to 800 w . PEP with 100 w . enciters; up to 500 m . Input with 30 w , exclters. For SSB, DSB, Anear AM, CW, PM and FSK operatlon. Completely bandswitched untt covers alf Ham bands 80 through 10 meters. Has 4 modifled 1625 tubes, 3 -element pt-network, multpurpose pane meler, and bulit-ln heavy-duty power supply. TVI-fuppressed and parissitlc-liree. Gray crinkle cabinet. 9 R $15 \times 10 \%^{\circ}$. For 105 - 125 v. $50-60$ cycle AC. Wt.. 52 tbs
90 SZ 284-J. Factory Wired. \$11 Monthly . ................................. 219.95
90 SZ 286. Kit Form. S9 Monthuy. ................................................ 179.95

## A FEW OF ITS STANDOUT FEATURES



MODEL 2-AC 10GKC CRYSTAL CALIBRATOR, Pluge Into Drake 2-B recelverno soldering or wiring. Gives ciear marker signal every 100 kc up to 30 mc . Controlled by front-panel slide switch on receiver. Wr., 5 oze
90 S 180 .
. NET 16.95
90 S 162. MODEL 2-BS MATCHING 6 - SPEAKER. 4 $1 / 1 \mathrm{IDS}$..
NET 16.95

## NEW knight-kit R-100A



## - $A$ R-100A COMMUNICATIONS RECEIVER KIT

Tre R-100A has all the extras thaf made the R-100 a DX-getting favorite with the Ham fraternity plus up-fo-the-minute panel and cabinet styling. Sensitivity is is to $1 \frac{1}{2} \mu \mathrm{~V}$ throughout the shortwave spectrum. Wlth full coverage from 540 kc to 30 mc . Has bandepresd for the $80-10$ meter Ham bands-tunes $i 60$, too. Builtin O multiplier works on all modes-CW. AM and SSB-10 peak desired sional or null interference. Selectivity is continuousily vartable from 300 cpes to $4 / / \mathrm{kc} ; 60-\mathrm{db}$ notch really takes out QRM! Use of printed circultry assures stable, rellable operation and easy assembly. Other highlights: exalted BFO for SSB. deiayed AVC, ANL. printed-circull bandswitch, and provislon for bullding-in aecessory crystal calibrator and S meter kite. With cabinet, tubes, alt parts, wite, solder and step-by-step instructions. Less speaker. Wi., 31 tbse See this catdoc's Knught. Kit section for details on this and other value-plus Amaleur Bodio kits.
83 YU 406. \$5 Monthiy.
OnLY 99.95
83 Y 423-J. S-METER KIT. WL. 12 or.
ONLY 12.95
B3 Y 424-J. S.BA MATCHING SPEAKER KIT. WIo, $31 / 2$ IOE.
ONLY 9.95

## P\&H, Eico, Mosley, Sonar, and Barker \& Williamson

POPULAR EICO AMATEUR KITS

65 Watts on Phone with Add-On $730-\mathrm{K}$ Modulator-Driver, Below

## 720-K TRANSMITTER KIT

This handsomely styled powsill CW tranmiliter kit Is fust the rig for seasoned veteran and newcomer allikel Covers $80,40,20,15$ and 10 meters whth handy one.knob bandswitehing. Sealed cablinet and careful bypaesing and Htering provide effective TVI suppression. Works AM phone when used with Model 730-K accessory Alt, below. Employs crrstat-controlled 6CL6 oscillator, BAOS butter-multiplier and 8146 Inal amplifler protacted by 6 AOS clamper tube. Mas bulit-in theying, pi-network output, and panel meter. $6 \times 15 \times \mathrm{s}$. With all Instructions. For $410-120 \mathrm{v}$. 80 cycle AC. Wt. 27 ibs.
90 SU 287J. Kit Form. $\$ 5$ Monthly. . . NET 79.95 90 SU 288J. Wired, 36 Monthly. .... NET 119.95

## 723-K TRANSMITTER KIT

A fine low-cost 60-watt CW transmitter for the beginning of advanced operator. Covers the 80, t0, 0, 15 and 10 -meter bands, iunning 60 watte input 10 60068 neutralized final amplifler. Fully band witehed, unit uses time-proven clrcultry and up-to-the-minute desian. 6CL6 otcillator ls electroncoupled Colpitts type noted for low crrstal heating and minimized effect of plate loading on trequency. Panel meter reads grid and piate circult of hinaf. Works AM phone at 50 watts input with optiona Model 730-K, below. TVI suppressed. Output Impedance, $30-9000$ ohme. $6 \times 81 / 211 \% \%^{\prime}$. Whth Instructlons. For $110-120$ v., 60 cycle /C. WL., 16 Ibe.
$905 \times 289 \mathrm{~J} . \mathrm{Kit}$ Form. 55 Monthily. . . NET 49.95 $905 \times 290 \mathrm{~J}$. Wired. $\$ 5$ Monthly. .... NET 79.95

## 730-K UNIVERSAL MODULATOR-DRIVER KIT

(Not tilusd A versatile high-level unit at a very modeat price, tdeal lot use with CW klts abovewill plate-modulate any transmitter having RF Input up to 100 watts. Delivers 50 watts of unditotorted audlo. Multu-tmpedance output. Inputs lor crystal or dynamte milke and phone patch. Unlque overmodule-

Ion Indicator. With instructlone. Less cover, below. For $110.120 \mathrm{v} . .60$ cycle AC. 21 lbg
90 SU 291 J . KII Form. $\$ 5$ Monthly . . NET 49.95
90 SU 292.」. Wired. 55 Manthily. ...... NET 79.95 905 293. COVER. For above. $5 \mathrm{lbs} . .$. . . NET 4.50

+ MOSLEY MODEL CM-1 Qual-Conversion Receiver


OWN IT FOR JUST \$10 MONTHLY

Now . . . this famed antenna manufacture brings you quallty A mateur-band reception at a orice within everyone Peach! Covers the $80-10$ meter bands with dual conver ton, eryetal-controlled first oscillator, celectivity of $2 / / \mathrm{kc}$ at -6 db and $1 / 2 \mu$ ensitivity tor $10 \mathrm{db} \mathrm{S} / \mathrm{N}$. Full $12^{\circ}$ of bandspread on each band; $36^{\circ}$ (3 segments) on 10 meters. Tunes WWV on 15 mc

Functional panel layout and compact de alon will compliment any statlon. Less than 500 eos dolft atter wermup. S meter functions with sFO on or off. Has diode and product detectors. ANL, 35 db lmage If relection. 5 dual-purpose tubes; 4 diodes. Jus! $7 \% / 3)^{10} 1 / 3 x^{*}$. Less speaker. For $110-120$ v. $50-60 \mathrm{cycle}$ AC. 14 lbs.
$905 \times 171$ J. 310 Monthly. NET 182.70
90 S 189. CMS-1 SPEAKER. 4 lbs .16 .95

## NEW! SONAR

Mono-Bander SSB Rigs


Selection of new one-band SS8 transceivers for both mobile and lized. atation use. Each Mono-bander is rated at 190 watte PEP and 165 watts CW Input. Employe Colline mechanical fliter and new RCA 7360 tube in balanced modulator elrcult, for 2.1 kc selectivity. 50 db unwanted sudeband suppression and 60 dt carrier supprestion. Recelver sensitivity, $I_{\mu v}$ lor $10 \mathrm{dth} \mathrm{S} / \mathrm{N}$. Also has: USB/LSB selection; VOX, anti-VOX and push-fo-talk: automatic modulatlon control: full-time AVC; 4-way meter function. Compact $51 / 3 \times 11 \frac{1}{1} 1111^{\prime \prime}$. With crystal for 200 kc coverage. Less power supplies and accessorles, below. 10 meler mrodel avalable on special order. Av. m., $10 \mathrm{lbs} . \$ 18$ Monthly.
90 SU 530J, 80 -Meter Model. 90 SU 532.J. 20-Meter Model EA. 90 SU 531 J. 40-Meter Model. sosU533J. 1s-Meter Model 395.00 90 SU 534J. 11720 VAC POWER SUPPLY w/bulit-in Speaher. Wr. 14 lbs. 90 SU 535J. 12 VDC POWER SUPPLY. WI., 14 Ibe.... NET 135.00 90 SU 538 . CERAMIC MIKE WIth coll-cord. plug. 1 lb . NET 17.90

NEW! B\&W 6100 TRANSMITTER


All-new from Barker 4 Willamson: a transmitter engineesed and bulli to olve the diecriminating Amalew licensee precialon SSB, CW and AM operstionl II employs a coystal-controlled trequency synthesizer, erystal latuen Hther, a noved ALC clrcuit and other highly destrablo featuret. Frequency coverage: 3.s4.1; 7.0-8.0; 14.0-15.0; 21.0-22 0; 28.0-29.0 and $29.0-30.0$ mc. Maximum power in Dute: 180 w. PEP on $\mathrm{SSB}, 180 \mathrm{w} . \mathrm{DC}$ on $\mathrm{CW}, 90 \mathrm{w}$. on AM Ilnesr, Unique BaW frequency synthesizer produces atability normaliy found only in costly commercia cysteme-tomperature-matched crystals control the frequency. resulting in irtually driftiess operatlon (no ftee running oscllitators are uned)
Crystal lattice filter method of aldeband generation achleves excellent sideband suppression. ALC with adjustable threshold is applied to 2 stages, preventing overdilve of the output stage or power amplifter; glves 10 db of volce compresston. Callbeations ese on 3 digital dials for hundreds, tens and unite of he"unite" dial ls confinuoualy variable, with aceuracy better than $\pm 1 \mathrm{kc}$ on any band. Dritt: 100 cps or lese during 15 -min. wermup: $\pm 25$ cps any hour thereatier. instant choice of USB/LSB without refuning; also cholce of VOX. push-to-falk or manual. Etlective orld-bloch keying clicult for clean, chlrpless CW whthour bachwave. Distortion products, sideband/carrler suppression, spurious mirture stonals, harmonics, and residual hum/notse are 40 to 55 dt down. Paraltel 6246 In final Solld-ataga recilfiar in bullt-tn cower supplies for tine requition and reduced heat disslpation. Ideal for use elther as a complete 100 watt tronsmitter or as a driver for a high-powered grounded-grid linal. Table-fop cabinef $9 / 4 x$ $184 \times 16^{6}$. For $105-125$ v., 60 cycle AC. Wh. 60 lbs.
90 SZ 294 J No Money Down.
NET 875,00

# Selected Amateur VHF Equipment 

## LINCOLN 6-METER TRANSCEIVER VALUE!


#### Abstract

Technicians. Generale, new Hams . . . set in on the 6-meter fun this easy, Inexpeneive wayl Alled's own Lincoln comes complete-bll eet to go, with mike, AC power supply and 50.2 -mt crystal. Veinler tuning superhet covers entire band from 50 to 54 mc . Transmitter runs 7 watts Input to fully modulated aCxs final empililer. with tunable output networt to metch any $30-100$ ohm anterna. Also has: front-panel sochet for 3rd-overtone crystals, bulit-ln TVI filter, adjustathe noise Ilmiter, and neon modutation indicator. Tubes: ©UBA RF amplifier/mixer; BUBA osciltator /AF; BALS detector/ANL; ECXI crystal


ocillator /RF output; $12 \mathrm{AX5}$ AF/milhe ampll. ther; 6VaGT AF output $/ \operatorname{modulator}$. Compact.
 plled with mike, $50.2-\mathrm{mc}$ crystel and bulti-in power suppiy for $110-120$ v.. 60 eycle AC. DC power supplies also avaliable for mobile work (see below). Shpg. wt. . 11 the. 90 SU 67ti-j. 5 Mm Monly. ..... OnLY 57.50 905679 . 12-VOLT OC POWER SUPPLY

905680.6 -VOLT DC POWER SUPPLY. $2 \% x$ $5 \% 1644^{\circ}$. Wt. . 4 lbs.

NET 11.95


## POLY-COMM " 6 " TRANSCEIVER

A new Polytronica 6 -moter station with ceramic mithe, flized/moblle aupply and under-desh mig. brackell "Mini-foad' VFO maintains mintmum diftt. Dual-conversion recelver tunes 49,75 to $\$ 4.25 \mathrm{mc}$ 2 nuviator RF stages give . $1-\mu \mathrm{V}$ sensitivity and $4-\mathrm{db}$ nolse tigure. 10 watts output. 5as 11 z 10 . For 115 v ., 60 cycle $A C$ and 12 v . DC. Wt.. 23 the
90 SU $681-\mathrm{J} .316$ Monthly.
NET 319.50
90 SU 6E2-J. I15-VAC MOOEL .... NET 299.50
POLY-COMM ' 2 ". Two-meter version for $115 \mathrm{v.,60}$ cycle AC and 12 v. DC. 6 watte output.
90 SU $683-J . \$ 16$ Manthly. ........ NET 339.50 90 SU 684-J. $115-V A C$ MODEL..... NET 319.50

POLY-COMM "G2-8" TRANSCEIVER. Covers 6 and 2 meters. 18 w . Input. $5 \times 11 \times 10^{\circ}$. With under-dash mig. bracket and ceramie mitie. For 115 r ., 60 cycte AC and 12 Y. DC. Wi. 23 tbs.
90 SU 685. 318 Monthly
. NET 379.50

## CLEGG 99'er TRANSCEIVER

A top-noteh 6 -meter traneceiver for both fixed and moblle work. Double-convertion superhel recelver utilizes 10 tuned chrcuite for outstanding eensitivity and selectivity with fredom from lmaget and crossmodulatlon. High-levet plate-screen modulated 755 final ampHiler works "stralght through". Caltbrated S meter accurately indtcestes signal atrengths-miso serves as tuno-up meter.
Front-panel apot awitch indicatee transmitter frequency. Also has: ultra-stable crystal osclifator, fleatble ol-network tank clrcult, 5-10-1 veinter tuning. nolse flmiter. $100 \%$ modulation without spiaties, TVI mupprestion. Overall nolse flaure, less than 41/4 db. Its 9 tubes and rectifies ofter 14 -lube performancel Use with $8,12,16$ or $84-\mathrm{mc}$ cryatals, of enternal VFO. SIze, $6 \times 10 \mathrm{~ms}$.' For 110 -120 v., 60 eycle AC. Less moblle supply, below. Wt., $181 / 2$ tbs. 90 SX146-J. ss Monthly.........net 159.95 80 F 263. C-O $6 / 1206$ POWERCON CONVERTER. For $6 / 12 \mathrm{v}$. OC. Wi., 12 ibs .
.NET 26.66


## P\&HTRANSMITTINGCONVERTER

MODEL s-150. Avold contly equlpment duplication by "poing VHF" thle easy way toed the 20-meter output of your $\$ S 8$. AM or CW exciter Into this unlt tor up to 175 w . PEP on 6 metert. May be crystal or VFO controlled. depending on exciter. Reslutive "pi-pad" and ewitehable "half-power pad" permit use with 5 to 100 -wath exclters. Inout to crossneutrailized push-pull 8117 output tube: 175 w . PEP SSB, 165 w . CW. 90 w . lineer AM. Copper-plated chasals and ahiedding. Output dack furniwhee occillator algnal infection for recelving converter. Has blower, sa-ro ohm input/output, power supply. mult-function panel meter. With crystal for $30.0-50.5$ mc . For $110-120 \mathrm{y}$. $50-60$ cycle AC. Wt. 451 bs. 90 SX 273-J. $\$ 15$ Monthly ........ NET 299.95 MODEL 2-150. Above, for 2 -meter band. 90 SX 274-J. \$16 Monthly...........NET 329.95

## NATIONAL "VFO-62'"

A deluxe, elf-powered 6 and 2 -meter VFO designed for maximum wablilty and versatility. Use with transmitters having 8 -me oselliator circults for full coverage of both the 50 and 144 -me bande. Frequency stability is better than $0.1 \%$ from cold start, and better than $0.005 \%$ atter 30 -minute warmup. Plugs into erystal socket of your tranamitter. Vernier dial drive provides preclse funing.
Complete internal shleiding ellminates all hand effects. Front-panel socket actepts 1 -me callbration cryatal or your favorite transmitting crystal. Provieton for remote standby-operate control. Housed in rugoed gray piantic cabinet for maximum mochanicat stabllity. Extsemaly fow power conaumption. Size, a compact $5 / 1 / 26 \% \times 5 / /^{\circ}$. For $110-120$ v. . $50-80$ cycle AC. Wt. ${ }^{6}$ tbe. 90 \$ 696. \$5 Monthly

NET 49.95


## AMECO VHF EQUIPMENT

MODEL CN-SOW G-METER CONVERTER. DAUXE converter employe 3 RCA nuvistore for extremely tow noise Hgure and high galn. $2 \times 21 / 8 \times 5 \%^{\circ}$. Requires
 power supply, below). Wi 2 tbe $\$ 5$ Manthly
90 S 686. 14-18 Mc Output...........NET 44.95 90 S 687. 30.5-34.5 Mc Output.

NET 44.95
MOOEL CN-14W 2-METER CONVERTER. Same as CN. 50 W , bui tor 2 -meter band. 2 lbs .55 Monthly 90 S 688.1418 Mc Output $1 . . . .$. NET 44.95 90 S 689. $30.5-34.5$ Mc Output ......... NET 44.95 MODEL CN-220W $1 \%$-METER CONVERTER. Shpg. wt. 2 tbs. $\mathbf{5}$ Monthly
$90 \mathrm{~S} 690,14-18 \mathrm{Mc}$ Output.
NET 49.95
90 S 691. 30.5-34.5 Mc Output
NET 49.85
Other If outpuls avallable on apecial order.
MODEL PV-506-METER PREAMP. Nuviator preamp. When used with present converter or seceliver. can Improve sensilivity and nolse tigure conmiderably. Requires $100-150 \mathrm{v}$. © 10 mh and 6.3 v . 230 mm . Stre. $21 / 52 \times 3 \% \%^{-}$. Wi. 1 to.
905 Si2.
NET 13.95
MODEL PV-144 2-METER PREAMP. WI. . 1 Ib. 905683.

NET 13.95 MODEL PV-220 $1 \%$-METER PREAMP. WE. 1 1t.
90 S 694. MODEL PS-IW POWER SUPPLY. Exceltent for use with any of the above converters. $21 / 2184 /(x 41 / 2$. For $105-120 \mathrm{~V}$., 60 eycle AC. Wt., 3 tbe. $90 \$ 695$.

NET 11.50

## TECRAFT VHF GEAR

mODEL TR-20,50 TRANSMITTER. (Not Hlluz.). A $20-25$ watt transmitter for 6 meters. Uses $8-m c$ crystala In Plerce osclilator-no trichy overtone clrcults. No frequency multiplication in final emplifier tage for reduction of radated harmonice. Has 6Aus otclilator, 5769 butfer-doubler, 6360 amplitiler, $12 \mathrm{AX7}$ speech, 2-6AQ5 modulators. Requlres 6.3 v . @ 3.89 amps and 250 v . DC (9) 250 ms . (See PTR-2 power supply, below.). Matehes 52 or 72 -ohm conxtal lines. Siret $5 / / 1091 / 15^{\circ}$. With erystals. Wi., 5 lbs. $90 \$ 697$. $\$ 5$ Manthiy.

NET 59.95
MODEL. TR-20/144 TRANSMITTER. Same as above, but for 2 meters. Has extra 5763 butter-multipller. 90 S 698. 55 Monthly

NET 59.95 MODEL PTR-2 POWER SUPPLY. For use with Tecratt tranumitters above; also Tecraft converters. Provides 6.3 volts ( 4 amps, 6.3 volts \& 4 ampe, and 250 volte DC@ 250 ma . Has send/recelve ewitch. Sire, $53 / 4 \times 91 / 516^{\circ}$. For $110-120$ v.. 60 cycle AC. Wi., 17 lbs.
90 S 699. S5 Monthly
NET 39.95

## Ham Station Accessories from Leading Manufacturers

## LOW AND HIGH-PASS TVI FILTERS

AMECO LN. 2 LOW.PASS FILTER. SIngleA. section fliter handtes up to 200 watts RF. For 52 to TR-ohm coak. Has 2-SO-239 connectors and wacket, 4\% $2 \% / 61 \%^{\prime \prime}$. Wi., 1 lb. 89 S 454.

NET 3.75
(B) DRAKE TV-1000-LP LOW-PASS FILTER. Rited B. At itw RF through 10 meters: 200 watt on 6 meters. dideal for 6 meters-cutoff frequency is 52 mc . For 52 -ohm coax. Wi., 2 lbs.
89 S 455.
NET 16.95
ORAKE TV-10G-LP. AbOVe. rated at 100 watts through 10; 20 watts on 6. Wt. , 1 lb . 89 S 456

NET 5.95
(C) BUD LF-GO1A LOW-PASS FILTER. 1 kw rating. For 52 or r2-ohm wnen. Cutoff, 42 me. Minimum attenuation: 85 db above $54 \mathrm{mc} ; 93 \mathrm{db}$ above 70 mc . $12 \times 2 / 1 / x^{2} 1^{\circ}$. We., $21 / 1 \mathrm{tbs}$.
89 S 457.
NET 16.90
[D] B.W 425 LOW-PASS FILTER. 4 iw rating. Two 85 db attenuation on TV channels: 100 db on channel 2. SO-239 coax fittings. $11 \times 32^{\circ}$. For 52 -ohm lines. We ${ }^{5}$ 1bs.

NET $\$ 7.10$
BAW 428. Above, for 72-ohm lines. 895459.

NET 17.10
[E DRAKE TV- $300-\mathrm{HP}$ HIGH-PASS FILTER. FO any TV set having 300 -ohm antenns input and 20 or $44-\mathrm{mc}$ IFs. Attenustion, more than 40 db through 52 mc -highty effective on Amateur 6 -meter interference. Iron-core, billiar colls. Fully shielded. Size,

91 C 180.
NET 3.97


SWR INDICATORS


262 indicator
M. C. JONES . 261 "MICROMATCH" ANTENNA COUPLER. For use with Model 262 Indicalor below. Measures RF power and VSWR. Rated at 1 kw at 1:1 VSWR. Has 32 -ohm, coandal UHF-type connectors. Frequency range, 0.5 to 225 mc . Less than 0.1 db power lass. $3 \times 4 \%_{0}^{\circ}$. Wha, 1 lb
89 5 465. s5 Morilhly
NET 22.50
M. C. JONES 262 INOICATOR. Meanures VSWA and relative power, lorward or felfocted, to 9000 watts. Senslitidy adjusiable continuously from about io watte full scale to 1000 wetts full acale.


- 5466 .

NET 14.50
CESCO CM-52 "REFLECTOMETER." Mensures SWR on 52 -ohm trenamission lines. For continuou: IIne insertion at powers from 25 to 1000 watts input. Range, 3 to 200 me . Sensilive $0-100 \mu$ meter cellbrated directly in SWR. Less than 1 db loss at 30 mc . Woiks with 10 watt at 7 mc and Up: 5 watte at 100 mc and up. Has So-230 connectors. $5 \% \times 3 \times 2 \%^{\circ}$ 。 mc and 2 lbs . Wh $\mathrm{S}^{2}$ lbs.
89 S 467. 5 Manthly
NET 29.95
CESCO CM-75 "REFLECTOMETER." For 75 ohms. 89 S 468. 55 Monthly

NET 29.95
F. DRAKE TV. 300 -FMT FM-BAND REJECTION FILTER. New unit rejects TV interference caused by FM stations operating from 88 to 108 mc . Reduces overload problems and "beats" between FM/TV stations. For 300 .ohm VHF TV eefs. Easy to attach and adjust. $24 \times 2 / 8 x 1 / 2$. Wt. 8 oz.

## 895460.

NET 2.55
G BAW 424 LOW-PASS FILTER. New low-cost 3-section fitter for low-dower Amateur tranamiters. Rating, 100 watts maximum. Attenuation, a least 60 db above 35 mc and throughout TV and FM channels. Also reduces spurious frequencles in inal gitd chrcult when instatled between exclter and high-power amplifier. Consists of 2 " $M$ " end sections and iconttam-K center section. Aanow, 1.5 to 30 mc . Impedance, 52 or 72 ohms (reveratble). Has So-239 fittings. $5 \times 2 \times 14^{\circ}$ - Wt. 1 1/p lbs.
89 S 461.
NET 8.65
H BUD HF-600 HIGH-PASS FILTER. Highiy effecH. Hive fiter for TV sets with 300 -ohm inputs. Rejects all shonals below 42 mc . Easy to attach. 3 Y/k 2/xalk. WL. 8 or
895462.

NET 4.85
(1) ANECO HP-A5 HIGH-PASS FILTER. Attenuates
J. All tignall below 45 mc . Provides 40 do attenuathon 14 mc and below; 20 db at 90 meters. Fasily attachod to any TV set with 300 -ohm intenna invut. $110 \mathrm{x} / \mathrm{Kn} \% \mathrm{~K}^{\circ}$. Wi.. 308. 89 S 463.

NET 95c
AMECO HPX-45 HIGH-PASS FILTER. (Not Hifus.) Delure 2-section model of above. Otters $8: 0$ db ate fenuation at 14 mc and below: 40 db et 10 meters. Negligible insertion ioss. $21 / 12 \times 11 / 3.5$ or. 595464.

NET 2.25


AMECO CD-I CONELRAD MONITOR. A IOw-COAt unit for converting any recelver having AVC into an effective Conelrad alarm syntem. Loss of broadcast station carter removes A VC from trigger tube, cmusing a clear warning tone to bo sounded in the itestiver. Function swith mutes radio for monitoring. Easy to Install-no leade in radio to cut. Slre, 31/ax $6 \% \times 2^{2}$. For $110-120 \mathrm{v} ., 50-60$ eycle AC. Shpg. wt., 2 K tbe. A Valuable station accessory
895469.
net 14.95
allied vinyl equipment Covers. Promlumquality covers to protect Amateur equipment from dust, molsture and tampering. Minimite maintonance probtems, theed gear looking the new. Ot beautiful s-gauge vinyl platilc. Extra-strong seams bound and teated-won't yellow or erack.
TYPE AE-12. Fits S-85, SX-99, SX-96, SX-100, SX111. $S X-110, S-100$ and other equipment not exceeding $8 \times 18 y^{2} \times 10^{\circ}$ (NWD). Wi., 6 oz. 89 S 470.

NET 1.75
TYPE AE-13. FITE HO-170, HO-180, HO-145. NC-300. NC-303 and any other equipment not exceeding

89 S 474.


NEW MASTERCRAFTERS 712 24-HOUR DESK/ WALL CLOCK. Can be hung on wall or placed on deak. Ten-minute timer signale you to sign your call. Has face-plate for call and polar projection to tell time anywhere, Loth.. $91 / 2=$. U. L. Approved movement for $110-120 \mathrm{v} ., 60$ cycle AC. Wt. i $1 /$ Ible 89 SX 450. Price includes F.E.T......NET 12.24 PENNWOOD 100-24H DIRECT-READING CLOCK. Altractive ${ }^{24}$-hour desk elock- hows time directly In numerale. In ebony piastic case. Size, $4 x 7 \% / 64^{\circ}$. For $110-120$ v., 60 cyele AC. Wi., 3 lbs.
$89 \mathbf{S X}$ 474. Price Inciudes F.E.T..... NET 16.34
89 S 475. MOOEL 124. Above, with call remindet. Buzzes every 10 minutes.. .............NET 24.26 MASTERCRAFTERS 191 WORLD CLOCK. TODvalue 24-hour wall clock. South potar mad projec. tion shows time anywhere. Chrome-plated case, B dia. For $110-120$ v., 60 cycle AC. Wi., $1 \%$ lbs.
89 S 472. Price includes F.E.T. NET 8.47
MASTERCRAFTERS 2324 WALL CLOCK. 24 -hour clock with red 2 nd hand, $\mathbf{2} 3 /{ }^{\prime \prime}$ black case. U. L. Approved. For $180-120$ v., 60 cyclo AC. 5 lbs.
$90 \mathbf{S X}$ 147. Price include F.E.T.......NET 9.97
$90.5 \times 179$. Above. In chrom case...NET 11.97 NEW PENNWOOD $920-24 \mathrm{H}$ DIRECT-READING Clock. 24 -hour type. Stalnless steel case, walnut onds, $3 \%=7 \% \times 3 \% \%^{\circ}$. U. L. Approved movement for $110-120$ y.i 60 cycle AC. WL, 3 lbs. $89 \mathbf{S} 476$. Prlce includes F.E.T..

NET 24.50

## HALLICRAFTERS S-METER KIT



Easy-to-install $\$$ meter for panel mounting. For use with Hallicrafters $\mathbf{S}-408$, S-20R. S-40A.SX-62.S-77. S-77A, S-85, S-107, S-108 as well as many other recelvers. Can be instelled In any RF of If stage wilh AVCACtion. $31 / 4=2 \%$ " meter has black dial with white markings.
Meter has 2 scales: microvolt ecale callibrated from a-ro00K and S-unit scale callbrated to SC db over \$9. Requlres $21 / 9^{\circ}$-dis. round hole for meter berrel and four $X^{\prime \prime}$ holes for mtg. studs. Can be separately mounted in individual meter case (aee catalog index). Wit consists of a 5.0 -milluampere meter, 500 ohm pot for electricas sero-set, one $82-\mathrm{ohm}$ 1/4-math $10 \%$ resistor, one 330 -ohm $1 / 4$-watt resititor and easy $10 \%$ resistor, one 330 -ohm $1 / 2-$ watt resimlor and easy Instructions. Exceltent for earHer
lacking bultioin $S$ meters. Wi., it 89 S 473.

NET 12.00

# Towers, Rotators, Antennas and Accessories 



These famed E-Z Wey mintenna towers crank way uo to snag DX, yet can be easlly tlited over for access to array when adjustments are necessary. Sturdily constructed of heary-wall high-tenalle steel tubing with solld steet rod and conilnuous diagonal bracIng. Electrlcaliy arc weided throughout. Ughiwelght and strong-withstand wind of very high velocity. Resist twlst and torque caused by constant starting and stopping of rotor and beam. Whan used with ground-post mounting hlts below. mount In $5^{\prime}$ hole; requlre no concrete base or ex. temat guying. When used with bullding-attached kit below, anchor to side of an adjoining atructure. Will support a full-ized beam in winde of 60 mph or higher. Thrust bearing relleves rotor of all welgh. All towers have hot-dipped galvanized eurtaces except "Model RBS-40P, dlp-painted surtace. Accept CDR Ham-M rotor head (right). Other rotor heads are avallable on speclal order. Specify rotator to be used when ordering. Shipped by truck or rail F.O.B. Tampa, Fla., or Chicago, III., whichever is closer. Send full remittence on cash orders -no C.O.D. Towers are also available on Affied's Credt Fund Plan for no money down. low monthly payments, and up to 24 months to pay.

| Stock No. | Model No. | Description | Ht Ft. | Lbs. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 89 CZ 827 | RBS $40{ }^{\circ}$ | Std. duty 2 sec . | 41 | 180 | 169.50 |
| ${ }^{69} \mathrm{C} 2828$ | RBES 406 | Std. duty 2 sec. | 41 | 190 | 209.50 |
| 89 CL 83 | RBS-50G | Std. duty 2 soc. | 51 | 235 | 279.50 |
| 89 C2 854 | R8X.60-36 | Heavy-duty 3 sec.l | 60 | 355 | 410.00 |

## E-Z WAY GROUND-POST <br> AND SIDE-MOUNTING KITS

For uso with E-Z Way tiltover antenna towers, above. GPK type ('Wonder Ground Post') ground-post kits contain afl necessary equlpment for mounting lowers tn the ground. without use of concrete base or ouy wires. Type BAK-Sso butlding-attached kit is for mounting tower atongside a buliding.

| $\begin{aligned} & \text { Slock } \\ & \text { Noc } \end{aligned}$ | $\begin{gathered} \text { Model } \\ \text { No. } \end{gathered}$ | $\begin{aligned} & \text { Use } \\ & \text { With } \end{aligned}$ | $\mathrm{Lbs}_{\mathrm{Lt}}$ | $\begin{aligned} & \text { NET } \\ & \text { EACH } \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 89 cz 866 | BAK-St0 | Any restur. | 10 | O |
| 89 C2 894 | GPK.S40 | RES-40P or 6 | 150 | 75.00 |
| 89 C2 895 | GPK.S50 | RES 506 | 195 |  |
| 89 C2 897 | GP\%-X60-3 | AB | 35 | 0 |



## CDR HAM-M Rotator

- Handies Full-Size Beams
- Load Rating Over 1000 Lb
- Complete $360^{\circ}$ Rotation
- Indicator Readable With Motor Off

Heavy-duty rotator system for support, control and rotation of the heaviest beam antennas commercially available-even in high winds. Features rugged stalinlese steel motor gears and pinlons. be ball bearingt, and solenoid brake release. Has electrica end-of-rotation dower cutoff. Vertical load rating is over $1000 \mathrm{lbs.;}$ heavy plates distribute atresses. Indoor remote-control indicator untt has large meter callbrated with compass points, and in $3^{\circ}$ increments. Readable with motor off. Provides 365 Inch-ibs. rotating lorque; 3500 inch-lbe. braking. Rotator easily mounted on all std. towers. Accommodates yo to $2^{\circ}$ O.D. masts. Less control cable, below. For $115 \mathrm{~V}_{\mathrm{F}} 86$ cycle AC. 23 lbs.
89 5X 025. 36 Monthir.
NET 117.11
47 T 330. 100-FT. COIL OF BELDEN TYPE 846 8-CONDUCTOR CABLE. For use wIth above sysiem. Shpg. wt., 4\% lbs.

NET 6.27

## AMECO FOLDED DIPOLE KITS

- Efficient/Low Loss
- Handle to 300 w.
- No Soldering
- Budget Priced
- With All Hardware

Each kit comes complete with low-los: iwin-lead Hat-tod cut to desired frequency band. 75 ' of lead-in wire, and high-dielectric hloh-atrength folded-dipole connector block. Excellent impedance match assured. No sotdering necess ary-solderless terminat! and hardware provided. Av. wt., 3 K lbs.

| Stock | No. Trpe | Bands (Moters) | NET EACN |
| :--- | :--- | :--- | :--- |
| $89 \$ \times 700$ | PD-10 | 10 | 3.50 |
| $895 \times 701 \mathrm{FD}-20$ | $15-20$ | 3.95 |  |
| $895 \times 702 \mathrm{FD}-40$ | 40 | 4.95 |  |
| $895 \times 717 \mathrm{FD}-80$ | 80 | 6.75 |  |

SPAULDING Strato-Tower Packaged Ham Towers

- All-Riveted Construction
- 100\% Galvanized Steel
- Assembled 8-Ft. Sections
- Choice of Screw-Anchor or Std. Concrete Mtg.


SERIES HAX STANDARD TOWERS. WIII sUpDORI maller-sized beam, rotator and clutch brake assembly. Factory-as sembled e-ft, sections altNveted construction. Heany gaivanized sfeelwiths tand greater wind-loading than slmilar standard towers. Top of HAX-48 is $10^{\prime} / 16^{\circ}$ acrose one side ol irlangle; bottom. $25^{\circ}$ across. Choice of tri-channel crew-anchor hinge-over base or stub base. HAX-B types are free-standing towere with screw-anchor base-no concrete required. Other have base stubs for mig. in concrete. Alt types are packaged with rotor piate and tod plate assembly. Lese mact. Shipped F.O.B. Frankfort, Ind. No C.O.D. ovders: please send full remittance to Allied. Shioping charges will be collected on delivery.


SERIES HOX HEAVY-DUTY TOWERS. SImllar to bove but of extra-heavy galvanized steel-upport fulh-sized beams. Strong durable and dependable HOX-48 top is $121^{*}$ (bottom 28") across one side of triangle. HDX-B types have screw-anchor base: others, base stube for concrete mtg.

| Stock | No. Type | H. | See. | Lbs. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 90 Cz | 444'HDX-32B | 32' | 4 | 212 | 99. |
| 90 Cz | 445 HDX 40 B | $40^{\prime}$ | 5 | 361 | 137.80 |
| 90 Cz | 446 HDX 48 B | 48, | 6 | 430 |  |
| 90 Cz | $447 \mathrm{HDX}-32$ | $32^{\prime}$ | 4 | 143 | 76.75 |
| 90 Cz | 448 HDX -40 | $40^{\circ}$ | 5 | 206 | 107.10 |
| 90 Cz | 49 HDX-48 | $48^{\circ}$ | 6 | 280 | 142.2 |

## TRANSMISSION LINE, COAXIAL FITTINGS, ANTENNA ACCESSORIES

A CONSOLIOATED RG COAXIAL CABLE. Highly dependable coax. Ideal for transmission llnes and other RF applicallons. All types have black vinyl Jacket, polyethylene dielectric, copper brald shield and bare copper conductor except RG $11 / \mathrm{U}^{\circ}$, which has tinned copper conductor.

| Stock No. | Type | Ohms | $\mathrm{Mmf} / \mathrm{Ff}$. | O.0. | lbs. 100 | R FT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 49 W 104 | RG8/U | 52 | 29.5 | .405* | 101/2 |  |
| 49 W 109 | RG11/U* | 75 | 20.5 | .405" | 10 |  |
| 49 W 113 | RG58/U | 53.5 | 28.5 | .195* | 3 | 4 |

AMPHENOL LOW-LOSS COAXIAL CABLE. TYpes $821-111$ and $621-715$ similar to RG8/U and RG59/U respectively, but have polyfoam dielectric. Attenuation $15 \%$ less than RG types; polyfoam dielectric constant. 1.50 .

| 49 W 644 | $621-111$ | 50 | 26.5 | $.405^{\prime \prime}$ | $101 / 2$ | .156 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 49 | $W 339$ | $621-715$ | 73 | 17 | $.195^{\prime \prime}$ | 2 |

B AMPHENOL TYPE 214-078 TRANSMITTING TWIN-LINE. 300-ohm aip-core (tubular. 7/88 copper conductors. Rated at 1 kw RF. Shog. wt., Def 100 ht ., $31 /$ lbs. Minimum order, 100 /t. coil.

NET 6.36
AMPHENOL 214-023 TRANSMITTING TWIN-LINE. 75 ohme. Mandles up to 1 kw of RF Dower. Propagation factor, $71 \%$. Attenuation, 1.40 db per 100 Ht . at 28 mc . Shog. wh, per 100 ft . 4 lbs

## 49 W 495.

net per foot $7 e$
C CESCO "DRI.FIT" COAXIAL DIPOLE CONNECTOR. A completely mols-ture-proof center connector Ideat for use whit dipole antennas. One-place aluminum alloy construction. Handles RF power to maximum legal IImits. For RG8, RG50, RG11 or RG59 coaxial cable. or 300 - hmm twin lead. Can be easity Intalled in a few minutes. Has eye pull-up for Inverted- V antennias. 2 oz . 89 S 026.


B\&W CC-50 COAXIAL CONNECTOR. Weatherprooi, waterlight connector for hall-wave doubiets. Ruggediy constructed of aluminum with high-quality teatite insulation. Internal connections. With seailng cement. 1 th 75 S 593.

NET 5.85
E. BAW 550-A MULTIPOSITION COAXIAL SWITCH. Inexpensive swith to ellminate bother of screwing and unscrewing coaxlal connections, instantly salectu any of five transmiltert, antennas, exciters, recelvers, of other devices using 52 or $75-\mathrm{hmm}$ Ines. Handles up to 1 kw of modulated power with maximum crosstalk of -45 db at 30 mc . Wh., 2 lbs .
895027.
net 8.25
895 028. BiW $551-A$. Above, bui 2-pole 2-posilion type
NET 7.05
F CUSH CRAFT "BLITZ BUG" COAXIAL LIGHTNING ARRESTER. Protects equipment from Ilghtning and prevents coax punctures due to high SWR. Gao princlole ellminates static build-up. No effect on performance or SWR. Type 83 RF cannectore. Install directiy to equipment. $31 / 4 /$ long. Wh, 4 oz 895044.

NET 3.95

# Popular Hand, Semi-Automatic and Electronic Keys 

MODEL 114-100-3 DELUXE HAND KEY, From E. F. Johnson, a precision made hand key of exceptionaily high quality, Carelully tempered spring, and hardened and polisted tine-ooint plvots prowide lively action for smooth, easy sending. An orceltent chotce for the Deplnner and old-timer allke. Spring tension. contact spacing and bearing pheseure are sastly adjubtable. Base and binding posts hove Instrument lacquer coating to proteci the highly attractive satin-bras: finish of key. Contects are of a tepectal, extremely durable, plitresistant alloy. Contact dia., $072^{\circ}$. Shorting swteh lete you close telegraph circult or make adjustments to transmitter. Shpg. wt., 2 lbs.
895912.
nET 7.35
MODEL $114-100$ KEY. Same as above, but less shorting awltch.
NET 6.45MODEL 114-320 STANDARD KEY. Telegraph wey buill to rigid spechications for smooth, comfortable sending. Lalge, ehrome-plated key armis suspended rom hardened steel bearings, Large, \%" coln-silvet contacte. Improved Navyype knob. Adjustable contact spacing and spring tension. Heavy brass connector concealed under base. Black die-cast bese. W $t_{\text {a }} 2$ Ibs
89 S 920.
NET 4.70
MODEL 114 -520 SPECIAL SEMI-AUYOMATIC KEY. A Eemi-automatic key for amooth, effortiess sadio-tolegraph sending. Contact spacing and sifding weight are easily adjustable to desired sending speed. Has clicult closing awlith Ruggedy constructec for long dependeble use. Hes ${ }^{\prime \prime}$ / coln-alliver contacte Hardware and vibrator are heavily chrome-plated. Heavy, die-cast base is finished in black wrinkle enamel. Rubbed feet prevent marring tinished surfaces and meep bug in stationary position on desk. Shpg. Wh.. 4 tos
89 S 921.
NET 15.95

(D)
JOHNSON MODEL 114-50: DELUXE SEMI-AUTOMATIC KEY. A smoothiy operating key with $1 / 4$ contacte. Arm, posis. circult-closing switch and all machine parts are heavily chrome-plated. Adjuztable from towest to highe anding speede. Has flve aduatmente with lock nute-ptastic paddlee adjue separately to beat height. On hand some pollahed chrome base with rubber feet to revent sllppage or marting oper ating desh. Wt., 5 lbs
89 S 934. \$5 Morthly
NET 22.95
MODEL $114-500$ SEMI-AUTOMA THC KEY. Identicel model to above, but with $\%{ }^{\circ}$ contacte and emart. blach wrinkle steet bate. WI., 5 tbs. 90 S 756.

NET 18.95

(E "ORIGINAL" SEMI-AUTOMATIC KEY. A moolh, easy-worhing "bug" tor use at speods from 10 wpm on up. Ptelerred and used by many veteran operators. Chrome-plated mechanlsmi gray castilion base with shp-proof rubber leet. Less cord and wedge eet (below). Wi., 5 lbe.
89 S 939. 85 Monthly.
NET 22.45
89 S 940. DELUXE "ORIGINAL". Same as above, but with Jeweled bearings and fuily chrome-plated base. Wi., 5 lbs. 35 Monthiy

NET 26.95
F "CHAMPION" SEMI-AUTOMATIC KEY, Inexpenslve key destoned for emooth, easy operation. Mechanism chromo-plated. Base ls attractive giny crackle finish, Lese cord and wedge (below). Wt.. 4 lbs.
895949.

NET 17.95
G VIBROPLEX "PRESENTATION" SEMI-AUTOMATIC KEY. Bequtifully demigned key offers a lifetime of sending enjoyment. Features patented adjustable mainspring that provides ortremaly wide range of speed. Jeweled movement resists trietion. malntaint smoother, easlor operation and prolongs He. Has pollshed chromium precision-machined paits mounted on a 24 K gold-plated base top. Colortul red switch knob, finger and thumb places. Rubber feet on bottom prevent allpping and protect finishes. Less cord and wedge (below). Wi.. 5 lbs. $89 \mathbf{S} 92$. ss monthir.

NET 33.95

(H)
STANDARD "BLUE RACER" SEMI-AUTOMATIC KEY. Small, Hghtweight and low-cost. Carefully built for extremely amooth operation. Chrome-pintod mechantsm. Gray base. Less cord and wodge (below). Wt.. 4 tbs. 89 S 944. 55 Monthls

NET 22.45
DELUXE "BLUE RACER." Idenilcal to "Standard Blue Racer" above. but has ioweled bearings and chrome base. Shog. wt. . A lbs 895943 . 55 Monthy.

NET 26.95
CARPYing CASE. (Not Illue.). Attractive earrying case for all Vibroplex semiautomatic keys above ercept "Blue Racer" models. Cloth-lined; protects hey from dust and molature. Styled in handsome, almulated black morocco. Has lock and key; convenient carrying handle. Shpo. wt., 2 tbe.

## 895944.

NET 6.75
CORD AND WEDGE SET, For uee when 2 keys sre wired in serles. Wedge ahorls out contacts of one tey. Other key controte sending. Wi., ${ }^{3} \mathbf{0 z}$.
89 S 945.
NET 1.75

## SELECTED ELECTRONIC KEYING DEVICES

## VIBROPLEX "Vibro-Keyer" Keying Mechanism

STANDARO MODEL. An excellent kaying mechanism for woe with elther unit below or any other efectronic "bug." whather manulactured or homebubtit. Employs the tamous Vibroplex frunion lever for smooth, effortiesa sending-greatly aids In in* creasing your speed and accuracy. Tenston snd pressure are lully adjustable. Atso teatures sturdy main trame. chrome-finished parts, large ${ }^{1} /$ for $^{\prime}$ con-
lacis, and red finger and thumb pleces. Beautliul beige-colored base. Rubber feet protect fintahes and prevent "walking." Base, $31 /\{141 / 5$. 3 bs. 89 S 946.
(2IUXE "YIBRO KEYER" e, but has chrome-pisted base.
895947 . \$5 Monthly.

## HAMMARLUND HK-1B Electronic Keyer

Fully transistorlzed, battery-powered keyer whith "personal touch" dot-dash control that tatee the cobot qualliy out of etectronic sending. He versatility and wide range of edjustable apeeds make 11 ideai for both Amateur and protessional operntors. Can be used as automatic. semi-automatic or straight hey. Has sidetone slonal with adjustable volume for stgnal monttoring or code practice. Speed range,
approxtmately 8 to 50 wpm: variable dot-dash rallo. Relay contacts have high curcent-capacity. eltminat Ing any poasible transistor damage due to reversing polarlty. $\mathbf{2}$ Kx7x4 Ǩ". Less keying device (above) and batiery (below), 41/2 lbe.
905275.15 Monthly

NET 39.95
55 J 560. $221 / 2$-V. BATTERY. $1 \mathrm{lb} . . . .$. NET 1.61

## HALLICRAFTERS HA-1 "T.O." Electronic Keyer

An advanced electronic keyer de:mitting emoath, essy. clear transmlasion of code. Not only ere dote and dashes sell-completing, but perfectly proportloned space is alway malntained between them. All timing clrcults are electronic--not affected by relay variatlone. Callbrated in range $10-30$ und $25-65$ wDm. Has monitor with bullt-in speaker, and headohone jack. Monitor may also be fed through receiver audto circult, Includes speed range selector, mont-
tor level controf. dot duration control, etc. Has bultiin transformer-type power supply. Employs 4 dualtrlodes, 2 VR tubes, 2 neons. and 3 diodes. Plupin. vacuum-seated, mercury-wetted relay used only to hey transmitter and sidetone slonal. Size, 5s7k7. Requires keying device (see "vibro-Keyer," abova). Fot operation from $110-120$ v., $50-60$ cycle AC. Shpg. wh. 2 lts.
90 S 119. 25 Monthiy
NET 79.95




Amateur Crystals，TR Switches，and Components

## JAMES KNIGHTS／PETERSEN PR CRYSTALS

A PETERSEN 2－2 AMATEUR TRANSMITTING CRYSTALS．In blaen phenolle holder．Pin apacing，．485 ．Pin dia．，．093．Tolernnce，$\pm .03 \%$ ．Slze， 116 z
 listed under Stock No． 99 S 257 （beneath table）are cul to the exact frequency you specify．Allow 30 days for delivery．Shipg．wi．． 3 oz．

| Srock No． | Frequency（ke）Stock No． | Frequency（kc） | EACH |  |
| :---: | :---: | :---: | :---: | :---: |
| 9055379 | $1750-2000$ | 9955267 | $7000-7425$ |  |
| 9055381 | $3500-4000$ | 9955259 | $8000-8222$ | 2.95 |
| 9055380 | $6740-6800$ | 9955296 | $83+0-9000$ |  |
| 90 |  |  |  |  |

$90 \mathbf{5} 393$ ．JK H－73＊ $1.8-18.0 \mathrm{mc}$ ．Spectiy Exact Frequency
EACH 4.80
［B］JK H－173 AMATEUR CRYSTALS．For oscillators with low erystal current． Pin spacing， $486^{\circ}$ ．Pin dia．．． $050^{\circ}$ ． $1 / 4 x 1 / 2 \times 1 / 0^{\circ}$ ．Special order oniy，Allow 30 day 5 for delivery．Specify frequency．Wt．， 3 oz．

| Stock No． | Frequency | Toleronce | EACH |
| :---: | :---: | :---: | :---: |
|  | 905382 | $1.8-40 \mathrm{mc}$ | $\pm .01 \%$ |
| 905383 | $1.8-75 \mathrm{mc}$ | $\pm .005 \%$ | 4.95 |

JK H－93 FREQUENCY－STANOARO CRYSTALS．Black phenolle base；anodized aluminum Can．Silver－plated crystal．Pin spacing．． $486^{\circ}$ ，PIn dia，．．083 ．Tolerance． t．005\％．2＂long； $1 \mathrm{~K}^{\circ}$ dia．Shpg．wt．． 3 oz．
90 S 384.100 kc .90 S 385.1000 kc
NET EACH 6.95
（B）JK SPECIAL－APPLICATION CRYSTALS．Size， $3 / x^{23} /$ an $^{3} / 6^{2}$ ．Pin spocing， （486＂．Pin dla．． $093^{\circ}$＂3rd overtone type．Ar．wt．， 3 oz
 90 S 387 H－17L． $27.255 \mathrm{mc} \pm .005 \%$ Kadio coneral ${ }^{2} .80$

 only．Allow 30 days for delivery．Specily Type No．and frequency desired．Av．shpo． wt．， 302.

| Stock Ne． | Type | Frequency | Tolerance | EEACH |
| :---: | :---: | :---: | :---: | :---: |
| 90 SS 388 | H－17T（HC－13／C） | $30 \mathrm{kc}-200 \mathrm{kc}$ | $\pm 0$. | 14.95 |
| 90 Ss 389 | H－17（HC－6／1） | $200 \mathrm{kc}-750 \mathrm{kc}$ | $\pm 0.005 \%$ | 13.90 | 90 SS 390 H－17（HC－6／U）$\quad 50 \mathrm{mc}-100 \mathrm{mc}| \pm 0.005 \%| 13.18$

## BLHEY SPECIALIZED SERVICE CRYSTALS

A TYPE MC．ALIGNMENT CRYSTALS．For use as marker in sweed generators
 $\pm .02 \%$ ．Pin spacing． $486^{\circ}$（1／${ }^{\prime}$ ），Pin dia．， $093^{\circ} .302$
90 S 391.5 .0 mc .90 S 392.10 .7 mc ．
NET EACH 3.95

## C MHLLEN STEATITE CRYSTAL SOCKETS

Entremely low loss．Phosphor－bronze contacts．Tinned luge．Av，wh， 2 os．

| Stock No． | Type | Pin Spacing | Pin Diameter | NET EACH |
| :---: | :---: | :---: | :---: | :---: |
| 72 S 035 | 33102 | 486＂ | ．094＂ | ． 36 |
| 72 S 075 | 33302 | 486＂ | ． 050 ＊ | ． 24 |
| 72 S 029 | 33002 | 3／4＂ | 125＊ | 36 |

## （D）MOSLEY CRYSTAL－SOCKET ADAPTERS

TYPE 75－5．Adapts．750 spaced crustal holders to ．486 sockets．Wt．， 2 oz． 89 S 544.

TYPE 5－75．Adapts ． $486^{-}$spaced crystal holders to $3 /=$ sockets．Wi． 2 oz． 895543.

## ANTENNA SWITCHING DEVICES

\＆NEW PdH AR－9 TRANSCEIVER TR SWITCH．Transfers antenn to trane ceiver on receive and provides ewliching to connect exciter to amplitier on wansmit－line for SSB exciterfinear．Exclier operatable stralght through to antenna it desired． 5 poseible interconnections．For $3-30 \mathrm{mc}$ ． $50-239 \mathrm{E}$ for $50-70$ thm coax．Paled $1500 \mathrm{w} .3 \mathrm{xax}^{\circ}$＂，Requires 6.3 v．AC（G） $675 \mathrm{ma} .21 / 2 \mathrm{lbs}$ ． 905 437． 55 Monthly．

NET 32，50
F ADVANCE CB／1C2C／115VA COAXIAL RELAY．For 52 ohms．Rated 800 ．w If SPDT Internal contaets connected to R3－1R．Also auxillary DPDT $2-a \mathrm{mp}$


## 76 P 254.

NET 13.25
75 P 645．CB／ACMi5VA．Above，less external DPDT coniacte
NET 12.15
G JOHNSON $250-30$ TR SWITCH．Swhiches antenna between receiver and
 For $110-120$ volts， $50-60$ cycle AC．Wh． 5 lbs．
895 305． 85 Monthly．NET 29.25
H 89 S 306．DOW－KEY OKC－TRM－1 TR SWITCH．For tredimoblie， 61.12 \％．
$1.5-30 \mathrm{mc}, 1 \mathrm{kw}$ ．For $90-120 \mathrm{v}$. OC（山） 25 ma .10 or
NET 12.50
（1）OOW－KEY DKC－TRP SELF－POWERED TR SWITCH．Coaxial type，to
（1）electronic antenna switening．Prowides gain between antenna and receiver For $1.8-30 \mathrm{me}$ ．Rated $1 \mathrm{~km} .4 / 2 \times 3 \times 2 \mathrm{~K}^{*}$ ．For $110-120 \mathrm{v}$. ．AC．Wt．， 1 K lbs． 895 308． 35 Monthly

NET 27.75
DOW－KEY COAXIAL FITTINGS．（Not Illus．）DKF－2 is double male．DK－60－P is panel－mount female tyoe．Av．shod．wt． 402
75 P 946．OKF－2 ．．．．．．．．．．NET 1．25 89 S 309．OK60－P 70


MODEL g0932 MODULATION MONITOR．Completely self－contained Amateur－ band oscilfoscope for monltoring the modulated RF output of any SSB or AM transmitter．Bulif－In link－coupled tuned circults cover all bands 3.5 through 54 mc ．Displays both RF envelope and traperoldal patterns．Shows llnearlity or non－ linearlty of Class B RF amplifiers，parasitlc oschlitions，neutralization，and RF output．Blanks out on standby．Easily connected to transmitter．Uses 28pi，\％ round CRT，not supplied，individual colls lor each band，and bullt－In setenlum－ rectiffer power supply for operation from $110-120$ w．，BO cyele AC．Sire， $3 \% \times 3 / \mathrm{m}$ $5 \%^{\circ}$ ．Shpg．wt．．a lbs．
89 S 045． 55 Monthly．
NET 87.50
E1－2BP1．RCA $2^{2}$ CRT． 2 lbs NET 19.05
MODEL 90672 ANTENNA BRIOGE．Sensitive bridge for measuring 5 to 500 －ohm Impedances at frequencies uo to 200 mc ．Use to check radlation reslatance， resonance，IIne Impedance，SWR，receiver Input Impedance，etc．Hasa ditter－ ential varrable capacitor． $3 / 2 \times 3 / 1 \times 5 \% / 2.21 / 2$ Ibe．
89 S 310.35 Monthiy．
NET 45.00

## STATION COMPONENTS FOR＂DO－IT－YOURSELF＂SPECIALISTS



K TUBE COOLING MOTOR AND FAN．Extend lile by heed－ Ing envelope and seate cool．Permilt more effective thield－ Ing of RF amplitiers，etc．．without depending on convection

 72 P 715.

NET 4.43
［1］EIMAC CONTACT FING ER STOCK．SHver－plated alloy stripe．Make excellent contact；prevent RF leakage through cabinet doors．May be secured etther mechanicalty or by solder－ ing．Shpg．wt．， 12 oz.
42 P 086． $3^{\prime}$ long；${ }^{13} /$ a $^{-1}$ wide
42 P 087． $3^{3}$ lone：＂ 6 ＂wide
NET 5.77
42 P 088． $3^{3}$ long： $11^{\prime \prime}$ wide
NET 6.23
NET 6.70
CAROWELL＂X＂TYPE TRANSMITTING CAPACITORS． （Not llius．）Single－sectlon variable types．Av．wt．， 4 lbs．
Sloch No．Type I Mmt platestir Gap Sirt


## BEW NETWORKS AND CHOKES（NOT IIUS．）

89 S 322．MODEL BSOA PI－NETWORKINOUCTOR．F or single or parallel tubes on 80－10．Rated 1 kw ．Mar．VDC：CW－SSB

89 S 331．MODEL 851．Identical to above，but rated 250 w ． AM； 500 m. CW－SSB．Max．volt DC：CW－SSB．2000；AM， 1250 v．Shze， $7 \times 3 \times 3$ 鱼＂．Shpg．wh．， 4 tbs．

NET 16.50
89 S 660．MODEL $350-204$ AUDIO PHASE－SHIFT NETWORK． Solite signala from $300-3000$ cps Into 2 equal components $90^{\circ}$ out of phase．Octal base．Wi．． 1 lb．

NET 4.95
$89 \mathbf{S} 950$. MDDEL 800 RF PLATE CHOKE．For $80-10$ mater transmitters with paraliel or seriesoled circults．Max．rating． 2500 VOC（4t $500 \mathrm{ma} .6 \mathrm{~K} / \mathrm{z}^{\prime \prime} \mathrm{dia}$ ． 2 lbe ．

NET 3.75 89 S 995．MOOEL FC－30A FILAMENT CHOKE．For grounded－ grid amplitiers． $30 \mathrm{amps} .2 \times 21 / 15^{\circ}, 21 / 2 \mathrm{lbo}$. NET 10.45
89 S 996．MODEL FC－15．Above，but rated at 15 amps． $1 / 2 \mathrm{x}$ $11 / 1 \times 412^{\circ}$ ．Wt．， 2 Klba ．

NET 7.50


## NEW-TRONICS MOBILE ANTENNAS

"Not III.) New "Hustler" type. Antenna consists of 1 rast, 1 resonator. For 52 -ohm coax. I Ib.

| No | Type | Describtion | Ant. Hi | NET |
| :---: | :---: | :---: | :---: | :---: |
| 90 CZ 849 | RM-10 | 10 | - | 5.9 |
| 90 Cz 850 | RM. 15 | $15-m$ mr fesone |  |  |
| 90 C2 859 | RM-20 | $20-\mathrm{mtr}$ resonator | 78 | 7.9 |
| 90 CZ 860 | RM-40 | 40.mtr resonator | 97-98 |  |
| C2 864 | 8 | 75-mit res | 910-97* | 11 |
| $90 C 2879$ | MO-1 | Rear. $\delta^{\prime} k / 1^{\circ}{ }^{\circ} \mathrm{d}-\mathrm{mt}$. $54^{\circ}$ mast $54^{*}$ masi tor bumpet mt . |  | 7.9 |
| C2 882 | M0. 2 |  |  |  |



MOBILE ACCESSORIES Av. wr., 3 lbs Stock Mo. Mir. \& TyDe Fie Descriotion NET 905992 Naw. tr'cs C29-32

90 S 994 Now.tr'cs C32
90 S 995 New-tr'es C29 905996 Hy-Gain T-3

Chrome base. SDing. W/insulatior.hdwe. 3-24 stud Base only Spring only Double chain pumper m?
Coil/atrloaded whips 10/15/20

# Amateur Antennas, Mounts, Accessories 

## MASTER MOBILE

## ANTENNAS

A NEW AM-5 TWIN-6 STACKED 2-METER BEAM. 12 db galn; $25-30 \mathrm{db}$ F/B. Pretuned. Mounts vertically/horizontally. Aluminum. With harnest for 52 -ohm coar, $3^{\prime}$ masi, balun, hdwe. 10 lbs 89 SX 066.

NET 16.95
89 SX 067 . AM-4 6-ELEMENT 2 -METER BEAM. Singley bay. WI. 3\% Ha.
(B) MASTERPLANE 300 2-METER GROUND 4 PLANE. Hae 4 drooping. 4 adjustable straight radials. With $3^{\prime}$ mate .32 -ohm coax inting. 3 lbs. 89 SX 068.

NET 12.61
C. 113 2-METER MOBILE WHIP. For auto rool-top C mig. Covers 140 to 165 mc . 7 min mlg , hole. With 12' al 52 -ohm coaz and PL-259. Wt., 11 b . 89 SX 069.

NET 3.88
89 SX 073. 613 WHIP. Above, with Jocking coaxial antenna-base connector .......... NET 4.85
114 2-METER COAXIAL ANTENNA. Low radiation angle from car or tixed location. For $140-165 \mathrm{mc}$. With $12^{\prime}$ coas. $3 / 5^{\circ}$ dla. stud. 5 lbe. 89 SX 076.
net 9.75
(D) B-1080 "SLIM JIM". For $10-75$ moters. Baseloading coll with 96 whip. $4 \frac{1}{2} \mathrm{lbs}$.
89 CU 090.
NET 17.59

## LOADING COILS

[E] ${ }_{10}^{656}$
$666^{\text {- }}$ ALL BANDER." Conllnuously varlable 10-75 meters. Silver-plated roller. Selects any pair ol adjacent furns. $21 / 113 y^{\prime \prime}$. $11 / 2$ Ibs. 89 S 098.

NET 14.66
89 S 048. 750 "DELUXE ALL BANDER"." Above but selects any spot on any turn. $2 \frac{1}{2}$ 1bs. NET 14.66

## LOADING COILS (Cont'd)

F 900 "ARISTOCRAT." Tapped for ff for 2 -eection whip. $3 \times 6^{\circ} .11 / 2 \mathrm{lbs}$.
89 S 046.
NET 14.66
G 925 DELUXE "MICRO-Z-MATCH." Varisble. Matcher any coax to any whlp. I Ib. 89 S 116.

NET 9.95
M "ULTRA-HI-Q" COILS. For 1 band use with 2-
section whip. $Q$ over 515. Wi., ith

|  | 14 |
| :---: | :---: |
| $89 \mathrm{~S} \mathrm{144.40} \mathrm{Meters} .21 / 12 \mathrm{x}{ }^{\text {c }}$. | NET 5.14 |
| 89 S 146. 20 Meters. $21 / 83^{\prime \prime}$. | 5.14 |

CCESSORIES

|  |  |  | Av. |  |
| :---: | :---: | :---: | :---: | :---: |
| Stock No. | Type | P14. | Description |  |
| 89 \$217 | 71 | H | "Flex R" simain reliet sprine | . 91 |
| 89 \$ 224 | 444 | J | Heawy-duty sp'ng. double swivel, chain mount | 17.80 |
| 89 \$238 | 445 |  | 7/30-24 chain mt. | 7.95 |
| 89 \$252 | 446 |  | Heavy duty $3 D^{\circ}$ ns 8 chain mL . |  |
| 89 $\$ 270$ <br> 89 $\$ 272$ <br> 89 $\$ 285$ | MMW7 MMW7HC MMW3AE | $\begin{aligned} & k \\ & k \\ & k \end{aligned}$ | Cad.-plated spone Above, heavy duty Ebony base mount |  |
| 89 \$ | MMW3APS | L | Polished mount \& steel hardware | 9.0 |
| 89 S 288 | Mmw7SS |  | Heavy-duty stainless spini |  |
| 90 Cu 844 <br> 90 CU 845 | $\begin{aligned} & 100-965 \\ & 100-60 \mathrm{~s} \end{aligned}$ |  | $\begin{aligned} & 96^{\circ} \text { stainiess whip } \\ & 60^{-} \text {stainiess whip } \end{aligned}$ |  |
| $905 \times 846$ | 88 |  | section and an$1 / 3^{\circ}$ die. |  |
| 90 S 847 | 10-H |  | "E-2.014" Poise |  |
| 90 5 848 | 295 |  | Oif" nolseree stainless |  |

## FAMOUS-NAME FIXED \& MOBILE ANTENNAS <br> FIXED-STATION VHF TYPES <br> MOBILE HALOs \& WHIPS

(N) NEW CUSH CRAFT A26-96 AND 2-METER 1 BEAM. Combination 4 -element 6 -meter and 6 element 2 -meter beam on ons 12 : $11 / 4^{-} .050$-wall aluminum boom. 2 -meter elemente preassembled on boom. Gain: 10 db on $2 ; 9 \mathrm{db}$ on 6 . F/B ratio: 25 db both bands. $1: 1$ SWR at frea. Turning radius, $7 \cdot 6^{-}$ Requires 2 separate $52 / 72$-ohm feed lines. $11 / 2162$ 90 CZ 883. 55 Monthly.

NET 27.50
NEW CUSH CRAFT SINGLE-BAND VHF BEAMS. (Not llius.) All-aluminum beams. As0-10 has .058wall tubing boom. \% \% . 050 wall tubing elements, and Reddl Mateh tor $52 / 72$ ohme. A50-3P is portable type with $1^{\circ}$ tubing boom, $1^{*}$ solld elements and direct 52 -ohm maich-folds to $50 \times 4 \times 4^{\circ}$ for easy carrying. Alst-11 has 1 -dia. . 050 -wall tublng boom, preassembled ${ }^{\prime \prime} \sin ^{-2}$. solid elements; matches 300 ohms (matches 72 ohms if used with balun). $E$, number elements; L. boom Igth.; R, turning rad.


NEW CUSH CRAFT CL-116 16-ELEMENT 2-METER COLINEAR. (Not llius.) Provides 13.2 db galn. Has 4- $X_{4}^{\prime \prime}$ tubing booms $29{ }^{\circ}$ long; elements $X^{\circ}$ and stacking bars $3 / i^{\circ}$ solld. All aluminum. Directly matches 300 ohms ( 72 ohms If used with balun). Overall ht., $10^{\circ}$. Requires mast $1 \mathrm{Y}_{4}{ }^{\prime \prime}$ dila. 10 Jbs . 89 CZ 887.

NET 16.00
P.ANTENNA SPECIALISTS M-7A 2-METER GROUNO PLANE. Radtator and iradlals. U-bolt hdwe. for \%" plpe. Accep1s PL-259. 8 oz.
$905 \times 673$.
NETT 5.29
(2) BK/MARK ABB-6 6-METER "BEACON." New 2 y yrwave vertical-no radials/skirta. Has $102^{-}$ radiator, flbarglas mitg. section, 50 -ohm stub. ChImney. rool side mtg. Accepte PL-259. 8 lbe
90 SX 888. $\$ 5$ MOnthly.
(5) HY-GAIN HH-6 HALO. For 6 mtrs. $t^{\circ}$ aluminum tubing. 52 ohms. Std. mt. Lese mast. 5 Ibs. $905 \times 997$.

NET 12.95
90 SX 999. HH-2 HALO. Above, for 2 meters. aluminum tubing. 1 \% lbs.

NET 5.95 90 CU 295. HY-GAIN HM MAS'T. Takes Halos singlyfogether. 8'. Sid. mi. 3 lbus.......... NET 4.95
R 90 SX 296. ANTENNA SPEC. ASP-157. 2-
meter whip. Clamps on car rain gutter. Cut tor 144 mc . With $12^{\prime}$ RG 58 C . PL- $259.11 / 3$ Ibs.. NET 6.76 W BKMMARKCVS-2144. 2-mtr. $3 / 1$-wave whid. $2 \% \mathrm{db}$ over $y_{-1}$-wave. Use HWM1/SA1 below. I lb. 90 SX 297.

NET 7.50
B BKMMARK MW MELIWHIPS. FIberglas con-
tinuously loaded whips for fender, trunk Hd (etc.) mig. ${ }^{2}: 1$ VSWR bandwldth. Fit std. mt. or MWM-1. †Permits $90^{\circ}$ swiveling of HWM-1 for sidelangle mito.

| tock No | Type | 8 and | *KC | Ft. Lbs |  | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 90 SX 298 | HW-6 | 6 M | 4000 | 3 |  | 9. |
| $905 \times 299$ | HW-10 | 10 m | 1000 | 4 | \% |  |
| $905 \times 302$ | HW-15 | 15 m | 500 | 8 | \% |  |
| 90 CX 307 | HW-20 | 20 | 250 | 8 |  |  |
| 90 CX 308 | H | 40 |  |  |  |  |
| 90 Cx 309 | HW-80 | 80 M |  |  |  |  |
| 90 CX 310 | H | 10-15.20M |  |  |  |  |
| 9 |  |  |  |  | $1 / 2$ |  |

Y WEBSTER"BANDSPANNERS." Tunable fiberglas center-loaded whips for $10-75$ meters. A-69 bumper mig.; A-62, tender/deck. Av. wt. 1 lb.
89 CU 752 . A $61,117^{\circ}$ overall......EACH
90 CZ 347. A-62. $93^{\circ}$ overall
24.75

AA MOSLEY MA-3 *TRAPMOBILE.* Stainless
AA whip covers 10/15/20 without switching/retuning -regulres std. base foading coll for 40/80. Center trap. Fils $\mathbf{s t d} . \mathrm{mt} .921 / \mathrm{c}^{-.} 6 \mathrm{lbs}$
90 CX 348 . $\$ 5$ Monftiy
NET 20.96

## ANTENNAS FOR SHORTWAVE LISTENERS

OD MOSLEY MODEL SWL? OUTDOOR DIPOLE KIT. A low-cost. easy-to-assemble with that really pulls in foreign stations! Peaked for the I internallonal shortwave bands between 11 and 49 meters. Includes: \& weatherproof trap assemblies. center connector, $4^{\prime}$ of copper wire, porcelain Insulators. $100^{\prime}$ of 75 -ohm tead-in. Wt., 3 lbs
90 CX 346

EE HY-GAIN MODEL SWI INOOOR ANTENNA. A abitive Indoor antenna covering 5 through 30 mc : includes all important international shortwave broadcast bands, 4 Amateur bands. CB. etc. Chrome-plated telescoping ears. "Tune" and "maten" controls allow adjusting for maximum signal. $6^{\prime}$ cable. Plastic housing. 1 it
90 SX 349.
NET 14.75
THUNDERBIRD "TRI-BANOER" BEAMS. Rugoed trap-type beame covering 10 , 15 and 20 metere. Employ heary-duty aluminum 2 boom and $91 / \%^{\circ}$ elemente tapering to $y^{\prime \prime}$. Less than 2:1 SWR on all 3 bande with no adjusting. Withetand 2 km PEP. Weatherproof 11100 -dia. solld-state Slim-Traps. TH-4 has pretuned beta mateh and interlaced thelement for hloh oaln and $F / 8$ ratio. $L$, boom Igth.; $R$. turning radius.

| Stook No. | Type | Elemente | Db Gain | $L$ | R | Lbs. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 89 C2 756 | TH-4 | 4 | 8-8.9 | 18 | 17'10 | 42 | 117.50 |
| 89 Cz 754 89 Cz 755 | TH-3 | 3 | Up to 8 | 14' | $1{ }^{1} 8^{\circ}$ | 36 | 5 |

NEW "DUO-BANOER" BEAMS. COmpact beama permitting 2-band operation with single $52-\mathrm{ahm}$ coaxlal leed lines (not supplled). Typo DB- 24 has 3 etements on 20 meters, 2 elements on $40 ;$ utilizee ilnear loading (no trapu). TypD DB-62 has 4 elements on 6 meters, 18 elements on 2. $L$, boom length; $R$, turning radius.

| Stook No | Yypo | Bend | Db Galn | $L$ | $R$ | Lbs. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 89 Cz 757 <br> 89 Cz | $\begin{aligned} & \text { DB-24 } \\ & \text { DB-62 } \end{aligned}$ | 20.40 | 4.98 .1 | 24, | ${ }^{248^{\circ} 2^{\circ}}$ | 04 |  |

"MONO-BANDER" SINGLE-BAND BEAMS. Incorporate beta match, fac lory pretuned for less than 1.5:1 SWR into 58 -ohm line. All arafull-aized arraye except Type 402-8 (sa-meter "My-Seven") which employs tinear loading to maintain high efficlency with elemente of reduced size. Aluminum-alloy construction. E, number of elements; L, boom loth.; R, turning radlus.

| Slock No. | Typm | 8snd | $E$ | DB Gath | F/B Ratio | $L$ | $R$ | m. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6967759 | $402-8$ | 40m | 2 | 5 | 20db | $16^{\circ}$ | 16'4* | 40 lbs . |  |
| 89 Cz 760 | 203-8 | ${ }^{20 m}$ | 3 | $8+$ | 25 db | $16^{\prime}$ | $19^{4} 3^{*}$ | 35 lbs | 65.95 |
| 89 Cz 761 89 Cz 762 | $153-8$ <br> 103.8 | ${ }_{10 \mathrm{~m}}^{15}$ | 3 | $8+$ | 25 db | 12 | $13^{\prime} 6^{\circ}$ 9 | 19 libs. | 38.50 |
|  | 103.8) | 10 m | 3 | $8+$ | 25 db | $8{ }^{\prime}$ | 98 | 12 lbs | 32.95 |

BALUN TRANSFORMERS. Desioned to couple unbalanced 5e-ohm coax to balanced 52 -ohm antennas. Ideal for use with Hy-Gain beame on this page. Improve eneroy transler, altminate stray RF, Improve pattern, reduce TVI. Mandie lull legal power with SWR less than $2: 1$. Mounts at antenna. 3 los.
895478 . TYPE BN-12. Covere 13.8 to 30.5 mc
NET 13.50
EACH 13.50
MULTIBAND VERTICALS. (Not Illus.) Multiband verticats for use on up to 4 bands without switching. Employ solld-atate SIIm-Traps. Pretuned for under 2:1 SWR. Match 52 -ohm linet. Handie 2 kw "PEP. With base insulator and mast
mount. Recuire root mig. Kit (below) containing mast. Fadtale and hardware.


89 CU 767. 14RMK ROOF MTG. KIT. For 14AVS. WL. O Ibs. . NET 11.95 89 CU 768. 12-RMK ROOF MTG. KIT. For 12-AVS. WL., 7 Ibs...... MET 9.50 895350 . LC-*0. 80-METER LOADING COIL. For 14-AVS. Y Ib.... NET 7.85

$52-\mathrm{Ohm}$ Baluns

Ground

## 18-HT HY-TOWER MULTIBAND VERTICAL

Thie completeiy sell-eupporting vertical utilizes an efficient stub decoupling syatem for automatic selection of the 10.15,20, 40 and 86 meter Amateur bands. No treps are used. Low SWR on alt 5 bende. Tower helght is $24^{\prime} ; 2-10-14^{\circ}$ aluminum top mast extende overall helght to $50^{\circ}$. Ruggedly made X-braced eteel tower hat $15^{\circ}$ base. $52-\mathrm{hmm}$ coax fed. With base insulatore; lese ground rod. Wt.. 105 Ibs. 89 CZ 769 . 57 Monthly.
.NET 139.50
MULTIBANO DOUBLETS. (Not illus.) All except 28DP are trap typet with Silm-Trapt and 500 w . AM $/ 1 \mathrm{kw}$ PEP fatinge. 2BDP Is a trapless fan doublet rated at $1 \mathrm{kw} A M / 2 \mathrm{kw}$ PEP. With center fend insulators. Less $52-\mathrm{hm}$ coan.


 | 89 | 52771 | $2 B D D T$ |
| :--- | :--- | :--- |
| 89 | 52 | 772 |
| 8 BDT |  |  |
| 89 | 52 | 773 |
| 4 BDT |  |  |
| 89 | 52 | 774 |

895 351. EXTRA TYPE CI CENTER INSULATOR. 8 O2.......EACH 3.95 895355 . EXTRA TYPE EI ENO INSULATOR. $T$ IONO. 3 cz. EACH 1.00 DS-1 DISCDNE. (Not IIUE.) Omndirectional anterna covering so through 500 mc without adjustmente. Mmintains low-angle raditatlon and nominal 50 ohms with lese than 1.5:1 SWR. Hest-tr eoted aluminum elements. 9 Ibs.
89 SX 791. \$6 Monthly.
NET 29.97
GROUND PLANES. Variable-tuned ground planes covering Amateur, CIthrens and commerclal bands from 25 to 500 mc . Radtator and radiala ere of heat-rreated aluminum alloy. Base invulators adjust to $44^{\prime \prime}$ to $1 \%^{\circ}$ masts. Each antenna can be pesied to a epecific trequency. Lese than $1.2: 1$ S WR. 52 ohms .
Stook No. Type Frequeney Aangel Holoke Wt. Lbs. NET

SINGLE-BANO VHF BEAMS. Top-quality beam for the mott papular VHF bands. All have excellent $F / 8$ ratios, are of rugged all-aluminum conntruction, and Hohtweight enough for TV rotators. Q-meter types heve beta match for 52 -ohm coax. Others (VHF "HI-Banders") may be ted with either 52 and 72 -ohm coax or 200,300 and 450 -ohm parallel linet. E Indicates number of elements; $L$, boom length; R, furning radlua.

| Stock No. | Typo | Eand | E | Db Gmin | $L$ | . | Wt. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 89 cx 778 | 68-B | 0 | 8 | 12.1 | 18 | $10^{\circ}$ | 13 lbs . |  |
| 89 Cx 763 |  | 2 | 5 | 12 | 9 | $7{ }^{1} 1$ | 8 Ibs | 18.9 |
| 89 cx ${ }^{89} 764$ | 210 | 2 | 10 | 13.4 | $41 \%$ \% | ${ }^{20} 0^{\circ}$ | 3 lbs | 8.95 |
| 89 cx 780 | 111 | 11/4 (220) | 11 | 13.2 | $412^{\circ}$ | ${ }^{6}{ }^{\circ}{ }^{\circ}$ | ${ }^{6} \mathrm{l}$ dbas. | 14.95 |
| B9 Cx 781 | 313 | 3/4 (420) | 13 | 16.1 | 12 | $44^{4} 4$ | ${ }^{5} \mathrm{~S}$ 8bs. | 13.95 |

89 S 369 . 2s-S STACKING KIT. For 2 Type 25 beams. 218 lbs.
. NET 4.95 09 S 370, z10-S STACKING KIT. For 2 Type 210 beame. 3 lbe........ NET 4.85

## FInco



## FINCO A-62 6 2-8AETER BEAM

## - Heavy-Duty Boom 10' Long

- All Elements Sleeve-Reinforced
- Suspension Rods End Boom Sag

An advanced-design VHF beam offering $F / B$ ratios of 17 db on 6 meters and 80.5 db on 2 meters. Gain is un to 8 db on 6 , and to 15.1 db on 2 . Has folded dipole. reflector and 2 directors working on 6; folded dipole with phasing atub. 1-3-element colinear reflector and 4-3-etement colinear directors working on 2. Elements are preassembled with snap-out brachets for easy Insfallation. Preassembled boom suspen. ston rods snap into upper end of mast. Hardy $1^{-}$ squart aluminum boom. U-bolt and saddle assembly attaches firmly to your mast. Turning redlus. $6^{\prime 1} 11^{\circ}$. Lases 50 -ohm line. 11 lbs.
-9 C2 72. \$5 Monthly. ............... NET 32.34
89 C2 783. AS-62 STACKING KIT. Y Ib.... 2.15

S-402 40-METER BEAM, 2-element beam with etflclent IInh-coupled 52 -ohm leed, 5 db gain, 20 db F/B ratlo. Longest element, 44'3', 2' O.D boom. Turning redius, $24^{\prime \prime} 4^{\circ}$. Wt., 65 ibs.
89 CZ 784 . 87 Monthly.
. NET 124.50
TA-36 $10 \mathrm{Ms} / 20-\mathrm{METER}$ BEAM. 20 db F/B ratio. Gain: 10 meters, $9 \mathrm{db}: 15,8.5 \mathrm{db} ; 20,8 \mathrm{dt}$. SWR $1.5: 1$ or better. Handies 1 kw . Longest element, 29'. Turning radius, $19^{\prime} 3^{\circ}$. Wi., 75 lbs .
09 C2 785. 37 Monthly.
. NET 129.50
TA-33 $10 / 15 / 20-M E T E R$ BEAM. To 8 db oain; 25 db F/B. Trapt take $1 \mathrm{kw} .14^{\prime}$ boom. 1.1:1 SWR. FIts maste to $1 \mathrm{k}=$. Radlue, $15^{\prime e} \mathbf{e}^{-54}$ Jbe.

89 CZ 787, TA-33 JR. Above, but 300 -w, model. 12' boom. 14'sr redius, 28 lbs............ NET 69.50
$\vee-4-64-8 A N O$ VERTICAL For $10-40$ meters. Trapa rated 1 kw . Aluminum tubing lelescopes to $20^{\circ}$. With mto. plate, puys. Wt., 12 fos.
89 C2 788. \$5 Monthly.
NET 27.95
895371. D-ABC O-METER BASE LOADING COIL. For above. Wi., 3 lbs. ............ NET 15.67
V-3 10 /15 20 -aneter VERTICAL. Traps rated 1 kw. $111 /{ }^{\prime} \mathrm{hl}$ h h. With guys, base. 8 lbs .
89 CZ 7.9 .
89 CZ 789 . $\$ 5$ Monthly.
. NET 22.95
69 CZ 790. V-3 JR. Above, but 300 w . model. 11 "9" high. Wi., 6 lbs.....................NET 17.95


## NEW CONVERSION KTT

TA-40k. Converts TA-33. TA-32. TA-31 Sr. Trap-Masters to 40 meters as alngle rotatable dipole. 10/15/20-meter operation totally unaftected. Easlly installed. Turning radius, $221 /{ }^{2}$. With mast, guys, hdwe. 13 Ibs. 375 or
89 S 375 . 85 Monlily. .........NET 39.95

## All New-KNIGHT Citizens Band Transceiver



EXCEPTIONAL VALUE! LOW-COST LINCOLN CITIZENS BAND TRANSCEIVER


LINCOLN MODEL L-2000A CB TRANSCEIVER

J0:
: 5 - Channel Transmit
:-Watt Transmitter
Superhet Receiver
Intercom-Type Press-
to-Talk Switch
Get excellent mobile or base-station performance at low cost. Features superhet recelver with all-channel vernier tuning. ANL, AVC, 5-channel transmit-crystal selector, 5 -watt input transmitter; paging switch, external speaker jack. $4 \frac{1}{8} \times 10 \frac{1}{2} \times 6 y_{0}^{\prime \prime}$. Channel 9 crystal. mike. For 115 v . AC. 11 lbs. 90 SX 145-J. 55 Monthly.

ONLY 57.50 90 S $679-\mathrm{J} .12-\mathrm{V}$. Power Supply. 4 lbs... 11.95 90 S $680-J .6-\mathrm{V}$. Power Supply, 4 lbs... . 11.95

Extra Crystals for Above are Listed Elsewhere in this Section

## A FEW REASONS WHY ALLIED SERVES YOU BEST

- King-Size Trade-Ins-Write Today
- Credit Fund Plan-No Money Down
- Free Trial-In Your Own Home
- Free Hetpful Technical Assistance




## JOHNSON "MESSENGER"

MODEL 242-128. Compact 5-channel Citizens Band transcelver for moblle or flixed-atation use. Offers top performance, conventent operation. Has highty sensltive superhetrodyne recelver section, full 5-wall transmitter section. Front-panel switch selects any of 5 eryatal-controlted tranamitting and recelving channels. Also has automatic nolse 1 mmlter , squelch that heeps recelver quiet between messapes, function indicator llohts. Chrome-plated front panel and gray witnkle finish metai cabinet. With tranomitting and recelving crystals for one channel, orest-to-talk mike, power cords. Less antenne. Size, $\mathbf{3} \% \mathrm{x} 7 \mathrm{x} 1 \mathrm{t}^{\circ}$. For $110-120 \mathrm{vo}$, $50-60$ cycio AC or 12 v. OC. Shpg. wh. 16 lbs.
90 SX414-J. 88 Manth/y
NET 144.95
90 SX 415-J. MODEL 242-127. As above, for'110v. AC or 6 v. DC NET 144.95 90 S 416. MODEL 251 -828 UNIVERSAL UNDER.DASH MOUNTING KIT. For above transcelvers. Shpg. $\mathbf{w 1 . , ~ 1 / 4 / 4 b s . ~}$

## HALLICRAFTERS CB-3A TRANSCEIVER

Newly Improved flxed station or moblle transcelver whith provtalon for 8 crystal controlled tramemit and recelve channels. Offert modern comoact styiling. Dusi conversion recelver section hat 6 -kc selecilvity-reduces adjacent channel interference. Sensitivity: better than $1.0 \mu v$ for 10 do signatetomolse ratio. Duel Itmitere effectively reduce Impulse noises. 5-wath foop neutrallzed tranemitter sectlon has link-coupled output-matches 25 to 75 -ohm transmiselon lines. Series trap effectlvely reduces TVI. Self-contalned duâl powel supoly usos efficlent sillicon diodes. In 2 -tone gray enamel finish cabinet. Slze, $51 / 5121 \times 88^{\circ}$. With prese-fo-talk mike and transmitting and recelving cryetale for Channel ti, Less optional S-meter. For $110-120$ y.. $50-60$ cyele AC or 12 v . DC. $12 \% \mathrm{ibs}$.
90 SU 411-J. se monthiy.
NET 159.95
90 SU 454 J. AB above, for $110 \mathrm{v}, \mathrm{AC}$ or 6 v . OC NET 159.95
90 S 417. HA-9 ILLUMINATED S-METER KIT. For above. 1 lb .


## NEW! multi.products

Deluxe 5-Channel Citizens Band tranacelver for moblle or fized station use. Function switch instantly selects crystal-controlted recelve, tunable recelve or crystal "Epot" to permilt bocating transmitting erystal frequencies. Has illuminated dial; $4: 1$ voriter recelver funing. Dual function meter showa slgnal strength and power output.
Sensifive superhet receiver section has \& tuned eir. culth, squelch, automatic nolse timiler. Sensitivity: 1/2 $\mu v$ for 6 db signal-to-nolse ratio. Efficient 5 -watl trantmitter operates on iny of 5 switch-selected erystal frequencles. Mas high-level $A M$ modulation, adjustable antenne coupler, Migh-O tank coll. Also has apeaker, Jack for headphone or external speaker, heavy duty power supply, $4 / 189 \times 10^{\circ}, 2$ power corde; crymale for $\uparrow$ channel. For $110-120$ v. $50-60$ cycle AC or 12 v DC. 15 lbs . 90 SUC 418-J. s10 Monthly.......... NET 189.50 90 SU $419-\mathrm{J}$. For 115 v . AC 16 v . DC. NET 189.50

## MULTI.PRODUCTS

 CITI-FONE CD-5/12MODEL CD $-5 / 12$. A versathe 5 -channel transcelver that can be taken anywhere. Provides dependable Citizens Band communications--keeps you in consiant touch wherever you go. Superhet recelver section features high sentifivity and selectlvity. Transmitter section operates at mazimum legal power, is AM modulated. Front panel switch selects any one of 5 channets - both recelver and trantmitter sections are erystal controlfed.
Has adjustable squelch control and bullt-in automatic nolse limiter. Power plug fits into auto's cigarette IIghter--perralts fast moblle installation. Btue and gray finfoh metal cabinet. Compact, only $4 / 168 \times 11^{\prime \prime}$. With presw-to-talk ceramic mike, crystals for on channel, powet cords. Lesp antenna. For operation from $110-120 \mathrm{v}$., $50-60$ cyele AC of 12 v DC. Shpg. me. 12 lbe .

90 SU 420-J. $\$ 7$ Monthly
NET 134.50
MODEL CD-5/6. For $110-120 \mathrm{v} . A C / 6 \mathrm{v}, D C$.
NET 134.50

## TRANSCEIVER

 KIT BY EICOAvallable in Kit Form or Wired

MODEL 770. Provides easler, more effectlve Citizens Band communications. Front-panel selection of Transmit crystals. Sensitive tunable superhet recelver section has RF stage for $1 \mu v$ senstilitity, automatre noise limiter, adjustable squelen control. 5 -watt transmitter sectlon teatures presa-to-taln mike, pi-network output, plate modulation with automatic thmiting. Elght tubes and germanlum diade provide relfable performance. Metering lack in eathode chrcult for Input power ehecking. Mas function Indicator Hghts. With mounting bracket, mike and 1 crystal. For operation from $110-120$ y.. 50 mike and 3 Crysta . For operation
90 SX 137-J. 85 M 0 .
90 SX 138 NET 19.95 Above, factory wired and totted. MODEL 772 KHT. For 120 v, AC 12 v, DC $905 \times 139-\mathrm{J}$.

NET 89.95 $90 \mathrm{SX} 140-\mathrm{J}$. Above. lactory wired and tented. $\$ 6$ Monthly. .............................. 111.95

## NEW VOCALINE COMMAIRE PT-27

- Tunes CB and Broadcasi Band - Uses Rechargeable Battery
- 5 Mille Range
- 18 Translators. 5 Dlodes
- Variable Squelch and Senslitivity

To Recharge, Just Plug into any 115 $\checkmark$ AC Wall Oullel

Complately translatorized, battery-powered portable 4-channel Clizens Band trantelver. Offers versatile perlormance, rellable on-the-go communications. Operates at rangee ol up to flve milos. with lis 62 ' center-loaded whlp-oven greater ranges with a more claborate antenna. Uses 18 translators and 5 atodes.

Double converstion superhat recelver sectlon has $0.1 \mu v$ sensitivity for 10 db sional-to-nolse rallo. Tunes 22 channels and is also crystal-controlled on any of four channels. Also tunes $535-1605 \mathrm{kc}$ broadcast band for news. weather, Coneltour channels. Also tunes $535-1605 \mathrm{kc}$ broadcast band for news. weather, Conel-
rad. ote. CB receiver section has fine funing control on fixed channels, adjustable senstivity-squelch, ANL. and excellent adjacent-channel relection.
Efficient transmitter sectlon has t-watt input. antenna tuning controls and meter. Front-panel iwitch selects any of cryital-controlled channels. Waterproof battery compartment has bullt-in charget. Battery supplled may be used up to 30 hours betore recharging. Also has panel light, press-to-talk mike. Rugged weatherproot aluminum case with handie. Size $9 \times 4 \times 11^{\circ}$, Charger for $110-120$ v. ${ }^{50-60}$ gycle AC. Shpo. wt., is lbs.
90 SX422-J. 510 Monthiy
NET 199.95
For Listings of CB Crystals, See Page 302


## POLY-COMM PC."N"12 TRANSCEIVER

Dual conversion-featurea Nuvistor RF stage that provides better than $0.1 \mu \mathrm{~V}$ receiver sentaivity. Hat adiustable squelch; notse itmilter; modulation indicator: 4* PM epenter: 5 walts input. Adjustable output matches 52 -ohm of 72 ohm enterinas. Extiemely high adjacent channel slgnal relection. Proviston for 4 crystal-controlled tranamit and recelve channels. 11 -tube clrcult. With erystale for one channel. AC/DC power cords, press-to-tath mike, mitg, brachetw. Steel cabinet. 7hn1185 . For $110-120$ y., $50-60$ cycle AC or $12 \mathrm{v}. \mathrm{DC} 18 lbs.$. 90 SU 423-J. $\$ 10$ monthly

NET 189.50
 NEW POLY-TUNER. Plugs into your Poly.Comm " $\mathbf{N}$ " of " $1 l$ ( $\mathrm{G}^{\prime}$ ". Provides manual tuning of all 28 chennele. Has S-meter. With Mounting bracket. 1 ib. 90 S 425. ts Monthly

NET 34.95

NEW!
POLY-COMM SENIOR "23" TRANSCEIVER
For the CB perfectionltit. Frequency synthestier provide crystal-controlled transmit and recelve on all 23 channels-no extra crystals to buyl "Poly-Call" iwo-way tone-controlled squelch sillences recelver untli mating unit in bytem calls in. Unaffected by trangmissions from unit not in sysiem, even thoee operatIng on the ame channeil Message Ilght comalns on after unti is called. Dual convertion superhel recetver tection tias nuvitior RF and mixer stages, squelch. nolse ilmiter. 0.1 py tensitivity. Efficient 5 -watt Iransmitter section matches 52 to 72 -ohm antennae. All electronic switching elrcultry ellminates relays. Moter Indicetes signal trength, RF output, or modulation. Unit doubiet as PA amplitier. Uses 14 tubes and 10 diodes. $41 / 3 \times 12 \times 8 / \sqrt{\prime \prime}$. Whth press- $10-1$ alh mike, moblle mounting brachet, power corde, 2825 wc tone fliter. For 110-120 v., 50-60 cycle AC or 12 v. DC. Shpo. wi. 23 lbs.
90 SU 426-J. s17 Monthiy
NET 349.50


## NEW SONAR MODEL E

Deoendable moblla or tired-station transcelver. Has proviston for © crystal-controlled tranamit and peCelve channels; recelver also funes all 22 channala. Recelver section has $0.5 \mu \mathrm{v}$ sensitivity Adjustabie squelch. ANL. Full 5 -watt transmitter wection has push-puli Class " 8 " or RF Indicator, Uees 9 tubeas, 4 diodes. With prese-to-telh mike, crystals for one channel. $4 \%$ I $11 \%$ r9 $\%$. For $110-120 \mathrm{yn}, 50-60 \mathrm{cycle}$ or $12 \mathrm{~V}, \mathrm{OC} .12 \mathrm{lbe}$.
90 SX 194 -J. 39 Monthty.... NET 179.50 90 S× 195-J. For 115 v. AC $/ 6$ v. DC. NET 179.50 905 427. S-METER. For Bbove. K lb. NET 17.95 OELUXE MODEL G. Dual-conversion recetver, proviston for 8 erystal transmit and recelve channols: recelver also tunable. Spoting switch. Meter feads output and " $\mathrm{S}^{\prime \prime}$ unlts. $41 / 4 \times 91 / 28111 / \mathrm{m}^{\prime}$. For $\$ 10-120 \mathrm{v}$., $50-60$ cycle AC of 12 v . DC. 10 lbs.
$50-60$ cycle AC. of 12 V . DC. $10 \mathrm{lbs} . \quad$ NET 229.50



## NEWI KAAR TR.327 TRANSCEIVER

For moblle or tired-station use. Provides rellabte 2 -way communications. Has 2 channels erystal. controlled transmit and recelve plus 3 channels crystal-controlled transmit end tunable recelve on all 22 channels. Superhet recetver section has $0.5 \mu \mathrm{v}$ sensilivity, 6 ke selectivity, 2 if stages, suelch. AVC. ANL.
S-watt Input with $100 \%$ modulation capabHity. Has front-panel output tuning control. Hluminated slonat and power output meter. $41 / 20$ spetixer. 2-tone gray
 and OC cables and mig. brachet; less cryetala. For $110-120$ v. $50-60$ cycle $A C$ or 12 v. DC. Shog. wt .16 lbs.
90 SU 430-J. 510 Moninly. ........ NET 189.00 $905 \mathrm{~S} 431 \mathrm{-J}$. For 115 v. AC 8 v , DC. NET 189.00 90 SU 432-J. TR-327A. (Not lllus.) channel crystal-controlled transmit-recelve; aiso tunes AM broadcaste. For 115 v. AC or 12 v. DC NET 199.00 90 SU $433-J .115$ v. AC/6 v. OC ..... 199.00


## 

Compact. completely transistorized 5-channel transcelver. Nees 48 tranisistoris and 8 dlodes for low battery draln-ldeal for moblle as well as Hredstation spolicettons. Has provision for 5 erystalcontroiled transmil and recelve channelt. In addt thon, provides manued funing that covers all 22 Cuthent Band channela.

Features dual-conver sion superhel recelver section; 1/rosv sensitivity for reliable long-distance reception. Alto has sdfustable suelch, automatic noise Ilmiter, pi-network output tilter, speech cilpolng. Juck for headphones or external speater. Provision for selective calling.
Eastly mounted in Cew, truch, boat or plane. Brushed aluminum and charcoal metal case. $3 / 6 \times 11 \% \times 5 \%$. with prese-to-talk milie, erytula for Chennel 11. mtg. brackel, plus nower cords for AC and OC. For $110-220$ v., $50-60$ evele AC of 12 v. DC. Carfing case and recharyeable battery pack avariable on special arder. 10 ibs.
90 SU 434-J. 58 Monthly.
NET 179.95

## HAMMARLUND HO-105TR RECEIVER TRANSCEIVER

Combines a senstilive, general-coverage shortwave receiver wilt a 5 -watt singlechannel transmitter that can be used for Citizens Band communications or refuned to the 10 -meter Amateur Band (requires general-ciass A mateur ilcense ior use on 10 meters). Recelver is continuousty funabte from 540 he to 30 mc in 5 ranges. Has varlable Q-multiplier, senalivity and melectivity controls; S -meter. bandspread. BFO. antenna trimmer. Offere push of swith-to-talk Iransmit.
 below and mike. For $110-120$ v., $50-60$ crele AC. Wt., 35 Ibs. 90 SU 181-J. S11 Monthr

NET 219.50
90 SU 184-J, HO-10STRC. Above, with cloch-IImer. 37 ibs
NET 229.50
90 S× 659-J. S-100 SPEAKER. FOr above. 10 dbs
NET .4 .95
90 SU 276-J. HO-105TRS. Above, with speaker, less clock: 37 Ybs . 224.50
MODEL CB-8 b-CHANNEL PUSH-BUTTON CRYSTAL SELECTOR. Pluge Into above Harmmariund transceivers. Permits Instant selection of any ol 8 crystal-
 905021
net 15.95
For Listings of CB Crystals, See Following Page


HO-105TRC, Speaker

CB-8
allied


## （A．JOHNSON＂TONE－ALERT＂

Selective calling eystem attaches to mot CB units． Uses frequency－selectlve resonant relay．Unit re－ mains silent untul called by other units in system． Unaffected by units not in tybtem．Ax $1 / 2 \times 7 y^{\circ}$ ．For 115 v．AC 12 v．DC units． 4 lbe．
89 S 389， 55 Monthily．
89 S 393．For 115 r AC／8v DC Unlte NET 59.95

## B TURNER P－254C MICROPHONE

Versatlie ceramic milke．Features puah－to－talh bar and button，lock－on witth． $80-7000 \mathrm{cps}$ responte． -54 db ．output． $5^{\prime}$ cord． $21 / 2 \mathrm{lbe}$
905281.

NET $\$ 5.29$

## AUDIO COMPRESSORS

C ELENCO＂POWER GAINER＂．Compression －amptiller Increases talk－power．Rides gain on voice frequencies essentlal to pood communicatlons． Prevents over and under－modulation．Not a cllpper． $5 \times 6 \times 4^{\circ}$ ．For 115 v．AC（ts and 12 －volt DC modele aleo avallable－spectly when ordering．）．Whith Instructiont． Shpg．w1．， 3 lbe ．
905 105． 85 Monthly．
NET 45.00
（0）＂SPEAKEASY＂AUDIO COMPRESSOR．AmDII－ （1）Hes sotter mounds－malmains louder sounds－ Improves readability．Gain control，modulation meter． $21 / 45 \times 4^{\circ}$ ，for $115 \mathrm{v} . \mathrm{AC}$ or 12 v ．DC． 3 lbs.
89 S 501． 25 montnly．．．．．．．．．NET 34.75 89 S 503．For 115 v．AC／6 v．OC ．．．．．．．．NET 34.75

## ［E BRC＂NOISTOP＂

Ignition nolee filter reduces pulse－type interterenca from cars，trucks，outboard motors．Also prowides quetch action．May be attached to any Euperhel－type


## 905106.

NET 16.95

## CB TEST EQUIPMENT

F SECO 510．For tast CB servicing．Read modula Hon，RF output．Teste funing stube，trans－ misalon lines，connectore，etc．Provimion for audlo nonitoring，cope． $51 / 86 \% / 621 / 4.2$ lbs．
87 F 306， 55 Monthly．
NET 46.95
G 905280 ．CESCO CB－52C．Roade power output and SWR．Reads $0-5$ watts．For 52 －ohm
coavial llines． $51 / 121 / 4 \times 21 / 4^{*}$ ，Wi． 10 oz．．．．．NET 24.95
［H］ 89 S 505 ．CESCO＂PHANTOM＂． 52 －ohm non－ Hinductive dummy load．For CB transcetvers． Has UHF connector．Wt．， 602.

NET 1.49
J 89 S 507．MONARCH FSI－1．Field－strength metor has magnet base， $200 \mu \mathrm{me}$ meter， $10 \%^{\prime \prime}$ whip．
 89 S 509．Above，tunes $1.6-150 \mathrm{mc} . .$. ．NET 8.40
K M．C．JONES＂MICROMATCH＂．Measure RF Dowar outpul and SWR．May be left in circult． For 52 －ohm coax Inet． $2 \times 4 / \times x 2 y_{4}$ ． 1 lb．
90 S 149． 85 Monthiy．
NET 26.50
L 87 F 305．SECO 500．Test set checke cryatsls prowidet RF test slgnal．Has 2 tranzlatore． diode．With $15^{\prime}$ remote cable，batterles．Slize， $81 / 4 \times 31 / 421 / 0^{\circ}$ ．WL， 1 K 16：

NET 29.35

## （M）⿵⿵冂䒑山⺝刂

 90．S 028．MONARCH＂KURLY－KORO＂．Extends to cond． 1 shielded．From higholmp．mikes．${ }^{3}-20$
## CESCO－CABLE ADAPTERS

N］ 90 S 029．TYPE CS．SO－239 socket one
and，auto ipace plue other end． 3 oz．．．．．．．．1．29
P 90 S 030．TYPE SC．PL－259 plug one end．
En． 1.29


## MOBILE ACCESSORIES

R SPRAGUE SK－1＂SUPPRESSIKIT．＂．Ignition R interterence suppression kil．Easily in whalled． For 6 or 12 －volf syatems．Contains 5 ＂Thru－Pass＂ capacitori，wire，Instructions．IX lbe
89511 ．
NET 17.85
S．CESCO 3－30 NOISE FILTER．Eliminate：generator whine，Tunsble $3-30 \mathrm{mc}$ ．Easily intialied．With mig．brachet． 502
89 S 512.
NET 2.95
（1）HY－GAIN CPR COUPLER．Switches antemna between CB and suto radios．Negilgible lasa． With cables，connectors． 7 oz． 895543.

NET 8.97
W 閉ADE－UP COAX CABLE KITS
Une low－loss cable with silver plated connectore． RG－58／U except＊RG－8／U．

| No． | Lenoth， F\＆． | $\begin{gathered} \text { PL-259 } \\ \text { Connootor } \\ \hline \end{gathered}$ | We． Lbs． |  |
| :---: | :---: | :---: | :---: | :---: |
| 895514 | 10 | E |  | 2.95 |
| 895515 | $10^{*}$ | Each End |  |  |
| 895516 | 20 | Each End |  | 3.75 |
| 895517 | $20 *$ | Each End |  | 4.45 |
| 895518 | 50 | Each End |  | 5. |
| 895519 | $50 *$ | Each E | 11／4 | 8. |
| 8955 | 100 | Each End | $31 / 2$ | 8.95 |
| 895522 | 100＊ | Each End |  | 4. |
| 5 | 10 | One End |  | 2.4 |
| 895528 | $10^{*}$ | One End | 1／2 | 2.9 |
| 895 | 20 | One End |  | 2. |
| 895537 | 20 | One End | 1 | 3.95 |
| S 538 | 50 | One End |  |  |
| 895539 | $50^{*}$ | One End |  |  |
| 895540 | 100 | One End | 31 | 17.95 |
| 895541 | 100＊ | One End | 31 | 4.45 |

## COMPREHENSIVE LISTING OF TRANSMITTING AND RECEIVING CRYSTALS

Easy－to－follow listing of transmitting and receiving crystala for all popular Citizena Band units．Avalisble for any Channel， 1 to 2o．Specily Stock No．and Channel desired．＂Preciston made，have hermeticnlly sealed holders．Tolerance：$\pm .005 \%$－meet FCC requirements．For
equipment not llsted here，write to our Technical Service Department． Give make and model of your equipment and as much ctrcuit and crystal information as is posslble．＂Indicates none required．＂Spectal＂ Indleates Speclal Order－30 day dellivery．Wt．． 3 oz．

| Manufaturar and Model | Stock Number | Manufaceurer and Model | Stock Number |  | Manufaoturer and Model | Stodk Number |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Tranemit Recel |  |  |  | Transmit | R |
| Arline（ | 90 \＄ 36890 |  | Transmief | Recolve |  | PolyComm PC－11，IG．N | 905s 355 | 055364 |
| Action Labs TCI－77 | 90 SS 350 Special | Heath CBI |  |  | Radifon | 905536 | 90 SS 363 |
| Arkay（All Units） | 90SS 36690 SS 360 | Heath GW10 | 90 SS 366 | 536 | Radson RT70A | 9055366 | OSS 358 |
| Bendix BC－6 | 90 SS 35190 Ss 358 | Heath GW21 | 90 Ss 353 | 90 S5 365 | Raytheon TWR | 90 SS | SS 363 |
| Browning Mobilaire | 90 SS 367 | ath GW31 | 9055353 | － | RCA．（All | 905536 90553 | $\begin{aligned} & 5 \$ 358 \\ & 55363 \end{aligned}$ |
| Browning | 90 SS 366 |  |  |  | Remency CBM 2 ？ | 9055366 |  |
| Chickasha（All Units） | 90 S5 366 | Int＇l．Exec． 50,100 | 90 SS 35490 | 90 SS 361 | RMEn 4303 （ ${ }^{\text {a }}$ | 90 SS 353 |  |
| Citifone CD5 | 90 SS 37190 S 372 | Johnson Personal M ess． | 905535 | SS | Shell CB－12 | 905536 |  |
| Courier I（ECI） | 90 S5 373 | Johnson Viking Mess． | 90 Ss 352 | 90 Ss 362 | Sonar Modet | 90 S5 | SS 363 |
| D．A．W．（All Unita） | 90 SS 366 | Kaar TR330，326A， 327 | 90 Ss 35 | 90 S5 376 | Sonar＂E＂．Serial No． |  | 3 |
| Dewald TR910 | 90 SS 366 | Kafat KN－2500 |  |  |  |  | 3 |
| Diron（All Units） | $\begin{aligned} & 90 \text { SS } 366 \\ & 90 \text { SS } 366 \\ & \hline \end{aligned}$ | Lafayerte HE | $\begin{aligned} & 90 \\ & 90 \end{aligned}$ | SS 358 | 916 and Higher <br> Serial No． | 90 S5 377 |  |
| Eico 762 Series | 90 S5 371 | Lafayette HE29 | 90 SS 366 | 90 cs 363 | Tel－Rad（All Unit |  | 0 SS 358 |
| Eico 772 Series | 90 S $\$ 366,90$ SS 356 | La Salle LA101 | $\begin{aligned} & 90 \text { SS } 366 \\ & 90 \text { SS } 366 \end{aligned}$ | 90 SS 363 90 SS 363 | Transcender 1000 <br> Transpace（All Units） | 90 SS 352 | 90 SS 358 |
| General Radiotele－ phone MC－1，2， 3 | 90 SS 36690 S5 363 90 SS 354190 SS 363 | Lincoln L2700A， 2 | 90 SS 366 | S 36 | Triumph TC－900 USL R800．TR910 | 9055353 905366 | 90 S 5375 |
| Gen．Radiotele．Mc－ |  | Lincoln L－2 |  |  | USL TR1000 | 90 \＄ | SS 358 |
| Globe CB100 | 90 SS 366.90 S5 |  | \＄ 5 | 0 SS 37 | Universal CT2701 | 905535 | 90 SS 375 |
| Globe CB100A | 90 SS 36690 S5 360 | Magnavox | 90 SS 36619 | $90 \$ 5363$ | Uuica TRC MC27 | 90 SS 366 | 90 SS 357 |
| Globe CB200 | 90 SS 3509055 | Minifone 400M1 | 90 SS 353 | 90 Ss 375 | Vanguard（All Units） | 0 S 535 |  |
| Gonset G11．12．14， 15 | 90 SS 3519088358 |  |  |  | Vocaline ED27M | 9085367 | － |
| Grove Electric ${ }^{\text {Hallicrafters }} \mathbf{C}$ | 90 S5 366 | Minifone $400 \mathrm{M}^{2}$ <br> Miratel CR117 | $\begin{aligned} & 90 \text { SS } \\ & 9055 \end{aligned}$ | $\begin{aligned} & 105875 \\ & 105 \$ 363 \end{aligned}$ | Warde．See dirline |  |  |
| Hallicraiters CB2，${ }^{3}$ | 90 \＄ 35290 \＄ 359 | Miratel CRIC－11 | $\begin{aligned} & 90 \text { S5 } 366 \\ & 90 \text { \$5 } 371 \end{aligned}$ | － 363 | Webeter 4－11 |  |  |
| Halmark（AUHUnits） | 90 SS 366 90 Ss 366 | Philmore TC－II |  |  | Westron 909 | $\begin{aligned} & 905 \$ 366 \\ & 90 \$ 5366 \end{aligned}$ | $90 \leq S 363$ |

Be Sure to Specify Stock No．，and Channel Desired

# Antennas for Citizens Band Stations mobile citizens band antennas 

## MY-GAIN

A 90 SX 126. CMR $50^{\circ}$ WHIP/MOUNT. Base londed atainiess steel whip. With mount. coax titting. Single hate mig. 1 lb .........NET 8.97B] 90 SX 130. TLWT $50^{\circ}$ TELESCOPING WHIP.
SS and chromed brase. Closes to $28^{\circ}$
1/2-24 stud. 12 oz
NET 7.20
90 SX $\$ 29$. TIWT-M WHIP/MOUNT. AbOve, with chromed body mount, coax fitting.
Wt. 1 to.
NET 8.95
C 90 SX 127. TLW-M $90^{\circ}$ WHIP/MOUNT. TOD-
C loaded lor improved radiation and matching. Rugged weatherproot coll capsule. Chrome-
plated body mount and coax flting. 110 . . NET 8.95
90 SX 128. TLW WHIP. Std. stud. 12 or..... 6.96
D 90 CZ 131. BWS. KIT. Cadmiumplated double-
tapered spying, stainless $102^{\circ}$ whip-bumper mount and strap. 4 tbe.

NET 12.96
90 CZ 141. W. 102 102' WHIP. Stalnlest treel, tepered whip. Std. stud. $1 \%$ lbs... NET 4.35

## ANTENNA SPECIALIST KITS

E 89 SX 792. ASP-tas KIT. Clamp-on base-
loaded $40^{\circ}$ whip with 12 RG-58/V, PL-259 adapter. Shpo. Wt., 13/1bs

NET 12.23
F 89 CZ 793. M-23 KIT. 102' stalaless whlp. coax F base, soring, 20 RG-5俔U, 2-PL-259: hardware. mig. pads. 51/2lbs............NET 17.46
G 89 C2 794. M8-24 KIT. $100^{\circ}$ whlp. sping. double chain bumper mount, $20^{\circ}$ RG. se/U. PL-25e, hold-down clip. 7 libe..... NET 18.67 89 CZ 795. M-24. Above. single-chain mount Shpg. wt. 6 lbs .

NET 15.88
(H) $905 \times 142 . \mathrm{M}-67 \mathrm{XIT} .44^{*}$ base-loaded atain(H) less steel whip with root-top mount, 12

RG-58/U, PL-259 connector. $1 / 1 / 2 \mathrm{bs} . . .$. NEY 15.68
[J] 89 SX 796 . M. 73 KIT . A: above, has tunkgroove mount that installs in seconde.
Securety fits all care. $21 / 1 \mathrm{lbs}$. .........NET 16.72
K $89 \mathbf{S X}$ 797. M-74 KIT. Same as M-67. but with mounl for cowl lender or deckemtg. Ad-
Justable $35^{\circ}$. Wt. , 2 ba

## NEWTRONICS ANTENNAS

[L]
$85 \mathrm{SX} 798 . \mathrm{CB}-27.00$ 4-section whip closes Lt $2 r$. Tunable to any channel. With Integra! cow! mount, $5^{\circ}$ RG-58/U. PL-zs9. 1 tb. NET 10.44 M 90 S 994. C-sa booy mount. For any tuned whip. Adjusts $180^{\circ}$. insulator, howo. 2 Ibs. 2.01
(N) $90 \mathbf{5} 995$. C-29 SPRING. Stainloet steel
3.06

## MARK MOBILE

(P) HW-19 "MELIWHIPS." FIberglses-moided ioaded whige. HW-19-4 for heavy-duty ute; others lightduty types for compact installatlons. Fit standard or HWM mounta (below). 1 lb.

| Stoch No. | Type | lenoth | NET |
| :---: | :---: | :---: | :---: |
| $895 \times 799$ | HW-11-4 | 1 ft | 9.95 |
| $905 \times 132$ | HW-11-St | 4 ft . | 7.20 |
| $905 \times 133$ | HW-11-S3 | 3 ft . | 7.20 |

R HWC "HELIWHIP" KITS. Light-duty antenna. n. wh cowl mount and $10^{\prime}$ RG-50/U comx. PL-259 enced "roof-tos mount 2 tos.


MOUNTING ACCESSORIES. For above. HWM-1 is hoavy-duty fiberglas flat-surlace mount. HWM-3 le Hght-duty molded mount whith angle mtg.ewivel. SA-1 $90^{\circ}$ swivel adapter. 1 lb

Stock No Typo Uso With NET 895614 HWM-1 AllHW-11 whips 7.50 | 90 | 5 | 135 | HWM-3 |
| :--- | :--- | :--- | :--- |
| 90 | HW-11-S whipt | 4.25 |  |
| 90 | 122 | SA-1 | HWM-1 mount |

## MOBILE ANTENNA PACKAGES

(S) 89 CZ ©12. Includes $102^{-}$stainleses steei whip
(5) standard chromed double-taper sping. chrome ball mount. Shpg. wh., 6 Ibs......NET 6.95 89 CZ 813. Above, but extra heavy-duty apring cadmlum-plated siluminum-tinlah ball mig. . . . . 8.95 89 CZ 814. Above, but chromed hetry-duty spring and ball mount. 7 lbs.

NET 10.95

## BASE STATION CITIZENS BAND ANTENNAS

## NEW MASTER-MOBILE BEAM

7 89 CZ 815. CBVM-9. Swiches from vert. to Whoriz polartzation. 9-db gatn. Aluminum eloments, boom $9 \%$. Requlres 25200 hm lines. With controi bon. PO\% lba........ NET 44.95

## MOSLEY 3-ELEMENT BEAM

W 89 CX 816 . A. 318 BEAM. Mount horizontally W) or vertically. Provides appion. B limes powel gain. Elements and $12^{\prime}$ boom of alumlnum. $9 \%^{\prime}$ furning radlue. 23 lbs......... NET 37.50

## ANTENNA SPECIALISTS

x 90 CZ 278. m-81 "MAGNUM." Omnidirectional antenna provides offective 6 db gain. sesection heavy-walled aluminum 207 1/-wave radlator, B aluminum radials. Matches 50 -ohm tranemission lines. Fits most all mants. 10 jbs . ...... NET 27.87

Y 89 CU 817. MC-27 GROUND PLANE. OmnId(1) rectional antenna has 108 aluminum radials and radiator. Radials bend to match 50 -ohm Unet. Fits 1 to $11_{6}{ }^{\circ}$ maste. Takes PL-230. 5 tbs. ..... NET 15.64

7 89 SX 818 . m-38 isolatimg SKirt. For llon angle. Fite $1-1 \mathrm{y} / \mathrm{a}$ mast. $3 \mathrm{lbs} . . . .$. NET 11.15

AA 89 CZ 819. M-36 COAX ANTENNA. OmntA. directional $1 / r$-wave entenna. Mounte on $14^{-}$ pipe. Constets of $9^{\prime}$ eluminum radiator on $\mathrm{g}^{\prime}$ aluminum skirt. For 52 -ohm Mres. Radiator element eccepte PL-259. 6 $1 / 2$ Jbs.......NET 19.56

BB 89 CZ 820. M-37 VERTICAL 3-ELEMENT BEAM. Provides uniditrectional low-angle radation Daftern- 7 db forward gain and $131 / 2 d \mathrm{~d}$ front-10back ratlo. Boom and elements are of heavy-wallad stuminum lubing. Helght. $18^{\circ}$ : boom length, $11^{\prime}$ Mounts on 1 mast (not supplied). For 52 ohm coar. Accepts PL-259. $15 \mathrm{lbs} . . .$. . NET 4. 10

## CESCO "DUO-POLE"



09 SX 821 . Omndirectional grounded quarterwave antenns of extruded dutatumtnum tubing. For 52 -ohm cons lines. Fite $1 \%^{\prime \prime}$ mast. $110^{-2}$ above mast. $100^{-\prime}$ radiale. $71 /$ ibs... NET 29.95

## HY-GAIN

DD
89 SX 22. CXL COAXIAL ANTENMA. For inconapicuous rool or side mounting. K" OD aluminum tubing radiator $2^{-}$OD aluminum sheeve. Fits $1.9 \%^{\circ}$ mast Length $18^{-}$, For 52 -ohm coaxiai lines. Shog wh 7 7 ibs.......NET 19.95 $895 \times 823$. 8RP BUMPER MOUNT. 1 1/IbE. . 6.57 EE 89 S45. CW TELESCOPING WHIP. $15^{\circ}$ to [E] $45^{-}$whip for trantcelver mig. Mas coll. -wivel, PLerse. q lb.

NET 5.97
FF 89 CZ 824. CLR. COLINEAR GROUND FI. PLANE. 3 db gain, 52 -ohms. Aluminum tubing. Meloht, $20^{\circ}: 9^{\prime}$ radials. Takes mast up to $1 \%$ WI. 10 lbe

NET 29.97
GG 8982 E2. SGP GROUND PLANE. Matches 6G) 58 ohme. Radiator and radials $\%$ aluminum lubing for $1 \%{ }^{*}$ masts. S Ibe.
16.17
[HH] 89 C2 826. 113-8 3-ELEMENT BEAM. 9-dB HW) gain. 25 db F/B. $8^{\prime}$ boom, $16 \%^{\prime}$ ete ment. 50 ohms. Less mast. 15 lbs ....... NET 31.50 89 S 615. t13S STACK KIT. 12 tbs.
53.85

## ANTENNEX

[JJ]
90 CZ 185. CBGP-1 GROUND PLANE. Omidirectional $\%$-wave alif-aluminum antenna. Has $\theta^{\prime}$ radiator, 4-9' radials. Requires $10^{\circ}$ matet up to $1 \%$ dia. Wi., 6 lbs.

NET 8.98
HK 90 CZ 279. CBY3 3-ELEMENT BEAM. Proes b-db gain. mounts ether verically or horizontaily. All-aluminum construction. $8^{\prime}$ boom it $1^{\circ}$ die. Elements are $1 / 2 z^{\prime \prime} \mathrm{dla}$. Longest efoment 18". Turning radius $\rho^{\prime}$. Accepts maste to $11 / 2^{\prime \prime}$. dia. Lese mast. 6 lbs


COMPLETE

## MOBILE KITS



## BASE STATION ANTENNAS



## MARK MOBILE

1190 CZ 136. NEW CBB-1 "BEACON" VERTICAL. Unjque $1 / 2$-wave base station antenna requiring no radials or skirts, but with ? db gain over std. ground planes. Has $17^{\prime}$ aluminum radlator, flber glas mitg. eection and $50-\mathrm{hm}$ maiching etub. Excellent for chimney, roof of slde mitg. Accepts PL-259. WL., 8 Ibs

NET 21.95
[MM NEW "SUPER-BEACON." Full-alre, omnidi1im rectional $1 / 1$-wave vestical antonna provides low radiation anole. 19 ' radiator has dielectric coating to reduce prectpittion static-Improves offoctive recelver sensitivity by up to 20 db . Noede no redials. Use with any 52 -ohm tine. With Instructiont and $50-230$ fitting. 12 tos
90 CZ 186.
NET 36.95

Citizens Band Walkie-Talkies
Keep in touch wherever you go! Great for business or personar $u$ se-for an types of indoor or outdoor activities.


POPULAR LINCOLN
9-TRANSISTOR
WALKIE-TALKIE


- Up to 1 Mile Range
- No License Needed

A proven perlormer, this rugged, leatheralight,highly dependable wathie-talinie is a plensure to use. Powered by 9 transistors so $\mid t{ }^{\prime}$ s always ready for action-needs no warmup time, operates as soon as you furnition. Provides consistent. on-the00 communications at distances of up to a mille or more. You need no license to opernte it, meets FCC requiroments for low-power unlicensed uniti. Features sensitive crystal-controlled superhetrodyne recelver section; full $100 \%$ modulaHon for outstanding "tath-power:" conventent pressto-talh operation. Has spesker that doubles as sensitive microphone when tansmitiling. Etticient $57^{\circ}$ whip anterna telescopes out of sleht when not In use. Compact. sturdy gray shoulder strap..earohone for private listening, and transmiting and recelving crystals for Chanel T. Lese batterles, below (uses 7). Imported from Japan. Shpg, wt.o. $11 / \mathrm{ibs}$.
90 SC 436-J. 55 monthly
EACH ONLY 32.50
$55 \mathrm{~J} 020.1 \%$-VOLT PENLIGMT CELL. For above. Takes 7.2 oz . ..EACH 10 C


DELUXE 9-TRANSISTOR
WALKIE-TALKIE WITH AM RADIO
Each
$\$ 3750$

- 2 Units In 1-CB Transceiver. AM Radio
- Crystal-Controlled Transmit and Receive
- No FCC Lucense or Permit Required
- Efficient Nine-Transistor Circuit

Enjoy the conventence of two-way redio communtcations, or thip a witch and tune in all of your lavorite AM brosdcest progrsms. This unique unit provides rellable commundcations at ranges of up to 1 mile-more over Ideal terrain. Uses euperhet recelver section. Dush-pull audio ampiltler that delivers fine sound. Speaker doubles as mike in transmit postition. Also has log-type AM dial, 57 telescoplng antenma. $6 \% \times 2 / 4 \pi 1 \% *$. With bafterien ftames 6 ), leather case, shoulder etrap. earpiece, crystals for Channel 10 . From Japan. $2 \%$ IDe.
90 SC
55 J 020 . EXTRA 1 K-V. PENLIGHT CELL, Tahes 6. 2 oz .
NET EACH 37.50 Tathe from


Fits in your pocket-yet prowidee reliable 2-way communications at ranges ol up to $1 / 2$ mile. Meets FCC reguiation regen fixed-tuned recelver section and crystal-controlled $80-\mathrm{mw}$ transmilterfeection, 12 Eection- $40^{-}$whip. Merion case, $5 \times 3 \times 111 / a^{2}$. With earphone, leather case, shoutder strap, earphone pouch, erystals for one channel. Lass $9-v$. battery (below). From Japan. 8 oz. 90 SC 282-J. 85 Montnly 55 J 119. 9-V. BATTERY. 2 ot

NET 19.95 Battery

EICO MODEL 700 WALKIE-TALKIE KIT
 cadmium battery that can be recharged overnlght. Meete FCC requiremente for lowtoower unlicensed CB units. $100-\mathrm{mw}$ transmitter and recelver sectiont are cryatalcontrolled. Has preas+to-taik switch, $2 y^{\circ}$ bpeaker-mike, $41^{\circ}$ whip antenna.
 crystais for Channel 16 . inatructions. $1 \%$ los.
90 SC $177-J . \$$ Monthly
NET 54.95
90 SC 178. Above, wired and tested. so Monthy

## rCa-the great name in electronic tubes-at new low prices

- Up to $60 \%$ Off List Price
- May be Assorted for Quantify-Price Savings
- Always Freshest Stocks-Full One-Year Guarantee
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You can be sure of complete satisfaction when you order receiving tubes from Allied. We will replace any tube that does not give efficient performance for 12 months from date of purchase. This does not apply to broken tubes. *Not made by RCA-other well-known brands supplied. Purchasers of tubes in lots of 15 or more may obtain RCA's Receiving Tube Manual ai no extra cost-ask for Stock No. 37 K 575 . Av. shpg. wt. per tube, 4 oz.; per 10 tubes, $21 / 2 \mathrm{lbs}$.

| $\begin{aligned} & \text { Tube } \\ & \text { Type } \end{aligned}$ | $\begin{aligned} & \text { Llst } \\ & \text { Price } \end{aligned}$ | NET EACH in Quantities of: |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 1 to 9 | 10 to 49 | 50 or More |
| EM84/6FG6 | \$3.25 | 1.63 | 1.46 | 1.30 |
| O24 | 2.40 | 1.20 | 1.08 | . 96 |
| OZ4A | 2.15 | 1.08 | . 97 | . 86 |
| O24G | 2.60 | 1.30 | 1.17 | 1.04 |
| 143 | 4.95 | 2.48 | 2.23 | 1.98 |
| 1ASGT | 4.25 | 2.13 | 1.91 | 1.70 |
| 1 ATGT | 5.75 | 2.88 | 2.59 | 2.30 |
| $1 \mathrm{~A} \times 2$ | 3.05 | 1.53 | 1.37 | 1.22 |
| 183GT | 2.90 | 1.45 | 1.31 | 1.16 |
| 1C5GT | 5.30 | 2.65 | 2.39 | 2.12 |
| 10N5 | 2.50 | 1.25 | 1.13 | 1.00 |
| 1G3GT/1B3GT | 2.90 | 1.45 | 1.31 | 1.16 |
| 1H5GT | 4.15 | 2.08 | 1.87 | 1.66 |
| 1 J 3 | 2.90 | 1.45 | 1.31 | 1.16 |
| 1 K 3 | 2.90 | 1.45 | 1.31 | 1.16 |
| 1L6 | 6.80 | 3.40 | 3.06 | 2.72 |
| 1 Lag | 6.20 | 3.10 | 2.79 | 2.48 |
| 1 LB4 | 8.65 | 4.33 | 3.90 | 3.46 |
| 1 LC6 | 8.30 | 4.15 | 3.74 | 3.32 |
| 1 LD5 | 8.40 | 4.20 | 3.78 | 3.36 |
| 1LE3 | 6.40 | 3.20 | 2.88 | 2.56 |
| 1 LG5 | 6.20 | 3.10 | 2.79 | 2.48 |
| 1 LH 4 | 8.05 | 4.03 | 3.63 | 3.22 |
| 1LN5 | 8.15 | 4.08 | 3.67 | 3.26 |
| 1 N2A | 4.65 | 2.33 | 2.09 | 1.86 |
| 1N5GT | 5.20 | 2.60 | 2.34 | 2.08 |
| 1 R5 | 2.70 | 1.35 | 1.21 | 1.08 |
| 152A* | 3.10 | 1.55 | 1.40 | 1.24 |
| 154 | 4.35 | 2.18 | 1.96 | 1.74 |
| 155 | 2.65 | 1.33 | 1.19 | 1.06 |
| $1 \mathrm{~T}_{4}$ | 2.50 | 1.25 | 1.13 | 1.00 |
| $1 \mathrm{U}_{4}$ | 2.50 | 1.25 | 1.13 | 1.00 |
| 105 | 2.20 | 1.10 | . 98 | . 88 |
| 1 V | 5.85 | 2.93 | 2.63 | 2.34 |
| 1 V 2 | 2.10 | 1.05 | . 95 | . 84 |
| $1 \times 2 \mathrm{~A}$ | 3.05 | 1.53 | 1.37 | 1.22 |
| $1 \times 2 \mathrm{~B}$ | 3.05 | 1.53 | 1.37 | 1.22 |
| 2 A 3 | 10.50 | 5.25 | 4.73 | 4.20 |
| $2 A F 4 B$ | 4.05 | 2.03 | 1.82 | 1.62 |
| 2BN4 | 2.55 | 1.28 | 1.15 | 1.02 |
| 2BN4A | 2.55 | 1.28 | 1.15 | 1.02 |
| 2CW4 Nuvistor | 4.45 | 2.23 | 2.00 | 1.78 |
| 2 CY 5 | 2.85 | 1.43 | 1.28 | 1.14 |
| $2 \mathrm{DS4}$ Nuvistor | 4.45 | 2.23 | 2.00 | 1.78 |
| 2ENS | 2.10 | 1.05 | . 95 | . 84 |
| 2ER5 | 3.50 | 1.75 | 1.58 | 1.40 |
| $2 F \mathrm{H5}$ | 3.05 | 1.53 | 1.37 | 1.22 |
| 2GK5 | 4.05 | 2.03 | 1.82 | 1.62 |
| 3 A2 | 4.85 | 2.43 | 2.18 | 1.94 |
| 3A3 | 3.40 | 1.70 | 1.53 | 1.36 |
| 3AF4A | 4.05 | 2.03 | 1.82 | 1.62 |
| 3 AL5 | 1.85 | . 93 | . 83 | . 74 |
| 3AU6 | 2.15 | 1.08 | . 97 | . 86 |
| 3AV6 | 1.75 | . 88 | . 79 | . 70 |
| $3 \mathrm{B2}$ | 9.85 | 4.93 | 4.44 | 3.94 |
| $3 \mathrm{BA6}$ | 2.15 | 1.08 | . 97 | . 86 |
| 3 BC 5 | 2.35 | 1.18 | 1.06 | . 94 |
| 3BE6 | 2.25 | 1.13 | 1.01 | . 90 |
| 3BN4A | 2.55 | 1.28 | 1.15 | 1.02 |
| 3BN6 | 3.05 | 1.53 | 1.37 | 1.22 |
| 3BU8 | 2.85 | 1.43 | 1.28 | 1.14 |
| 3 BY 6 | 2.35 | 1.18 | 1.06 | . 94 |
| 3826 | 2.30 | 1.15 | 1.04 | . 92 |
| $3 \mathrm{CB6}$ | 2.30 | 1.15 | 1.04 | . 92 |
| 3CE5 | 2.35 | 1.18 | 1.06 | . 94 |
| 3CF6 | 2.55 | 1.28 | 1.15 | 1.02 |



Take advantage of our liberal, convenient Credit Fund Planpurchase all of the receiving
 tubes you need from Allied on our dollar-stretching Easy Pay Plan. You can take up to 24 months to pay ... no money down!

| Tube Type | List Price | NET EACH in Quantities of: |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 1 to 9 | 10 to 49 | 150 or More |
| 3 C56 | \$2.45 | 1.23 | 1.10 | . 98 |
| 3 CY 5 | 2.85 | 1.43 | 1.28 | 1.14 |
| 30G4 | 3.40 | 1.70 | 1.53 | 1.36 |
| 3DK6 | 2.40 | 1.20 | 1.08 | . 96 |
| 3DT6A | 2.20 | 1.10 | . 99 | .88 |
| 3EA5 | 2.85 | 1.43 | 1.28 | 1.14 |
| 3ER5 | 3.50 | 1.75 | 1.58 | 1.40 |
| 3GK5 | 4.05 | 2.03 | 1.82 | 1.62 |
| 3GS8/3BU8 | 2.85 | 1.43 | 1.28 | 1.14 |
| 3LF4 | 6.40 | 3.20 | 2.88 | 2.56 |
| 3Q4 | 3.55 | 1.78 | 1.60 | 1.42 |
| 305GT | 5.65 | 2.83 | 2.54 | 2.26 |
| 354 | 2.65 | 1.33 | 1.19 | 1.06 |
| 3 V 4 | 2.50 | 1.25 | 1.13 | 1.00 |
| $4 A \cup 6$ | 2.15 | 1.08 | . 97 | . 86 |
| 4AV6 | 1.70 | . 85 | . 77 | . 68 |
| $4 \mathrm{BC5}$ | 2.35 | 1.18 | 1.06 | . 94 |
| 4 BC 8 | 4.05 | 2.03 | 1.82 | 1.62 |
| 4BL8 | 2.55 | 1.28 | 1.15 | 1.02 |
| 4BN6 | 3.05 | 1.53 | 1.37 | 1.22 |
| 4BG7A | 4.20 | 2.10 | 1.89 | 1.68 |
| $4 \mathrm{BS8}$ | 3.85 | 1.93 | 1.73 | 1.54 |
| $4 \mathrm{BU8}$ | 2.85 | 1.43 | 1.28 | 1.14 |
| 4826 | 2.25 | 1.13 | 1.01 | . 90 |
| 4827 | 4.05 | 2.03 | 1.82 | 1.62 |
| 4CB6 | 2.30 | 1.15 | 1.04 | . 92 |
| 4 C56 | 2.35 | 1.18 | 1.06 | . 94 |
| 4 CY 5 | 2.85 | 1.43 | 1.28 | 1.14 |
| 4DE6 | 2.65 | 1.33 | 1.19 | 1.06 |
| 4DT6A | 2.25 | 1.13 | 1.01 | . 90 |
| 4EH7 | 3.80 | 1.90 | 1.71 | 1.52 |
| 4EJ7 | 3.80 | 1.90 | 1.71 | 1.52 |
| 4ES8 | 4.60 | 2.30 | 2.07 | 1.84 |
| 4EW6 | 2.35 | 1.18 | 1.06 | . 94 |
| 4GS8/4BU8 | 2.85 | 1.43 | 1.28 | 1.14 |
| 5AM8 | 3.55 | 1.78 | 1.60 | 1.42 |
| 5AN8 | 4.00 | 2.00 | 1.80 | 1.60 |
| 5AO5 | 2.20 | 1.10 | . 99 | . 88 |
| 5AS4A | 2.65 | 1.33 | 1.19 | 1.06 |
| 5 5 58 | 4.15 | 2.08 | 1.87 | 1.66 |
| 5AT8 | 3.65 | 1.83 | 1.64 | 1.46 |
| $5 A \cup 4$ | 3.40 | 1.70 | 1.53 | 1.36 |
| 5 5V8 | 4.05 | 2.03 | 1.82 | 1.62 |
| 5AW4 | 2.80 | 1.40 | 1.26 | 1.12 |
| 5 52Z | 5.65 | 2.83 | 2.54 | 2.26 |
| $5 \mathrm{B8}$ | 5.30 | 2.65 | 2.39 | 2.12 |
| 5BC3 Novar | 2.30 | 1.15 | 1.04 | . 92 |
| $5 \mathrm{SE8}$ | 3.30 | 1.65 | 1.49 | 1.32 |
| 5BK7A | 3.40 | 1.70 | 1.53 | 1.36 |
| 5BG7A | 4.05 | 2.03 | 1.82 | 1.62 |
| 5B R8 | 3.65 | 1.83 | 1.64 | 1.46 |
| 5BT8 | 3.30 | 1.65 | 1.49 | 1.32 |
| 5BW8 | 3.40 | 1.70 | 1.53 | 1.36 |
| 5CG8 | 3.25 | 1.63 | 1.46 | 1.30 |
| 5CL8A | 3.15 | 1.58 | 1.42 | 1.26 |
| 5CM8 | 3.80 | 1.90 | 1.71 | 1.52 |
| $5 \mathrm{CQ8}$ | 3.35 | 1.68 | 1.51 | 1.34 |
| 5 C 25 | 4.35 | 2.18 | 1.96 | 1.74 |
| 5DH8 | 4.50 | 2.25 | 2.03 | 1.80 .88 |
| 5 DJ 4 | 2.20 | 1.10 | . 99 | . 88 |
| 5EAB | 3.15 | 1.58 | 1.42 | 1.26 |
| 5 EU8 | 3.35 | 1.68 | 1.51 | 1.34 |
| 5EW6 | 2.35 | 1.18 | 1.06 | . 94 |

RCA Receiving Tuhes (Cont'd)
QUANTITY PRICES ALSO APPLY TO ASSORTED TUBES

| Tube Type | List Price | NET EACH in Quantities of |  |  | Tube Type | List Price | NET EACH In Quantities of |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 to 9 | 10 to 49 | 50 or More |  |  | 1 to 9 | 10 to 49 | 50 or More |
| 5FG7 | \$2.75 | 1.38 | 1.24 | 1.10 | 68G6G | \$6. 80 | 3.40 | 3.06 | 2.72 |
| 5FV8 5GH8 | 3.15 3.20 | 1.58 | 1.42 | 1.26 | 6BH3 Novar | 2.95 | 1.48 | 1.33 | 1.18 |
| 5GH8 $5 \mathrm{GM6}$ | 3.20 2.40 | 1.60 | 1.44 | 1.28 | 6BH6 | 2.70 | 1.35 | 1.21 | 1.08 |
| 5GM6 $5 \mathrm{GX6}$ | 2.40 2.35 | 1.20 1.18 | 1.08 1.06 | .96 .94 | 6BH8 6 BJ 6 | 3.50 | 1.75 | 1.58 | 1.40 |
| 5 J 6 | 2.85 | 1.43 | 1.28 | 1.14 | 6BJ7 | 2.6 | 1.30 | 1.17 | 1.04 |
| 5 T 4 | 12.10 | 6.05 | 5.45 | 4.84 | 6BJ8 | 3.15 3.50 | 1.58 | 1.42 | 1.26 |
| 5T8 | 3.40 | 1.70 | 1.53 | 1.36 | $6 \mathrm{BK4}$ | 3.50 8.00 | 1.75 | 1.58 | 1.40 |
| 5U4G 5U4GB | 2.10 | 1.05 | . 95 | . 84 | 6BK5 | 8.00 3.70 | 1.00 1.85 | 3.60 | 3.20 1.48 |
| 5U4GB | 2.10 | 1.05 | . 95 | . 84 | 6BK7B | 3.40 | 1.85 1.70 | 1.67 1.53 | $\begin{aligned} & 1.48 \\ & 1.36 \end{aligned}$ |
| 508 5 V 3 A | 3.30 | 1.65 | 1.49 | 1.32 | 6BL7GTA | 3.95 | 1.98 |  |  |
| 5V3A | 3.85 | 1.93 | 1.73 | 1.54 | 6BL8 | 3.95 | 1.98 | 1.78 | 1.58 1.58 |
| 5V4GA | 3.50 2.20 | 1.75 | 1.58 | 1.40 | 6BM8* | 3.05 | 1.53 | 1.37 | 1.22 |
| $5 \times 4 \mathrm{G}$ | 3.35 | 1.68 | 1.59 | .88 1.34 | 6BN4A 6BN6 | 2.50 2.95 | 1.25 1.48 | 1.13 1.33 | 1.00 |
| $5 \times 8$ | 3.30 | 1.65 | 1.49 | 1.32 | 6BN8 | 3.05 |  |  |  |
| 5Y3GT | 1.75 | . 88 | . 79 | . 70 | 6BG5 | 2.35 | 1.53 | 1.37 | 1.22 |
| 5Y4GA | 2.60 | 1.30 | 1.17 | 1.04 | 6BG6GTB/6CU6 | 4.35 | 1.18 2.18 | 1.06 | . 94 |
| 5Y4GT | 2.65 | 1.33 | 1.19 | 1.06 | 6B97A | 3.95 | 1.18 1.98 | 1.96 1.78 | $\begin{aligned} & 1.74 \\ & 1.58 \end{aligned}$ |
| 523 | 3.30 | 1.65 | 1.49 | 1.32 | 6日R8A | 3.65 | 1.83 |  | $\begin{aligned} & 1.58 \\ & 1.46 \end{aligned}$ |
| 524 | 8.35 8.50 | 4.18 4.25 | 3.76 3.82 | 3.34 | 6BS8 | 3.75 | 1.88 | 1.69 | 1.50 |
| 6 688 | 8.50 6.85 | 4.25 3.43 | 3.82 <br> 3.08 | 3.40 2.74 | $6 \mathrm{BU8}$ 6 BV | 2.80 | 1.40 | 1.26 | 1.12 |
| 6A8G | 8.60 | 3.43 4.30 | 3.82 <br> 3.87 | 2.74 3.44 | 6BV8 68 BW | 3.15 | 1.58 | 1.42 | 1.26 |
| 6A8GT | 8.60 | 4.30 | 3.87 3.87 | 3.44 3.44 | 6BW8 | 2.00 3.50 | 1.45 1.75 | 1.31 1.58 | $1.16$ |
| 6AB4 | 2.15 | 1.08 | . 97 | . 86 | $6 \mathrm{BX7GT}$ |  |  |  |  |
| 6AB5/6N5 | 8.05 | 4.03 | 3.63 | 3.22 | 6BY5GA | 4.00 5.10 | 2.00 2.55 | 1.80 2.30 | $\begin{aligned} & 1.60 \\ & 2.04 \end{aligned}$ |
| 6AB7 | 8.25 | 4.13 | 3.72 | 3.30 | 6BY6 | 2.50 | 1.25 | 1.13 | $\begin{aligned} & 2.04 \\ & 1.00 \end{aligned}$ |
| 6AC5GT 6AC7 | 6.25 | 3.13 | 2.81 | 2.50 | 6BY8 | 2.65 | 1.33 | 1.19 | $\begin{aligned} & 1.00 \\ & 1.06 \end{aligned}$ |
| 6 6AC7 | 5.10 | 2.55 | 2.30 | 2.04 | 6BZ6 | 2.25 | 1.13 | 1.01 | .90 |
| 6AD7G 6AF3 | 9.40 | 4.70 | 4.23 | 3.76 | 6827 | 4.00 | 2.00 | 1.80 | 1.60 |
| 6AF3 6 6AF4 | 2.90 | 1.45 | 1.31 | 1.16 | $6 \mathrm{BZ8}$ | 4.45 | 2.23 | 2.00 | 1.78 |
| 6AF4A | 4.00 4.00 | 2.00 | 1.80 | 1.60 | 6 C 4 | 1.85 | . 93 | . 83 | . 74 |
| 6AF6G | 4.00 6.20 | 2.00 3.10 | 1.80 2.79 | 1.60 | $6 \mathrm{C5}$ | 4.25 | 2.13 | 1.91 | 1.70 |
| 6AG7 | 6.20 | 3.10 | 2.79 | 1.10 2.48 | 6C8G | 8.55 1.95 | 4.28 | 3.85 | 3.42 |
| 6AH4GT | 3.45 | 1.73 | 1.55 | 1.48 1.38 | 6CAS | 1.95 3.15 | .98 1.58 | .88 1.42 | . 78 |
| 6АН6 | 4.70 | 2.35 | 2.12 | 1.88 | 6CBSA | 8.25 | 1.58 4.13 | 1.42 3.72 | 1.26 3.30 |
| 6 6K5 | 4.40 | 2.20 | 1.98 | 1.76 | 6CB6A | $\mathbf{8 . 2 5}$ 2.25 | 1.58 1.13 | 1.72 1.01 | $\begin{array}{r} 3.30 \\ .90 \end{array}$ |
| 6AL3 <br> 6AL5 |  | 1.38 | 1.24 |  | 6CD6GA | 5.80 | 2.90 | 2.61 |  |
| 6AL5 | 1.85 5 | . 93 | . 83 | . 74 | 6CE5 | 2.35 | 1.18 | 1.06 | 2.32 .94 |
| 6AMG ${ }^{\text {6AM }}$ | 5.75 5.90 | 2.88 2.95 | 2.59 2.66 | 2.30 2.36 | ${ }_{6 C F 6}$ | 2.55 | 1.28 | 1.15 | 1.02 |
| 6AM4 <br> 6AM8A | 5.90 3.45 | 2.95 1.73 | 2.66 1.55 | 2.36 1.38 | 6CG7 6CG8A | 2.45 3.30 | 1.23 | 1.10 | . 98 |
| 6AN4 | 6.55 |  |  | 1.38 | 6CG8A | 3.30 | 1.65 | 1.49 | 1.32 |
| 6AN8A | 4.00 | 3.28 2.00 | 1.95 1.80 | 2.62 1.60 | 6CH8 | 5.20 | 2.60 | 2.34 | 2.08 |
| 6AQ5A | 2.15 | 1.08 | 1.80 .97 | 1.60 .86 | 6CK4 | 3.00 3.75 | 1.50 | 1.35 | 1.20 |
| 6AG6 | 2.60 | 1.30 | 1.17 | 1.84 | 6CL8A | 3.75 3.15 3.10 | 1.88 | 1.69 | 1.50 |
| 6AQ7GT | 4.00 | 2.00 | 1.80 | 1.60 | 6CL8A | 3.15 3.30 | 1.58 | 1.42 | 1.26 |
| 6 6AP8 | 3.15 | 1.58 |  |  | 6CM7 |  |  | 1.49 | 1.32 |
| 6 6R5 | 2.65 | 1.33 | 1.19 | 1.26 | 6CM7 6CM8 | 2.90 4.25 | 1.45 | 1.31 | 1.16 |
| 6 6AS5 | 2.40 | 1.20 | 1.08 | . 96 | 6CN7 | 4.25 2.75 | 1.13 1.38 | 1.91 | 1.70 |
| 6AS8 | 3.80 | 1.90 | 1.71 | 1.52 | 6CQ4 | 2.75 3.00 | 1.38 1.50 | 1.24 1.35 | $\begin{aligned} & 1.10 \\ & 1.20 \end{aligned}$ |
| 6AT6 | 1.90 | . 95 | . 86 | . 76 | 6CQ8 | 3.30 | 1.65 | 1.49 | $\begin{aligned} & 1.20 \\ & 1.32 \end{aligned}$ |
| 6AT8A | 3.80 | 1.90 | 1.71 | 1.52 | 6C R6 | 2.40 | 1.20 | 1.08 |  |
| 6AU4GTA | 3.60 | 1.80 | 1.62 | 1.44 | 6CS6 | 2.35 | 1.18 | 1.06 | . 94 |
| 6AUSGT | 4.30 2.10 | 2.15 1.05 | 1.94 | 1.72 | 6CS7 | 2.95 | 1.48 | 1.33 | 1.18 |
| 6AU8A | 2.50 3.50 | 1.05 1.75 | 1.95 1.58 | .84 1.40 | $6 \mathrm{CU5}$ | 2.35 | 1.18 | 1.06 | . 94 |
| 6AV5GA | 4.00 |  |  |  |  |  |  |  |  |
| 6AV6 | 1.65 | 2.83 | . 74 | 1.60 | 6CU8 | 4.15 | 2.08 | 1.87 | 1.66 |
| 6AW8A | 3.70 | 1.85 | 1.67 | 1.48 | ${ }_{6} 6 \mathrm{CX8} 8$ | 4.45 3.65 | 2.23 | 2.00 | 1.78 |
| $6 A^{3}$ | 2.45 | 1.23 | 1.10 | .48 .98 | 6CY5 | 3.65 2.75 | 1.83 1.38 | 1.64 | $1.46$ |
| 6 AX4GTB | 2.65 | 1.33 | 1.19 | 1.06 | 6CY7 | 3.65 3.20 | 1.38 1.60 | 1.24 1.44 | $\begin{aligned} & 1.10 \\ & 1.28 \end{aligned}$ |
| 6AX5GT | 3.10 | 1.55 |  |  |  |  |  |  |  |
| $64 \times 8$ | 3.70 | 1.85 | 1.67 | 1.48 | 6D6 | 7.80 | 2.05 3.90 | 1.85 3.51 | 1.64 3.12 |
| 6 6, 3 Novar | 2.75 | 1.38 | 1.24 | 1.10 | 60A4A | 2.70 | 1.35 | 1.21 | 1.64 1.08 |
| 6 6AZ8 | 5.55 | 2.78 | 2.50 | 2.22 | 6DB5 | 5.30 | 1.35 <br> 2.65 | 1.21 2.39 | 1.09 2.12 |
| 6B4G* | 15.05 | 7.53 | 6.78 | 6.02 | 60C6 | 3.40 | 1.65 1.70 | 1.51 1.53 | 2.12 1.36 |
| $6 \mathrm{B8}$ | 7.30 | 3.65 | 3.29 |  |  |  |  |  |  |
| 6BA3 Novar | 2.75 | 1.38 | 1.24 | 1.10 | 6DE4 | 2.80 | 1.60 1.40 | 1.44 | 1.28 |
| $6 \mathrm{BA6}$ | 2.00 | 1.00 | . 90 | . 80 | 6DE6 | 2.55 | 1.28 | 1.15 | 1.12 |
| 6BA7 | 5.95 | 2.98 | 2.68 | 2.38 | 60E7 | 3.40 | 1.70 | 1.15 1.53 | 1.02 1.36 |
| 6BA8A | 3.85 | 1.93 | 1.73 | 1.54 | 6DG6GT | 2.55 | 1.28 | 1.15 1.53 1.15 | $\begin{aligned} & 1.36 \\ & 1.02 \end{aligned}$ |
| $6 \mathrm{BC4}$ | 4.90 | 2.45 | 2.21 | 1.96 |  | 2.35 |  |  |  |
| $6 \mathrm{BC5}$ | 2.55 | 1.28 | 1.15 | 1.02 | 6DN6 | 7.45 | 3.73 | 3.36 | 2.98 |
| 6 BC 7 | 3.80 | 1.90 | 1.71 | 1.52 | 6DN7 | 3.50 | 1.75 | 1.36 1.58 | 2.98 1.40 3.30 |
| 6 BC 8 | 4.00 | 2.00 | 1.80 | 1.60 | 6DO5 | 8.35 |  | 1.58 3.76 | 1.40 3.32 |
| 5806 | 2.45 | 1.23 | 1.10 | . 98 |  |  |  |  |  |
| 68E6 | 2.20 | 1.10 | . 99 | . 88 | $60 R 4$ | 4.15 1.85 | 2.08 .93 | 1.87 | 1.66 |
| 6BF5 | 3.55 | 1.78 | 1.60 | 1.42 | $6 \mathrm{CR7}$ | 1.85 3.40 | .93 1.70 | .83 .83 | . 74 |
| 6856 | 1.80 | . 90 | . 81 | . 72 | 6 OS4 Nuvistor | 4.45 | 1.70 <br> 2.23 | 1.53 2.00 | 1.3 m 1.78 |

## QUANTITY PRICES ALSO APPLY TO ASSORTED TUBES

## Extra Savings When You Buy More Than 9 Tubes

The first net price column ( 1 to 9 ), is for orders of less than 10 tubes. If you buy 10 or more tubes of any one type or assorted types (and up to a total of 49).
use the prices in the second net price columin ( 10 to 49). For 50 tubes and over, use the third price column (50 -
or More). Take advantage of these quantity prices!

| Tube Type | List Price | NET EACH In Quantities of : |  |  | Tube Type | $\begin{aligned} & \text { List } \\ & \text { Price } \end{aligned}$ | NET EACH In Quantities of: |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 to 9 | 10 to 49 | 50 or More |  |  | 1 to 9 | 10 to 49 | 50 or More |
| 6DS5 | $\$ 3.20$ 3.25 | 1.60 1.63 | 1.44 | 1.28 1.30 | 6JC8 $6 \mathrm{JH8}$ | $\$ 2.90$ 4.35 | 1.45 2.18 | $\begin{aligned} & 1.31 \\ & 1.96 \end{aligned}$ | $\begin{aligned} & 1.16 \\ & 1.74 \end{aligned}$ |
| 6DT5 | 3.25 | 1.63 1.08 | 1.46 .97 | 1.30 .86 | 6JH8 6 JU 8 | 4.35 2.95 | 1.18 1.48 | $\begin{aligned} & 1.96 \\ & 1.33 \end{aligned}$ | $\begin{aligned} & 1.74 \\ & 1.18 \end{aligned}$ |
| 6DT6A 6DT8 | 2.15 3.80 | 1.08 1.90 | 1.77 | .86 1.52 | 6JU8 ${ }_{\text {6KGT }}$ | 2.95 2.65 | 1.48 1.33 | $\begin{aligned} & 1.33 \\ & 1.19 \end{aligned}$ | $\begin{aligned} & 1.18 \\ & 1.06 \end{aligned}$ |
| 6DT8 $6 \mathrm{DW4} 4$ Novap | 3.80 3.70 | 1.90 | 1.71 | 1.52 1.48 | 6K6GT 6K7 | 2.65 4.95 | 1.33 <br> 2.48 | $\begin{aligned} & 1.19 \\ & 2.23 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.06 \\ & 1.98 \end{aligned}$ |
| 60W5 | 4.05 | 2.03 | 1.82 | 1.62 | 6K7GT | 4.95 | 2.48 | 2.23 | 1.98 |
| $60 \times 8$ | 3.10 | 1.55 | 1.40 | 1.24 | 6K8 | 7.50 | 3.75 | 3.38 | 3.00 |
| 6DZ7 | 5.45 | 2.73 | 2.45 | 2.18 | 6 K 11 | 3.50 | 1.75 | 1.58 | 1.40 |
| 6 E5 | 4.45 | 2.23 | 2.00 | 1.78 | $6 \mathrm{KA8}$ | 3.80 | 1.90 | 1.71 | 1.52 |
| 6 EA5 | 2.80 | 1.40 | 1.26 | 1.12 | $6 \mathrm{L6}$ | 8.60 | 4.30 | 3.87 | 3.44 |
| 6EA7 | 3.45 | 1.73 | 1.55 | 1.38 | 6L6GC | 4.20 | 2.10 | 1.89 | 1.68 |
| 6EA8 | 2.70 | 1.35 | 1.21 | 1.08 | 6L7 | 7.35 | 3.68 | 3.31 $648 / 6 N$ | 2.94 |
| $6 \mathrm{EB8}$ | 3.70 | 1.85 | 1.67 | 1.48 | 6 NS 6 N 7 |  |  | $6.485 / 6 \mathrm{~N}$ 2.25 |  |
| 6EH5 | 2.90 | 1.45 | 1.31 | 1.16 | 6N7 6N7GT | 5.00 5.00 | 2.50 2.50 | 2.25 2.25 | 2.00 2.00 |
| 6EH7 | 3.80 | 1.90 | 1.71 | 1.52 | 6N7GT | 5.00 | 2.50 | 2.25 | 2.00 |
| 6EH8 | 3.15 | 1.58 | 1.42 | 1.26 | 6 O 7 | 5.30 | 2.65 | 2.39 | 2.12 |
| 6ES7 | 3.80 | 1.90 | 1.71 | 1.52 | 6Q7GT | 5.65 | 2.83 | 2.54 | 2.26 |
| 6EM5 | 3.40 | 1.70 | 1.53 | 1.36 | $6 \mathrm{R7}$ | 5.45 | 2.73 | 2.45 | 2.18 |
| 6EM7 | 5.10 | 2.55 | 2.30 | 2.04 | 6S4A | 2.05 | 1.03 | + 92 | . 82 |
| 6EQ7 | 2.90 | 1.45 | 1.31 | 1.16 | 657 | 7.20 | 3.60 | 3.24 | 2.88 |
| 6ERS | 3.50 | 1.75 | 1.58 | 1.40 | 6S8GT | 4.40 | 2.20 | 1.98 | 1.76 |
| 6ES5 | 3.05 | 1.53 | 1.37 | 1.22 | 6SA7 | 4.30 | 2.15 | 1.94 | 1.72 |
| 6ES8 | 5.80 | 2.90 | 2.61 | 2.32 | 6SA7GT | 4.30 | 2.15 | 1.94 | 1.72 |
| 6EU7 | 2.60 | 1.30 | 1.17 | 1.04 | 65B7Y | 6.30 | 3.15 | 2.84 | 2.52 |
| 6EU8 | 3.30 | 1.65 | 1.49 | 1.32 | $65 C 7$ | 4.20 | 2.10 | 1.89 | 1.68 |
| 6EV5 | 3.00 | 1.50 | 1.35 | 1.20 | 6SF5 | 3.70 | 1.85 | 1.67 | 1.48 |
| $6 \mathrm{EV7}$ | 2.50 | 1.25 | 1.13 | 1.00 | 6SF5GT | 3.20 | 1.60 | 1.44 | 1.28 |
| 6EW6 | 2.30 | 1.15 | 1.04 | . 92 | 6SF7 | 6.25 | 3.13 | 2.81 | 2.50 |
| 6EW7 Novar | 3.90 | 1.95 | 1.76 | 1.56 | $65 \mathrm{G7}$ | 4.60 | 2.30 | 2.07 | 1.84 |
| 6E×6 | 7.25 | 3.63 | 3.27 | 2.90 | $6 \mathrm{SH7}$ | 4.45 | 2.23 | 2.00 | 1.78 |
| 6EY6 | 3.15 | 1.58 | 1.42 | 1.26 | 65 J 7 | 4.15 | 2.08 | 1.87 | 1.66 |
| 6E25 | 3.40 | 1.70 | 1.53 | 1.36 | 6SJ7GT | 4.15 | 2.08 | 1.87 | 1.66 |
| 6E28 | 3.80 | 1.90 | 1.71 | 1.52 | 6SK7 | 3.95 | 1.98 | 1.78 | 1.58 |
| $6 F 5$ | 4.60 | 2.30 | 2.07 | 1.84 | 6SK7GT | 3.95 3.50 | 1.98 | 1.78 | 1.58 |
| $6 F 6$ | 5.85 | 2.93 | 2.63 | 2.34 | 6SL7GT | 3.50 | 1.75 | 1.58 | 1.40 |
| 6F6G | 5.85 | 2.93 | 2.63 | 2.34 | 6SN7GTB | 2.60 | 1.30 | 1.17 | 1.04 |
| 6F6GT | 5.85 | 2.93 | 2.63 | 2.34 | 6SQ7 | 3.75 | 1.88 | 1.69 | 1.50 |
| 6 F 7 | 11.70 | 5.85 | 5.27 | 4.68 | 6SQ7GT | 3.80 | 1.90 | 1.71 | 1.52 |
| 6F8G | 8.95 | 4.48 | 4.03 | 3.58 | 6S R7 | 3.90 | 1.95 | 1.76 | 1.56 |
| 6FA7 | 2.50 | 1.25 | 1.13 | 1.00 | 6557 | 5.50 | 2.75 | 2.48 | 2.20 |
| $6 F \mathrm{D7}$ | 5.05 | 2.53 Use EM84/6FG6 ${ }^{2.02}$ |  |  | $6{ }_{6} 4$ | 5.45 | 2.73 | 2.45 | 2.18 |
| 6FG6 | 5.05 |  |  |  | 6T8A | 3.40 | 1.70 | 1.53 | 1.36 |
| 6FG7 | 2.75 | 1.38 | 1.24 | 1.10 | $6 \mathrm{U5}$ | 5.55 | 2.78 | 2.50 | 2.22 |
| 6FH5 | 2.55 | 1.28 | 1.15 | 1.02 | 6U8A | 3.30 | 1.65 | 1.49 | 1.32 |
| 6FH8 | 3.30 | 1.65 | 1.49 | 1.32 | 6 V 3 A | 4.55 | 2.28 | 2.05 | 1.82 |
| 6 FM8 | 3.00 | 1.50 | 1.35 | 1.20 | 6 V 6 | 6.75 | 3.38 | 3.04 | 2.70 |
| 6FG5A | 4.05 | 2.03 | 1.82 | 1.62 | 6V6GTA | 2.15 | 1.08 | . 97 | . 86 |
| $6 \mathrm{FG7}$ | 2.30 | 1.15 | 1.04 | . 92 | 6W4GT | 2.40 | 1.20 | 1.08 | . 96 |
| 6FS5 | 3.05 | 1.53 | 1.37 | 1.22 | 6W6GT | 2.85 | 1.43 | 1.28 | 1.14 |
| 6FV6 | 3.55 | 1.78 | 1.60 | 1.42 | $6 \times 4$ | 1.65 | . 83 | . 74 | . 66 |
| 6FV8 | 3.15 | 1.58 | 1.42 | 1.26 | $6 \times 5 \mathrm{GT}$ | 2.10 | 1.05 | . 95 | . 84 |
| 6FW5 | 4.10 | 2.05 | 1.85 | 1.64 | $6 \times 8$ | 3.15 | 1.58 | 1.42 | 1.26 |
| 6G6G | 7.20 | 3.60 | 3.24 | 2.88 | 6Y6G | 4.30 | 2.15 | 1.94 | 1.72 |
| 6GC5 | 3.20 | 1.60 | 1.44 | 1.28 | 6Y6GA 624 | 4.30 | 2.15 | 1.94 Use $84 / 624$ | 1.72 |
| 6GH8 | 3.15 | 1.58 | 1.42 | 1.26 | 624 |  |  | Use 84/624 |  |
| $6 \mathrm{GJ5}$ Novar | 4.55 | 2.28 | 2.05 | 1.82 |  | 7.50 6.00 |  | 3.38 2.70 | 3.00 2.40 |
| 6GK5 | 4.05 | 2.03 | 1.82 | 1.62 | 7 7 5 | 6.00 7.40 | 3.00 3.70 | 2.70 3.33 | 2.40 2.96 |
| 6GK6 | 2.75 | 1.38 | 1.24 | 1.10 .96 | $7 A 6$ $7 A 7$ | 7.55 | 3.70 3.78 | 3.33 3.40 | 2.96 3.02 |
| 6GM6 6GN8 | 2.40 3.70 | 1.20 | 1.08 | 1.10 1.48 | 7A8 | 8.25 | 3.78 4.13 | 3.42 | 3.30 |
| 6GT5 Novar | 4.20 | 2.10 | 1.89 | 1.68 | 7AF7 | 6.00 | 3.00 | 2.70 | 2.40 |
| 6GW6 | 4.15 | 2.08 | 1.87 | 1.66 | 7AG7 | 8.40 | 4.20 | 3.78 | 3.36 |
| 6GX6 | 2.30 | 1.15 | 1.04 | . 92 | 7AH7 | 6.40 | 3.20 | 2.88 | 2.56 |
| 6GY6 | 2.30 | 1.15 | 1.04 | . 92 | $7 A U 7$ | 2.60 | 1.30 | 1.17 | 1.04 |
| 6GY8 | 3.80 | 1.90 | 1.71 | 1.52 | 784 | 7.20 | 3.60 | 3.24 | 2.88 |
|  | 4.00 | 2.00 | 1.80 | 1.60 | 785 | 8.85 | 4.43 | 3.99 | 3.54 |
| 6HB6 | 3.10 | 1.55 | 1.40 | 1.24 | 786 | 5.60 | 2.80 | 2.52 | 2.24 |
| 6HF8 | 3.70 | 1.85 | 1.67 | 1.48 | 787 | 8.10 | 4.05 | 3.65 | 3.24 |
| 6HJ8 | 3.30 | 1.65 | 1.49 | 1.32 | 788 | 5.95 3.50 | 2.98 1.75 | 2.68 1.58 | 2.38 1.40 |
| 6HS6 | 2.50 | 1.25 | 1.13 | 1.00 | $7 \mathrm{C5}$ | 3.50 | 1.75 | 1.58 |  |
| 6HS8 | 2.80 | 1.40 | 1.26 | 1.12 1.46 | $7 C 6$ 787 | 7.75 3.60 | 3.88 1.80 3.85 | 3.49 1.62 | 3.10 1.44 |
| $6 J 5$ | 3.65 | 1.83 | 1.64 | 1.46 | $7 C 7$ $7 E 7$ | 3.60 6.70 | 1.80 3.35 | 1.62 3.02 | 1.44 2.68 |
| 6J5GT | 3.65 | 1.83 | 1.64 | 1.46 | 7 E 7 | 6.70 | 3.35 | 3.02 | 2.68 |
| 6J6A | 2.80 | 1.40 | 1.26 | 1.12 1.98 | RECEIVING TUBES CONTINUED ON NEXI PAGE |  |  |  |  |
| $6 J 7$ | 4.95 | 2.48 | 2.23 |  |  |  |  |  |  |  |

RCA Receiving Tubes (Cont'd)
QUANTITY PRICES ALSO APPLY TO ASSORTED TUBES

| Tube | ist | NET E | H In Qua | tities of: | Tube Type | $\begin{aligned} & \text { List } \\ & \text { Price } \end{aligned}$ | NET EACH In Quantities of: |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TEY6 ${ }^{\text {Type }}$ | Price | 1 to 9 | 10 to 49 | 50 or More |  |  | 1 to 9 | 10 to 49 | 50 or More |
| $\begin{aligned} & 7 E Y 6 \\ & 7 F 7 \end{aligned}$ | \$3.15 | 1.58 | 1.42 | 1.26 | 12BY7A | \$3.05 | 1.53 | 1.37 | 1.22 |
| 758 | 7.95 8.75 | 3.98 | 3.58 | 3.18 | $12 \mathrm{BZ6}$ | 3.10 | 1.55 | 1.40 | 1.24 |
| $7 \mathrm{G7}$ | 6.40 | 4.38 3.20 | 3.94 2.88 | 3.50 | $12 \mathrm{Bz7}$ | 4.40 | 2.20 | 1.98 | 1.76 |
| 7H7 | 6.40 | 3.20 3.20 | 2.88 2.88 | 2.56 2.56 | 12C5 | 9.70 | Use 12 | /12C5 |  |
| 757 | 7.25 | 3.63 | 3.27 |  | 12CA5 |  | 4.85 | 4.37 | 3.88 |
| $7 \mathrm{K7}$ | 8.60 | 3.63 4.30 | 3.87 | 2.90 3.44 | 12CN5 | 2.50 3.45 | 1.25 | 1.13 | 1.00 |
| 7N7 7Q7 | 7.55 | 3.78 | 3.40 | 3.44 3.02 | 12CR6 | 3.45 2.40 | 1.73 | 1.55 | 1.38 |
| 7Q7 | 6.20 | 3.10 | 2.79 | 3.48 2.48 | 12CT8 | 2.40 4.25 | 1.20 2.13 | 1.08 | . 96 |
| $\frac{7 R 7}{7 V 7}$ | 6.05 | 3.03 | 2.72 | 2.42 | 12CU5/12C5 | 2.35 | 1.13 1.18 | 1.91 1.06 | 1.70 .94 |
| 767 $7 \times 7$ | 4.90 7.00 | 2.45 | 2.21 | 1.96 | $12 \mathrm{CU6}$ | Use 12BQ6GTB/12CU6 |  |  |  |
| $7 \times 7$ | 8.10 | 3.50 4.05 | 3.15 3.65 | 2.80 3.24 | $12 \mathrm{CX6}$ | 2.90 | 1.45 | 1.31 | 1.16 |
| $7 \mathrm{7Y4}$ | 7.15 | 4.05 3.58 | 3.65 3.22 | 3.24 2.86 | 12D4 ${ }^{\text {12DB5 }}$ | 2.75 | 1.38 | 1.24 | 1.10 |
| 724 | 6.90 | 3.58 3.45 | 3.62 3.11 | 2.86 2.76 | 12DE8 | 2.75 3.30 | 1.38 1.65 | 1.24 | 1.10 |
| 8AU8 8AW8A | 4.05 | 2.03 | 1.82 | 1.62 | 12DK6 | 2.40 | 1.20 | 1.49 | 1.32 |
| 8AW8A | 3.70 | 1.85 | 1.67 | 1.48 | 12DK7 | 2.95 | 1.20 | 1.08 | . 96 |
| $88 A 8 A$ $8 B H B$ | 3.65 | 1.83 | 1.64 | 1.46 | $12 \mathrm{DL8}$ | 5.80 | 1.48 2.90 | 1.33 2.61 | 1.18 |
| 8BN8 | 3.65 3.25 | 1.78 1.63 | 1.60 | 1.42 | $12 \mathrm{DQ6B}$ | 4.20 | 2.10 | 1.89 | 2.32 1.68 |
| 8BG5 | 2.40 |  |  | 1.30 .96 | $12 \mathrm{DG7}$ | 3.45 | 1.73 | 1.55 | 1.38 |
| ${ }_{8}^{8 C G 7}$ | 2.50 | 1.25 | 1.13 | 1.00 | 12 DS 12 DT 5 | 3.40 | 1.70 | 1.53 | 1.36 |
| $8 C M 7$ $8 C N 7$ | 2.90 | 1.45 | 1.31 | 1.16 | 12DT8 | 3.05 | 1.53 | 1.37 | 1.22 |
| 8CN7 8CS7 | 2.80 | 1.40 | 1.26 | 1.12 | $12 \mathrm{DT8}$ $12 \mathrm{DU7}$ | 3.80 | 1.90 | 1.71 | 1.52 |
| 8C57* | 2.95 | 1.48 | 1.33 | 1.18 | $12 \mathrm{DU7}$ $12 \mathrm{DV8}$ | 4.05 3.55 | 2.03 | 1.82 | 1.62 |
| $8 \mathrm{CX8}$ | 3.85 | 1.93 |  |  |  |  | 1.78 | 1.60 | 1.42 |
| 8EB8 | 3.75 | 1.88 | 1.69 | 1.50 | 120W8* | 3.25 3.55 | 1.63 | 1.46 | 1.30 |
| 8EM5 | 3.45 | 1.73 | 1.55 | 1.38 | $12 \mathrm{DY8}$ | 3.55 4.60 | 1.78 | 1.60 | 1.42 |
| 8 ET7 | 4.40 | 2.20 | 1.98 | J. 76 | 12DZ6 | 4.60 2.55 | 2.30 1.28 | 2.07 | 1.84 |
| 8 FQ7 | 2.35 | 1.18 | 1.06 | $\begin{array}{r}1.76 \\ \hline 1.94\end{array}$ | 12EA6 | 2.55 2.65 | 1.28 1.33 | 1.15 1.19 | 1.02 |
| 8GN8 | 3.75 | 1.88 | 1.69 | 1.50 |  |  |  | 1.19 | 1.06 |
| 8 KA8 | 3.85 | 1.93 | 1.73 | 1.54 | 12EC8 | 3.60 | 1.80 | 1.62 | 1.44 |
| $9 \mathrm{9AT}$ | 2.80 | 1.40 | 1.26 | 1.12 | 12EG6 | 2.85 | 1.43 | 1.28 | 1.14 |
| 98R7 | 3.35 | 1.68 | 1.51 | 1.34 | 12EH5 | 2.55 2.90 | 1.28 | 1.15 | 1.02 |
| 9CL8 | 3.15 | 1.58 | 1.42 | 1.26 | 12EK6 | 2.90 2.55 | 1.45 | 1.31 | 1.16 |
| 9U8A | 3.55 | 1.78 |  |  |  |  | 1.28 | 1.15 | 1.02 |
| 10 CB | 4.25 | 2.13 | 1.91 | 1.42 1.70 | 12EL6 | 2.00 | 1.00 | . 90 | . 80 |
| $10 \mathrm{DE7}$ | 3.40 | 1.70 | 1.53 | 1.36 | 12EG7 | 3.05 2.90 | 1.53 | 1.37 | 1.22 |
| $100 \mathrm{R7}$ | 2.95 | 1.48 | 1.33 | 1.18 | 12F8 | 2.90 2.75 | 1.45 | 1.31 | 1.16 |
| 10EG7 | 4.60 | 2.30 | 2.07 | 1.84 | 12FK6 | 2.75 2.10 | 1.38 | 1.24 | 1.10 |
| 10EM7 | 3.70 | 1.85 | 1.67 | 1.48 |  |  | 1.05 | . 95 | . 84 |
| $10 \mathrm{HF8}$ | 3.75 | 1.88 | 1.69 | 1.50 | 12FM6 | 2.00 | 1.00 | . 90 | . 80 |
| 11CY7 12 ¢gGT | 3.25 | 1.63 | 1.46 | 1.30 | 12FG8 | 2.95 | 1.48 | 1.33 | 1.18 |
| $12 A .8 G T$ $12 A B 5$ | 8.85 | 4.43 | 3.99 | 3.54 | 12FR8 | 4.35 | 2.18 | 1.96 | 1.74 |
| 12 AB5 | 2.45 | 1.23 | 1.99 1.10 | 1.54 .98 | $12 F V 7$ $12 F X 8$ | 3.65 3.80 | 1.83 1.90 | 1.64 | 1.46 |
| 120.C6 | 2.20 |  |  |  |  |  | 1.90 | 1.71 | 1.52 |
| 12AD6 | 2.40 | 1.20 | 1.08 | . 88 | 12GA6 | 2.30 4.20 | 1.15 | 1.04 | . 92 |
| 12AE6A | 2.05 | 1.03 | . 92 | . 82 | 12G 12 Novar | 4.20 4.60 | 2.10 | 1.89 | 1.68 |
| 12 AE7 | 3.75 | 1.88 | 1.69 | 1.50 | 12 GT 5 Novar | 4.60 4.25 | 2.30 | 2.07 | 1.84 |
| 12 AF 3 | 2.90 | 1.45 | 1.31 | 1.16 | 12H6 | 4.25 3.95 | 2.13 1.98 | 1.91 1.78 | 1.70 |
| 12 AF6 | 2.35 | 1.18 |  |  |  |  |  |  | 1.58 |
| 12AH7GT | 5.55 | 2.78 | 2.50 | 2.22 | 12J7GT | 4.35 7.40 |  |  | 1.74 |
| 12AJ6 | 2.55 | 1.28 | 1.15 | 1.02 | 12 l | 7.40 4.60 | 3.70 2.30 | 3.33 <br> 2.07 | 2.96 |
| 12AL5 | 1.90 | . 95 | . 86 | 1.02 .76 | 12J8 | 4.60 2.95 | 2.30 1.48 | 2.07 1.33 | 1.84 |
| 12AL8 | 6.55 | 3.28 | 2.95 | 2.62 | $12 \mathrm{K7GT}$ | 2.95 7.00 | 1.48 3.50 | 1.33 3.15 | 1.18 2.80 |
| 12AQ5 | 2.60 | 1.30 |  |  |  |  |  |  | 2.80 |
| 12 AT6 | 1.85 | . 93 | . 83 | . 74 | 12L6GT | 8.70 250 | 4.35 | 3.92 | 3.48 |
| 12 AT7 | 3.05 | 1.53 | 1.37 | 1.22 | 12Q7GT | 2.50 5.80 | 1.25 | 1.13 | 1.00 |
| 12 AU6 | 2.15 | 1.08 | .97 .97 | . 86 | 12R5 | 5.80 3.10 | 2.90 | 2.61 | 2.32 |
| 12AU7A | 2.45 | 1.23 | 1.10 | . 98 | 12 SAT | 3.10 4.30 | 1.55 2.15 | 1.40 | 1.24 |
| 12AV5GA | 3.85 | 1.93 | 1.73 |  |  |  |  | 1.94 | 1.72 |
| 12 AV6 | 1.65 | . 83 | .73 .74 | . 66 | $\begin{aligned} & 125 A 7 \\ & 12 S C 7 \end{aligned}$ | 4.30 5.50 |  |  | 1.72 |
| $12 \mathrm{AV7}$ | 3.55 | 1.78 | 1.60 | 1.42 | 12SF5 | 5.50 4.10 | 2.75 2.05 | 2.48 1.85 | 2.20 |
| 12AW6 | 3.30 | 1.65 | 1.49 | 1.32 | $125 F 5$ $12 S F 7$ | 4.10 6.60 | 2.05 3.30 | $\begin{aligned} & 1.85 \\ & 2.97 \end{aligned}$ | 1.64 |
| $12 \mathrm{~A} \times 4 \mathrm{GTB}$ | 2.70 | 1.35 | 1.21 | 1.08 | $12 \mathrm{SG7}$ | 6.60 4.65 | 3.30 2.33 | 2.97 2.09 | 2.64 1.86 |
| $12 A \times 7$ $12 A X 7 A$ | 2.55 | 1.28 | 1.15 | 1.02 | $12 \mathrm{SH7}$ |  |  |  |  |
| $12 A X 7 A$ $12 A Y 3$ Novar | 2.55 | 1.28 | 1.15 | 1.02 | $125 \mathrm{J7}$ | 4.20 |  |  |  |
| 12AY3 Novar 12AY7 | 2.80 | 1.40 | 1.26 | 1.12 | 12 K 7 | 3.95 | 1.98 | $\begin{aligned} & 1.89 \\ & 1.78 \end{aligned}$ | $\begin{aligned} & 1.681 \\ & 1.58 \end{aligned}$ |
| 12AY7 | 5.00 | 2.50 | 2.25 | 2.00 | 12SK7GT | 3.95 | 1.98 | 1.78 | 1.58 1.58 |
| 2B4A | 3.05 <br> 2.70 | 1.53 | 1.37 | 1.22 | 12SL7GT | 3.75 | 1.88 | 1.69 | 1.50 |
| 12BA6 | 1.65 | 1.35 .83 | 1.21 .74 | 1.08 .66 | 12SN7GTA | 2.70 | 1.35 | 1.21 | 1.08 |
| $2 \mathrm{BA7}$ | 5.95 | 2.98 | 2.68 | 2.38 | 12SQ7GT | 3.75 3.75 | 1.88 1.88 | 1.69 | 1.50 |
| 12BD6 | 2.45 | 1.23 | 1.10 | 2.38 .98 | 12SR7 | 3.75 5.45 | 1.88 2.73 | 1.69 2.45 | 1.50 |
| $12 \mathrm{BE6}$ | 1.75 | . 88 | . 79 | . 70 | 12U7 | 5.45 2.65 | 2.73 1.33 | 2.45 1.19 | 2.18 1.06 |
|  | 2.20 | 1.10 | . 99 | . 88 | 12V6GT | 2.15 |  |  |  |
| $\begin{aligned} & 12 \mathrm{BH} 7 \mathrm{~A} \\ & 12 \mathrm{BK5} \end{aligned}$ | 3.05 | 1.53 | 1.37 | 1.22 | 12W6GT | 3.00 | 1.50 | 1.35 | .86 1.20 |
| $\begin{aligned} & \text { 12BK5 } \\ & 12 \mathrm{BL} 6 \end{aligned}$ | 4.00 | 2.00 | 1.80 | 1.60 | $12 \times 4$ | 1.90 | . 95 | . 86 | 1.20 .76 |
| 12BG6GTB/12CU6 | 2.30 | 1.15 | 1.04 | . 92 | 130 E 7 | 3.40 | 1.70 | 1.53 | 1.36 |
| 128R7 | 4.45 3.20 | 2.23 1.60 | 2.00 1.44 | 1.78 1.28 | 130R7 | 3.40 | 1.70 | 1.53 | 1.36 |
| $12 \mathrm{BV7}$ | 3.20 | 1.60 | 1.44 | 1.28 | 13EM7 $13 \mathrm{FD7}$ | 4.75 5 | 2.38 | 2.14 | 1.90 |
| 128W4 | 2.90 | 1.45 | 1.31 | 1.16 | $14 A 7$ | 5.35 5.90 | 2.68 | 2.41 | 2.14 |
|  |  |  |  |  | 14 A7 | 5.90 | 2.95 | 2.66 | 2.36 |

# RCA Receiving Tubes - Argos Tube Caddies 

RCA RECEIVING TUBES (Cont'd)

| Tube Type | List Price | NET EACH In Quantities of |  |  | Tube Type | List Price | NET EACH in Quantities of |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 to 9 | 10 to 49 | 50 or More |  |  | 1 to 9 | 10 to 49 | 50 or More |
| 14AFT | \$6.05 | 3.03 | 2.72 | 2.42 | 34GD5 | \$2.10 | 1.05 | .95 .95 | .84 .84 |
| 14B6 | 5.60 | 2.80 | 2.52 | 2.24 | 34G D5A | 2.10 6.00 | 1.05 3.00 | .95 2.70 | 2.40 |
| $14 \mathrm{C7}$ | 6.00 | 3.00 | 2.70 | 2.40 3.26 | 35A5 | 6.00 3.40 | 1.05 1.70 | 1.53 | 1.36 |
| 14F7 | 8.15 | 4.08 | 3.67 3.02 | 3.26 2.68 | 3585 $35 C 5$ | 3.40 2.15 | 1.08 | . 97 | . 86 |
| 14 F 8 | 6.70 | 3.35 | 3.02 | 2.68 |  |  |  | 1.55 |  |
| 14GT8 | 3.00 | 1.50 | 1.35 | 1.20 | 35DZ8 35EH5 | 3.45 2.30 | 1.73 1.15 | 1.04 | .92 .92 |
| 14.97 | 6.20 | 3.10 | 2.79 | 2.48 |  | 2.30 | 1.15 | 1.04 | . 92 |
| 14 R7 | 7.20 | 3.60 | 3.24 | 2.88 | 35G6GT | 2.40 | 1.20 | 1.08 | . 96 |
| 15EW6* | 2.35 | 1.18 | 1.06 1.49 | .94 1.32 | 35W64 | 1.05 | . 53 | . 47 | . 42 |
| 15HB6 | 3.30 | 1.65 | 1.49 | 1.32 | 35W4 |  | 2.40 |  |  |
| 17AX4GT | 2.70 | 1.35 | 1.21 | 1.08 | $35 Y 4$ 3523 | 4.80 5.00 | 2.50 | 2.25 | 2.00 |
| 17 YY3 Novar | 2.80 | 1.40 | 1.26 | 1.12 | 3523 - ${ }^{3524}$ | 5.00 2.70 | 1.35 | 1.21 | 1.08 |
| 178H3 Novar | 3.05 | 1.53 | 1.37 | 1.22 | 3524GGT | 1.85 | .93 | . 83 | . 74 |
| 178G6GTE | 5.55 | 2.78 | 2.50 | 2.22 3.04 | 3525G3B 36AM | 1.50 | . 75 | . 68 | . 60 |
| 17 C 9 | 7.60 | 3.80 | 3.42 | 3.04 |  |  |  | 2.61 | 2.32 |
| 17D4 | 2.75 | 1.38 | 1.24 | 1.10 | 41 42 | 5.80 5.15 | 2.58 | 2.32 | 2.06 |
| 17 DE 4 | 2.85 | 1.43 | 1.28 | 1.14 | 43 | 7.60 | 3.80 | 3.42 | 3.04 |
| 17 DM4 | 2.85 | 1.43 | 1.28 | 1.14 | 47 | 9.15 | 4.58 | 4.12 | 3.66 |
| 17DO6B | 4.20 | 2.10 | 1.89 | 1.68 1.84 | 50.45 | 6.25 | 3.13 | 2.81 | 2.50 |
| 17GJ5 Novar | 4.60 | 2.30 | 2.07 | 1.84 | $50 \mathrm{B5}$ | 2.95 | 1.48 | 1.33 | 1.18 |
| 17GT5 Novar | 4.25 | 2.13 | 1.91 | 1.70 | 50 C 5 | 2.15 | 1.08 | . 97 | . 86 |
| 17GW6 | 4.25 | 2.13 | 1.91 | 1.70 1.00 | 50 DC 4 | 1.55 | . 78 | . 70 | . 62 |
| $17 \mathrm{H3}$ | 2.50 | 1.25 | 1.13 | 1.00 | $50 \mathrm{EH5}$ | 2.30 | 1.15 | 1.04 | . 92 |
| 18 A 5 | 4.15 | 2.08 | 1.87 | 1.66 .80 | 50FE5 | 3.65 | 1.83 | 1.64 | 1.46 |
| 18FW6 | 2.00 | 1.00 | . 90 | . 80 |  | 2.30 | 1.15 | 1.04 | . 92 |
| 18FX6 | 2.15 | 1.08 | . 97 | . 86 | 50L6GT | 2.55 | 1.28 | 1.15 | 1.02 |
| 18FY6 | 1.65 | . 83 | . 74 | . 66 | $50 \times 6$ | 6.20 | 3.10 | 2.79 | 2.48 |
| 18GD6A | 2.15 | 1.08 | . 97 | $\begin{array}{r}.86 \\ \hline .40\end{array}$ | 50Y6GT | 4.60 | 2.30 | 2.07 | 1.84 |
| 19AU4 | 3.50 | 1.75 | 1.58 | 1.40 1.38 | $50 Y 7 \mathrm{GT}$ | 4.50 | 2.25 | 2.03 | 1.80 |
| 19AU4GTA | 3.45 | 1.73 | 1.55 |  |  |  | 1.25 | 1.13 | 1.00 |
| 19BG6GA | 6.50 | 3.25 | 2.93 | 2.60 | 70L7GT | 10.15 | 5.08 | 4.57 | 4.06 |
| 19CL8A | 3.15 | 1.58 | 1.42 | 1.26 |  | 6.80 | 3.40 | 3.06 | 2.72 |
| 19EA8 | 3.25 | 1.63 | 1.46 | 1.30 1.02 | 78 | 7.20 | 3.60 | 3.24 | 2.88 |
| 19HS6 | 2.55 3.95 | 1.28 | 1.15 1.78 | 1.02 | 80 | 4.20 | 2.10 | 1.89 | 1.68 |
| 19 J 6 | 3.95 | 1.98 | 1.78 | 1.58 | 80 |  |  | 1.64 | 1.46 |
| 1978 | 3.40 | 1.70 | 1.53 | 1.36 | 117LT/117M7GT | 10.15 | 5.08 | 4.57 | 4.06 |
| $19 \times 8$ | 4.35 | 2.18 | 1.96 | 1.74 | 117M7GT |  | Us | 17L7/117 | 7GT |
| 20 E 27 | 3.65 | 1.83 | 1.64 | 1.46 | 117N7GT |  | 6.80 | 6.12 | 5.44 |
| 22EH3 Novar | 3.05 | 1.53 | 1.37 | 1.22 1.24 | 117P7GT | 13.60 | 6.80 | 6.12 | 5.44 |
| 22DE4 | 3.10 | 1.55 | 1.40 | 1.24 | 117P7GT |  |  |  | 1.74 |
| 24A | 6.60 | 3.30 | 2.97 | 2.64 | 11723 GT | 7.35 | 3.55 | 3.20 | 2.84 |
| 25AV5GA | 4.25 | 2.13 | 1.91 | 1.70 | 11726GT | 7.70 | 3.95 | 3.56 | 3.16 |
| 25AX4GT | 2.90 | 1.45 | 1.31 | 1.16 | 5642* | 3.75 | 1.88 | 1.69 | 1.50 |
| 25BK5 | 3.65 | 1.83 | 1.64 | 1.46 1.86 | 5881 | 6.40 | 3.20 | 2.88 | 2.56 |
| 25B96GTB/25CU6 | 4.65 | 2.33 | 2.09 | 1.86 | 5887 |  | 2.25 | 2.03 | 1.80 |
| $25 C 5$ | 2.15 | 1.08 | . 97 | . 86 | 7973 | 2.95 | 1.48 | 1.33 | 1.18 |
| 25CA5 | 2.60 | 1.30 | 1.17 | 1.04 2.34 | 7025 A | 6.90 | 3.30 | 2.97 | 2.64 |
| 25CD6GB | 5.85 | 2.93 | 2.63 | CU6 ${ }^{2.34}$ | 7167* | 3.85 | 1.93 | 1.73 | 1.54 |
| 25CU6 |  | 2.78 | 2.50 | 2.22 | 7189 | 2.65 | 1.33 | 1.19 | 1.06 |
| 25 DN6 | 5.55 | 2.78 | 2.50 | 2.22 |  | 3.70 | 1.85 | 1.67 | 1.48 |
| 25EC6 | 5.70 | 2.85 | 2.57 | 2.28 | 7794 | 2.85 | 1.43 | 1.28 | 1.14 |
| 25EH5 | 2.30 | 1.15 | 1.04 | 3.92 | 7355* | 2.70 | 1.35 | 1.21 | 1.08 |
| 25L6 | 8.85 | 4.43 | 3.99 | 3.54 .94 | 7408 | 2.15 | 1.08 | . 97 | . 86 |
| 25W4GT | 2.70 | 1.35 | 1.21 | 1.08 |  |  |  |  | 1.18 |
| 2575 | 4.60 | 2.30 | 2.07 | 1.84 | 7591 7695 | 2.95 4.40 | 1.48 2.20 | 1.98 | 1.76 |
| 2526GT | 2.90 | 1.45 2.70 | 1.31 2.43 | 1.16 2.16 | 7868 Novar | 3.30 | 1.65 | 1.49 | 1.32 |
| 27 | 5.40 | 2.70 1.10 | 2.43 .99 | 2.16 .88 | 7868 Novar |  |  |  |  |
| 32ET5 | 2.20 | 1.10 | . 99 | . 88 |  |  |  |  |  |

RCA RECEIVING TUBE MANUAL

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CARRY-ALL" CADDY a complete radio-TV service shop in a single caddy 1 Features popular "break-away" dcsign opening out ward from center to permit quickest access to all sections. Partitions aid in orderly arrangement of parts; one side has snap-down cover for kecping parts separatex. Has two clasp locks; plastic carrying handie. Scuft-proof brown $8^{\circ}$ deep. Slips. wt.. 12 thes. 1532 wide. $8^{\circ}$ deep. Slıpk. wt... 12 ihs.
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Type TC-5. The largest tube caddy
made by made by nowned cabinet manufacturer built dou built doucaddy that
provides guick accessibllty to tubes, tools, meters and parts. Carries up to 325 tubes with plenty of space for any assortment of small parts. Entre caddy features over 3300 cu . in. volume-for the serviceman who belleves in carrying a full load to save extra tripa! Has removable $23 / 4$ " deep tray featuring "eas crate" design for safely carring fuses, bulbe, ctc; cutouts for easy removal. Brown vinyl. $161 / 2^{\prime \prime}$ high, $24^{\prime \prime}$ wide. $81 / 2^{\prime \prime}$ deep. Wt.0 19 lbs 86 NX 153 . List. $\$ 36.00$. NET
21.08

## USE ALIIED'S CREDIT FUND PLAN NO MONEY DOWN!

Get the picture tube you need right now-Use Allied's Credit Fund Plan, the most liberal plan in electronics.
no money downl See back section of Catalog for full details.

| Stock No. |  | Wt., Lbs. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Dept. | Tube Type |  |  |
| AU3 | 8DP4* | 4 | 25.67 |
| AU3 | 10BP4A* | 13 | 29.10 |
| AU3 | 10FP4A | 13 | 31.06 |
| AU3 | $12 \mathrm{KP4A}$ | 17 | 30.70 |
| AU3 | 12LP4A* | 17 | 30.70 |
| AU3 | 14ATP4 | 12 | 25.14 |
| AU3 | $14 \mathrm{BP4}$ |  | Use 14EP4 |
| AU3 | $14 \mathrm{CP4}$ |  | Use $14 \mathrm{EP4}$ |
| AU3 | 14EP4* | 14 | 28.74 |
| Au3 | 14HP4* | 14 | 27.77 |
| $\overline{A W 3}$ | 14NP4 $14 \mathrm{NP4}$ |  | Use 14VP4 |
| AU3 <br> AU3 | $14 \mathrm{NP4A}$ | 10 | Use 14WP4 |
| AU3 | $14 \mathrm{RP4A}$ |  | Use ${ }^{30.06}$ |
| AU3 | $14 \mathrm{SP} 4{ }^{\text {1 }}$ |  | Use $14 \mathrm{WP4}$ |
| AU3 | 14WP4 | 12 | 30.06 |
| AU3 | 142P4 |  | $14 \mathrm{WP4}$ |
| AU3 | 16AP4A* | 17 | 28.29 |
| 1U3 | 16DP4A* | 23 | 29.40 |
| AU3 | 16GP4B* | 16 | 27.77 |
| AU3 | $16 \mathrm{kP4}$ |  | Use 16RP4A |
| AU3 | $16 \mathrm{KP4A}$ |  | Use 16RP4A |
| AU3 | 161.P4A* | 25 | 32.66 |
| AU3 | 16RP4A | 21 | 30.06 |
| AU3 | 16TP4** | 21 | 30.06 |
| AU3 | 1617P4A* | 21 | 32.66 |
| AU3 | 162P4 |  | Use 16LP4A |
| AU3 | $17 \mathrm{AP4}$ |  | Use 178P4B |
| AU3 | 17ATP4 |  | Use 17BJP4 |
| AU3 | 17ATP4A |  | Use 17BJP4 |
| AU3 | 17AVP4A |  | Use $17 \mathrm{BJP4}$ |
| AU3 | 17BJP4 | 17 | 26.17 |
| AU3 | 178P4* |  | Use $178 \mathrm{BP4B}$ |
| AU3 | $\begin{aligned} & 17 \mathrm{BP} 4 \mathrm{~B} \\ & 17 \mathrm{BP} 4 \mathrm{C} \end{aligned}$ | 21 | $25.48$ |
| AU3 | 178RP4 |  | Use 17DSP4 |
| AU3 | $17 \mathrm{BUP4}$ |  | Use $17 \mathrm{BJP4}$ |
| ヘU3 | $17 \mathrm{BVP4}$ |  | Use 17CSP4 |
| AU3 | $17 \mathrm{BWP4}$ |  | Use 17 CSP 4 |
| AU3 | $17 \mathrm{BZP4}$ | 14 | $29.13$ |
| AU3 | $17 \mathrm{CAP4}$ |  | Use 17DSP4 |
| AU3 | 17 CBP 4 |  | Use 178JP4 |
|  | 17 CDP 4 | 14 | 37.17 |
| AU3 | $17 \mathrm{CFP4}$ $17 \mathrm{CKP4}$ | 17 | 26.17 |
| AU3 | $17 \mathrm{CKP4}$ | .... | Use 17DSP4 |
| AU3 | $17 \mathrm{CLP4}$ |  | Use 178JP4 |
| AU3 |  | 16 | 27.44 |
| AU3 | 17CSP4 | 13 | 29.79 |
| AU3 | $17 \mathrm{CYP4}$ | 17 | Use 17 DSP 4 $34.15$ |
| AU3 | $17 \mathrm{DAP4}$ | 13 | 35.47 |
| AU3 | 17DKP4 | 14 | 29.79 |
| AU3 | $17 \mathrm{DLP4}$ |  | Use 17DSP4 |
| AU3 | $17 \mathrm{DQP4}$ | 13 | 29.13 |
| AU3 | 17DSP4 | 13 | 29.13 |
| AU3 | $17 \mathrm{DTP4}$ |  | Use 17DKP4 |
| AU3 | 17DXP4 |  | 29.13 |
| AU3 | 176P4* | 16 | 30.06 |
| AU3 | 1711P4A |  | Use 17HP4B |
| AU3 | $17 \mathrm{HP4B}$ | 23 | 25.48 |
| AU3 | $177 \mathrm{~T}^{4}$ |  | Use 178P4B |
| AU3 | 17L14A | 23 | $24.52$ |
| AU3 | $170 \mathrm{P}^{\text {a }}$ | 23 | 25.17 |
| AU3 | 17RP4* |  | Use 17HP4B |

## ALL TUBES GUARANTEED FOR ONE FULL YEAR

Premium-Quality Picture Tubes at Low Cosi For razor-sharp viewing. choose your replacement tube from $R C A$ 's renowned "Silverama" premium-quality line. Dependable "Silverama" picture tubes feature aluminized screens, except types with *(asterisk). Where substitutes are indicated (for original types no longer being manufactured), substitution is directly interchangeable. When ordering givo Dept. and Tube Type No.

| Stock No. |  | Wt. Lbs. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ | Stock No. |  | Wt., Lbs. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dept. | Tube Type |  |  | Dept. | Tube Type |  |  |
| AU3 | $17 \mathrm{RP4C}$ 17 TP |  | Use $17 \mathrm{HP4B}$ | AU3 | $21 C 2 P 4$ |  | Use 21DEP4A |
| AU3 | 17TP4* | 16 |  | AU3 | 21 DAP4 |  | Use 21 DEP4A |
| AU3 | $17 \mathrm{VP4}$ |  | Une $17 \mathrm{LP4A}$ | AU3 | 21 DEP4 |  | Use 21 DEP4A |
| AU3 | 17VP4B |  | Une 17LP4A | AU3 | $210 E P 4$ A | 26 | 32.42 |
| $1 \mathrm{U}^{3}$ | 17 YP 4 |  | Use 170P4A |  |  |  |  |
| AU3 | 19 AFP | 24 |  | AU3 | 211 LPP | 30 | 29.98 |
| AU3 | 19A124 ${ }^{\text {P }}$ | 24 | 32.02 | AU3 | $210 \mathrm{DP4}$ |  | Jse 21 FAP4 |
| AU3 | $19 \mathrm{AVP4}$ | 19 | $\begin{aligned} & 32.02 \\ & 32.90 \end{aligned}$ | AU3 | $21 \mathrm{DNP4}$ |  | Use $21 \mathrm{CBP4A}$ |
| AU3 | 19AXP4 |  | Use 19AYP4 | $\begin{aligned} & \text { AU3 } \\ & \text { AU3 } \end{aligned}$ | $\begin{aligned} & 21 D Q P 4 \\ & 21 D S P 4 \end{aligned}$ | 34 | $\begin{gathered} \text { Use } 21 \mathrm{LP} 4 \\ 29.98 \end{gathered}$ |
| AU3 | $19 \mathrm{AYP4}$ | 20 | $32.90$ | AU3 | $21 E P 4$ |  |  |
| AU3 | 19XP4 | 24 | $32.90$ | $\begin{aligned} & \text { AUS } \\ & \text { AU3 } \end{aligned}$ | $21 \mathrm{FAP} 4$ |  | Use 21 FDP4 |
| AU3 | $20 \mathrm{CP4}$ |  | Use 20 PP4C | AU3 | $21 E \mathrm{EPP}$ |  | Use 21 EOP4 |
| AU3 | 20CP4A |  | Use 20DP4C | AU3 | $21 E P 4 B$ | 34 | $30.90$ |
| AU3 | 20CP4B |  | Use 20DP4C | AU3 | 21 EQP4 | 29 | 32.42 |
| AU3 | 20CP4C |  | Use 20DP4C | AU3 | $21 E S P 4$ |  | Use $21 \mathrm{FAP4}$ |
| AU3 | 20CP4D |  | Use 20DP4C | AU3 | $21 \mathrm{FAP4}$ | 26 | 32.42 |
| AU3 | $20 \mathrm{DP4A}$ |  | Use 20DP4C | AU3 | 21 FDP4 | 26 | 41.28 |
| AU3 | 20DP4B |  | Use 20DP4C | AU3 | $\begin{aligned} & 21 \text { FLP4 } \\ & 21 \text { FPA } \end{aligned}$ |  | Use $21 \mathrm{CBP4}$ |
| AU3 | 20DP4C | 29 | 33.32 |  |  |  |  |
| AU3 | $20 \mathrm{HP4}$ | 2 | Use $20 \mathrm{HP4}$ | AU3 | $\begin{aligned} & 21 \text { 1FP4A } \\ & 21 F P 4 C \end{aligned}$ |  | Use 21HP4C |
| AU3 | $20 \mathrm{HP4B}$ |  | Use 2011P4D | AU3 | $21 \mathrm{MP4*}$ | 25 | $35.94$ |
| AU3 | $20 \mathrm{HP} 1 \mathrm{C}$ $20 \mathrm{HP4D}$ |  | Use 20HP4D | AU3 | $21 \mathrm{WP4A}$ | 31 | $\begin{aligned} & 35.94 \\ & 32.42 \end{aligned}$ |
| AU3 | 20LP4 |  |  | AU3 | $21 \times \mathrm{P} 4 \mathrm{~A}$ | 33 | 32.42 |
| AU3 | 20MP4 |  | Use 20HP4D | AU3 | 21 YP4A | 33 | 29.33 |
| AU3 | 21 ACP 4 |  | Use $21 \mathrm{AMP} \mathrm{P}^{\text {d }}$ | AU3 | $217 \mathrm{P4}$ |  | Use 212 P 4 B |
| AU3 | $21 \mathrm{ACP4A}$ |  | Use 21AMP4A | AU3 | $212 P 4 B$ $23 A H P 4$ | $33$ | 29.98 40.28 |
| AU3 | 21 AFP4 |  | Use $21 \mathrm{YP4}$ | AU3 | $23 A N P 4$ | 36 | Use 20.28 KP 4 |
| AU3 | 21 AlP P4 |  | Use 21CBP4A | AU3 |  |  |  |
| AU3 | $21 \mathrm{ALP4A}$ |  | Use 21CBP4A | AU3 | $\begin{aligned} & 23 A W P 4 \\ & 23 B J P 4 \end{aligned}$ |  | $40.28$ |
| AU3 | 21ALP4B |  | Use $21 \mathrm{CBP4A}$ | AU3 | $23 \mathrm{BKP4}$ | 45 | $\begin{aligned} & 40.28 \\ & 47.04 \end{aligned}$ |
| AU3 | $21 \mathrm{AMP4}$ |  | Use $21 \mathrm{AMP4A}$ | AU3 | $23 B 1 . P 4$ | 45 | 48.34 |
| AU3 | 21.1MP4A | 27 | 29.98 | AU3 | $23 C P 4$ | 41 | 47.04 |
| AU3 | 21 ANP4 |  | Use $21 \mathrm{CBP4A}$ | AU3 |  | 41 |  |
| AU3 | $21 \mathrm{ANP4A}$ |  | Use $21 \mathrm{CBP4A}$ | AU3 | ${ }_{23 \mathrm{GP}}{ }^{2}$ | 41 | Use $23 \mathrm{CP4}$ |
| AU3 | 21 21 AOP'* | 25 | 33.98 | AU3 | $23 \mathrm{HP4}$ |  | Use 23 CP 4 |
| AU3 AU3 | 21 21 21001 |  |  | AU3 | $23 \mathrm{MP4}$ | 41 | 40.28 |
| AU3 | ${ }_{21 A T P 4}$ |  | Use 21AMP4A | AU3 | $23 \times 14$ |  | Use $23 \mathrm{VP4}$ |
| AU3 | $21 \mathrm{ATP4A}$ |  | Use 21CBP4A | All3 | $23 Y P 4$ | 45 | 47.04 |
| AU3 | 21ATP4B |  | Use 21C8P4A | AU3 | $24 A D P 4$ |  | Use 24CP4A |
| AU3 | 21 AUP4 |  | Une $21 \mathrm{AVP4}$ | AU3 | 24AEP4 | 43 | 43.16 |
| AU3 | $21 \mathrm{AlP4}$ |  | Use 21AVP4B | AU3 | $\begin{aligned} & 24 \mathrm{AHP}_{4} \\ & 24 \mathrm{ALP} \end{aligned}$ | 37 |  |
| AU3 | $21 A 11 P 4 B$ |  | Use 21AVP4B | AU3 | 24ANP4 |  |  |
| AU3 | 21 AVP4A |  | Use 21AVP4B | AU3 | 24ATP4 |  | Use 24 AEP |
| AU3 | 21 AVP4B | 33 | 29.98 | AU3 | $24 \Lambda U P 4$ | $39$ | 6. |
| AU3 | 21 A WP4 | 33 | 29.98 | AU3 | $24 B A P 4$ | 34 | 60 |
| AU3 | 21 BAP4 | .... | Use 21 CBP4A | AU3 | $24 \mathrm{CP} 4$ |  |  |
| AU3 | 21 BNP4 |  | Use 21CBP4A |  |  |  |  |
| AU3 | 21 BSP4 |  | Use $21 A M P 4$ A | AU3 | $\begin{aligned} & 24 \text { CP4A } \\ & 24 \mathrm{DP} \end{aligned}$ | 39 | $\text { Use } \begin{aligned} & 43.16 \\ & 24 \mathrm{APP}_{4} \end{aligned}$ |
| AU3 | 21 BTP4 |  | Use $21 \mathrm{CBP4A}$ | AU3 | $24 \mathrm{DP4}$ A |  | Use 24AEP4 |
| AU3 AU3 | $21 \mathrm{CBP4}$ |  | Use 21CBP4A | AU3 | 24QP4 |  | Use 24CP4A |
| AU3 | 21CBP4A | 33 | 29.98 | AU3 | 24 TP4 |  | Use 24CP4A |
| AU3 <br> AU3 | 21CBP48 |  | Use $21 \mathrm{CBP4A}$ | AU3 | 24VP4 |  | Use 24CP4A |
| AU3 | 21CEP4 2:CEP4 |  | Use 21 DFP4 | AU3 | $24 \mathrm{VP4}$ |  | Use 24CP4A |
| AU3 | $21 \mathrm{CMP4}$ |  | Use 21 ITFP4 | AU3 | $24 X P 4$ |  | Use 24CP4A |
| AU3 | $21 \mathrm{CQP4}$ | 20 | Use 21CBP4A | AU3 | $24 \mathrm{VP4}$ |  | Use 24AEP4 |
| AU3 | 21 CUP4 |  | Use $21 \mathrm{AMP4}$ | AU3 | 24ZP4 |  | Use 24AEP4 |
| AU3 | $21 \mathrm{CVP4}$ |  | Use 21 CBP4A | AU3 | 27EP4 |  | Use 27 RP4 |
| AU3 | $21 \mathrm{CWP4}$ |  | Use 21 CBP4A | AU3 | 27RP4 | 42 | 78.40 |
| AU3 | $21 \mathrm{CXP4}$ |  | Use 21 DSP4 | AU3 | $27 \mathrm{RP4}$ | 62 | 74.47 |

74.47

## RCA (FULL COLOR) PICTURE TUBES

- Deliver Vivid Color Images, Plus Sharper Block-ondWhite Imoges for Optimum Televiewing Enjoyment
- Employ New Color Phosphors for Brighter Pictures

RCA's "Colorama" color picture tubes offer a host of outstanding fea-tures-more efficient phosphors for greater color brilliance and sharper pictures: improved cathode assemblies for longer operating life; glareproof screens that practically eliminate annoying room light reffections; greater pieture contrast on both color and black-and-white; etc. When ordering. specify Dept. No, and Tube Type No.

| Stock No. |  | we. Lbs. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Dept. | Tube Type |  |  |
| AU3 | 21 AXP22 |  | Uer 21 AX 1 '22A |
| AU3 |  | 38 |  |
| A173 | 21 C1122A | 45 | Use 104.94 |
| AU. | 21 FBr 22 | 45 | 111.47 |
| A 173 | 21FJP22 | 54 | 122.58 |

## DUMONT (ABD) $\mathbf{8}^{\prime \prime}$ TV RECEIVER CHECK TUBE



Improved version of this extremely versatile $8^{*}$ rectangular universal pieture tube-a great aid in television servicing. Now fully aluminized for greater briglitness and clarity Permits testing television set without using the original picture tube. Provides a positive on-the-spot substitution test for picture tubes and ellminates the necessity for taking the original picture tube back to shop for servicvirtually all electi-focusing, Can be used in $66^{\circ} .70^{\circ}$, or $90^{\circ}$ yoke. No sets rekardless of deflection angle. For $53^{\circ}$ AU magnetic-focus sets. Shpg. wt.. 6 lbs
21.90

Model 8YP4/JP4. Receiver Check Tube. Same as above but also or $110^{\circ}$ maknetic deflection. $90^{\circ}$ and older type tubes. Includes deflection thask and two adapter. Slipg. wt.. 6 lbs .

## TV Picture Tubes - Special Design, and Audio Tubes

## UNBEATABLE VALUES IN REBUILT TV PICTURE TUBES

## Lowest-Priced Factory Rebuilfs for Top Savings

Remarkable savings can le yours on these rebullt TV picture tubes. AH are completely new. except for glass envelope. and have been facpletures. Each tube is thoroughly tested to conforin to oripinal specifications; All are guaranteed for one full year.

Take advantake of these unusually low prices and order now-enjoy the benefit of sharper pictures with more comirast. at rock-bottom cost. All have eltuninized wreen, except tube eypes indleated by - (asterisk). When ordering, be sure to speclfy Department Number and Tube Type Number.

As Low As 42 $2^{23}$

| Slock No. |  |
| :---: | :---: |
| Dept. | Tube Type |
| AU6 | 12LP4A* |
| AU6 | 148P4/CP4/EP4* |
| AU6 | $14 \mathrm{CPA}^{\text {/ }} \mathrm{HP4} 4^{*}$ |
| Au6 | 14RP4/WP4/NP4 |
| AU6 | 16APdA* |
| AU6 | 16GP4B* |
| AU6 | 16KP4/RP4/TP4* |
| AU6 | 16RP4A / KP4 |
| Aus | 178JP4 |
| AU6 | 17BP4A/JP4* |
|  | 178P1B/JP4B |
| AU6 | 178WP4 |
| AU6 | 1782P4 /BRP4/CWP4/CRP4/CKP4 |
| AU6 | 17CP4* |
| AU6 | 170KP4/0TP4/DLP4 |
| AU6 | 17DQP4 |
| AU6 | 17HP4/RP4* |
| AUG | $17 \mathrm{HP} 4 \mathrm{~B} / \mathrm{RP4A}$ |


| Wt. | NET |
| :---: | :---: |
| Cbs. | EACH <br> 17 |
| 12.63 |  |
| 14 | 12.63 |
| 10 | 14.02 |
| 12 | 17.31 |
| 17 | 18.35 |
| 16 | 19.37 |
| 21 | 14.46 |
| 21 | 16.31 |
| 17 | 19.75 |
| 21 | 14.83 |
| 21 | 16.81 |
| 14 | 22.90 |
| 14 | 22.90 |
| 16 | 21.82 |
| 13 | 22.90 |
| 13 | 22.90 |
| 23 | 16.07 |
| 23 | 17.90 |


| Stock No. |  | $\begin{aligned} & \text { wt. } \\ & \text { Lbs. } \end{aligned}$ | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Dept. | Tube Type |  |  |
| AU6 | 17PPA NP ${ }^{\text {a }}$ | 23 | 16.58 |
| AU6 | 17LP4A NP\&A | 23 23 | 18.28 |
| A 46 | 170P4/UPA/YPA* | 23 | 15.34 |
| AU6 | 170P4A/UP4A /YP4A | 23 | 16.95 |
| AU6 | 19A.JP4 | 20 | 24.60 |
| AU6 | 19AP4B* | 24 | 22.73 |
| AU6 | 198DP4 | 20 | 24.59 |
| AU6 | $19 \times 84$ | 20 | 24.59 |
| AU6 | 20CP4A/DP4A* | 29 | 17.08 |
| AU6 | 20CP4D / PP4C | 29 | 19.14 |
| AUE | 20HP4A/LP4/FP4/MPA* | 29 | 18.04 |
| AU6 |  | 27 | 22.51 |
| AU6 | $214 P^{4}{ }^{\text {a }}$ | 25 | 27.70 |
| AU6 | 21 AUP4A / AVP4B | 33 | 24.34 |
| AU6 | $21 \mathrm{CEP4}$ | 28 | 24.58 |
| AU6 | $21 \mathrm{CQP4}$ | 20 | 24.58 |
| AU6 | $21 \mathrm{CXP4} / \mathrm{DSP4}$ | 32 | 25.08 |
| Aus | 210AP4/DEP4/C2P4 | 26 | 24.58 |


| Slock No. |  |
| :---: | :---: |
| Dept. | Tube Type |
| AU6 | 21EP4A* |
| AU6 | $21 E P 48$ |
| AU6 | 21FDP4/EAP4 |
| AU6 | 21FLP4/CBP9 |
| AU6 | 21FP4A* |
| AU6 | 21FP4C |
| Au6 | 21WP4A |
| AU6 | $21 \times P 4 A$ |
| AU6 | 21YP4* |
| AU6 | $21 Y P 4 A$ |
| AU6 | 212P4A* |
| AU6 | 212 P 48 |
| AU6 | 23 ANP4 (Bonded Face) |
| AU6 | $23 C P 4 / G P 4 / \mathrm{MP4}$ (Bonded Face) |
| AU6 | 24AEP4/DP4/YP4 |
| AU6 | 24AHP4/ALP4 |
| AU6 | 24CP4A/ADP4A/QP4/TP4 |
| AU6 | $27 \mathrm{VP4} / \mathrm{UP4} / \mathrm{SP}^{\text {4 }}$ /XP4 |

[^16]
## ALLY TESTED <br> Special Design for Hi-Fi and Other Critical Applications <br> MULLARD MASTER IOM SERIES ELECTRON TUBES—INDIVIDUALLY TESTED

The Mullard Master 10M Series is a special range of carefully designed tubes. individually laboratory-tested to meet exacting standards. Eacls thbe is guaranteed for 10,000 hours of effective performance within a two-year period from date of purchase. Nultiple tests are conducted on each tube for contact potential; matched sections, cathode stabimy, hum, noise, tratsonductace Long life and rellabillty for critical applications.

Master 10 M Series tubes are highly recommended for the full range of electronic equipment in any commercial application, including hi-fi components, sound and instrunientess systenis, broadcast and antencations sysems. etc. Use these tubes for best results with existing entuipment, as well as when designing new equipment. Tube pins are gold protected; each tube cartoned and bedded in foam. Av. wt.. 5 oz .

## Be Sure to Specify Department E8-Mullard and Tube Type When Ordering

| Stock No. |  | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ | Stock No. |  | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ | Stock No. |  | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dept. | Tube Type |  | Dept. | Tube Type |  | Dept. | Tube Type |  |
| E8 E8 E8 E8 E8 | 6AB8 <br> 6AJ8 <br> 6AK5 <br> 6 AK8 <br> 6ALS | $\begin{aligned} & 2.50 \\ & 2.40 \\ & 2.95 \\ & 2.55 \\ & 1.75 \end{aligned}$ | $\begin{aligned} & \text { E8 } \\ & \text { E8 } \\ & \text { E8 } \\ & \text { E8 } \\ & \text { E8 } \end{aligned}$ | $\begin{aligned} & \text { 6EU7 } \\ & 6 \mathrm{FY5} \\ & 6 \mathrm{GK5} \\ & 6 \mathrm{HG} 8 \\ & 6 \mathrm{~J} 6 \end{aligned}$ | $\begin{aligned} & 2.15 \\ & 2.15 \\ & 2.20 \\ & 2.80 \\ & 2.30 \end{aligned}$ | E8 E8 E8 E8 E8 | $\begin{aligned} & \text { PL.84/15CW5 } \\ & \text { ECC85/6AQ8 } \\ & \text { ECF86/6HG8 } \\ & \text { EF86/667 } \\ & \text { PCFB6/7HG8 } \end{aligned}$ | $\begin{aligned} & 2.25 \\ & 2.15 \\ & 2.80 \\ & 2.25 \\ & 2.40 \\ & \hline \end{aligned}$ |
| $\begin{aligned} & \text { E8 } \\ & \text { E8 } \\ & \text { E8 } \\ & \text { E8 } \end{aligned}$ | $\begin{aligned} & 6 A{ }^{6} \\ & 6 A Q 5 A \\ & 6 A Q 8 \end{aligned}$ 6AT6 | $\begin{aligned} & 1.95 \\ & 1.95 \\ & 2.15 \\ & 1.80 \end{aligned}$ | $\begin{aligned} & \hline \mathbf{E 8} \\ & \text { E8 } \\ & \text { E8 } \\ & \text { E8 } \end{aligned}$ | $\begin{aligned} & 616 A \\ & 6 T 8 A \\ & 71 G 8 \\ & 9 A 8 \end{aligned}$ | $\begin{aligned} & 2.30 \\ & 2.55 \\ & 2.40 \\ & 2.95 \\ & \hline \end{aligned}$ | E 8 E 8 E 8 E 8 | $\begin{aligned} & \text { ECC88/6D]8 } \\ & \text { EBF89/6DC8 } \\ & \text { EF } 8960 \text { A6 } \\ & \text { EC } 9164 \end{aligned}$ | $\begin{aligned} & 2.80 \\ & 2.40 \\ & 2.30 \\ & 2.60 \\ & \hline \end{aligned}$ |
| $\begin{aligned} & \text { E8 } \\ & \text { E8 } \\ & \text { E8 } \end{aligned}$ |  |  | $\begin{aligned} & \text { E8 } \\ & \text { E8 } \\ & \text { E8 } \\ & \text { E8 } \end{aligned}$ | $\begin{aligned} & 12 A X 7 A \\ & 12 \mathrm{DW7} \\ & 15 \mathrm{CVS} \\ & \text { EABC } 80 / 6 \mathrm{AK} \end{aligned}$ | $\begin{aligned} & 2.00 \\ & 2.30 \\ & 2.25 \\ & 2.55 \\ & \hline \end{aligned}$ | E8 E8 E8 E8 | $\begin{aligned} & \text { HBC91/12AV6 } \\ & \text { EF93/6BA } \\ & \text { EF94/6AU6 } \\ & \text { EC95/6ER5 } \\ & \hline \end{aligned}$ | 1.75 1.80 1.85 2.20 |
| E8 E8 E8 E8 E8 | $\begin{aligned} & \text { 6DA6 } \\ & \text { 6DC8 } \\ & 6 \mathrm{DIB} \\ & \text { 6DL. } \\ & \mathrm{DX8} \end{aligned}$ | $\begin{aligned} & 2.30 \\ & 2.40 \\ & 2.80 \\ & 2.30 \\ & 2.60 \end{aligned}$ | E8 E8 E8 E8 E8 | $\begin{aligned} & \text { ECF } 80 / 6 \mathrm{BL8} \\ & \text { ECL80/6AB8 } \\ & \text { PCF80/9A8 } \\ & \text { ECC81/12AT7 } \\ & \text { ECH81/6AJ8 } \end{aligned}$ | $\begin{aligned} & 2.75 \\ & 2.50 \\ & 2.95 \\ & 2.30 \\ & 2.40 \end{aligned}$ | E8 E8 E8 E8 E8 | $\begin{aligned} & \text { EF9S/6AKS } \\ & \text { EL95/6DL5 } \\ & \text { EC97/6FYS } \\ & \text { EF183/6EH77 } \\ & \text { EF184/6EJ7 } \end{aligned}$ | $\begin{aligned} & 2.95 \\ & 2.30 \\ & 2.15 \\ & 2.35 \\ & 2.35 \\ & \hline \end{aligned}$ |
| E8 E8 E8 E8 |  | $\begin{aligned} & 2.60 \\ & 2.35 \\ & 2.35 \\ & 2.20 \\ & 3.15 \end{aligned}$ | $\begin{aligned} & \text { E8 } \\ & \text { E8 } \\ & \text { E8 } \\ & \text { E8 } \end{aligned}$ | $\begin{aligned} & \text { ECC82/12AU7 } \\ & \text { ECC83/2AX7 } \\ & \text { EC184/6DX88 } \\ & \text { EL84/6BQ5 } \end{aligned}$ | $\begin{aligned} & 2.00 \\ & 2.00 \\ & 2.60 \\ & 1.95 \end{aligned}$ | $\begin{aligned} & \text { E8 } \\ & \text { E8 } \\ & \text { E8 } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { ECC } 189 / 6 \text { ES8 } \\ & 6267 \\ & 7025 \\ & 7247 \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.15 \\ & 2.25 \\ & 2.15 \\ & 2.30 \\ & \hline \end{aligned}$ |

Gala Liom

## HAND-CRAFTED CUSTOM AUDIO TUBES BY GENALEX

A series of hand-crafted, deluxe replacement tubes for high-fidellty components, offering ultra-reliable, distortion-free design. Each Gold Lion" tube is carefully quality-controlled during manufacture-actually measure up to prototy pe laboratory standard General Electric Co. Ltd tion of British craitsmanship by the renowned General Eluding operational of England. $100 \%$ tested tests. noisc and microplionics. in accordance to S Govermment M1L-E-1 procedures. Eacts tube includes individual test report.

| Stock No. |  | Replaces: | NET |
| :---: | :---: | :---: | :---: |
| Dept | Type |  | 2.90 |
| E7 | GLU52 | 5U4G. 5T4.5931 <br> EL35. EL36. EL37, EL39, 1614, | $2.90$ |
| E7 | GL-KT66 | EL35. EL36. EL37, EL39, 1614, $1622.5881$ | 4.50 |
| E7 | GL-KT66-MP | EL35. EL36. El37, EL39, 1614. 1622. 5881 | $10.00 / \mathrm{pr}$ |
| E7 | $\begin{aligned} & \text { GL-KT77 } \\ & \text { GL-KT77-MP } \end{aligned}$ | 6L6GB. 6CA7, EL.34. 7581 <br> 61.6GB. 6CA7. EL34, 7581 | $\begin{aligned} & 5.50 \\ & 12.00 / \mathrm{pr} \\ & \hline \end{aligned}$ |
| E.7 | GL-U77 | 5AR4, 5V4, 524, G230. G232. G233. C234 | 3.70 6.95 |
| E7 | GLKT88 | 6L6GC. 6550, 7027A | $6.95$ <br> $14,90 / \mathrm{pr}$. |
| E7 | GL-K788-MP | 61,6GC, 6550.76127A <br> 6ス4, 68×4. U78, EZ90, 5993, 6063, |  |
| L.7 | GL-U707 | $6202,6203$ | 3.40 |

In adilltion, 1000-hour life tests are resularly cartied out on samples selected at random with ssome tules terted to 10.000 hours. Every component in "Sola L.ion" tubes is microscopically examined, cleaned in ultrasonic baths. and assembled at pressurized dust-free benches. Each tube beat-sealed in pliofim and separately cartoned. When ordering, give full Slock No., whirh consisss of Depl. No. und Mfr's Type No. ihus: E7-CL-KT77. MP after tube type indicates matched pair. Av. slipg, wt., 4 oz .

| Stock No. | Rypeplaces: |
| :---: | :---: | :---: |

Dept. $\left.\begin{gathered}\text { Type } \\ \text { GL-N709 }\end{gathered} \right\rvert\, \begin{gathered}\text { REOS, EL84 }\end{gathered}$
6BQS, EL84
6BQS. EL84
6BQS. EL84
$\begin{array}{ll}\text { 6CA4, EZ81 } & 8.60 / \mathrm{pr} \\ \text { 6AL5, D77 }\end{array}$
6ALS, D77, EB91, 5726, 6058.
6CF8, EF86, 6267
124T7. ECC81, B309. 6060,6201,
12AU7, ECC82, 5814, 6067, 6189,
12 人X7, ECC83, 5751, 6681, 7025.

## Special－Purpose and Hi－Fi Audio Tubes




## HIGH RELIABILITY TUBES

 FOR EXACTING USESHigh reliability，special purpose tubes for exacting applications in commer－ mental and thoroughly tested－assure opti－ mum performance of electronic equip－ ment by minimizing tube failure．RCA ＂Premium＂and G．E．＂Five－Star＂ tube types are indicated by an aster－ isk＂，or asterisk with prototype tubse there tubes．Thisedirecty interchamseable with their prototypes and require no re－ wiring．

## SPFCIAL HIGH－FIDELITY

 AUDIO TUBESTube types that are followed by a $t$ in table below，are special hish－fidelity tubes for top audlo performance．Sklll－ provide full fidelity tion and long Ilfe．hun－free opera－ brackets are receiving tube proto－ types．All are directly interchanceable except \＆，may remuire some rewiring Sufix MP indicates matched pairs． Laboratory balanced，matched pairs are recommended for optinum pairs formance in fower－output stages of

Easy to Order－Specify Department and Tube Type．This tabular presentation lets you quickly and easily locate the tube types you want． the Department．Number and the Manufacturer＇s Tube Type Number thus E1－0A2．These numbers represent the exact location of the tube in Allied＇s stockrooms and speed up shipment of your order．

Allied stocks over 1100 different tube types，from 23 manulacturers． always ready for immediate delivery．Write for information on any high－ complete lines of our pose tube not shown in this listing－we carry manllafturers．Allied will suppliers．As new tube types are released by for all yourers．Alfed will atock them．Make Allied your one stop source

| Stock No． |  | Mir． | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ | Stock No． <br> Dept．Tube Type |  | Mfr． | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ | Stock No． |  | Mfr． | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dept． | Tube Type |  |  |  |  |  |  |  |  |  |  |
| E1 | OA2 | RCA | 1.46 | E3 | EBF $80+(6 \mathrm{~N} 8)$ | MULL | 1.67 |  |  |  |  |
| E1 | OA3 | RCA | 1.54 | E3 | EF80才（ 6 BX 6$)$ | MULL | 1.67 | EI | $\begin{aligned} & 2050 \\ & 5639 * \end{aligned}$ | RCA RCA |  |
| E1 | OA4G OB2 | RCA | 1.86 | E3 | EZ $80+(6 \mathrm{~V} 4)$ | MULL | ． 81 | E1 | $5651 *$ | $\begin{aligned} & \text { RCA } \\ & \text { RCA } \end{aligned}$ | $6.55$ |
| E2 | O82 | RCA RAY | 1.44 | E4 | ECC81＋（12AT7） | AMP | 1.53 | E2 | CK5654 | RAY | $\begin{aligned} & 1.78 \\ & 3.05 \end{aligned}$ |
| E1 | OC3 |  | 1． 50 | E3 | E MR1 1 （6DA5） | MULL | 1.41 | E3 | 5662 | GE | 1.45 |
| E1 O | OD3 | RCA RCA | 1.50 1.44 | E4 | E481 4 （6CA4） | AMP | 1.05 | E1 | $5670 *(2 \mathrm{C} 51)$ | RCA | 3.00 |
| E3 | 1885 | VIC | 1.44 8.50 | E3 | EZ81）（6CA4） | MULL | 1.14 | E1 | 5670 WA＊（2C51） | RCA | 3.95 |
| E1 | 114 | RCA | 1.37 | E4 | ECC82才（12AU7） | AMP | 1.23 | E1 | 5687 | RCA | 4.05 |
| E1 1 | $1 P 39$ | RCA | 2.45 | E3 | ECl $82 \dagger\left(6 \mathrm{~B}^{\text {c }} 8\right.$ ） | MULL | 1.62 | E1 | 5696 | RCA | 2.05 |
| E1 1 | 1 P40 | RCA | 3.75 |  |  | MUL | 3.65 | E1 | 5725 （6AS6） | RCA | 3.80 |
| E1 2 | 2 D21 | RCA | 1.29 | E3 | CL82†（50BM8） | MUL！ | 1.62 | E1 | $5726 *(6 A L 5)$ | RCA | 1.55 |
| E1 2 | 2E24 | RCA | 5.25 | E1 | 83 | MUL6 | $3.90 / \mathrm{Pr}$ ． | E3 | $5727 / 2021 \mathrm{~W}$ | GE | 2.90 |
| E1 2 | 2E26 | RCA | 5.25 3.85 | E1 |  | RCA | 1.89 | E1 | $5751 *(12 \mathrm{AX} 7)$ | RCA | 2.95 |
| E1 2 | 2K2A | RCA | 3.85 | E4 |  | AMP MULL | 1.28 | E 1 | 5763 （1） | RCA | 2.53 |
| E1 3 | 3 AS | RCA | 2.03 | E4 |  |  | 2．84／pr． | EI | $5814 \mathrm{~A} *(12 \mathrm{AU7})$ | RCA | 3.35 |
| E1 3 | $3 \mathrm{B28}$ | RCA | 6.00 | E4 |  | AMP | 1.30 | E1 | 5823 | RCA | 1.75 |
| E1 3 | 3 KPI | RCA | 19.50 | E4 | EL84 MP ${ }^{\text {UL }}$（684 $(4585)$ | AMP | $2.63 / \mathrm{pr}$ ． | E2 | CK5879 | RAY | 1.75 |
| E1 4 | 4．65A | RCA | 28.75 | E3 | UL84MP＋（45B5） | MULL | 1.49 | E1 | $5881+(616)$ | RCA | 3.39 |
| E3 4 | 4－125A | EIM | 36.00 | E4 | UL84MPT（45B5） | MULL | $3.38 / \mathrm{pr}$ ． | E3 | $5881+(616)$ | TUNG | 3.50 |
| E3 4 | 4－250A | EIM | 46.50 |  |  | AMP |  | E3 | $5881 \mathrm{MP}+(6 \mathrm{~L} 6)$ | TUNG | $7.85 / \mathrm{pr}$ ． |
| E3 4 | 4．400A | EIM | 48.00 | E3 | C85＋（6AQ8） | AMP | 1.45 | E1 | 5896＊ | RCA | 4.45 |
| E23 4 | 4－1000A | EIM | 132.00 |  | EF85 EF86 EFB | MUL | 1.89 | E1 | 5899＊ | RCA | 6.55 |
| E3 4 | 4Ex250B／7203 | EIM | 132.00 39.00 | E4 | EF86 EF86＋（6267）（Amp | X）Use | Type 6267 | E1 | 5902＊ | RCA | 5.75 |
| E3 4 | $4 \mathrm{C} \times 300 \mathrm{~A}$ | EIM | $55.00$ | E3 | EF86t（6267） EL86＋（6CWS） | MULL | 1.38 | E1 | $6005 *(6 A Q 5)$ | RCA | 3.93 |
| EU3 4 | 4CX1000A | EIM | 156.00 |  | － | MULL | 1.43 | E1 | 6026 | RCA | 2.40 |
| E2 R | RK 4032 | RAY | 156.00 32.76 | E3 | EL86 MP ${ }^{\text {UF86 }}$（6CW | MUL！ | 3.32 ／Pr． | E1 | 6072＊（12AY7） | RCA | 3.90 |
| 1 4 | 4E27A／5－1258 | RCA | 40.00 | E4 | UF86 | MULL | 1.76 | E1 | $6073 *(O 42)$ | RCA | 3.35 |
| E3 4 | $4 \times 250 \mathrm{~B}$ | EIM | 39.35 | E3 | ECC88才toDJ8 KT88t | AMP | 1.89 5.95 | E1 ${ }^{\text {E }}$（ 6 | $6074 *(O B 2)$ | RCA | 3.70 |
| E4 5 | $5 \mathrm{AR4} \dagger(\mathrm{GZ34})$ | AMP | 2.20 | E3 | KT88 MP $\dagger$ | GEN | 5.95 | E3 6 | 6087 ＊（5Y3GT） | GE | 5.75 |
| EZ3 4 | $4 \times 500$ A | EIM | 128.50 |  |  |  | $3.65 / \mathrm{pr}$. | E | 611 | RCA | 5.45 |
| EZ1 5 | SBPIA | RCA | 23.30 | E3 |  | MULL | 2.73 ／pr． |  | $6112^{\text {\% }}$ | RCA | 5.45 |
| EZ1 5 | 5 CP7A | RCA | 28.60 | E3 |  | MULL | .81 1.43 | E1 6 | $6136 *(6 \mathrm{AU} 6)$ | RCA | 2.75 |
| ．．．． 5 | $5 R 4$ GY | Use Typ | 28．64GYB | E3 | EL95MP ${ }^{\text {E }}$（6DL5） | MULL | 1.43 | E1 6 | $6146$ | RCA | 5.00 |
| E3 5 | 5R4GYA | GE | 2.05 | E3 | 100 TH | EIM | $2.73 / \mathrm{pr}$ 23.50 |  | 6159 | RCA | 5.00 |
| E1 5 <br> EZ1 5 | SR4GYB 5 UP 1 | RCA RCA | 2.03 12.45 | EZ3 | PL172 | PEN | 135.00 |  | *(6AG5) | RCA | 3.85 |
| EX6 | C5－10／P2 | RCA | 12.45 52.00 | EZ3 | 2501 H | EIM | 38.50 | E1 6 | $6189 / 12 \mathrm{AU7}$ WA |  |  |
| E1 6 | 6 ¢K6 | RCA | 1．40 | E3 | 304 TH | EIM | 64.50 |  | ＊（12AU7） | RCA | 3.70 |
| $E 1 \quad 6$ | 6 A56 | RCA | 3.43 | E1 | 304 TL 502 A | EIM | 64.50 | E1 6 | $6201 *(12477)$ | RCA | 2.95 |
| El 6 | 6 A57 G | RCA |  |  | 502 A | RCA | 2.30 | E4 6 | 6211 | AMP | 2.35 |
| 46 | 6CA7 MP＋（EL34） | AMP | 6．80／pr． | E1 |  | RCA | 3.00 | E4 6 | 6227 | AMP | 3.05 |
| 46 | 6 GB5 $\dagger$ | AMP | 2.05 | E1 8 | 810 | RCA | 7.95 | E3 6 | 6265 ＊（6BHO） | GE | 4.10 |
| 46 | $6 \mathrm{GK5} \dagger$ | AMP | 1.07 | E1 8 | 8811 A | RCA | 26.95 | E4 6 | 6267 （EF86） | AMP | 1.38 |
| 16 | 6.14 | $\mathrm{RCA}$ | .07 4.19 | E1 | 811 A 812 A | RCA | 6.90 6.90 | E1 61 | 6293 | RCA | 6.40 |
| $\times 37$ | JP1／7VP1 | SYL | 29.00 | E1 8 |  | RCA | 6.90 | E1 6 | 6328 | RCA | 11.10 |
| X1 7 | JP4 | RCA | 23.84 | E1 8 |  | RCA | 23.15 | E1 6 | 6417 | RCA | 3.04 |
| 112 | 1246 | RCA | 3.36 | E1 B | 816 | RCA | 28.35 | E3 6 | $6550 \dagger$ | TUNG | 4.95 |
| 3 G | G232 $\dagger$ | MULL | 2.54 | E1 B | $829 B$ | RCA | 2.95 | E3 6 | 6550 MPl | TUNG | 10．55／pr． |
| 3 EL | L34＋（6CA7） | MULL | 3.16 | EZ1 8 | 8298 833 A | RCA | 19.00 53.65 | E1 6 | 6626／OA2 WA＊（OA2） | RCA | 4.45 |
| E3 EL | L34 MP ${ }^{\text {（ }}$（6CA7） | MULL | 6．86／pr |  |  | RCA | 53.65 | El | $6661 / 6 \mathrm{~B}$ | RCA | 1.34 |
| E3 G | G234＋（5AR4） | MULL | 6．86／pr． 2.27 | E1 ${ }^{\text {E }}$ | 8664 | RCA | 2.65 | E1 6 | $6678 / 6$ UBA | RCA | 1.62 |
| E3 35 | 35 | EIM | 21.50 | E1 8 | 866JR | TAY | 1.95 | E1 6 | 6679／12AT7 | RCA | 1.50 |
| E3 EL |  | MULL | 3.40 | E1 ${ }^{\text {E }}$ | 8724 884 | RCA | 10.65 | E1 6 | $6680 / 12 \mathrm{AU7}$ | RCA | 1.22 |
| E4 EL | L37＋（6L6） | AMP | 3.40 3.20 | E1 18 |  | RCA | 2.28 | E1 6 | $6681 / 12 \mathrm{AX7}$ | RCA | 1.26 |
|  |  |  |  | E1 | 885 | RCA | 2.00 | E1 6 | 6883 | RCA | 5.00 |
| 4 EL | L37 MPti6L6 | MULL AMP | 6．82／pr | E1 El | 921 | RCA | 3.50 | E3 7 |  |  |  |
| 3 T2 | Z40 | AMP TAY | ${ }^{6.82 / \mathrm{Pr}}$ ． | E1 ${ }^{\text {E1 }} 9$ | 927 | 8CA | 3.80 | E1 7 | $7034 / 4 \times 150 A$ | RCA | 25.00 |
| 4 EF | $\begin{aligned} & 1240 \\ & F P 60 \end{aligned}$ | TAY <br> AMP | 10.20 7.50 | E1 9 | 931 VA | RCA | 11.75 | E1 7 | $7189+$＋180 | RCA | 25.00 |
| 3 KT | T611 | $\begin{aligned} & \text { AMP } \\ & \text { GEN } \end{aligned}$ | 7.50 3.75 | E1  <br> E1  | 991 | RCA | ． 87 | E3 7 | $189+$ | MULL | 1.40 |
| 3 KT |  |  |  |  | $1614 \dagger$ | RCA | 4.93 | E3 7 | $7189 \mathrm{MP} \dagger$ | MULL | 3．53／pr． |
| 2 RK | KK61 | GEN RAY | $9.25 / \mathrm{pr}$ 4.20 | E1 1 | $1620+5(6 J 7)$ $1621+5(6 F 6)$ | RCA | 7.55 | E1 72 | 212 | RCA | 6.75 |
| 3 KT | T66 ${ }^{\text {（6L6）}}$ | RAY GEN | 4.20 3.50 | E1 1 | $1621+5(6 F 6)$ | RCA | 3.50 | E1 7 | 412 | RCA | 2.10 |
| 3 KT | T6\％MPt | GEN | 8.50 ／pr． | E1 1 | 1622 ¢5（616） | RCA | 4.85 | E1 7 | 536 | RCA | 2.10 |
| E3 DM |  | MULL | $8.75 / \mathrm{pr}$. 1.05 | E1 El | 1625 1635 | RCA | 4.75 | E1 7 | 551 | RCA | 2.10 |
| －M | miot（1m3） | MULL | 1.05 | E1 1 | 1635 | RCA | 3.82 | E1 17 | 558 | RCA | 3.50 3.50 |

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International Rectifier
.. Microwave Associates
Motorola
National Semiconductors
Pacitic Semiconductors
Rhilco
Raytheon
Radio Corp. of America
Sarkes-Tarzian


## EXPLANATION OF COLUMN HEADINGS AND SYMBOLS

$P_{e}$-maximum collector dissipation in milliwatts Pt-total disslpation In watts
c-maximum collector current in milliamperes

BV $\mathrm{C}_{\mathrm{ct}}$-collector-to-base breakdowis (small signal AC beta) hFE-DC current galn (large signal DC beta) fob-aloha cutoff frequency in megacycles
fab-alpha cutoff frequency in megacycles-conmon emitter AJ-alloy junction type GJ-grown junctlon type Av. shpg. wt., 2 oz .

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \[
\begin{gathered}
\text { Type } \\
\text { No. }
\end{gathered}
\] \& Mir. \& Fir. \& Design of Structure \& \[
\left|\begin{array}{lll}
P_{c} \& \& P_{i}^{*} \\
M W \& \& W
\end{array}\right|
\] \& \[
\begin{aligned}
\& \text { Ie } \\
\& \text { Ma }
\end{aligned}
\] \& \[
B V_{c b}
\] \& \[
\begin{gathered}
h_{1} \\
\text { or } h_{F E t} \\
\hline
\end{gathered}
\] \& lab or fae 中Mc \& \[
\underset{\text { EACH }}{\substack{\text { NET }}}
\] \& \[
\begin{aligned}
\& \text { Type } \\
\& \text { No. }
\end{aligned}
\] \& MIf. \& Fig. \& Design or Stsucture \& \[
\begin{aligned}
\& \text { PcPi } \\
\& \text { or }
\end{aligned}
\] \& \[
\begin{aligned}
\& l_{c} \\
\& \mathrm{Ma}_{3}
\end{aligned}
\] \& \[
\left|\begin{array}{c}
\mathrm{BV}_{\text {ct }} \\
\mathrm{V}
\end{array}\right|
\] \& \[
\begin{gathered}
\text { hee } \\
\text { or heet }
\end{gathered}
\] \& \[
\begin{aligned}
\& \text { Tabor } \\
\& 1.0 \pm 1 \\
\& \text { Mac }
\end{aligned}
\] \& \[
\begin{aligned}
\& \text { NET } \\
\& \text { EACH }
\end{aligned}
\] \\
\hline \& SYL \& A \& A \& \(\frac{250}{}\) \& 100 \& 40 \& 75 \& 0.4 \& 3.26 \& 2 N 307 \& \[
\overline{\mathrm{RCA}}
\] \& \(\stackrel{\text { c }}{\text { C }}\) \& Alioy \& 11* \& 1.0A \& 35 \& 301 \& \& 1.49 \\
\hline 2 N 35 \& SYL \& A \& -AJ \& 180
240 \& 100
300 \& 40
45 \& \begin{tabular}{l}
75 \\
53 \\
\hline
\end{tabular} \& 1.3 \& 1.17
4.15 \& \(2 N 319\)
\(2 N 319\) \& \& E \& A) \& 240 \& 200 \& 20 \& 33 \& 20 \& 1.50 \\
\hline 2 N 43 \& GE \& D \& A) \& 240 \& 300 \& 45
45 \&  \& 1.0
1.0 \& 4.15
2.95 \& 2 N 320 \& GE \& \& A) \& 240 \& 200 \& 20 \& 48
80 \& 2.5 \& 1.58 \\
\hline 2N44 \& GE \& \[
\underset{\mathbf{E}}{\mathbf{E}}
\] \& A) \& 240
65 \& 30 \& 20 \& 90 \& 5.0 \& 2.50 \& 2 N321 \& \& E \& A) \& 240 \& 200 \& 20 \& \& \& \\
\hline 2N78 \& GE \& \& \& \& \& \& 10 \& 3.0 \& 1.34 \& 2N322 \& GE \& E \& A] \& 140 \& 100 \& 16 \& 42 \& 2.0 \& 75 \\
\hline 2 N 94 \& SYL \& B \& -AI \& 150 \& 5 \& 30 \& 44 \& 0.7 \& 1.65 \& 2N324 \& GE \& E \& A \& 140 \& 100 \& 16 \& 80 \& 3.0 \& 3.72 \\
\hline 2 N 104 \& RCA \& K \& A \& 150
50 \& 10 \& \& 19 \& 1.0 \& . 55 \& 2N327A \& RAY \& A \& Si. Alloy \& 250 \& 50 \& 50 \& 14 \& as \& \begin{tabular}{l}
3.70 \\
1.50 \\
\hline
\end{tabular} \\
\hline 2 N 107 \& GE \& D \& A \& 150 \& 70 \& 25 \& 75 \& \& . 91 \& 2N331 \& MOT \& A \& AJ \& 200 \& 200
5 \& \(\begin{array}{r}30 \\ 5 \\ \hline\end{array}\) \& 50
22 \& as \& \begin{tabular}{l}
1.50 \\
3.45 \\
\hline
\end{tabular} \\
\hline 2N109 \& \[
\begin{aligned}
\& \text { RCA } \\
\& \text { PHI }
\end{aligned}
\] \& K \& \({ }_{\text {SB }}\) \& 25 \& 5 \& 4.5 \& 40 \& 60 \& 6.30 \& 2N344 \& PHI \& 1 \& SB \& 20 \& \& \& \& \& \\
\hline 2N128 \& \& \& \& \& \& \& 20 \& 4.5 \& 2.15 \& 2N345 \& PWI \& 1 \& SB \& 20 \& 5 \& \[
5
\] \& \& \& \\
\hline 2N135
\(2 \mathrm{~N} \mid 36\) \& GE \& \[
\begin{aligned}
\& D \\
\& D
\end{aligned}
\] \& -Switch \& 100 \& 50
50 \& 20 \& 40 \& 6.5 \& 2.55 \& 2N346 \& PHi \& \(\frac{1}{c}\) \& \[
\begin{aligned}
\& \text { SB } \\
\& \text { AJ }
\end{aligned}
\] \& \({ }_{90}{ }^{\text {a }}\) \& \({ }_{5}^{5}\) \& 40 \& \[
35
\] \& 400 \& \[
\begin{aligned}
\& 5.85 \\
\& 1.80
\end{aligned}
\] \\
\hline \(2 N 136\)
\(2 \mathrm{~N} \mid 37\) \& GE \& D \& - Switch \& 100 \& 50 \& 10 \& 60 \& 10 \& 6.20 \& 2N351A \& RAY \& \({ }_{\text {A }}\) \& A) \& 150 \& 100 \& 18 \& 90 \& 2.0 \& . 83 \\
\hline 2N137 \& RCA \& H \& A) \& 80 \& 15 \& 16 \& 48
75 \& 6.8 \& 1.16 \& \(2 N 362\)
\(2 N 363\) \& RAY \& A \& AJ \& 150 \& 100 \& 32 \& 50 \& 1.5 \& . 72 \\
\hline -2N140 \& RCA \& H \& A) \& 80 \& 15 \& 7.0 \& \& \& \& \& TI \& A \& Alloy \& 150 \& 50 \& 30 \& 34 \& 1.0 \& 1.92 \\
\hline 2N169 \& GE \& F \& \({ }^{*-G J}\) \& 65 \& \[
\begin{aligned}
\& 20 \\
\& 20
\end{aligned}
\] \& \& 72 \& 9.0 \& 2.57 \& 2N369 \& Use \& T1.32 \& \& \& \& \& \& \& \\
\hline 2NI69A \& GE \& E \& \({ }^{\circ} \mathrm{GJ}\) \& 65
25 \& 20
20 \& \[
\begin{array}{r}
25 \\
6
\end{array}
\] \& 72
20 \& 2.5 \& 2.45 \& 2N371 \& RCA \& F \& DF \& \& \& \[
\begin{aligned}
\& 20 \\
\& 20
\end{aligned}
\] \& \[
\begin{aligned}
\& 60 \\
\& 60
\end{aligned}
\] \& \[
\begin{array}{r}
30 \\
30
\end{array}
\] \& 1.12 \\
\hline 2 N 170 \& GE \& G \& -AJ \& 150** \& 15 \& 60 \& \(70 \uparrow\) \& 10 ! \& 6.35 \& 2N372 \& \begin{tabular}{l}
RCA \\
MOT
\end{tabular} \& F \& \[
\underset{A J}{\text { DF }}
\] \& \[
\begin{aligned}
\& 80 \\
\& 90^{*}
\end{aligned}
\] \& \[
\begin{aligned}
\& 10 \\
\& 5 A
\end{aligned}
\] \& \[
\begin{aligned}
\& 20 \\
\& 40
\end{aligned}
\] \& 601 \& 500 \& 1.85 \\
\hline 2Ni73 \& RCA \& H \& N \& 50 \& 2.0 \& 10 \& 65 \& . 85 \& 1.63 \& \& \& \& \& \& 200 \& 25 \& \(40 \dagger\) \& 6.0 \& 1.56 \\
\hline 2N176 \& M \& C \& A) \& \(90^{*}\) \& 3.0
30 \& 40
40 \& 701 \& \& 1.88 \& 2N377 \& \[
\underset{S Y L}{S Y L}
\] \& \[
\begin{aligned}
\& A \\
\& A
\end{aligned}
\] \& AJ \& 150 \& 400 \& 50 \& 115 \& 5.0 \& 1.45 \\
\hline 2 N 178 \& MOT \& C \& AJ \& 40* \& 3.0 \& \& \& \& 1.57 \& 2 N 384 \& RCA \& M \& Si Mesa \& 120 \& 10 \& 30 \& 60 \& 100 \& 2.48 \\
\hline \(2 N 185\) \& Use II \& \& \& \& \& \& \& 1.2 \& \& 2N386 \& PHI \& C \& A) \& 12* \& 3.0 A \& 60 \& \begin{tabular}{l}
601 \\
35 \\
\hline
\end{tabular} \& . 70 \& 6.75
9.75 \\
\hline 2NI88A \& GE \& D \& \[
\begin{aligned}
\& \text { A) } \\
\& \text { AI }
\end{aligned}
\] \& \[
\frac{200}{75}
\] \& \(\begin{array}{r}20 \\ 50 \\ \hline\end{array}\) \& 25 \& 24 \& . 80 \& \(\begin{array}{r}.70 \\ \hline\end{array}\) \& 2N387 \& PHI \& C \& AI \& 12* \& 3.0A \& 80 \& \& \& \\
\hline 2NIB9 \& GE \& \& \& \& \& \& \& 1.0 \& \& 2N388 \& R \& \& -Ā \& 150 \& 200 \& 25 \& 1501 \& 8.0 \& 1.43 \\
\hline 2 N 190 \& GE \& 0 \& AJ \& \[
\begin{aligned}
\& 75 \\
\& 75
\end{aligned}
\] \& \[
\begin{aligned}
\& 50 \\
\& 50
\end{aligned}
\] \& 25 \& 56 \& 1.2 \& . 83 \& 2N398 \& MOT \& A \& A) \& 50 \& 100 \& 105 \& 60 \& 1.0 \& 1.30 \\
\hline 2 N 191 \& GE \&  \& AJ \& 75 \& 50 \& 25 \& 75 \& 1.5 \& 1.57 \& 2N398A \& mot \& A \& AJ \& 150 \& 100
100 \& 105
25 \& 10 \& 12.0 \& . 63 \\
\hline 2 N 194 \& SYL \& B \& -AJ \& 50 \& 50 \& 18 \& 8.0 \& 3.0 \& 1.25 \& 2N404 \& RCA \& \begin{tabular}{l} 
A \\
\(H\) \\
\\
\hline
\end{tabular} \& AJ \& 150 \& 170 \& 12 \& 35 \& . 65 \& . 46 \\
\hline 2N 207 \& P1H \& E \& A) \& 50 \& 20 \& 12 \& 100 \& 2.0 \& 1.95 \& 2 N 405 \& \& \& \& \& \& \& \& 65 \& . 46 \\
\hline 2N207A \& PHI \& E \& A) \& 50 \& 20 \& 12 \& 100 \& 2.0 \& 2.10 \& 2N406 \& RCA \& \& AJ \& 150 \& 70 \& 20 \& 75 \& \& . 56 \\
\hline 2N207日 \& PH1 \& 8 \& A) \& 50
50 \& 20
50 \& 18 \& 10 \& 6.0 \& 1.20 \& 2 N 408 \& RCA \& K \& A) \& 150 \& 70 \& 20 \& 75
48 \& \& . 56 \\
\hline 2N2! \& SYL \& 8 \& -A \& 150 \& 100 \& 40 \& 150 \& 3.0 \& 1.25 \& - 2 N 409 \& RCA \& H
\(K\) \& A) \& 80
80 \& 15 \& \[
\begin{aligned}
\& 13 \\
\& 13
\end{aligned}
\] \& 48 \& 6.8 \& . 68 \\
\hline \[
\begin{aligned}
\& 2 N 213 \\
\& 2 N 213 A
\end{aligned}
\] \& SYL \& B \& -AJ \& 150 \& 50 \& 40 \& 250 \& . 15 \& 1.59 \& 2N4 10 \& RCA \& \& \& \& \& \& \& \& \\
\hline 2N214 \& SYL \& B \& -A] \& 180 \& 100 \& 40 \& 75 ¢ \& \& \& -2N41! \& RCA \& \& AJ \& \[
\begin{aligned}
\& 80 \\
\& 80
\end{aligned}
\] \& 15 \& 13 \& 75 \& 10.0 \& .71 \\
\hline 2N215 \& RCA \& , \& -AJ \& 150
50 \& 50 \& \begin{tabular}{l}
30 \\
18 \\
\hline
\end{tabular} \& 44 \& 3.0 \& 1.73 \& -2N412 \& RAY \& A \& AJ \& 150 \& 200 \& 30. \& 60 \& 7.0 \& . 75 \\
\hline 2 N 216 \& SYL \& k \& -AJ \& 50
150 \& 70 \& 18
25 \& 7.5 \& \& 1.75
.86 \& -2N4l6 \& Ray \& A \& AJ \& 150 \& 200 \& 30 \& 80 \& 10.0 \& 1.50
1.95 \\
\hline 2N217 \& RCA \& \[
\begin{aligned}
\& k \\
\& k
\end{aligned}
\] \& A \& 150
80 \& 15 \& 16 \& 48 \& 6.8 \& 1.16 \& 2N422 \& Ray \& A \& AJ \& 150 \& 100 \& 35 \& 50 \& . 80 \& \\
\hline 2N218 \& RCA \& \& A \& \& \& \& \& \& \& \& \& \& \& 150 * \& 15A \& \& \(40 \dagger\) \& 10 kc ! \& 2.65 \\
\hline -2N219 \& RCA \& K \& A \& 80 \& \& 7 \& 75
65 \& \({ }^{10} .85\) \& 1.24 \&  \& \& \& - \({ }^{\text {a }}\) \& 150 \& 125 \& 20 \& 130 \& 5.0 \& 2.10 \\
\hline 2N220 \& RCA \& K \& A) \& 250 \& 2.0 \& 18 \& 110 \& . 60 \& 1.08 \& 2N456A \& TI \& C \& Alloy \& 150* \& 7.0A \& \({ }^{40}\) \& 601 \& . 43 \& 2.60
3.30 \\
\hline 2 N 223 \& PHI \& F \& A \& 250
250 \& 150 \& 25 \& \(90 \%\) \& . 51 \& 1.10 \& 2N457A \& TI \& C \& Allioy \& 150
150

150 \& $$
{ }_{70 \mathrm{~A}}^{7.0 \mathrm{~A}}
$$ \& \[

$$
\begin{aligned}
& 60 \\
& 80
\end{aligned}
$$

\] \& \[

$$
\begin{aligned}
& 60 \dagger \\
& 60 \dagger
\end{aligned}
$$

\] \& \& | 3.30 |
| :--- |
| 4.70 | <br>

\hline 2N225 \& PHI \& F \& Pair \& of 2N224 with \& HFE \& malch \& ed to 20 \% \& \& 2.20 \& 2N458A \& \& \& Altay \& \& \& \& \& \& <br>
\hline 2N226 \& PHI \& \& A) \& 250 \& 150 \& 30 \& 60¢ \& 40 \& 1.02 \& 2N464
$2 N 465$ \& \& \& \& 150
150 \& 100 \& 40 \& 45 \& 88 \& 1.56 <br>
\hline 2N227 \& PHI \& F \& Pair 0 \& of 2N226 with \& heE \& match \& ed to $20 \%$ \& \& 1.04
.50 \& 2N465 \& MOT \& A \& AJ \& 150 \& 100 \& 35 \& 90 \& 1.0 \& 1.65 <br>

\hline 2 N 229 \& SYL \& 8 \& - AI \& \& \& \& \& \& 1.05 \& ${ }_{2}{ }_{2} \mathrm{~N} 467$ \& RAY \& A \& A) \& 150 \& 100 \& | 35 |
| :--- |
| 35 | \& 180 \& 1.2 \& 2.10 <br>

\hline 2N232 \& PHI \& ${ }^{\text {B }}$ \& -AJ \& 50.0 \& $$
\begin{aligned}
& 3.0 \\
& 50
\end{aligned}
$$ \& 10 \& - 5.0 \& 3.0 \& . 50 \& 2N495 \& PHI \& 1 \& SI A) \& 150 \& 50 \& 25 \& 30 \& 21 \& 11.63 <br>

\hline 2N233 \& SYL \& \& \& \& \& \& \& \& \& \& PHI \& \& 08 \& 30 \& 50 \& 30 \& 8.5 \& 170 \& 3.98 <br>

\hline 2N241A \& GE \& \& \& \& $$
\begin{array}{r}
500 \\
10
\end{array}
$$ \& \& \& \& 2.47 \& 2N50i \& PHI \& J \& DB \& 60 \& 50 \& 15 \& 701 \& 175 \& 6.38 <br>

\hline 2N247/33 \& SYL \& C \& $$
\begin{gathered}
\text { DF } \\
\text { Alloy }
\end{gathered}
$$ \& \[

$$
\begin{aligned}
& 80 \\
& 25 *
\end{aligned}
$$

\] \& \[

$$
\begin{array}{r}
10 \\
3.0 \mathrm{~A}
\end{array}
$$

\] \& \[

$$
\begin{aligned}
& 35 \\
& 30
\end{aligned}
$$

\] \& \[

$$
\begin{aligned}
& 60 \\
& 90
\end{aligned}
$$
\] \& 8.0 kc \& 1.90 \& 2N508 \& GE \& A \& A) \& 140 \& 100 \& 16 \& 112 \& 3.5

35 \& 8.95 <br>

\hline 2N250 \& T1 \& ${ }_{C}^{C}$ \& Alloy \& 25** \& 3.0 A \& 60 \& 90 \& 8.0 kc \& 2.25 \& $2{ }^{2} 514$ \& T \& C \& AJ \& \[
$$
\begin{aligned}
& 150^{*} \\
& 150{ }^{*}
\end{aligned}
$$

\] \& \[

$$
\begin{aligned}
& 25 A \\
& 25 A
\end{aligned}
$$

\] \& \[

$$
\begin{aligned}
& 40 \\
& 60
\end{aligned}
$$
\] \& \& . 35 \& <br>

\hline $$
\begin{aligned}
& 2 N 251 \\
& 2 N 255
\end{aligned}
$$ \& SYL \& c \& A \& 10** \& 3.0 A \& 15 \& $30 \uparrow$ \& 100 \& 1.00 \& 2NSI4A \& TI \& c \& A) \& \& \& \& \& \& <br>

\hline 2N265 \& GE \& D \& A) \& 75 \& 50 \& \& 110 \& 1.5 \& 1.87 \& ${ }^{2} \mathrm{NS} 14 \mathrm{AB}$ \& \& \& AJ \& $$
\begin{gathered}
150^{*} \\
50
\end{gathered}
$$ \& 10 \& 18 \& 1.5 \& 3.0 \& 1.67 <br>

\hline 2 N 278 \& MOT \& \& A \& 150* \& 15 A \& 50
15 \& 701
25 \& $10: \mathrm{kc}$
6.0 \& 1.85
.75 \& 2N525 \& MOT \& ${ }_{0}$ \& AJ \& 225 \& 500 \& 45 \& 52 \& 2.5 \& 1.65 <br>

\hline 2N292 \& GE \& $$
\stackrel{\overline{\mathbf{E}}}{\mathbf{E}}
$$ \& -GJ \& \[

$$
\begin{aligned}
& 65 \\
& 65
\end{aligned}
$$

\] \& \[

{ }_{20}^{20}
\] \& 15

15 \& 25
25 \& 7.0 \& . 83 \& 2N527 \& GE \& , \& A) \& 225 \& 500 \& 45 \& 91
100 \& 3.3
2.0 \& 1.91
2.78 <br>

\hline $$
2 N 293
$$ \& \[

$$
\begin{aligned}
& \text { GE } \\
& \text { MOT }
\end{aligned}
$$

\] \& \[

\mathbf{E}

\] \& \[

{ }^{*} \mathrm{GJ}
\] \& 65 \& 4.0 A \& 60 \& 1004 \& $12 \mathrm{kc} \ddagger$ \& 2.90 \& 2N535 \& PHI \& E \& AJ \& 50 \& 20 \& 20 \& 100 \& \& 2.78 <br>

\hline \& \& \& \& \& \& \& \& \& \& 2N554 \& \& \& \& $40 *$ \& 3.0 A \& 30 \& \& \& <br>

\hline $2 \mathrm{2N30}$ \& RCA \& \[
$$
\begin{gathered}
\mathbf{C} \\
\mathbf{C}
\end{gathered}
$$

\] \& \[

$$
\begin{aligned}
& \text { AJ } \\
& \text { AJ }
\end{aligned}
$$

\] \& \[

$$
\begin{aligned}
& 3 * \\
& 3 *
\end{aligned}
$$

\] \& ${ }_{2} 2.0 \mathrm{~A}$ \& 60 \& $70 \dagger$ \& \& 3.71 \& 2N555 \& mOT \& c \& AJ \& \[

$$
\begin{aligned}
& 40^{*} \\
& 50
\end{aligned}
$$

\] \& \[

$$
\begin{gathered}
3.0 \mathrm{~A} \\
40
\end{gathered}
$$
\] \& 40

32 \& 70 \& $$
40.70
$$ \& . 95 <br>

\hline 2N301A \& $$
\begin{aligned}
& \text { RCA } \\
& \text { SYL }
\end{aligned}
$$ \& ${ }_{c}^{C}$ \& \[

\bullet A A

\] \& 50 \& 100 \& \& 75 \& 75 \& . 84 \& 2N591/5 \& ${ }_{\text {SYM }}$ \& A \& ${ }_{\text {Of }}$ \& \[

$$
\begin{aligned}
& 50 \\
& 30
\end{aligned}
$$

\] \& \[

$$
\begin{aligned}
& 40 \\
& 50
\end{aligned}
$$
\] \& 15 \& 14 \& 250 \& . 43 <br>

\hline \& \& \& \& \& \& \& \& \& \& $2 N 588$
2 N600 \& PHI \& \& AJ \& 750 \& 500 \& 35 \& 125 \& 8.0 \& 3.45 <br>
\hline
\end{tabular}

Transistors


EXPLANATION OF COLUMN HEADINGS AND SYMBOLS
Pe, maximum collector dissipation. Pi, total dissifation. Ie, maximum signal AC current gain. hFE, DC current gain. fab, alpha cutoff fre-
silicon type; all others are fermanium. ©


| $\begin{aligned} & \text { Type } \\ & \text { No. } \end{aligned}$ | Mir. | Fig. | Design of Structure | $\begin{aligned} & \text { Pe or } P_{t} \\ & \text { Mw of } W \end{aligned}$ | $\begin{aligned} & \mathrm{l}_{\mathrm{e}} \\ & \mathrm{Ma} \end{aligned}$ | BVCB | $\begin{aligned} & \text { hie or } \\ & \text { hFE } \end{aligned}$ | fiab or faet Mc | $\begin{gathered} \text { NET } \\ \text { EACH } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 2 N 627 \\ & 2 N 629 \\ & 2 N 647 \\ & 2 N 6449 \\ & 2 N 650 \\ & \hline \end{aligned}$ | $\begin{aligned} & \overline{\text { MOT }} \\ & \text { MOT } \\ & \text { RCA } \\ & \text { RCA } \\ & \text { MOT } \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathrm{C} \\ & \mathrm{C} \\ & \mathrm{M} \\ & \mathrm{M} \\ & \mathrm{~A} \\ & \hline \end{aligned}$ | AJ A A A AJ AJ | $90{ }^{\circ}$ $90{ }^{\circ}$ 100 100 200 | $10 A$ $10 A$ 100 50 250 | $\begin{aligned} & 40 \\ & 80 \\ & 25 \\ & 20 \\ & 45 \\ & \hline \end{aligned}$ | $\begin{aligned} & 30 \uparrow \\ & 304 \\ & 30 \\ & 655 \\ & 40 \\ & \hline \end{aligned}$ | $\begin{array}{r} .40 \\ .40 \\ \times 20 \\ \hline \end{array}$ | $\begin{aligned} & 3.45 \\ & 6.90 \\ & 1.16 \\ & 1.86 \\ & 1.85 \end{aligned}$ |
| $\begin{aligned} & 2 N 651 \\ & 2 N 652 \\ & 2 N 653 \\ & 2 N 654 \\ & 2 N 655 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { MOT } \\ & \text { MOT } \\ & \text { MOT } \\ & \text { MOT } \\ & \text { MOT } \end{aligned}$ | $\begin{aligned} & A \\ & A \\ & A \\ & A \\ & A \\ & A \end{aligned}$ | AJ AJ A AJ | $\begin{aligned} & 200 \\ & 200 \\ & 200 \\ & 200 \\ & 200 \\ & \hline \end{aligned}$ | 45 250 250 250 250 | $\begin{array}{r} 250 \\ 45 \\ 30 \\ 30 \\ 30 \\ \hline \end{array}$ | 75 <br> 160 <br> 40 <br> 75 <br> 160 | $\begin{aligned} & 2.5 \\ & 3.0 \\ & 2.0 \\ & 2.5 \\ & 3.5 \end{aligned}$ | $\begin{aligned} & 1.88 \\ & 2.40 \\ & 1.65 \\ & .80 \\ & 1.95 \\ & \hline \end{aligned}$ |
| $2 N 669$ 2N677 $2 N 705$ 2N710 $2 N 711$ | $\begin{aligned} & \text { MOT } \\ & \text { SYL } \\ & \text { TI } \\ & \mathrm{TI} \\ & \mathrm{TI} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{C} \\ & \mathbf{C} \\ & R \\ & A \\ & A \\ & \hline \end{aligned}$ | AJ AJ MESA MESA MESA | $\begin{aligned} & 200 \\ & 300 \\ & 300 \\ & 150 \\ & \hline \end{aligned}$ | $\begin{array}{r} 3.0 \mathrm{~A} \\ 15 \mathrm{~A} \\ 50 \\ 50 \\ 50 \\ \hline \end{array}$ | $\begin{aligned} & 40 \\ & 50 \\ & 15 \\ & 15 \\ & 12 \end{aligned}$ | $100 \dagger$ 404 $40 \dagger$ 409 309 | $\begin{aligned} & 3.50 \\ & 300 \\ & 300 \\ & 360 \end{aligned}$ | $\begin{aligned} & 1.70 \\ & 3.15 \\ & 2.48 \\ & 2.48 \\ & 1.45 \end{aligned}$ |
| $\begin{aligned} & 2 N 797 \\ & 2 N 964 \\ & 2 N 1008 \\ & 2 N 1010 \\ & 2 N 1038 \\ & \hline \end{aligned}$ | TI MOT SYL RCA TI | $\begin{aligned} & T \\ & T \\ & A \\ & M \\ & H \\ & H \end{aligned}$ | -MESA <br> D <br> A <br> AI <br> Alloy | $\begin{gathered} 150 \\ 150 \\ 167 \\ 50 \\ 20^{\circ} \\ \hline \end{gathered}$ | 150 <br> 100 <br> 300 <br> 2.0 <br> 3.0 A <br> 3 | 20 15 20 10 40 | $\begin{aligned} & 80 \dagger \\ & 40 \uparrow \\ & 90 \\ & 35 \\ & 33 \uparrow \\ & \hline \end{aligned}$ | $\begin{gathered} 1000 \\ 460 \\ 1.0 \\ 2.0 \\ 10 \mathrm{kc} \\ \hline \end{gathered}$ | $\begin{aligned} & 4.58 \\ & 4.58 \\ & 1.20 \\ & 1.93 \\ & 2.85 \end{aligned}$ |
| $\begin{aligned} & 2 N 1039 \\ & 2 N 1040 \\ & 2 N 1041 \\ & 2 N 1042 \\ & 2 N 1043 \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathrm{T} \\ & \mathrm{~T} \\ & \mathrm{TI} \\ & \mathrm{TI} \\ & \mathrm{TI} \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathrm{H} \\ & H \\ & H \\ & H \\ & H \\ & H \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Allay } \\ & \text { Alloy } \\ & \text { AJ } \\ & \text { AJ } \\ & \text { AJ } \end{aligned}$ | $\begin{aligned} & 20^{\circ} \\ & 20{ }^{\circ} \\ & 20^{\circ} \\ & 20^{\circ} \\ & 2{ }^{\circ} \end{aligned}$ | $\begin{aligned} & \hline 3.0 \mathrm{~A} \\ & 3.0 \mathrm{~A} \\ & 3.0 \mathrm{~A} \\ & 3.0 \mathrm{~A} \\ & 3.0 \mathrm{~A} \end{aligned}$ | $\begin{array}{r} 60 \\ 80 \\ 100 \\ 40 \\ 60 \end{array}$ | $\begin{aligned} & 339 \\ & 339 \\ & 339 \\ & 259 \\ & 259 \end{aligned}$ | $\begin{aligned} & \text { loke } \\ & \text { 10kc } \\ & \text { 10kct } \\ & 10 \mathrm{kct} \\ & 10 \mathrm{kc} \end{aligned}$ | $\begin{array}{r} 3.75 \\ 11.25 \\ 15.75 \\ 5.25 \\ 9.00 \\ \hline \end{array}$ |
| $2 N 1045$ $2 N 1059$ $2 N 1086$ $2 N 1087$ $2 N 1097$ | $\begin{aligned} & \text { T1 } \\ & \text { SYL } \\ & \text { GE } \\ & \text { GE } \\ & \mathbf{G E} \end{aligned}$ | $\begin{aligned} & \hline \text { H } \\ & \text { E } \\ & \text { E } \\ & \mathbf{D} \\ & \hline \end{aligned}$ | AJ AJ - G R AJ | $\begin{array}{r} 20 * \\ 180 \\ 65 \\ 65 \\ 140 \\ \hline \end{array}$ | $\begin{array}{r} 3.04 \\ 100 \\ 20 \\ 20 \\ 100 \end{array}$ | $\begin{aligned} & 100 \\ & 20 \\ & 9.0 \\ & 9.0 \\ & 16 \\ & \hline \end{aligned}$ | $\begin{aligned} & 254 \\ & 75 \\ & 17 \\ & 179 \\ & 34 \end{aligned}$ | $\begin{gathered} \text { 10ke } 9 \\ 8.80 \\ 8.0 \\ 8.0 \\ 1.0 \end{gathered}$ | $\begin{array}{r} 18.00 \\ 1.00 \\ 1.83 \\ 1.82 \end{array}$ |
| $\begin{aligned} & 2 N 1098 \\ & 2 N 1101 \\ & 2 N 1102 \\ & 2 N 1109 \\ & 2 N 1124 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { GE } \\ & \text { SYL } \\ & \text { SYL } \\ & \text { PI } \\ & \hline P H I \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline D \\ & 8 \\ & 8 \\ & 8 \\ & 8 \\ & \hline \end{aligned}$ | AJ AA AA GJ AJ | 180 <br> 180 <br> 180 <br> 30 <br> 300 | 100 100 100 5 250 | $\begin{aligned} & 16 \\ & 20 \\ & 40 \\ & 16 \\ & 40 \end{aligned}$ | 349 <br> 40 <br> 40 <br> 20 <br> 125 | $\begin{gathered} 1.0 \\ .15 \\ 30 \\ 15 \\ 1.3 \end{gathered}$ | $\begin{array}{r} .60 \\ .75 \\ .84 \\ 1.89 \\ 1.95 \end{array}$ |
| $2 N \mid 125$ $2 N \mid 128$ $2 N$ $2 N 129$ $2 N$ $2 N$ 143 | $\begin{aligned} & \hline \text { PHI } \\ & P H I \\ & P H I \\ & P H I \\ & \text { PI } \\ & \hline \end{aligned}$ | $\begin{aligned} & F \\ & F \\ & F \end{aligned}$ | $\begin{aligned} & \text { AI } \\ & \text { AI } \\ & \text { AI } \\ & \text { A } \\ & \text { MESA } \end{aligned}$ | $\begin{aligned} & 3 C 0 \\ & 150 \\ & 150 \\ & 150 \\ & 750 \end{aligned}$ | $\begin{aligned} & 250 \\ & 250 \\ & 250 \\ & 250 \\ & 100 \end{aligned}$ | $\begin{aligned} & 40 \\ & 25 \\ & 25 \\ & 30 \\ & 25 \end{aligned}$ | $\begin{aligned} & 125 \\ & 120 \\ & 165 \uparrow \\ & 110 \uparrow \\ & 32 \end{aligned}$ | 1.5 1.25 .75 480 | $\begin{aligned} & 2.85 \\ & 1.43 \\ & 1.65 \\ & 1.43 \\ & 6.38 \end{aligned}$ |
| $\begin{aligned} & 2 N: 144 \\ & 2 N: 145 \\ & 2 N: 191 \\ & 2 N: 192 \\ & 2 N: 193 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathrm{GE} \\ & \mathrm{GE} \\ & \text { MOT } \\ & \text { MOT } \\ & \text { MOT } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline D \\ & D \\ & A \\ & A \\ & A \\ & \hline \end{aligned}$ | A) AJ AJ AJ AJ | $\begin{aligned} & 140 \\ & 140 \\ & 175 \\ & 175 \\ & 175 \\ & \hline \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \\ & 200 \\ & 200 \\ & 200 \\ & \hline \end{aligned}$ | $\begin{aligned} & 16 \\ & 16 \\ & 40 \\ & 40 \\ & 40 \\ & \hline \end{aligned}$ | $\begin{aligned} & 34 \dagger \\ & 34 \dagger \\ & 40 \\ & 75 \\ & 160 \\ & \hline \end{aligned}$ | $\begin{aligned} & 15 \\ & 2.0 \\ & 2.5 \\ & \hline \end{aligned}$ | .68 <br> .60 <br> 1.12 <br> 1.12 <br> 1.50 |
| $\begin{aligned} & 2 N: 204 \\ & 2 N: 224 \\ & 2 N: 225 \\ & 2 N: 226 \\ & 2 N: 264 / 33 \end{aligned}$ | $\begin{aligned} & \text { PHI } \\ & \text { RCA } \\ & \text { RCA } \\ & \text { RCA } \\ & \text { SYL } \end{aligned}$ | $\begin{aligned} & \hline D \\ & \text { K } \\ & A \\ & A \\ & A \\ & \hline \end{aligned}$ | Alioy AJ AJ AJ DI | $\begin{aligned} & 200 \\ & 120 \\ & 120 \\ & 120 \\ & 50 \end{aligned}$ | $\begin{array}{r} 500 \\ 10 \\ 10 \\ 10 \\ 10 \end{array}$ | $\begin{aligned} & 20 \\ & 40 \\ & 40 \\ & 60 \\ & 20 \end{aligned}$ | $\begin{aligned} & 30 \dagger \\ & 60 \\ & 60 \\ & 60 \\ & 25 \end{aligned}$ | $\begin{gathered} 60 \\ 100 \\ 60 \\ 3.0 \end{gathered}$ | 6.38 2.06 2.89 3.30 .57 |
| $2 N: 265 / 5$ <br> $2 N: 266$ <br> $2 N: 273$ <br> $2 N: 274$ <br> $2 N: 300$ | $\begin{aligned} & \hline \text { SYL } \\ & \text { SYL } \\ & \mathrm{NI} \\ & \mathrm{TI} \\ & R C A \\ & \hline \end{aligned}$ | A A A A A | AI AJ Alloy Alloy MESA | $\begin{array}{r} 50 \\ 80 \\ 150 \\ 150 \\ 150 \\ \hline \end{array}$ | $\begin{aligned} & 100 \\ & 150 \\ & 150 \\ & 100 \\ & \hline \end{aligned}$ | $\begin{aligned} & 10 \\ & 10 \\ & 15 \\ & 25 \\ & 13 \end{aligned}$ | $\begin{aligned} & 75 \\ & 50 \\ & 50 \\ & 50 \end{aligned}$ | $\begin{array}{r} 1.0 \\ 1.0 \\ 2.0 \\ 2.0 \\ 40 \end{array}$ | $\begin{array}{r} .57 \\ .59 \\ .67 \\ . .16 \end{array}$ |
| $2 \mathrm{~N} \mid 301$ $2 \mathrm{~N}: 302$ $2 \mathrm{~N}: 303$ $2 \mathrm{~N} \mid 304$ $2 \mathrm{~N}: 305$ | $\begin{aligned} & \hline \text { RCA } \\ & \text { II } \\ & \text { TI } \\ & T I \\ & T I \\ & \hline 1 \end{aligned}$ | A J J | $\begin{aligned} & \text { MESA } \\ & \text { Allay } \\ & \text { Alloy } \\ & \text { Alloy } \\ & \text { Allay } \end{aligned}$ | $\begin{aligned} & 150 \\ & 150 \\ & 150 \\ & 150 \\ & 150 \\ & \hline \end{aligned}$ | $\begin{aligned} & 300 \\ & 300 \\ & 300 \\ & 300 \\ & 300 \\ & \hline \end{aligned}$ | $\begin{aligned} & 30 \\ & 25 \\ & 30 \\ & 25 \\ & 30 \\ & \hline \end{aligned}$ | $\begin{array}{r} 100 \\ 50 \\ 50 \\ 70 \\ 70 \\ \hline \end{array}$ | $\begin{array}{r} 10 \\ 3.0 \\ 3.0 \\ 5.0 \\ 5.0 \\ \hline \end{array}$ | 1.65 .50 .50 .61 .61 |
| $\begin{aligned} & 2 N: 306 \\ & 2 N: 307 \\ & 2 N: 308 \\ & 2 N: 309 \\ & 2 N: 362 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \overline{T i} \\ & \text { Ti } \\ & \text { Ti } \\ & \text { Ti } \\ & \text { MOT } \\ & \hline \end{aligned}$ |  | Allay <br> Alloy <br> Alloy <br> Allay Allay | $\begin{gathered} 150 \\ 150 \\ 150 \\ 150 \\ 90^{+} \\ \hline \end{gathered}$ | $\begin{array}{r} 300 \\ 300 \\ 300 \\ 300 \\ 3.0 \mathrm{~A} \end{array}$ | $\begin{array}{r} 25 \\ 30 \\ 35 \\ 30 \\ 100 \\ \hline \end{array}$ | $\begin{gathered} 100 \\ 100 \\ 150 \\ 150 \\ 55 \dagger \end{gathered}$ | 10.0 10.0 15.0 15. $10 \mathrm{kc} \ddagger$ | $\begin{aligned} & 1.12 \\ & 1.12 \\ & 1.57 \\ & 1.57 \\ & 5.00 \\ & \hline \end{aligned}$ |
| $\begin{array}{r} 2 N 1370 \\ 2 N I 371 \\ \hline \end{array}$ | $\begin{array}{\|l} \hline \mathrm{T} \\ \mathrm{Ti} \\ \hline \end{array}$ | $\begin{aligned} & A \\ & A \end{aligned}$ | Alloy Alloy | $\begin{aligned} & 150 \\ & 150 \end{aligned}$ | $\begin{aligned} & 150 \\ & 150 \end{aligned}$ | $\begin{aligned} & 25 \\ & 45 \\ & \hline \end{aligned}$ | $\begin{aligned} & 80 \\ & 80 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2.0 \\ & 2.0 \end{aligned}$ | $\begin{array}{r} .27 \\ 1.14 \end{array}$ |



| Type No. | Mfr. | Fig. | Designor Structure | Pe or Pt * <br> Mw or | $\begin{aligned} & \text { Ic } \\ & \text { ma } \end{aligned}$ | $\begin{gathered} \text { Bves } \\ v \end{gathered}$ | hie of hFEI | $f_{\text {tals of }}$ | $\begin{aligned} & \mathrm{NEI} \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 N 1372 | TI | A | Alloy | 210 | 200 | 25 | 45 | 2.0 | 82 |
| $2 \mathrm{~N} / 373$ | 1 | A | Alloy | 250 | 200 | 45 | 45 | 2.0 | 1.20 |
| $2 \mathrm{~N} / 374$ | T1 | A | Alloy | 250 | 200 | 25 | 70 | 2.0 | 1.02 |
| 2N1375 | TI | A | Alloy | 250 | 200 | 45 | 70 | 2.0 | 1.39 |
| 2N1376 | 11 | A | Alloy | 250 | 200 | 25 | 95 | 2.0 | 1.29 |
| 2N1377 2 N 1378 | TI | A | Alloy | 250 | 200 | 45 | 95 | 2.0 | 50 |
|  | If | A | Al | 250 | 200 | 12 | 200 | 2.0 | 1.29 |
| 2N1380 | II | A | Alloy | 250 | 200 | 25 | 200 | 2.0 | 1.44 |
| 2Ni3EI | II | A | Alloy Alloy | 250 250 | $\begin{aligned} & 200 \\ & 200 \end{aligned}$ | $\begin{aligned} & 12 \\ & 25 \end{aligned}$ | 100 | 2.0 | . 67 |
| 2 N 1382 | II | A | Allay | 200 | 200 | 25 | 80 | 2.0 |  |
| 2N1383 | TI | A | Alloy | 200 | 200 | 25 | 50 | 2.0 | . 92 |
| 2 N 1401 | II | A | MESA | 35 | 5.0 |  | 2.1 |  | 4.74 |
| 2 N 1404 | It | A | A) | 150 | 300 | 25 | $100 \dagger$ | 4.0 | . 63 |
| $2 \mathrm{~N} / 411$ | PHI | A | Alloy | 25 | 50 | 5 | 75 |  | 3.74 |
| 2N1425 | RCA | $\stackrel{N}{N}$ | DF | 80 | 10 | 24 | 49 | 33 |  |
|  | RCA | N | DF | 80 | 10 | 24 | 120 | 33 | . 89 |
| ${ }_{2 N \mid 525}$ | SYL | 8 | A | 180 | 100 | 20 | 150 |  | 1.12 |
| -2Ni526 | RCA | M | A) | 80 80 | 10 | $\begin{aligned} & 24 \\ & 24 \end{aligned}$ | $\begin{aligned} & 60 \\ & 130 \end{aligned}$ | $\begin{aligned} & 33 \\ & 33 \end{aligned}$ | . 68 |
| -2N1527 | RCA | K | A) | 80 | 10 | 24 | 130 | 33 |  |
| $2 N 1530$ | MOT | P | A) | $90 *$ | 5.0 A | 60 | $30 \dagger$ | 109 kc | 2.00 |
| 2N1586 | TI | 8 | Si GI | 150 | 25 | 15 | 18 | 4.0 | 6.20 |
| 2NI605 | TI | A | - ${ }^{\text {a }}$ | 150 | 160 | 25 | 40 | 12 | 1.09 |
| -2N1631 | RCA | K | A) | 80 | 10 | 12 | 80 | 45 | . 74 |
| - 2 N1633 | RCA | k | A) | 80 | 10 | 34 | 75 | 40 |  |
| - 2 N 1635 | RCA | K | A) | 80 | 10 | 34 | 75 | 45 | 1.32 |
| -2N1637 | RCA | A | A) | 80 | 10 | 34 | 30 | 45 | . 58 |
| 2Ni671A | GE | ${ }_{\text {A }}$ | S1. Un | 450 |  |  |  |  | 2.95 |
|  |  |  | Si. Un | 450 |  |  |  |  | 3.20 |
|  | CE | D | Switch | 75 | 25 | 26 | 304 | 9.0 | . 99 |
| $\begin{aligned} & 2 \mathrm{NI} 745 \\ & 2 \mathrm{~N} I 750 \end{aligned}$ | PHI | , | A) | 60 | 50 | 20 | 331 |  | 1.83 |
| -2N1752 | PHI | 0 | S8 | 15 | 5.0 | 14 | 30 | 50 | 1.17 |
| 2Nigos | $R C A$ |  | ${ }_{0}$ | $\begin{aligned} & 60 \\ & 50^{*} \end{aligned}$ | 50 | 12 | 250 | 106 | 2.16 |
| 2N1907 | TI |  | A) | $150{ }^{\circ}$ |  |  |  | . 5 kc | 4.13 |
| 2N2078 | mot | G | A) | $170 *$ | 2 CA | 100 | 10 | 20 | . 00 |
| 2N2082 | mot | G | AJ | $170^{*}$ | $15 A$ $15 A$ | 40 | $40 \%$ | 10hc: | 2.60 |
| 2N2102 | RCA | A | Si, 01 | 5* | IA | 120 | 1209 | loke: | 3.20 |
| -2N2188 | II | R | MESA | 125 | 50 | 40 | ${ }^{129}$ | 125 | 1.27 |
| -2N2189 | II | R | MESA | 15 | 50 | 40 | 135 | 150 | 1.64 |
| $\begin{array}{r} -2 N 2190 \\ -2 N 2191 \end{array}$ |  | $\begin{aligned} & \mathrm{R} \\ & \mathrm{R} \end{aligned}$ | MESA | 125 | 50 | 60 | 90 | 125 | 1.47 |
| $2 N 2270$ | $\begin{aligned} & \text { R } \\ & \text { In } \end{aligned}$ | N | MESA | 125 | 50 | 60 | 135 | 150 | 1.86 |
|  |  |  | Planar | $5 *$ | 1.0A | 60 |  |  | 4.54 |
| CK721 | RAY |  | A) | 180 | 10 | 15 |  |  |  |
| CK722 | RAY | $8$ | A) | 180 | 10 | 22 |  | 0.6 | 2.40 |
| CK768 | RAY | ${ }_{\text {A }}$ | -MESA | 150 | 100 | 15 |  | 3.5 | 1.50 |
| S日iol |  |  | $194$ | 600 |  | 20 | 6.0 | 150 | 15.00 |
| \$E102 |  | 2N3 |  |  |  |  |  |  | - |
| S8103 |  | 2N3 | 46 |  |  |  |  |  |  |
| T1.321 | T1 | 11 | A) | 100 | 50 | 30 | 95 | 50 |  |
| T1.376 | It | 1 | A) | 150 | 150 | 20 | 105 |  | 1.71 |
| T1.377 | 11 | 1 | A) | 150 | 150 | 20 | 53 ¢ |  |  |
| 11.480 | T1 | 1 | SI. G1 | 600 | 60 | 50 | 36 |  | 1.55 |
| T1.481 TI.482 | $\begin{aligned} & \mathrm{Ti} \\ & \mathrm{Ti} \end{aligned}$ |  | - MiESA | 600 600 | 60 | 80 | 36 |  | 1.90 |
| Ti.483 | Ti | J | - MESA | 600 | $2 \mu \mathrm{a}$ | 20 | $\frac{2}{2}$ |  | 2.15 |
| T1.484 | 1 | J | - MESA | 600 | 2 $\mu \mathrm{a}$ | 40 | 2 |  | 2.40 |
| T1-485 | T1 | J | MESA | 300 | 143 |  | 1 |  |  |
| T1.492 | T1 | J | SI, GJ | 150 | 25 | 40 | 15 | 8.0 | 1.55 |
| T1.493 TI. | Ti | ${ }^{1}$ | Si, GI | 125 | 20 | 40 | 15 | 20 | 1.00 |
| T1.495 | Ti | J | Si, GJ SI, GJ | 125 | 20 | 40 | 40 | 20 | 2.50 |
| T1.496 | Ti |  |  |  |  |  |  |  | 3.00 |
| T0037 | PHI | , | Si, Gj | $\begin{array}{r} 600 \\ 40 \end{array}$ | $\begin{aligned} & 60 \\ & 20 \end{aligned}$ | $\begin{aligned} & 70 \\ & 12 \end{aligned}$ | $\begin{aligned} & 10 \dagger \\ & 145 \end{aligned}$ | 1.0 | 1.75 |

## MOTOROLA TRANSISTOR

 MOUNTING KITSProvide hardware for correctly chassis mtg . TO-3 power transistor types and 50 -
watt zener diodes.

| Type No | Insulating Wather | 1-24, EA | 25-99, EA | 100-999, EA. |
| :---: | :---: | :---: | :---: | :---: |
| M K-10 | Teflon-coated fiberglass | . 23 | . 23 | 15 |
| MK-15 | Mica | . 23 | . 23 | .15 |
| M K-20 | Anodized Aluminuma | . 35 | . 35 | . 23 |
| MS-10 | Teflon* | 2.25 | 1.95 | . 23 |
| MS-15 | Mica* | 2.25 | 1.95 |  |

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## GENERAL AUDIO TRANSISTOR

Only - Extremely Low in Price
05 C - Replaces Many Types
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100 mc . Max. Ico (maximum collector cutoff 100 me. Max. Ico (maximum collector cutof


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ren shop must stock; also simplifies replacement problems. Supplied in packakes of 4,5 or 6 transistors. Av. shpg. wits. per pkg.: MT304 pkg. of 4.2 oz .: MT305, pkg. of $5,3 \mathrm{oz}$.; MT306, pkg, of $6,4 \mathrm{oz}$.
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| 54 E 302 | M M220 | 200 | 1 N 2027 |  |
| 54 E 303 | M M 240 | 400 | 1 N 2029 |  |
| 4 E 304 | M M260 | 60 | 1N2031 | 1.3 |
| 54 E 305 | M M280 | 800 | 1 N1236 | 1.75 |
| 54 E 306 | M M291 | 1000 | 1N3366 | 2. |
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## $\underset{\substack{\text { As } \\ \text { As } \\ \text { as }}}{\substack{2}}$



2 N107 Audio Translstor. An alloy junction, PNP hermetically sealed audio transistor that's ideal for hobbylat projects. Packed with the transistor are several circuit dlagrams from which interesting gand useful clectronic devices can be built. Shpg. wt.. 2 oz . 2 N 107.

ONLY. 55
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ONLY. 44

## Diodes


explanation of symbols and column headings

## Manufaciurers' Names

GE-General Electric
HU-Hughes Aircraft
HOF-Hofman
i R-International Rectifier
MiC-Microwave Associates

Column Heads and Abbreviations
Piv-peat inverse dollage. Max. Inv. Ma-maximum inverse current in millamperes. Itwt-minimum forward current in milliamperes measured at I volt and at $25^{\circ} \mathrm{C}$. 1 mr maximum reverse current measured in microainperes at specified temperature. Ip-peak rectified forward current in milliamperes. $V_{2}$ Min.- minimum zener voltake @ $25^{\circ} \mathrm{C}$. "Ge" indicates germanium type; "Si" indicates silicon type. Av, shpg. wt.. 2 or

TI-Texas -Sylvania
DIODES FOR VARIED APPLICATIONS

| Type No. | F12 | Mir. | PIV | Max. Inv. Ma @ $25^{\circ} \mathrm{C}$. | liwa | - Description | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| IN2IB | B | MIC | 3000 -me silicon microwave mixer 3000 -mac silicon microwave mixer 9000 -me silicon microwave mixer $10000-\mathrm{mc}$ silicon microwave mixer $75$ <br> 035 10V |  |  |  |  |
| IN2IC | 8 | MIC |  |  |  |  | 1.68 |
| IN23日 | 8 | MIC |  |  |  |  | 1.68 |
| 1N23C | 8 | MIC |  |  |  |  | $1.68$ |
| IN34A |  | RAY |  |  |  |  | $\begin{array}{r} 1.02 \\ .32 \end{array}$ |
| IN34AS 1N35 | $\overline{0}$ | $\overline{S Y L}$ | $60$ | 30 giov | 50 |  |  |
| N N 5 <br> IN38BS | $\begin{aligned} & \text { C } \\ & \text { F } \end{aligned}$ | SYL <br> SYL | $50$ | 01 610 lov | 7 | Ge; Matched pair | 2.52 |
| IN388S | F | SYL | 100 | 633 S | 50 | Ge ; Gen. purp. | . 75 |
| INS4AS | C | SYL | 85 50 | . 833 (a) 10 V | 40 5 | Ge; Gen purp. | 33 |
| INS5AS | C | SYL | 150 | 5 (a. 15cV |  |  |  |
| IN56A | 6 | SYL | 50 | . 3 (1) 30 V | 15 | Ge; Gen. purp. | 1.44 |
| IN58A | C | SYL | 120 | . 6 @100V | 4 | Ge; High cond. Ge; Hight cond. | 1.14 |
| IN60 | 0 | SYL | 25 | 03 ¢ 1.5 V | 4 | Ge ; Hight cond. Ge ; Vid. det.; sen . puro. | 1.20 .48 |
| IN635 | C | SYL | 100 | 05 @ 50V | 4 | Ge; Vid det.; l en. purp. Ge; High back res. | .48 .90 |
| IN64 <br> IN655 | $\begin{aligned} & \mathrm{D} \\ & \mathrm{C} \end{aligned}$ | $\begin{aligned} & \overline{S Y L} \\ & S Y \mathrm{~L} \end{aligned}$ | 25 | Noise. 18 db max. |  | Ge; Vid. det. | 72 |
| IN655 IN66A |  | SYL | 70 60 | . 2 ¢ 40 V | 2.5 | Ge; Gen purp. | . 48 |
| IN67A | D | RAY | 60 80 | . 8950 V | 5 | Ge; Gen. purp. | . 39 |
| IN67A | D | RAY | 80 | . 05 cm 50V | 4 | Ge; High Dack res. | . 61 |
| IN6BA | 0 | HU | 100 |  |  |  | 55 |
| IN69A | C | SYL | 60 | 625 @ 100 V .590 c | 3 | Ge; Gen. purd. | 1.00 |
| 1N82 | C | SYL | 5 | Naise. 16 db max. | 5 | Ge; Gen. purp. Ge UHF mixer (to 1000 mc ) | . 58 |
| IN82A | C | RAY | 5 | Noise. 14 db max. |  | Ge; UHF mixer (to 1000 mc ) <br> Ge ; UHF mixer (to 1000 mc ) | .95 .92 |
| 1N90 | D | HU | 60 | $\text { S } 50 \mathrm{~V}$ | 5 | Ge; UhF mixer (to 1000 mc ) <br> Ge; Gen. purd. | . 92 |
| N95 | 0 | HU | 50 | 5 ¢ 50 V | 10 | Ge; Geri. purp. | 52 |
| N96 | D | HU | 60 | . 5 (44) 50V | 20 | Ge ; Gen purp. | . 59 |
| N99 | D | HU | 80 | . 05 (a) 50 V | 10 | Ge; Hish back res. | . 88 |
| N100 | D | HU | 80 | .05950 V | 30 | Ge; Gen. puro. | . 86 |
| N\|I6 | D | HU | 60 | . 100 (4)50V | 5 | Ge; High back res. | . 96 |
| $1 N 118$ | 0 | HU | 60 | . 100650 V | 2 | Ge; High back res. | 61 |
|  | D | HU | 60 | . 850 ¢ 50V | 50 | Ge; Gen purp. | . 45 |
| N\|38A | ${ }^{\text {A }}$ | HOF | 36 | . 03 @ 20 V | 21 | Ge; Gen purp. | 2.75 |
| N147A | A | MOF | 18 | . 01 @10V | 35 | Ge; Gen purp. | 2.75 |
| N\|91 |  |  | 2 | Frequency. 900-1000 | mc | Ge; Mixer Ulif | . 96 |
| N192 | D | HU | Compu | er-recovers to 50 | in 0.5 | $5 \mu \mathrm{sec}$. | 58 |
| N198 | D | HU | 170 | 20 G 50Y | 30 | Ge: Switch | . 53 |
| N270 | D | Rar | 80 | 100 \& 50 V | 5 | Ge; Gen purp. | . 51 |
| N273 | D | HU | 35 | 100 (G) 20 V | 80 | Ge; Gen. purd. | . 50 |
| N279 | D | HU | 35 |  |  | Ge: Quick recovery | . 68 |
| N294 | 0 | SYL | 60 | -10 (a) 10 V | 100 50 | Ge; Quick recovery | 7 |

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20-Plece Assortment. A handy assortment containing 5 each of the 4 adeal popular germanum diodes used in today's radlo and TV sets. An tube caddy. Includes 5 or including in the radio and TV serviceman's Offered at a special assortment types iN34A, 1 No0, 1 N 64 and iN295. act ually cost $\$ 7.10$ if purchased separately. venient storage box. Shpg. wt.. 2 ibs. 54 E 400 .

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28-Plece Assortment with Cross Reference Chart. All-purpose germanium diode assortment includes 12 different ratings to cover the entire radio. TV and audio replacement market. Includes 5 each of the 4 1N295 plus one each od in apsortment above, IN34A. 1 N60. 1 N 64 and $1 N 87 A .1 N 29.4$, 1 N541, IN542 and ing Thbes: $1 N 48,1 N 82 \mathrm{~A}, 1 \mathrm{IN67A}$. cross reference for making guick and easy Also included is a complete special assortment price of $\$ 9.95$ these diodes wonld cost a total of $\$ 11.30$ if purchased separately. Supplied in box. Shpg. Wi.. 3 lbs . 54 E 401 .
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G. Quality germaniunt tunnel diodes for use in a variety of applications. nillivolts; valley voltage of 320 millivoltsolts; peak point voltage of 55 to $100^{\circ}$ C. Minimum peak to valley point current tatlo: IN $3560 / \mathrm{T} 1925$, 5: 1N356i/1975,8; 1 N $3562 /$ T1976, 6. Av. shpg. wt., 2 oz.

| Mir's Type | In Ma | Neg. Realstance | Series Reslstance | NET EACH |
| :---: | :---: | :---: | :---: | :---: |
| IN3560/T1925 | 1.0 | -120 ohms | 2.5 ohins |  |
| IN3561/T1975 | 1.0 5.0 | - 120 ohmins | 1.5 ohins | 4.75 |

## G.E. TUNNEL DIODE MANUAL

A highly comprehensive gulde to the important field of tunnel diodes. Cludes suled concisely explains tunnel dlode theory and ratings. Includes specific thinel diode applications and test circuits. Profusely 39 K 573. Postpald in U.S.A.

| $\begin{aligned} & \hline \text { Type } \\ & \text { No. } \\ & \hline \end{aligned}$ | Fig. | MIf. | PIV | $\begin{aligned} & \text { Max. Inv. } \\ & \text { Ma © } 25^{\circ} \mathrm{C} . \end{aligned}$ | liwd | Description | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| IN294A | 0 | Ray | 60 | (3) -50 V | 5 | Ge; Gen. durn. | 50 |
| iN295 | D | ${ }_{\text {SFL }}^{\text {GYL }}$ | 40 | 18 (4) 10 V |  | Ge; Gen. purp. | 35 |
| $\begin{aligned} & \text { IN295 } \\ & \text { IN295A } \end{aligned}$ | $\begin{aligned} & 0 \\ & 0 \end{aligned}$ | SYL | $\begin{aligned} & 40 \\ & 40 \end{aligned}$ | $\begin{array}{r}18 \text { @ } 10 \mathrm{~V} \\ 2 \mathrm{~m} \\ \hline 10 \mathrm{~V}\end{array}$ |  | Ge; Gen. purp. Ge; Gen ourp. | . 35 |
| IN297A | d | RAY | 80 80 | 10 2 10 V | 30 | Ge; Gen purp. <br> Ge: Gen purp. | . 27 |
| IN305 | K | RAY | 60 | ${ }^{2}$ (13) $1 \overline{0 V}$ | 125 | Ge; Gen. purd. |  |
| IN306 | K | RAY | 15 | 2 e 10v | 150 | Ge; Gen. purp. | 2.60 |
| 1N307 | c | RAY | 125 | 5 ¢ 10 V | 50 | Ge: Gen. purp. | 2.60 |
| $\begin{aligned} & \text { IN } 456 \\ & \text { N } 457 \end{aligned}$ | ${ }_{c}^{c}$ | $\begin{aligned} & \text { SYL } \\ & \text { SYL } \end{aligned}$ | 30 | . 025 \& 25 V | 90 | Si; Gen. purp. | . 37 |
|  |  |  | 70 | 025 @ 60v | 75 | Si; Gen. purp. | . 45 |
| IN458 | C | SYL | 150 | 025 © 125v | 55 | Si; Gen. purp. | 51 |
| 1 N 459 | c | SYL | 200 | . 025 @ 175 V | 40 | Si; Gen. purp. | . 66 |
| 1N461 | c | SYL | 30 | 50 @ $25 y$ | 60 | Si; Gen purp. |  |
| \|N462 | c | ${ }^{\text {SYL }}$ | 70 | . 50 @ 60 V | 50 | Si; Gen. purp. |  |
| iN463 | C | SYL | 200 | . 50 @ 175 V | 30 | Sl: Gen. putp. | . 46 |
| INS 11 | 0 | IR |  |  | 10 | Si; Gen, purp. |  |
| INS42 | 0 | IR |  |  | . 90 |  |
| 1N625 | D | HU |  |  | 30 | Si; Gen. purp. | . 60 |
| 1N626 | 0 | HU |  |  | 30 | Si; Gen. purp. | . 60 |
| 1N627 | D | HU |  |  | 30 | Si: Gen. purp. | . 70 |
| IN628 | $\begin{aligned} & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & \text { HU } \\ & H U \end{aligned}$ | 150 | 1.09125 V |  | 30 | Si; Gen. purp. | . 88 |
| \|N636A | 0 |  |  | 1.0 (e) 175 V | 30 | Si; Gent. purd. | 95 |
| IN643 | E | II | 175 |  | 30 | Ge: Gen. purp. | . 38 |
| IN645 | E | It | 225 | 025 (4) lov | 400 | SI; Swithing | 2.20 |
| IN659 |  | II | 50 | 5.0 O. 50 V | 30 | Si: Switching | 50 |
| IN660 | E | TI | 100 | 5.0 @ 100V | 30 | Si: Switehing | 1.40 |
| IN661 | E | II | 200 | 10.62004 | 30 | Si; Switching Si; Switching St | 1.65 |
| 1N662 | E | II | 80 | 20 @ 50V | 5 |  |  |
| IN663 | E | T | 80 | 5.0 (19)75V | 5 | Si; Switching | . 60 |
| IN914 |  | T | 75 | 5 (13) 75V | 10 | Si; Switching |  |
| IN2326 | H | RCA | 1 | (10 ma. max. (a) 71 |  | Gé; Compensating |  |
| COI | E | II | 40 | 10 @ 40V |  | Si; Computer | 1.00 |
| 601 | E | JI | 100 | . 50 @ 100V | 125 |  | . 95 |
| GO2 | E | II | 50 | 25 (10) 50v | 50 | Si; Gen purp | . 73 |
| G129 |  | II |  |  |  | Si; Reference |  |
| G130 | E | T1 | Relerence range: .576. 704V. |  |  | Si; Relerctice | 1.30 |
| G222 | E | T1 | 100 | 1.06100 V | 125 | Si; Gen. pusp. | . 75 |
| G296 | E | T | 200 | 1.0 @ 200 V | 250 | Si: Gen. purp. | . 85 |
| HD2 120 | D | hu | 75 | . 5 (16) 50V | 5 | Sl; Gen. purp. | 59 |
| HD2125 | 0 | HU | 130 | . 05 (c4) 50V |  | Si; Gen. purp. |  |
| HD2135 | 0 | HU | 75 | . 1950 V | 5 | Si; Gen. purp. | . 64 |
| HD2155 | D | HU | 60 | 50 (a) 50V | S0 | Ge; Point Contact | . 85 |
| T-2 |  | II | 40 | . 025 (6) 10 V | 50 |  | 3.85 |
| [1-6 | E | 1 | 20 | 1.0 ¢ 10V | 10 | Si; Swithing | 3.00 1.68 |

## HOFFMAN ECONOMY ZENER DIODES

(A) High-quality, low-cost zener diodes. All are rated 150 mlliwatts operating temperature rating is $100^{\circ} \mathrm{C}$. Shpg above $25^{\circ} \mathrm{C}$. Maximum



## TEXAS INSTRUMENT ZENER DIODES

(H) Have max. power dissipation ( $25^{\circ} \mathrm{C}$ ) of 400 mw ( $25^{\circ} \mathrm{C}$. 10 of 230 ma Type No. Op. Lemp. range, $-65^{\circ}$ to $+175^{\circ} \mathrm{C}$. Tol.. $=10 \% .2 \mathrm{oz}$.

| Type No. | Description | Dynamle Zener Imp. ( $\mathrm{Zz}_{\mathbf{z}}$ ) | NET EACH |
| :---: | :---: | :---: | :---: |
| 1N703 | 3.0-3.9 v. breakdown | 55 ohms |  |
| ) N704 | $3.7-4.5 \mathrm{v}$. breakdown | 45 ohms |  |
| N705 N706 N70 | 4.3-5.4 v. breakdown | 35 ohms | 2.60 |
| 1 N 707 | 6.2-8.0 v, breakdown | 20 ohms |  |

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39 K 071 .
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## General Purpose Silicon Rectifiers

MAKE ALLIED YOUR HEADQUARTERS FOR SEMICONDUCTORS


GENERAL PURPOSE SILICON RECTIFIERS

A selection of general purpose silicon rectifiers for the hobbyist, experimenter, serviceman and radio Amateur. These units cover the entire ranye of popular voltage and current values. All are products of leading, component manufacturers and incorporate the highest standards of quality, reliability and consistency of specification. They are equally suitable for inclusion into newly designed original equipment, or for replacement use in existing electronic devices. Can also be used convert vacuum tube power supplies into modern, cool-running silicon
rectifier power units. Explanations of column heads and symbols in table below: Piv, peak inverse voltage. Io (Ma) (3) C., maximum average rectified forward current in milliamperes at the ambient temperature specified. Imr (Ma) @ C., maximum reverse curret in min amperes at the amblent temperature specified. lsur (A) 26 . mum surge-current rating in amperes at the ambient we. 2 oz . Be sure to specify Manufachurer and Type No. on rectifier orders.


| Type No. | Flg | Manu. facturer | $\begin{aligned} & \text { Piv } \\ & \text { Volts } \end{aligned}$ | $\begin{aligned} & 10\left(\mathrm{Ms}^{\circ}\right) \\ & \text { \& } 0^{\circ} \mathrm{C} . \end{aligned}$ | $1 \mathrm{~mm}$ |  | $\begin{aligned} & (A) \\ & 25^{\circ} \mathrm{C} \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { NET } \\ & \text { EA. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 N2069 | E | T | 200 | $75025^{\circ}$ | 10 | $25^{\circ}$ | 6 | 57 |
| IN2069A | E | SYL* | 200 | $75025^{\circ}$ | 10 | $25^{\circ}$ | 6 |  |
| IN2070 | E | TI | 400 | $75025^{\circ}$ | 10 | $25^{\circ}$ |  | 72 |
| IN20704 | E | SYL* | 400 | $75025^{\circ}$ | 10 | $25^{\circ}$ | 6 | . 96 |
| IN2071 | E | Tl | 600 | $75025^{\circ}$ | 10 | $25^{\circ}$ | 6 | 1.12 |
| 1 N 2071 A | E | SYL* | 600 | 730 25 | 10 | $25^{\circ}$ | 6 | 1.49 |
| IN2483/F4 | E | ST | 400 | $750100^{\circ}$ | 1.0 | $25^{\circ}$ |  |  |
| 1 N2484/F6 | E | ST | 600 | $750100^{\circ}$ | 1.0 | 25 |  |  |
| I N2487/40H | 1. | ST | 400 | $750100^{\circ}$ | 1.0 | $25^{\circ}$ | 75 |  |
| I N2489/60H | $L$ | ST | 610 | $750100^{\circ}$ | 1.0 | $25^{\circ}$ | 75 | . 50 |
| 1 N 2610 | D | MOT | 100 | $75050^{\circ}$ | 01 | $25^{\circ}$ | 30 | 1.05 |
| IN2611 | D | MOT | 200 | $75050^{\circ}$ | . 01 | 25 | 30 | . 58 |
| IN2612 | D | MOT | 300 | 75050 | . 01 | 25 | 30 | . 5 |
| IN2613 | D | MOT | 400 | $75050{ }^{\circ}$ |  | $25^{\circ}$ | 30 | 1.95 |
| IN2614 | D | MOT | 500 | $750.50{ }^{\circ}$ | . 01 | $25^{\circ}$ | 30 | 5 |
| 1N2615 | D | MOT | 600 | $75050^{\circ}$ | 01 | $25^{\circ}$ | 30 | 2.30 |
| 1N2616 | D | MOT | 500 | 750 | . 01 | 25 |  |  |
| IN3193 | A | RCA | 200 | $750100^{\circ}$ | 01 | $25^{\circ}$ |  | . 6 |
| IN3194 | A | RCA | 400 | $750100^{\circ}$ | 1 | ${ }^{2} 5^{\circ}$ |  |  |
| 1N3195 | A | RCA | 600 | $750100^{\circ}$ | 1 | $25^{\circ}$ |  | 1.39 |
| 1N3196 | A | RCA | 800 | $750100^{\circ}$ | . 01 | $25^{\circ}$ |  | 1.82 |
| IN3208 | H | MOT | 50 | $15000150^{\circ}$ | 1.0 | 25 ${ }^{\circ}$ | 250 | 1.55 |
| I N3208R | H | MOT | 50 | $15000150^{\circ}$ | 1.0 | 25 . | 25 |  |
| IN3209 | H | MOT | 100 | $15000150^{\circ}$ | 1. | $25^{\circ}$ | 250 | 1.60 |
| IN3209 R | H | MOT | 100 | $15000150^{\circ}$ | 1.0 | 25 | 250 | 1.60 |
| 1N3210 | H | MOT | 200 | $15000150^{\circ}$ | 1.0 | $25^{\circ}$ | 250 | 2.15 |
| - N32ion | H | MOT | 200 | $15000150^{\circ}$ | 1.0 | $25^{\circ}$ | 250 | 2.15 |
| \| N3211 | H | MOT | 300 | $15000150^{\circ}$ $15000150^{\circ}$ | 1.0 | $25^{\circ}$ | 250 | 2.70 |
| IN3211R | H | MOT | 300 400 | $15000150^{\circ}$ $15000150^{\circ}$ | 1.0 | $25^{\circ}$ | 250 | 3.30 |
| 1N3212 | H | MOT | 400 | $15000150^{\circ}$ | 1.0 |  |  |  |
| 1N3212R | H | MOT | 400 | $15000150^{\circ}$ | 1.0 | $25^{\circ}$ | 25 |  |
| $2 \mathrm{~F}-4$ | E | ST | 400 | $200100^{\circ}$ |  | $25^{\circ}$ | .... | . 90 |
| M150 | K | ST | 360 | $1500100^{\circ}$ | 2.0 | 25 |  | .90 |
| $\begin{aligned} & \text { M500/ } \\ & \text { INIO84 } \end{aligned}$ | K | ST | 400 | $500100^{\circ}$ | 2.0 | $25^{\circ}$ |  | 1.50 |
| MR322 | H | MOT | 50 | 18000 150 | 2.0 | $25^{\circ}$ | 300 | . 82 |
| MR322R | H | MOT | 50 | $18000.150^{\circ}$ | 2.0 | $25^{\circ}$ | 300 | . 82 |
| MR323 | H | MOT | 100 | $18000150^{\circ}$ | 2.0 | $25^{\circ}$ | 300 |  |
| M R323 R | H | MOT | 100 | $18000150^{\circ}$ $18000150^{\circ}$ | - $\begin{array}{r}2.0 \\ 2.0 \\ \hline\end{array}$ | $25^{\circ}$ | 300 | .90 .35 |
| M R 324 | H | MOT | 200 | $18000150^{\circ}$ | 2.0 | $25^{\circ}$ | 300 | 1.35 |
| M A324R | H | MOT | 200 | $18000150^{\circ}$ | 2.0 | $25^{\circ}$ | 300 | 1.35 |
| เv1 R 325 | H | MOT | 300 | $18000150^{\circ}$ | - 2.0 | $25^{\circ}$ | 300 300 | 1 |
| MR325R | H | MOT | 300 | $18000150^{\circ}$ | - 2.0 | $25^{\circ}$ | 300 | . .7 |
| M R 326 | H | MOT | 400 | $18000150^{\circ}$ | - 2.0 | $25^{\circ}$ | 300 | 2.15 |
| MR326 ${ }^{\text {R }}$ | H | MOT | 400 | $18000,150^{\circ}$ | - 2.0 | 25 |  | 2.15 |
| PS005 | G | PAC | 50 | $140100^{\circ}$ | 100 | $100^{\circ}$ | 1.5 | 1.07 |
| PS010 | G | PAC | 100 | $140100^{\circ}$ | 100 | $100^{\circ}$ | 1.5 | 1.47 |
| PSO15 | G | PAC | 150 | $140100^{\circ}$ | . 100 | $100^{\circ}$ | 1.5 | 1.87 |
| PS020 | G | PAC | 200 | $140100^{\circ}$ | 100 | $100^{\circ}$ | 1.5 | 2.33 |
| PS025 | G | PAC | 250 | $140100^{\circ}$ | 100 | $100^{\circ}$ | 1.5 | 2.75 |
| PS030 | G | PAC | 300 | $140100^{\circ}$ | - 100 | $100^{\circ}$ | 5 | 2.80 |
| PS035 | G | PAC | 350 | $140100^{\circ}$ | -100 | $100^{\circ}$ |  | 3 |
| PSO40 | $G$ | PAC | 400 | $140100^{\circ}$ | -100 | $100^{\circ}$ | 1.5 | 3.20 |
| PS050 | G | PAC | 500 600 | $140100^{\circ}$ | -100 | $100^{\circ}$ | 1.5 | 3.30 |
| PS060 | 6 | PAC | 600 | $140100^{\circ}$ | 100 | 100 |  |  |
|  | G | PAC | 50 | $150.150^{\circ}$ | 500 | $100^{\circ}$ | 1.2 |  |
| PS410 | G | PAC | 100 | $150150^{\circ}$ | . 500 | $100^{\circ}$ | 1.2 | 2. 13 |
| PS4 15 | G | PAC | 150 | $150150^{\circ}$ | 500 | $1100^{\circ}$ | 1.2 | 2.60 |
| PS420 | $G$ | PAC | 200 250 | 150150 $150.150^{\circ}$ | - 500 | $100^{\circ}$ | 1.2 | 2.80 |
| PS425 | G | PAC | 250 | $150150^{\circ}$ | - |  |  |  |
| PS430 | $G$ | PAC | 300 | $150150^{\circ}$ | +500 | $100^{\circ}$ | 1.2 | 3.00 |
| P5435 | G | PAC | 350 | $150150^{\circ}$ | - 500 | $100^{\circ}$ | 1.2 | 3.10 |
| P5440 | G | PAC | 400 | $150150^{\circ}$ | - 500 | $100^{\circ}$ | 1.2 | 3.20 |
| PS450 | ${ }_{6}$ | PAC | 500 600 | $125150^{\circ}$ | - 500 | $100^{\circ}$ | 1.2 | 23.30 |
| P\$460 | G | - PAC | 600 | 125150 | - ${ }^{\circ}$ | 100 |  |  |
|  | A | TI | 200 | $75025^{\circ}$ | - 10 | $25^{\circ}$ | 6 | 57 |
| U213 | A | - TI | 400 | $75025^{\circ}$ | ${ }^{\circ} 10$ | 25 | 6 |  |
| U214 | A | TI | 600 | 750 25 |  | 25 |  |  |

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K Type M500. Clip-in silicon rectifier for TV replacement and minia$\mathrm{B}+$, greater drive and sweep, more anode voltage on sets 100 volts: DC mum ratings: AC input, 130 volst, peak inverse voltase, current, 500 ma; peak current, 5000 ma. Shpg. Wt.. 4 oz. Specify 10-49.


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## Rectifiers

## ALLIED STOCKS OVER 4700 SEMICONDUCTOR TYPES



EXPLANATION OF ABBREVIATIONS AND COLUMN HEADINGS

PIV, peak inverse voltage. Max. Ioc, maximum surge current. 1 second $25^{\circ} \mathrm{C}$ with teat specifications: 2000 current required to turn device on at bias, and 1000 olnn gate shunt resistance VF resistance. 50 volt anode "off" condition at $+125^{\circ} \mathrm{C}$ measured wish a 1000 ohm exterake in the

## NEW G.E. GE-504 UNIVERSAL RECTIFIER

A A silicon rectifier with a $45-\mathrm{amp}$ surge rating. Recommended as a TV replacement for ali selenium, gernanium and silicon rectifiers used in limiting resistors normally rectuired eliminates the need for the surge PIV is 400 volts; max IDC. 750 ma . Shpg. wt., 2 oz . 4 EOOO.

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Economy priced silicon controlled rectifiers by Texas Instrument. Low est priced 400 voit devices. All are PNPN 4-layer ( 3 -junction) solid state mostatron units. All have toriof 50 ma . All-diffusion process insures ut most reliability in critical applications. Av. shpg. we., 2 oz.

| Mfr's Type | Fig. | $V_{\text {PiV }}{ }^{\left(\text {old }^{\prime}\right)}$ | $\begin{gathered} I_{0} \\ 60^{\circ} \end{gathered}$ | $\begin{aligned} & B V_{F} \\ & \Leftrightarrow 100^{\circ} \mathbf{C} \end{aligned}$ | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| T1-40AO | C | 50 V | 3 A | 60 V | 4.80 |
| Ti-40A2 | C | 100 V | 3 A | 120 V | 5.10 |
| T1.40A3 | C | 300 V | 3 A | 240 V | 7.25 |
| TI-40A4 | C | 400 V | 3 A | 480 V | 8.65 10.55 |
| Tl-140AO | B | 50 V | 750 ma |  |  |
| TI-140AI | B | 100 V | 750 ma | 120 V | 4.80 |
| T-140A2 | B | 200 V | 750 ma |  | 7.25 |
| TI-140A3 | 8 | 300 V | 750 ma | 340 V | 7.25 8.85 |
| TJ-140A4 | 8 | 400 V | 750 ma | 480 V | 10.55 |
| T1.145AO | D | 50 V |  |  |  |
| T1-145A1 | D | 100 V | 3 A | 120 V | 5.10 |
| T1.145A2 | D | 200 V | 3 A | 240 V | 7.25 |
| T1-145A3 | D | 300 V | 3A | 360 V | 8.85 |
| T1.145A4 | D | 400 V | 3 A | 480 V | 10.55 |

## G.E. CONTROLLED RECTIFIER MANUAL

Up-to-the-minute manual by Gerieral Electric includes theory of opera(ion, ratings, applications and specifications of controlled rectifiers. Clearly illuscrated. 352 pases. Size, $51 / 2^{\times 81 / 2^{\circ}}$
1.50

## G.E. GERMANIUM TV RECTIFIERS

Germanium TV power rectifiers for low-voltage power aupplies Feature compact size, increased output. long life, easy installatlon. mounting. Type N1024 Types iN1008 and N1016 have single hole mounting: Type 1 N 1024 requires 3 mige, holes. All half-wave except Mirs

| Mir's Type | RMS Voles | PIV | Max. DC Ma | Voltage Drop | NET EA. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| IN:008 | 130 | 380 | 400 | .3 | 1.50 |
| IN 1016 | 130 | 380 | 400 | .3 | 3.00 |
| INiO24 | 130 | 380 | 400 | 0.15 | 1.50 |

## PACIFIC SEMICONDUCTOR "VARICAPS"

F. Silicon PN junction device permits varying circuit capacitance

| $\begin{aligned} & \text { Mre's } \\ & \text { Type } \end{aligned}$ | C ( $\mu \mu$ f) |  | Q |  | $\begin{aligned} & \text { PIV } \\ & \text { (V) } \end{aligned}$ | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (2) 4V | Range | Min. | Type |  |  |
| V7 | 10 | $3.0 \cdot 18$ | 13 | 18 | 25 |  |
| $\begin{array}{ll} \text { vio } \\ \text { vile } \end{array}$ | 10 | 4.3.26 | 13 |  | 25 | $\begin{aligned} & 3.05 \\ & 3.05 \end{aligned}$ |
| $\begin{aligned} & V: 2 E \\ & V \end{aligned}$ | 12 | 2.7-31.0 | 4.0 | 6.5 | 100 | 3.05 |
| $\begin{aligned} & V 15 \\ & \text { V20 } \end{aligned}$ | 15 20 | $6.5-39$ $10-50$ | 13 | 18. | 25 | 3.05 |
|  |  |  | 7.0 | 18.7 | 20 | 2.75 |
| $\checkmark 33$ | 33 | 14.70 1785 | 7.0 | 15.7 | 20 | 2.75 |
| $\vee 39$ | 39 | $10-100$ | 7.0 | 14.6 | 20 | 2.75 |
| V47 | 47 | 24-120 | 7.0 | 15.1 | 20 | 2.75 |
| $\checkmark 56$ | 56 | 32-145 | 7.0 |  |  |  |
| $\checkmark 68$ | 68 | 39-175 | 9.0 | 14.0 | 15 | 2.75 3.05 |
| V82 | 82 | 47-210 | 9.0 | 13.0 | 15 | 3.05 |
| V100 | 100 | 57-260 | 8.0 | 11.0 | 15 | 3.05 |

## G.E. SEMICONDUCTOR REPLACEMENT KIT



Model K-915. Convenient kit covers a tor replacement needs an ideal semiconduc and TV servicemen. Contains 23 units of service-designed semiconductors including of 5 universal translstors, 4 silicon rectifiers, 7 crystal diorles, 5 dual diodes, and 2 power transistors. Units are housed in at sturdy cabinet with is clearly labeled drawers- every unit lway wit in handy reach. Cabinet size. $81 / 0 x 121 / 0 \times 0^{\circ}$. Shpg. Wh., 4 lis. NET 19.99
resistance between cathode and gate. Io, maximum average rectified with a specified. BVF, forward breakover voltage in the "oft" condition ifwd. minimum forward current. mr, maximum reverse current. PRV, peak reverse voltage. AMS, root mean square value of voltage.

## SELENIUM DUAL DIODE RECTIFIERS

GENERAL ELECTRIC VAC.U-SEL DOUBLE DIODES

GType No. $\frac{11 \mathrm{wd}}{} \mathrm{I}_{\mathrm{mr}}$ Description Max. Case Temp. NEI EACH $6 G C 1$ 1.1 (3) 2.5 V 620V Common cathode 6 GD 1.1 © 2.5 V 4 m 20 V Series connected Common anode $85^{\circ} \mathrm{C}$
$85^{\circ} \mathrm{C}$
$85^{\circ} \mathrm{C}$
.54

## INTERNATIONAL RESISTANCE DUAL DIODES

G TV Hets stable selenium dual diodes. Exact replacement units in many Steck No. Mir's Type|PIVIMax. Voliage Description NETEA.



Handy G.E. RECTIFIER SELECTION CHART
Handy slide rule picks optimum rectifier for your needs. When average forward current is set against max. PRV and ambient temperature, tule idicates proper rectifier. Shpp. 52 E 563
net 1.00
SARKES TARZIAN RECTIFIER BOOK
By Sarkes Tarzian engineers, Chapters include: Theory of Semiconductors, Rectifier Characteristics; Typical Rectifier Circuits; Rectitier and Filter Circuit Design. 62 pages. 39 K 291 . Postpald in U.S.A.

## SARKES-TARZIAN TUBE-REPLACEMENT RECTIFIERS

(H) Silicon rectifier pluk-ins for direct replacement of vacuum tubes semp. $100^{\circ} \mathrm{C}$. Max. rms voltage 1100 y for efficiency. Max. ambient
 sis) : S-501iA. S-5017, $=5018$. $221 / 2 \times 11 /{ }^{*}$ dia. S-5019. Sizes (above clias.

 Manufacturer and Type No. on order.

| $\begin{aligned} & \text { Mir's } \\ & \text { Typo } \end{aligned}$ | JEDEC No. | PIV | $\begin{aligned} & \mathrm{DC} \\ & \mathrm{Ma} \end{aligned}$ | Tubes Replaced |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| S-5011A | IN150 | 1600 | 750 | 80, 82, 83, 83V. 523 |  |
| S. 5017 | ${ }^{1} 1237$ | 1600 | 750 | 024, $5 \times 4,5 Y 4,6 A \times 5,6 \times 5$ | 12.87 |
| S.5018 S-5019 | 2N1238 <br> iN1239 <br> 1 | 1600 2800 | 750 | 5AU4, 5A24, 5U4, 5Wi, 5931, 6087, 6106 | 12.87 |
| 5-5033 | 1N1262 | 4500 | 500 250 | $6 \mathrm{CAU4}$ | 20.25 |
| S.5130 |  | 10,400 | 300 | 866, 866A, 3828 |  |
| 5.5207 | 1N2490 | 1600 | 500 | $6 \times 4,6063,6202$ | $\begin{aligned} & 28.86 \\ & 12.87 \end{aligned}$ |
|  | 1N2389 | 1600 | 600 | SAU4, 5AW4, 5AZ4, 5T4, 5U4, 5W4,5Y3 | $\begin{aligned} & 2.87 \\ & 6.04 \end{aligned}$ |
| S.5343 |  | 7000 | 300 | 816, $836,3828,866$ ( (educed voltare) | 20.04 |
| \$-5347 |  | 1600 | 500 | 68W4, 128W4 | 12.87 |

## SARKES-TARZIAN SELENIUM RECTIFIER STACKS

(J) Widely used as replacements in radio and TV sets, etc. Supply plate, former fiant and bias voleages directly from power line or from trans 380. Approximate incernal drop 5 , 130 . Maximum peak inverse voltage, 380. Approximate internal drop, 5 volts. Av, shps. wet. 5 oz .
"CENTRE-KOOLED" STACKS

| Stock No. | $\begin{aligned} & \text { Mfr's } \\ & \text { Type } \end{aligned}$ | D | Size | NET EACH |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Ma |  | $1-4$ | 5-49 | 50.Up |
| ${ }_{4}{ }^{\text {E }} 631$ | 50 | 50 | 1/16x $x^{2 / 3} x^{1 / 4} 8^{4}$ |  |  |  |
| 4 A 616 | $65$ | 65 | $1 \times 1 \times 116^{2}$ | . 78 | . 67 | . 46 |
| $4 \mathrm{HE17}$ | 75 100 | +75 | $1 \times 1 x^{1} 166^{*}$ | . 80 | . 73 | . 65 |
| $4 E 618$ $4 E 620$ | 100 150 | 100 150 | 11/8x ${ }^{1 / 1 / 8 x 13 / 160}$ | .82 | .84 | . 74 |
| $4 E 621$ | 200 |  |  |  |  | 82 |
| 4 E 622 | 250 | 250 |  | 1.25 | 1.13 | 1.81 |
| 4 E 623 | 300 | 300 |  | 1.31 | 1.16 | . 1.03 |
| 4 E 627 | 400 | 400 | $2 \times 2 \times 156^{\circ} \mathrm{s}$, | 1.66 | 1.50 | 1.06 |
| 4 E 625 | 500 | 500 | $2 \times 2 \times 178^{\circ}$ | 1.72 | 1.57 | 1.49 |

CONDENSED RECTIFIER STACKS

| Stock No. | Mir's Type | $\begin{aligned} & D C \\ & \mathrm{Ma} \end{aligned}$ | Size | NET EACH |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1.4 | 5.49 | S0.Up |
| $\begin{aligned} & 4 \text { E } 595 \\ & 4 E 596 \end{aligned}$ | $50.75$ | $50-75$ | 11/6 $\times^{1 / 1 / 6 x^{23 / 80}}$ | 8 | 43 | . 39 |
| 4 E 597 | 200-250 | ${ }^{1000-256}$ | $1 \mathrm{x} \times 1 / 18 \times 1{ }^{\text {a }}$ | . 71 | . 64 | . 58 |
| 4 E 598 | $300-500$ | $300-500$ |  | 1.07 | .96 1.18 | $\begin{array}{r}.86 \\ \hline 86\end{array}$ |

# Selenium Rectifiers, Thermistors, Ballasts 

## INTERNATIONAL RECTIFIER

SELENIUM RECTIFIER STACKS
High current density selenium rectifiers with low forward drop and high inverse voltage ratints. All are bridge cont nected except that J14C04. J14C1, J14C5 ant J14C8 have center-tapped common cathode. and Jo-4346B has a center-tapped common anode. All battery charker types are single-plate oot trickle chargers. universal fast-charger replacemenv., 12 oz .

HIGH-DENSITY POWER RECTIFIERS

| Stock No. | Mif's Type | Max. AC Input Volzs | DC Output |  | Size | $\left\lvert\, \begin{gathered} \text { NET } \\ \text { EACH } \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Volts | Ampe |  |  |
| $4 E 834$ | J14C04 | 36 | 14 | 0.4 | $1 \times 1 \times 11$ | 95 |
| 4 E 835 | J 14 Cl | 36 | 14 | 1.5 | $11 / 2 \times 11 / 3 \times 1 /{ }^{\circ}$ | 1.39 |
| 4 E 987 | J14C5 | 36 | 14 | 4.8 | $3 \times 3 \times 1$ | 48 89 |
| 4 E 988 | J14C8 | 36 | 14 | 8.4 0.4 | $4 \times 4 \times 1 / 2$ $1 \times 1 \times 1 / 2$ | 4.89 1.57 |
| 4 E 836 | J29B04 | 36 | 29 | 0.4 | $1 \times 1 \times 1 / 2$ | 1.57 |
| 4 E 837 | J2981 | 36 | 29 | 1.5 | [1/2x11/2x11/2 | 2.28 |
| 4 E 88 | $\} 2985$ | 36 | 29 | 4.8 | 3x3x25/ | 3 |
| 4 E 839 | 12988 | 36 | 29 | 8.4 | $4 \mathrm{x}+\mathrm{x} \times 2$ | 8.93 |
| 4 E840 | J58804 | 72 72 | 58 58 | 0.4 1.5 | $11 / 2 \times 11 / 2 \times 21 / 4 *$ | 4.49 |
| 4 E 841 | J58B1 | 72 | 58 | 1.5 | 3x $3 \times 436$ |  |
| 45842 | J58B5 | 72 72 | 58 58 | 4.8 8.4 | $\begin{aligned} & 3 \times 3 \times 43 / 16^{\prime \prime} \\ & 4 \times 4 \times 436 \end{aligned}$ | $\begin{aligned} & 12.08 \\ & 16.75 \end{aligned}$ |
| 4 E 843 | J5888 | 72 144 | 116 | 0.4 | $1 \times 1 \times 311^{\prime \prime} 16$ | 5.56 |
| 4 E 844 | J116B04 | 144 144 | 116 | 1.5 | $11 / 2 \times 11 / 2 \times 313 / 16$ | 8.15 |
| $4 E 989$ | J116B1 J16B5 | 144 144 | 116 | 4.8 | $3 \times 3 \times 7416^{\circ}$ | 22.91 |
| 4 E 845 | J116B5 | 144 | 116 |  |  |  |
| 4 E 846 | J116B8 | 144 | 116 | 8.4 0.4 | $4 \times 4 \times 73 / 16^{\prime \prime}$ | 32.09 6.77 |
| 4 E 847 | J135 B04 | 180 180 | 135 | 0.4 1.5 | $\begin{aligned} & 1 \times 1 \times 4 \% 6^{\circ} \\ & 11 / 2 \times 11 / 2 \times 49 / 16^{\circ} \end{aligned}$ | 6.77 9.93 |
| 4 E 848 | J13581 | 180 180 | 135 135 | 4.8 | $3 \times 3 \times 810^{\circ}$ | 28.29 |
| $4 E 849$ | J 135 BS | 180 180 | 135 135 | 8.4 | $\begin{aligned} & 3 \times 3 \times 88^{10} \\ & 4 \times 48^{1} \end{aligned}$ | 39.71 |
| 4 E 986 | J 13588 | 180 | 135 | 8.4 | 4x4x816 |  |


| Stoak | BATTERY CHARGING |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mir'sType | DC Output |  | AC Input Volts | Slze | We., Lbs. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
|  |  | Volte | Amps |  |  |  |  |
| $4 E 748$ | D-4346B | 0.13 | 30 | 16.5/33 | $6 \times 5 \times 41 /{ }^{\prime \prime}$ | 3 | 16.75 |
| 4 E 79 | D-116K | 0-13 | , | 16.5 | $3 \times 3 \times 1 / 2$ | 2 | 1.80 |
|  | D-117K | 0-13 | 2.7 | 16.5 | $4 \times 4 \times 12^{-}$ | 2 | 1.80 2.46 |
| 4 E 74 | D-241K | 0.13 | 6.0 | 16 | 6x5x | 2 | 2.46 |

## LOW VOLTAGE TYPES

Miniature selenlum rectifiers for small power applications where relatively low voltage is reguired. Ideal or uselay power supplies. 2 and 6 -volt battery chargers. trickle power supplies. ${ }^{2}$ and Suffix " $H$ " in type number indicates single plate. half wave type; suffix "B" in "ype
 number indicates ninimum resistive loads shown in table below. Av. shpg. wt., 2 oz

| Stock No. | Mir's Type | Max. DC | Max. Rms Volts | Min. Serles Load Ohm: | Size | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $4 \mathrm{E822}$ | O1H | 65 | 25 | 47 | 2/3x ${ }^{2 / 3 x}$ | 6 |
| 4 EP | A1H | 100 | 25 | 22 |  | + 38 |
| 4 E824 | B1H | 150 | 25 | 15 | 12/3x12/5x ${ }^{1 / 16}{ }^{\text {a }}$ | . 42 |
| 4 E 225 | CiH | 250 | 25 |  |  |  |
| E8 | M1H1 | 500 | 25 | 5 | $2 \times 2 \times 7 / 6{ }^{6}$ | . 86 |
| 4 E 227 | 818 | 100 | 25 |  | 退 $413 \times 3 / 3 \times 1$ | + 56 |
| $4 \mathrm{Eg28}$ | $\mathrm{O}_{81 \mathrm{~B}}$ | 100 180 | 130 25 |  | 1x1x $1 / 4^{=}$ | 1.22 |
| 4 E 829 | Bi B | 180 |  |  | 1814/4 |  |
| $4 E 830$ | ${ }^{\text {A } 18}$ | 300 | 25 |  | 1/2x1 | 1.46 |
| 4 E831 | ${ }_{\text {C1 }} \mathrm{B}_{8}$ | 600 1200 | 25 25 |  | $2 \times 2 \times 3 / 4$ | 1.72 |

## I.T.T. SELENIUM RECTIFIER STACKS MINIATURE TYPES

Fully miniaturized selenium rectiers for limited space applications. Types 1010 and 1017 are bride-connected. Internal voltage drops: Ty pes 1001, 1013, $1512-1.2$ voles; Types 1016, 1017-2.4 volts; T Ypes $1002 \mathrm{~A}, 1003 \mathrm{~A}, 1004 \mathrm{~A}$. $1005 \mathrm{~A}, 1101 \mathrm{~A}, 1159-7$ volts; Types $1007,1014-9$ volts. Type 1013 is excellent for charging small 2 and 6 -volt batteries, such as those used in electronic photoflash equipment. Type 1512 is for trickle charging 6 -volt auto
 batteries. in paper tube; has $11 / 2^{\circ}$ leads. +RMS indicates max. input voltage. All have locking lug. Av. shpg. wt., 5 oz Stock No. Type DCMa +RMS Slzo NET EACH


COMPACT HI-DENSITY TYPES
Feature hish current capacity: extremety compact size. Eliminate nstallation por volts. Maximum peldually boxed. Av, shpg. wt, 4 oz

| Stock No. | Type | DC Ma | Size | NETEA. |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 4 E 918 \\ & 4 E 919 \end{aligned}$ | $\begin{aligned} & 1234 \mathrm{~A}-\mathrm{H} \\ & 1235 \mathrm{~A}-\mathrm{H} \\ & 1237 \mathrm{~A}-\mathrm{H} \end{aligned}$ | $\begin{aligned} & 65-75 \\ & 100-150 \\ & 300-500 \end{aligned}$ |  | $\begin{array}{r} .59 \\ .68 \\ 1.29 \\ \hline \end{array}$ |

## FENWAL ELECTRONICS THERMISTORS, KITS THERMISTORS

Thermal resistors resistore with high negative cmiperature coefficients. For temperature neasurement. compensatlon and control. liq-
 uid level meas urement, et Have unlimited life under normal operating conditions. Bead types are lass-coated-useful for insertion probes. UHF power measurements, etc Washer types are $3 / 0$ insertion pise. Disc wheads and rod types may be und nee $100^{\circ} \mathrm{C} .50^{\circ} \mathrm{C}$. Av, shps. wt. 2 oz

| Stock No. | $\begin{aligned} & \text { Type } \\ & \text { No. } \end{aligned}$ | Fig. | Style | Ohms <br> (6) $25^{\circ} \mathrm{C}$ | R $\mathrm{R}^{*}$ | EACH | $\begin{aligned} & 10-24 \\ & E A C H \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E 909 | G | B | Bead | 100.000 | 10,3:1 | 2.70 | 2.16 |
| 9 E 910 | GA51P2t | A | Bead | 0,000 | $0.3: 1$ | 2.70 | 0 |
| 9 COll | GB32J 2 \% | B | Bead | 2000 | 7.3:1 | 2.70 |  |
| 10 E 097 | GB32P2 | B | Probe | 2000 | 7.3:1 |  |  |
| 54E172 | GC32L3 | B | Bead | 20 | 5.7:1 | 3.50 | 2.80 |
| 9 E 914 | KA31L1 |  | Disc | 1000 | 9.1:1 | . 85 |  |
| $9 E 915$ | LB21J1 |  | Disc | 100 | 6.9:1 | . 25 |  |
| $9 E 916$ | QA51J1 | D | Rod | 100.000 | 9.1:1 | 1.25 | . 00 |
| £ 917 | RB33L1 | D | Rod | 3150 | 7.1:1 | 1.20 |  |
| 9 E 918 | RB41L1 | D | Rod | 10.000 | 7.1:1 | 1.35 | . 08 |
| 9 E 919 | WA21W1 | E | Washer | 100 |  |  | . 00 |
| 9 ¢ 925 | wBilwi | E | Washer | 10 | 6.9:1 | 1.25 | . 00 |

## THERMISTOR KITS

Model G-200. Contains all 12 of above therm Mod for use in circuit design, experimental work etc. Each thermistor is packed with a complete set of curves and data. 10 NzT 19.95
G. 701 (Not illus.) Basic thermistor kft includes 4 glass beads and 6 probes in a wide ranke of resistance values for all applications. With application manual and data a nd curve computer. Shp\&. Wt. 10 NET. 9.95 54 E 170

G.700. (Not illus.) Economy thermistor kit. Includes 2 glass beads and 2 probes for a variety of basic applications. With thermistor application 54 E 17 and data and curve computer. Shpg. wt.. 10 oz . NET 4.95 54 E171
FENWALL THERMISTOR COMPUTER-MANUAL COMBINATION
Comple information kit covering thermistor applications, Inclucles Complete information

No charge with your next order E 877.

## JFD BALLASTS

Quality TV, adjustable and step-down ballasts. Types 17 A470303 and 17 A 485459 are keyed octal plug-in units for AC-Dhat replaces No. 9 E 886 is an 8 -prong adjustable plug-in type that replaces ballast ypes beginning with K. L, M, BK, BL, BM, having numbers 45 through 105 and ending with letier maximum dissiG. H. S-1. 2 or 3. All have perforated shelis for maximum dassi pation and radiation of heat. Have large insulating surtaces.


## CLAROSTAT UNIVERSAL RESISTOR TUBES

Clarostat resistor tubes for voltage-reducing applications. For BL. K. L and M ; and corresponding numbers and letcers sition below. Order tubes accordink to leter andace a B-23-A tube. of tube being replaced. For example, to replace a $8 \mathrm{~K}-2.3$-A cube etc. Shps. wt.. 6 oz.

| Stoch No. | $\begin{aligned} & \text { Mfris } \\ & \text { Type } \end{aligned}$ | Tubo Numbers From: | Endlng 1n Letter: | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 9 <br> 9 <br> 9 | $\begin{aligned} & 23-55-A \\ & 23-55-F \end{aligned}$ | $\begin{aligned} & 23 \text { to } 55 \\ & 23 \text { to } 55 \end{aligned}$ | $\begin{aligned} & A, B, C, D \\ & F, G, H \end{aligned}$ | 0 |

## CONSOLIDATED AC-DC RESISTANCE LINE CORDS

Heavily iasulated reaistance line cords. Supply proper filament voltage for tubes wired in series across in be used for l-lamp. 160 -ohm cords can also be used for l-lamp. 15 and 20 -watt fuorescent igitles. Ali have use with , Variations of color-coned linned leads. niven resistance value nearest that desired.
yv. shpg. wt. 6 oz.


| Stock No. | Type | Ohms | EACH | StockNo. | Type | Ohms | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 49 T 522 | 2401 | 135 |  | 49 T 511 | 2407 | 350 |  |
| 49 T 520 | 2402 | 160 | 71 | 49 T 510 | 2406A. | 590 | 71 |
| 49 T 515 | 2404 | 290 | .7 | 49 T 525 | 2414A* | 560 | 1 |
| 49 T512 | 2405 | 330 |  |  |  |  |  |

49 T 512 2405 230 . $220-110$ Volt Step-Down Cord. Rated at 2 amps. 1.32

Shpg. wt., 5 oz . NET

## Photocells, Solar Cells and Sensing Devices



## CLAIREX PHOTOCONDUCTIVE CELLS

Yariable reaist
In hermetically sealed glass enclosures. Have ligh hation and control. current at low light levels. All have power dissimation of of 75 m to dark except " $50(1)-250 \mathrm{mw}$ (with and willout heat sink). 3 oz .

| Stock No. | $\begin{aligned} & \text { Type } \\ & \text { No. } \end{aligned}$ | Fie. | Sens. Mat. | Encl. (in.) | Pk. Spec Resp.. A | Max. $V$. Rating | bight Res. Ohms | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $4 E 100$ | CL402S | A | CdS | .265x1 | 5150 | 300 |  |  |
| $4 E 101$ | CL 403 S | A | CdSe | 265x] | 7350 | 300 | $133 \mathrm{~K}$ |  |
| $4 E 102$ | CL.403A | A | Case | 265x1 | 7350 | 300 | 75 k |  |
| $\begin{aligned} & 4 E 104 \\ & \hline \end{aligned}$ | CL403ASL | A | CuSe | 265x1 | 7350 | 300 | 75k | 4.00 |
| 4E105 | Cleas | A | CdSe | $265 \times 1$ | 7350 | 60 | 3.5 K |  |
| 4 E 106 | CL404SL | A | case | 265x | 6900 | 300 | 30k |  |
| 4 E 107 | CL405-15 | 8 | CdS | 265x1 | 6900 | 60 | 1.5 K |  |
| 4 E 108 | CL.405-1SL | 8 | Cas | 265x | 5500 | 300 | 166 K |  |
| 4E109 | CL407S | A | CdS | 265x1 | 5500 6150 | $\begin{array}{r} 60 \\ 300 \end{array}$ | 7.5 K | ) |
| $4 \mathrm{El\mid O}$ | CL504* | 8 | cdse | .5x. 5 |  |  | 1.5 K |  |
| $4 \mathrm{El\mid l}$ | CL504L* | 8 | Case | . $5 \times .5$ | 6900 6900 | 250 60 | $1.5 K$ $0.25 k$ |  |
| $4 E 112$ | CL505* | B | cas | . $5 \times .5$ | 5500 | 250 | 0.25 K 9 K |  |
| 4 E 113 | CL505.1\% | A | CdS | .5x.5 | 5500 | 250 250 | 9K | 400 |
| 4 E 114 | CL505-11. | A | Cas | . $5 \times .5$ | 5500 | $\begin{array}{r} 250 \\ 60 \end{array}$ |  | 4 |
| $4 E 115$ | CL5051* | 8 | Cas | . $5 \times .5$ |  |  |  |  |
| 4 C 116 | CL602 | 8 | Cas | 25x. 5 | 5150 | 300 |  |  |
| $4 \mathrm{C}_{1} 117$ | CL603 | 8 | CdSe | . $25 . \times 5$ | 7350 | $300$ |  |  |
| 4 E 118 | CL603A | 8 | Case | . $25 \times .5$ | 7350 | $\begin{aligned} & 300 \\ & 300 \end{aligned}$ | $\begin{aligned} & 133 \mathrm{~K} \\ & 75 \mathrm{~K} \end{aligned}$ | 4.00 |
| 4 E 119 | CL603AL. | 8 | Case | 25*.5 | 7350 | $\begin{array}{r} 300 \\ 60 \end{array}$ | $\begin{aligned} & 75 \mathrm{k} \\ & 3.5 \mathrm{k} \end{aligned}$ | . 0 |
| $\begin{aligned} & 4 E 120 \\ & 4 E \\ & \hline \end{aligned}$ | CL604 | B | CaSe | . $25 \times .5$ | 6300 | 300 | 30K |  |
| 4E122 | CL604 | 8 | Case | .25x. 5 | 6900 | 60 | 1.5K |  |
| 4 E 123 | C.605-1 | B | CdS | $25 \times .5$ | 5500 | 300 | 166 K |  |
| $4 E 124$ | CL605-1L | B | CdS | 25. 5 | 5500 | 300 | 166 K | 4.00 |
| 4 E125 | CL60SL |  |  | 25x.5 | 5500 | 60 | 7.5K |  |
| $4 E 126$ | CL607 | 8 | CdS | $\begin{array}{r} 25 \times .5 \\ .25 \times .5 \end{array}$ | $\begin{aligned} & 5500 \\ & 6150 \end{aligned}$ | 60 | 7.5K | 4.00 |

## SOLAR SYSTEMS SILICON PHOTOCELLS

control circuits. light sensing. Can bectors. Ideal for operating relays, tranajator circuits. Provide instantaneous directly into low impedance aging; unaffected by temperature. Plastic rasporse 20 wsec. max. No aging; unaffected by temperature. Plastic case is supplied with terminal pins to plug into octal based socket. Av, wt., 2 oz .

| Stock No. | Typo No. | Fig. | Min. Output wleh Matehed Load |  |  | Size | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Ma | Mv | Mw |  |  |
| 4 E 300 <br> 4 E 301 | SS-100 <br> SS-200 | C | 15.0 60.0 | $\begin{aligned} & 400 \\ & 400 \end{aligned}$ | $\begin{aligned} & 60.0 \\ & 24.0 \end{aligned}$ | $\begin{aligned} & 1 \times 1 \times 1 / 4^{2} \\ & 11 / 4 \text { dia. } \end{aligned}$ | $\begin{array}{r} 6.00 \\ 12.00 \end{array}$ |

## POLARIS "MAJI" PHOTOCELL

E Resisior type, cadmum sulphide photocell. Res., 200 ohms @92.9 ft. povel diasipat 10 meg in total darkness. Max. change $0.2 \mathrm{meg} / \mathrm{sec}^{\circ}$. Max


## HOFFMAN PHOTOVOLTAIC READOUT CELLS

(f) Encapsulated silicon cels. Have $0.5 x 0.08^{\circ}$ dia.; $2^{\circ}$ leads. Output is verse current is measured at -1 volt bias, $55^{\circ} \mathrm{C}$. 1 FC maximum, Dark remax. response. Peak spectral remponse, 0.85 microns. Av. wh. $10 \mu \mathrm{sec}$

| Stock No. | Type No. | Output |  | Dark Reverse Current | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\mu \mathrm{a}$ | Mv |  |  |
| $4 E 654$ 4 4 | EA7E1 | 300 300 | 300 300 | ${ }_{10}{ }^{\text {ma }}$ | 8.25 |
| $4 E 655$ | EA7E3 | 250 | $\begin{gathered} 300 \\ 250 \end{gathered}$ | $10 \mu \mathrm{a}$ | 7.50 |
| 4 E 656 | EA7E5 | 200 | 250 200 | $\begin{aligned} & 10 \mu \mathrm{~m} \\ & 20 \mu \mathrm{a} \end{aligned}$ | $\begin{aligned} & 6.40 \\ & 5.75 \end{aligned}$ |

## SILICON SOLAR CELLS BY SOLAR SYSTEMS

Convert light into DC power. Instantaneous response- $20 \mu \mathrm{sec}$. max.


| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | Type | Fig. | Min. Output with Matched Load |  |  | Size | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Ma | Mv | Mw |  |  |
| $\begin{aligned} & \text { E } 302 \\ & \text { E } 303 \end{aligned}$ | SS. | G | 18.0 27.0 | ${ }_{400}^{400}$ | 7.2 |  | 1.95 |
|  | SS-10-1 | G |  |  |  | $8 \mathrm{8x}$ |  |
| 305 | SS-11-L | G | 12 | 400 | 4.8 |  |  |
|  | SS-12-L | G | 5.0 | 400 | 2.0 | 4x.2* | 1.45 |
|  | SS |  | 12.0 | 100 | 8 | $8 \times .{ }^{7}$ |  |
|  | SS-22 | H | 2.5 | 400 | . 0 |  |  |
|  | SS.23-1, | H | 1.3 |  |  | 2x. | 1.40 |
| E 311 | S $5.30-1$. | j | 60.0 | 400 | 24.0 | ${ }^{.2 \times 125^{\prime \prime}}{ }^{\text {cha }}$ dia. |  |
| E 312 | SS. 31.1 |  |  |  |  |  |  |
| E 313 | SS-40-L | K | $60.0$ | 400 | 6.0 | 0.28 | 25 |



A wide variety of devices for 1) accurately measuring light electrical equipment and, 4) converting using light to control elcical power. Photoconductive eqves are higenerky into elecwhose resistances sreandyctive types are high palue resistors photosensitive surfaces. photosensitive surfaces. Photovoltaic typer sonvert light directly radios, operatating relays and battery charcersing transiztorized

## racios, operating relays and battery chargers.

## INTERNATIONAL RECTIFIER EXPERIMENTAL CELLS

A wide variety of top-quality silicon solar cells designer. These unite lis for the experimenter and sistor radios, light mean used to power tranetc. Selenium phot meters, small motors, relays, similar to the luman cyave a spectral response sively in light meters and, and are used extenSilicon cells have mand other opical devices. efficiency. particularly in sumlight, and are the same type of cells used for charking batteres in space satellites. All are mounted in molded plastic cases. except are moumted in molded bracket. In table below, all are silicon cells except rselemum cells. Included with each cell is the higlty informative., 24-page Experimenter's


| Stock | Type | Fig. | Output |  | Slzo | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Volts | Ma |  |  |
| E 877 | ${ }_{+}^{+183}$ | M | - | $1{ }^{2}$ | 1/123/4* | 1.50 |
| 7 E E 879 | ( ${ }^{\text {SIM }}$ | M | . 3.45 | 11/2-21/2 | 1, $1 / 10 \times 11 / 8 \times 3 \times 1 / 86^{\circ}$ | 1.75 <br> 2.75 |
| 6E495 | S5M | M | -6-.85 | 10.16 18.25 | $11 / 0 \times 1 / 8 \times 16$ | 3.95 |

## INTERNATIONAL RECTIFIER CADMIUM SULPHIDE CELI

Type CS-120M6
burglar alarms, etc. Handiles 120 phiotocrll. Contwols door openers,
 7E878
nEt 2.35

## HOFFMAN SOLAR CELLS

For converting light to DC power. Output sliown is load output meas$280^{\circ} \mathrm{K}$. $\mathrm{mw} / \mathrm{cm}^{2}$ solar equivalent radiation from ioad output measmseconds or less. Peak response is at of $25^{\circ} \mathrm{C}$. Speed of restomse is 20

| Stock |  | Fig. | Load Output |  |  | Size | NACT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Ma | Mw | Mv |  |  |
| 7 E 259 | $120{ }^{2 A}$ | $\stackrel{N}{\mathrm{~N}}$ | 100 34 | 40.0 13.6 | 400 | $1.125^{\circ} \mathrm{dia}$ | 7.50 |
| A E 201 | $\xrightarrow{110 \mathrm{C}}$ | F | 17 | 6.8 | 400 | 0.4x0.8* | 2.40 |
| 4E202 | S2C | $\underset{F}{\text { F }}$ | $\begin{array}{r}15 \\ 7.5 \\ \hline\end{array}$ | 6.0 <br> 3.0 | 400 | 0. $2 \times 0.8^{\circ}$ | 1.90 3.60 |
| $4 E 204$ |  | F | 3.8 |  | 400 | $0.2 \times 0.4^{\circ}$ | 2.50 |
| 4 E 205 | 58 C | F | 1.8 | 1.5 | 400 400 | ${ }^{0.2 \times 0.20}$ | 1.50 |

## TEXAS INSTRUMENTS NPN SILICON DEVICES <br> Diffused photo-duo-diodes Hard

( ${ }^{\text {P }}$ se dla, 0.082 fused lenses. Leads are zold-plated. Lenza healed cases are Incident radlation i, Dark current is leaknage across diode (max.), tion in 0.7 to 1.0 micron band width, at $55^{\circ} \mathrm{Ct} 9 \mathrm{mw} / \mathrm{cm}^{2}$ incident radia-

| $\begin{aligned} & \text { Type } \\ & \mathbf{T}_{\mathrm{No}} \end{aligned}$ | Man. Blas | $\begin{aligned} & \text { Dark } \\ & \text { Current } \end{aligned}$ | $\begin{aligned} & \text { Light } \\ & \text { Current } \end{aligned}$ | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 1 \mathrm{~N} 2175 \\ & \mathrm{H} .11 \\ & \mathrm{H} .35 \\ & \mathrm{H}-38 \\ & \hline \end{aligned}$ | $\begin{aligned} & \pm 50 \\ & \pm 50 \\ & \pm 50 \\ & \pm 50 \\ & \hline 50 \end{aligned}$ |  | $\begin{array}{r} 200 \mu a \\ 60 \\ 0 \mu a \\ 200 \mu a \end{array}$ | $\begin{array}{r} 11.50 \\ 4.00 \\ 5.30 \\ 4.00 \end{array}$ |

## HYGROPAK HUMIDITY SENSING ELEMENTS

R Uumidity by electronic Type HA for use in ectronic means. Hikhly sensitise to water vapor use in bridge circuit with circuits to control relays, etc. Type HA- 26 fos humidity lncrease. Pins o-1 ma meter. Both decrease in resistance with $100 \%$ relative humidity. Ix11/4x $1 / 4 \%$, Shpg. wt. Range : bet ween $30 \%$ and

| Stock No. | Typeno. | Description | NET |
| :---: | :---: | :---: | :---: |
| 7 F 746 | HA | Under 100 K to over 100 megs | 3.00 |
| 76747 76748 | HA-26 | 50 ohms to 100 ohtrs |  |
| 7 ¢ 748 | ...... | Socket for above ${ }^{\text {a }}$ | 3.00 30 |

## INTERNATIONAL RECTIFIER ECONOMY SOLAR CELL KIT

Ideal for students or experimenters-for use at home or in scbool labs. ned a current ight. Supplied in handy ping suz. 4 E 400
net 1.98

## INTERNATIONAL RECTIFIER PHOTOCELL HANDBOOK

Explains the construction, design and operation of circuits utilizing
Photocells and solar cells. Includes educational charts, datainand informa4 E 401 . Postpaid in USA projects, 112 pages. $6 \times 9{ }^{\circ}$.

# IRC Resistors 



Type GBT and SR Fixed Composition. Choose from $10 \%$ (Table A) or $5 \%$ (Table B) tolerances. Meet or exceed MIL-R-11 specifications. Withstand $50-100 \%$ overloads for short periods of time. EIA (RETMA) coded. Sizes: GBT-1/2, ${ }^{25 / 64} \times 9 / 44^{\prime \prime}$; GBT-1, $9 / 10 x^{7 / 2 "}$; SR, $11 / 10 x^{3} / 16^{\prime \prime}$. Figure after hyphen in Type No. indicates wattage rating. Values may be assorted for quantity price.

New Type BWH 2. Watt Fixed Wire.Wound. Values to 1000 Ohms. Choose from $10 \%$ (Table A) or $5 \%$ (Table B) tolerances. Rated (a) $2 \cdot \mathrm{~W}$. to $158^{\circ} \mathrm{F}$ ambient temp.; $1-\mathrm{w}$. @. $239^{\circ} \mathrm{F}$; and $1 / 2-\mathrm{w}$. @. $279^{\circ} \mathrm{F}$. Meet MIL-R-11C specs. Small as $1-w$. composition. EIA (RETMA) coded; wide first band. Inductance $.04-4.5 \mu \mathrm{~h}$ from . 24-1000 ohms. Values may be assorted for quantity price.

$5 \%$ INSULATED GBT, SR AND BWH TYPES

TYPE GBT, SR $5 \%$ FIXED COMPOSITION

| Stock No. |  | Type and Wattage | MIL Equiv. | Values <br> See Table "B" | NET EACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1.9 |  |  | 10-99 |
| 1 | M M 005 |  | GBT-1/2 | RC20 | $10 \Omega$ to 22 megs | . 24 | 19 |
|  | MM 025 | GBT-1 | RC32 | $10 \Omega$ to 22 megs | . 36 | . 28 |
|  | M M 045 | SR-2 | RC42 | $10 \Omega$ to 22 megs | . 48 | 37 |

NEW TYPE BWH 5\% 2-WATT FIXED WIRE-WOUND

| Stock No. |  | Values to 1000 Ohms See Table " 8 " | NET EACH |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Mir's Type |  | 1-9 | 10.99 |
| MM078 | BIVH | . 24 ohms thru 9.1 ohms | . 47 | . 40 |
| 1 MM 079 | BWH | 10 ohms thru 1000 ohms No values above 1000 ohms | . 30 | . 25 |

TABLE "B" - $5 \%$ EIA (RETMA) VALUES-SPECIFY RESISTANCE WANTED

| Ohms | Ohms | TABLE "B'Ohms Ohms |  | Ohms | Ohms | Ohms 2400 | Ohms <br> 11,000 | Ohms | Ohms | Ohms |  | Ohms |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0.24 | 1.1 | 5.1 | 24 | $110$ |  |  |  | $51.000$ | 0.24 meg 0.27 meg | 1.1 1.2 | meg meg | 5.1 5.6 | meg meg |
| 0.27 | 1.2 | 5.6 | 27 | 120 | 560 | 2700 30910 | 12,000 13,000 | 56,000 $\mathbf{6 2 , 0 0 0}$ | 0.30 meg | 1.3 | meg | 6.2 | meg |
| 0.30 | 1. 3 | 6.2 | 30 | 130 | 620 | 3300 | 15,000 | 68,000 | 0.33 meg | 1.5 | mer | 6.8 | meg |
| 0.33 0.36 | 1.5 | 6.8 7.5 | 33 36 | 150 160 | 680 750 | 3600 | 16,000 | 75,000 | 0.36 meg | 1.6 | meg | 7.5 | meg |
| 0.36 | 1.8 | 8.2 | 39 | 180 | 820 | 3900 | 18,000 | 82,000 | 0.39 meg | 1.8 | meg | 8.2 9.1 | meg |
| 0.43 | 2.0 | 9.1 | 43 | 200 | 910 | 4300 | 18,000 $\mathbf{2 2 , 0 0 0}$ | 91,000 0.1 meg | 0.47 meg | 2.2 | meg | 10 | mes |
| 0.47 | 2.2 | 10 | 47 | 220 240 | 1000 | 4700 5100 | 24,000 | 0.11 meg | 0.51 meg | 2.4 | meg | 11 | meg |
| 0.51 | 2.4 | 11 | 51 56 | 240 270 | 1200 | 5600 | 27,000 | 0.12 meg | 0.56 meg | 2.7 | meg | 12 | meg |
| 0.56 | 2.7 | 12 |  |  |  | 6200 | 30.000 | 0.13 meg | 0.62 meg | 3.0 | meg | 13 | meg |
| 0.62 | 3.0 | 13 | 62 | 330 | 1500 | 6800 | 33,000 | 0.15 meg | 0.68 meg | 3.3 | meg | 15 | meg |
| 0.68 | 3.3 | 15 | 75 | 330 360 | 1600 | 7500 | 36.000 | 0.16 meg | 0.75 meg | 3.6 | meg | 18 | meg |
| 0.75 | 3.6 | 18 | 75 82 | 390 | 1800 | 8200 | 39,000 | 0.18 meg | 0.82 meg | 3.9 | meg | 18 |  |
| 0.82 | 3.9 | 18 | 82 91 | 430 | 2000 | 9100 | 43,000 | 0.20 meg | 0.91 meg | 4.3 | meg | 20 |  |
| 0.91 | 4.3 | 20 | 100 | 470 470 | 2200 | 10,000 | 47.000 | 0.22 meg | 1.0 meg | 4.7 |  | 22 | meg |

## MULTI-RANGE 10-WATT WIRE-WOUND RESISTORS

Type MR. Versatile resistors combining 4 separate 10 -watt elements in a single, compact unit. With instructions for connecting element leads to provide up to 47 different resistance values within the ranges listed below. Shpg. wt., 3 oz .2 per pig.

| Stock No | Type |  | Reslatance R | Rang9 | NET <br> PERPKG. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 31 M 580 | $\overline{1 k 1}$ |  |  |  |  |
| 31 M 581 | MR2 | 47 values | from 5.0 throu | ugh 150 ohms | 1.20 |
| 31 31 | Mk3 | 47 values 47 values | from 50 throu | ugh is,000 ohins | 1.20 |
| 31 31 | MR5 | 12 values f | rom 3000 thro | ugh 50,000 ohms | 1.80 |



Type 55 Power Resisior Assortment. A complete power resistor kit consisting of 10 Type MR multi-range resistors. Kit includes 2 of each Type MR resistor listed in the table at left. Highly recommended for schools and laboratories, experimenters, Amateurs, etc. 200 different resistance values can be obtained from these 10 multi-range units. Provides complete 10 -watt coverage right at your fingertips-resistance values range all the way from 0.5 ohns to 50,000 ohms. Steatite housings provide excellent insulation. Supplied in convenient plastic box. Size, $11 / 4 x$ $51 / 4 \times 31 / 2^{\prime \prime}$. Shpg. wt., 1 lb .
31 M 585. NET 1 lb .
$\qquad$

# IRC Resistors 




Adiustable

## WIRE-WOUND POWER RESISTORS

Highly-reliable. "Reslster" coated power resistors. Toler ances: fixen, $\pm 5 \%$; adjustable, $\pm 10 \%$ All types of 25 -wat aling or higher, supplied with mtg. orackets. All rated 100 watts or less have eyelets for screw mounting plus leads, exept cads oaly, types rated over 100 watts have eyelet anly. Specify resistance and wallage $z^{\text {hhen }}$ ordering. Av, shps wts., 5 to 50 -watt types, 4 oz .; others, 1 lb .

TABLE "A" VALUES-SPECIFY VALUES WANTED

| Ohms | Ohms | Ohms | Ohms | Ohms |  |  | OR | NTED |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 12 | 75 | 350 | -800 | Ohms | Ohms | Ohm | Ohms | 5 | Ohms |
| 1.5 | 15 | 100 | 350 400 | 800 900 | 22000 | 5000 6000 | 11 K | 20 K | 55 K | 95 K |
| 2 | 20 | 125 | 450 | 1000 | 2500 | 7000 | 12.5 K |  | 60 K | 100 K |
| 3 | 25 | 150 | 500 | 1100 | 2750 | 7500 |  | 25K | 65 K | 125 K |
| 4 | 30 | 200 | 600 | 1200 | 3000 | 8000 | 15 K | 30 K | 70 K | 150 K |
| 5 | 35 | 225 | 650 | 1250 | 3500 | 8500 | 16 K | 40 K | 80 K |  |
| 7.5 | 40 | 250 | 700 | 1500 | 4000 | 9000 | 17.5 K | 45 K | 85 K | 200 K |
| 10 | 50 | 300 | 750 | 1750 | 4500 | 10K | 18K | 50 K | ${ }_{90 \mathrm{~K}}$ | 250K |

FIXED POWER RESISTORS (SEE TABLE "A" ABOVE FOR VALUES) TYPE 1A-5.8 WATTS-1 $18 / 6^{\prime \prime}$

| Stock No. | Ohms <br> See Table "A" Above |  |
| :---: | :---: | :---: |
| $250$ | 1 to 1000 ex cept 650 |  |
| MM 251 | 1100 to 5 K except 2750 |  |
| MM 252 | 6K ${ }^{2} \mathrm{O}$ 10K except 8500 | . 58 |
|  | 12.5 K to 20 K *except 13.5 K <br> 16 K .18 K |  |
| M 25 | 22.5 K * and 25 K * only |  |
| TYPE 13/4A-10-12 WATTS-1 $1 / 4 \times 5 / 16^{\prime \prime}$ |  |  |
| MM 270 | 650 |  |
| MM 271 | 1100 to 5 K except 2750 | . 61 |
| MM 272 | 6 K 20 10 K |  |
| MM 273 | K to 20K |  |
| MM 274 | 22.5 K to 40 K | 3 |
| MM 268 | 45 K and 50 K only | . 8 |

TYPE 2C-20 WATTS $-2 x$ /6"
I MM 278 [1 to 1000 except $1.5,7.5,12$. 450.600

MM 2791200 to 5 K
MM 2806 K to 10 K except 8.5 K
IMM 28112.5 K to 20 K except 13.5 K

MM $283{ }^{2} 45 \mathrm{~K}$ to 60 K
MM 25865 K to 80 K
TYPE 2D-25 WATTS—2x\%*

| I MM 204 | $1,2,3,4,5,10,15,25,50$, $75,100,150,200,250,500$, $750,800,1000$ $1.5 \mathrm{~K}, 205 \mathrm{~K}$ except 1750. 2250,2750 and 4500 | 5 |
| :---: | :---: | :---: |
| MM 20 | 6K. $7.5 \mathrm{~K}, 10 \mathrm{~K}$ oniy | . 85 |
| IMM 206 | 12K. $15 \mathrm{~K}, 20 \mathrm{~K}$ only |  |
| I MM 20 | 50K to 4 | . 04 |
| 1 mm 209 | 70 K and 80 K | . 2 |
| M 210 | 100 K only |  |

ADJUSTABLE POWER RESISTORS (SEE TABLE "A" ABOVE FOR VALUES) TYPE $13 / 4$ AA -10.12 WATTS $13 / 4 \mathrm{x}^{3} / 4$

| $\begin{gathered} \text { Stoek } \\ \text { No. } \end{gathered}$ | Sec Table "A"' Above | NET <br> Each |
| :---: | :---: | :---: |
| IMM 275 | 1 to 1000 execept $1.5,4,12$ $30,35,40,125,225,450^{\circ}$ 650. 700 and 900 |  |
| $\begin{aligned} & \text { I MM } 276 \\ & \text { IMM } 277 \\ & \hline \end{aligned}$ | 1250 to 5 K except 1750, 2750 6 K to 10 K | $\begin{array}{r}1.14 \\ 1.18 \\ \hline\end{array}$ |

## TYPE 2DA -25 WATTS $-2 x^{*} / 6^{\prime \prime}$

I MM 2841 to 1000 except $1.5,4.12$. $30.35 .40,125,225,350$,
$450.600 .650,700$ and 900 I MM 2851250 to 5 K except 1750 and
MM 2866 K to 10 K except 8.5 K
MM $28712 \mathrm{~K}, 15 \mathrm{~K}, 20 \mathrm{~K}$ only
1.29

M $288{ }_{25} \mathrm{~K}$ only 20 K only
1.32
1.42
1.67

TYPE 4DA- 50 WATTS- $4 x^{7} / 66^{\prime \prime}$
1 MM $294 \left\lvert\, \begin{gathered}1,2,3,4,5,10,25,50,75 . \\ 100,150,200,250,300,400 \\ 500, ~\end{gathered}\right.$ $100,150,280,250,30$
$500,750,800.1000$
MM $2951250^{\circ}$ to 5 K except 1750,2750
MM 2966 K to 10 K except 8500
M M 290 कर 30 K . 50 K only
MM 298950 K and 60 K only 50 K only
M M 269595 K and 60 K only
M 308 100K only
TYPE SEA -75 WATTS— $5 \times 1 / 4$
IMM 2111 .2.3.4.5.10.25.50, 100, 250,500 and 1000 only 1 MM 2121.5 K .2 .5 K and 5 K only MM 21415 K and 20 K only

| Stock No. | Ohms <br> See Table "A" Above | NET <br> Each |
| :---: | :---: | :---: |
| MM 290 | 1, 2, 3, 4, 5, 10, 25, 50, 75 $100,150,200,250,500.750$ 800, 1000 | 1.11 |
| MM 291 | 1.5 K to 5 K except 1750. | 1.11 |
| MM 292 | $7.5 \mathrm{~K}, 8 \mathrm{~K}$ and 10 K only | 1.123 |
| MM 293 | $12 \mathrm{~K}, 15 \mathrm{~K}$ and 20 K only |  |
| MM 225 | 25 K and 35 K only | 1.54 |
| IM M 227 | 50 K only | 1.72 |
| 1 m 228 | 100 K only | 1.97 2.13 |
| 1 M 229 | 125 K only |  |
| M 330 | 150 K only |  |
| M 331 | 175 K only | 2.79 |
| M 332 | 200 K only | 2.89 |
| M 333 | 250 K only | $\frac{2.84}{}$ |

TYPE 6 $1 / 2 \mathrm{E}-100$ WATTS- $61 / 2 \times 3 / 4^{\text {n }}$
IMM 30911, 2, 3, 4, 5, 10, 25, 50, 75, $100,125,150,250,500$, MM $3101.5 \mathrm{~K}, 2 \mathrm{~K}, 2.5 \mathrm{~K}, 3 \mathrm{~K}, 5 \mathrm{~K}$ only

 MM 236 25K 30K MM 23750 K and 60 K on!y | I M 238 | 75 K only |
| :--- | :--- | :--- |
| I M 239 | 100 K only |

TYPE $101 / 2 \mathrm{H}-200-225$ WATTS- $101 / 2 \times 11 /{ }^{\circ}$ "
I MM $44111,2,3,4,5,10,25,50,75$,
I MM 442 100, 150, 250,500, 750,1000 MM $4421.5 \mathrm{~K}, 2 \mathrm{~K}, 2,5 \mathrm{~K}, 3 \mathrm{~K}, 5 \mathrm{~K}$ only MM 4437.5 K and 10 K only MM 44415 K and 20 K only MM $44525 \mathrm{~K}, 30 \mathrm{~K}$ and 40 K only MNA 44650 K and 60 K only M448 look only $\qquad$
$\square$

Cobinet
Included


## RESISTOR ASSORTMENTS

Space saving cabinets have 4 drawers and 28 ompartments. Each resistance value is in a

## METAL RESIST-O-CABINETS

Assortment No. 3A. 1202 -watt resistors as follows: 7 each: $8200,10 \mathrm{~K}, 22 \mathrm{~K}, 47 \mathrm{~K}$, 5 each: $1 \mathrm{~K}, 6800,15 \mathrm{~K}, 0.1 \mathrm{meg} ; 4$ each: $100,330,470$, $1500,2200,3300,4700,27 \mathrm{~K}, 1.0$ meg; 3 each: $47,82,150,220,270,3900,0.22$ mes, 0.47 meg ; 2 each: $4.7,10,22,68 ; 1$ each: 15, 27, 33. 39. With Resist-O-Cabinet. $41 / 2 \mathrm{lbs}$.
2 M 776. NET.
28.80

Assortmont No. 4 A .150 IRC $1 / 2$-watt resistors. 8 each: $1 \mathrm{~K}, 47 \mathrm{~K} .0 .1$ meg, $0.27 \mathrm{meg}, 470 \mathrm{~K}$. 1.0 mes. 7 each: 4700 iok 0.22 mes. 2.2 meg, meg: 4 each: $100,470,1500,2200,2700,56 \mathrm{~K}$ $68 \mathrm{~K}, 3.3$ meg; 3 each: $47,220,270,10 \mathrm{meg}$. With Resist-Q: Cabinet. Wi., $41 / 2 \mathrm{lbs}$. 18.00
2 M 777 . NET.
Assortment No. $5 \mathrm{~A}, 125$ IRC 1 -wate resistors. 7 each: $1 \mathrm{~K}, 10 \mathrm{~K}, 27 \mathrm{~K}, 47 \mathrm{~K}, 0.1$ meg 0.27 meg : 4 each 33 K mes; 5 each: $2200,4700,22 \mathrm{~K}$ : $220,270,470,1500,2700,3300,15 \mathrm{~K}$. $0,15,150$. 0.22 meg. 2.2 meg, 4.7 mes. With metal Resist-O-Cabinet. Shpg. wt.. 4\% ibs.
2 M 778 . NET.................... 22.50
Combinaton Assortment No. 6A. Complete resistor stock for AM. FM and TV in one DCFy cabinet. 139 IRC insulated and Type DCF resistore. Watt. 4 each: 1000.47 K . $10 \mathrm{~K}, 220 \mathrm{~K}, 2.2$ meg, 2 each: $47{ }^{3}$ each: 4700 , $270,470,1500,2200,2700,3300,15 \mathrm{~K}, 22 \mathrm{~K}$, $27 \mathrm{~K} .43 \mathrm{~K}, ~ 39 \mathrm{~K}, 68 \mathrm{~K}, 150 \mathrm{~K}, 4.7 \mathrm{meg}$. Watt. 4 each: $1000,10 \mathrm{~K}, 27 \mathrm{~K}, 100 \mathrm{~K}, 1.0 \mathrm{meg}$ : 3 each: $47 \mathrm{~K}, 470 \mathrm{~K}, 2.2 \mathrm{meg} ; 2$ each: 3300 . 15 K : $220,270,470$. 1500,2200 each: $2700,4700,150$. $39 \mathrm{~K}, 220 \mathrm{~K}, 4.7$ meg. 2 Watt 1 each: $47100^{\circ}$ 470,4700 , $10 \mathrm{~K}, 22 \mathrm{~K},{ }^{2} \mathbf{4 7 \mathrm { K }}$. Type DCF: 1 each, 100. $1000,10 \mathrm{~K}, 100 \mathrm{~K}, 1.0 \mathrm{meg}, 5$ meg. With metal Resist-O-Cabinet. Wt., 5 lbs.
2 M 779. NET...................... 23.22

## AXIAL-LEAD POWER RESISTORS



## PW-5 AND

PW. 10
TYPE PW-5. IRC 5-watt wire-wound resistors With glass fiber core. Sealed and insulated recta:ngular ceramic case. $11 / 3^{\circ}$ leads. Tolerance, $\pm 10 \%$. Size less leads, $7 / \mathrm{x}^{3} / 0^{\circ}$. Shpg. wt., 2 oz .
Available in values 1 to 6000 ohms only. Specify value see Table "B" below.
I MM 175. NET EACH
Type PW-10. As above but 10 watt rating.
 bolow.
.36
TABLE "B" (OHMS)-SPECIFY VALUES

| 1 | 20 | 125 | 600 | 1500 | 4000 | 8500 |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2 | 25 | 150 | 700 | 1750 | 4500 | 9000 |
| 3 | 30 | 200 | 750 | 2000 | 5000 | 10,000 |
| 4 | 40 | 250 | 800 | 2250 | 6000 | 12.000 |
| 5 | 50 | 300 | 900 | 2500 | 7000 | 12.500 |
| 7.5 | 75 | 350 | 1000 | 3000 | 7500 | 15.000 |
| 10 | 100 | 400 | 1200 | 3300 | 8000 | 20.000 |
| 15 | 120 | 500 | 1250 | 3500 | 8200 | 25.000 |

## AXIAL-LEAD "RESIST-O-CARD" RESISTOR ASSORTMENTS

Type PW. $5 \times 10$. IRC 10 -
 $25,50,100,500,1 \mathrm{~K}, 2 \mathrm{~K}$, $4 \mathrm{~K}_{\mathrm{K}}$ \& 5 K . NET $\quad 2.50$
Type PW-5 $\times 20.5$-watt registors. 1 ea: $1,5,7.5,10,15$, 20, 25, 50, 100, $150,500,750$, $3 \mathrm{~K}, 4 \mathrm{~K}, 5 \mathrm{~K} .5 \mathrm{~K}, 2 \mathrm{~K}, 2.5 \mathrm{~K}$, M 177. NET
5.00

Type 20-A. 10-wate reslstors. 1 ea: $50,75,100,250$.
500 . 750 , $1 \mathrm{~K}, 15 \mathrm{~K}, 2 \mathrm{~K}$ $2.5 \mathrm{~K}, 3 \mathrm{~K}, 3.3 \mathrm{~K}, 3.9 \mathrm{~K}, 4 \mathrm{~K}, 5 \mathrm{~K}, 6 \mathrm{~K}, 7.5 \mathrm{~K}$, IM 191 . NET.

# IRC and Ohmite Resistors 

## IRC RESISTORS

## ½-WATT 1\% PRECISION RESISTORS—MIL-10509

Type DCC. Precision, unmolded, filmype carbon realstors for circuits requiring laigh voltage ratings and low noise evels as in instrumentation. advanced electronics, and critical color TV circuita. Values indicated in Table below. Have low voltage coefficient, xcellent frequency characteristics and small size. $1 / 2$-watt rathg. Meet ( $1 \mathrm{~L}-10509$ Ratinga, $40^{\circ} \mathrm{C}$. Be sure to speclly values when orderlng. Av. shpg. wt.o 3 oz

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { Mir's } \\ & \text { Type } \end{aligned}$ | $\begin{aligned} & \text { Mit. } \\ & \text { Type } \end{aligned}$ | See Table "A" Below | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| MM 492 | ${ }^{\mathrm{DCC}}$ | $\begin{aligned} & \text { RN20X } \\ & \text { RN20X } \end{aligned}$ | 10 ohins- 100 ohms 110 ohms- 1.96 megs | $.54$ |

TABLE "A" VALUES-SPECIFY VALUES WANTED


Designed to keep stocks withtn quick, easy reach-end "cigar box confusion." Handy-Paks are unlform size for $1 / 2,1$ and 2 watts-one pack-size for each resistor value. Complete stocks are always visible. All resistors are $10 \%$ carbon compositlon types. Value and wattare clearly
"RESIST-O-CADOY"
(A) Well-organized and compact plastic pouch containing HandyA 1'aks folds to $63 / 4 \times 37 / 3^{2} \times 11 / 2^{2}$. Individual pockets keep packets secure and orderly-inventory is always visible. Ideal for in-home servicing. Type 41. Assortment of $120 \mathrm{1} / 2$-watt resistors; 20 values, 47 ohms to 10 meg. Shp. wt. 8 OZ.
2 M 782 . NET EACH
Type 45. Assortment of 80 1-watt resistors; 20 values, 47 ohms to 10 megai Shpg. Wt. 8 Oz.
14.40

## "RESIST-O-CHEST"

B. Convenient inventory. All-metal resistor filing cabinet supplied B) complete with a wlde assortment of resistors in "Handy-Paks. or the service shop. Has hinged lid and metal separators to keep fandy for the service shop, Has your fingertios. Inventory list in lid helps you
Paks orderly righe at
keep stock up-todate. Size, $61 / 4 \times 53 / 0 \times 33 /$. Shps. Wes.: 42 and $43,21 / 4$ keep stock up-to-date. 46 and $47,21 / 211 \mathrm{se} ; 49 \mathrm{~A}$ and $50 \mathrm{~A}, 3 \mathrm{lbs}$.

| Stoek No. | Mer's | Description | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
|  | 42 | $2041 / 2$-wath resistors; 34 values, 47 ohms- 10 mers. | 24.48 |
| 2 M 788 | 43 | 462 \% -watt resistors; 77 values, 10 ohms - 22 megs. | 55.44 24.48 |
| 2 M 789 | 46 | 136 l -watt resislors; 34 values, 47 orms- 10 merss. | 55.44 |
| 2 M 790 | ${ }^{47}$ | 308 1 -watt resistors; 77 values, 10 Ohms-22 mers. | 24.48 |
| 2 M 791 2 M 792 | 50A | 2312 -watt resislors; 77 values. 10 ohms- 22 mess. | 55.44 |

## REPLACEMENT "HANDY-PAKS"

C. For replacement in above assortinents. Standard "Handy-Pak" C. package of either sixx $1 / 2$-watt, four 1 -watt. or three 2 -watt carbon
resistora. $10 \%$ tolerances. Specify value desired. Av. shpg. wt. 6 oz .

| Srock No. | Wattage Rating | Quantiry Per Pkg. | NET PER PACKAGE |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | $12011, \mathrm{EA}$. | 12 and Up, EA. |
| MM 4 7 | 1/2 |  | . 72 | 54 <br> 54 |
| MM 488 | $\frac{1}{2}$ | 4 | . 72 | . 54 |

## OHMITE RESISTORS

FAMOUS "BROWN DEVIL" WIRE-WOUND RESISTORS
For voltage dropping, bias supplies, bleeders. etc. Have thick vitreous enamel coating-for exceltent heat conduction and insulation; also protects against the harmful effects of humidity. Accuracy, $\# 5 \%$ Size; 5 -watt units,

 lengih, $11 / 2^{\prime \prime}$. Av. shpg.

5-WATT SIZE (SEE TABLE "B" BELOW FOR VALUES)

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | Ohms | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ | Stook No. | Ohms | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { TMM } 730 \\ & \text { IMM } 731 \end{aligned}$ | $\begin{aligned} & \text { ito } 1000 \\ & 1100105000 \end{aligned}$ | $\begin{array}{r} .52 \\ .55 \\ \hline \end{array}$ | 1 MM 732 | 60001010,000 | . 58 |

10-WATT SIZE (SEE TABLE "B" BELOW FOR VALUES)

|  | Available in all values to 50,000 excep f 5 dmms 79 |  |  | 12,500 to 20.000 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MM 700 | 1 to 1000 1100 to 5000 | . 67 | I MM 706 | 25.000 to 40,000 | . 83 |
| MM 702 | 6000 to 10,000 | . 70 | 1 MM 707 | 45,000 and 50.000 | . 93 |

20-WATT SIZE (SEE TABLE "B" BELOW FOR VALUES)
A vailable in all values except those markel * in table " $B$ " below.

| IMM 720 <br> MM 721 <br> MM <br> M <br> MM | 101000 200 to 50 000 2,50010 | .68 .70 .83 .85 | MM 724 $M M 725$ $M M 726$ $M M 727$ |  | $\begin{aligned} & 1.99 \\ & 1.35 \\ & 1.57 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TABLE "B" VALUES-SPECIFY VALUES WANTED |  |  |  |  |  |
| Ohms | Ohms | Onms | Ohms | Ohms | Ohms |
| 1 | 30* | 350 | 1250 | 7.000 | 45.000 50.000 |
| 1.5* | $35^{*}$ | 400 400 | 1500 1750 | 7.500 8.000 | 50,000 55,000 |
| 3 | S0** | ${ }_{500}$ | 2000 | 9.000 | 60.000 |
|  | 75 | $6100 *$ | 2250 | 10.000 | 65.000 |
|  | 100 | 760 | 2500 | 12.500 | 70.000 |
| 7.5* | 125* | 750 | 3000 | 15.000 | 75.000 |
| 10 | 150 | 800 | 3500 | 20.000 | 80.000 |
| 12* | 200 | 900 | 4010 | 25,000 | 85,000 |
| 15 * | 225* | 1000 | 4500 5000 | 30,000 35000 | 95.0 ¢Н) |
| ${ }_{25}^{20}$ | 350 | 1200 | 6000 | 40,000 | 1100.000 |

OHMITE AXIAL-LEAD WIRE-WOUND RESISTORS
Axial-lead, ceramic-core re-
gistors. Covered with vitre-
hish temperature. Resistance wise and terminals welded to end caps to assure excellent stability and minimum noise. Well-suited for all applica* tons where equipment is subject to high operating temperatures and adverse conditions. Tolerance: $=5 \%$ Wattage based on temperature rise to $300^{\circ}$ C. $11 / 2^{\circ}$ leads. Av. shps. wt., 4 ox.
3 WATTS- $\% / 16 \times 1 / 4$ " (SEE TABLE " $C$ " BELOW FOR VALUES)

| Stock No. | Ohms | EACH |  | No. | Ohms | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2 \mathrm{MMO9O}$ | 1-1000 | . 59 | 2 | MM 110 | 5600-10,000 | . 66 |

5 WATTS - $11 / 6 x^{11 / 82 " ~(S E E ~ T A B L E ~ " C " ~ B E L O W ~ F O R ~ V A L U E S) ~}$


 | 2 MM | 30 | $1200-5000$ | .66 |
| :--- | :--- | :--- | :--- | :--- |
| 2 MM | 135 | $5600-10,000$ | 70 |

10 WATTS - $115 / 16 x^{13 / 2 " ~(S E E ~ T A B L E ~ " C " ~ B E L O W ~ F O R ~ V A L U E S) ~}$


TABLE "C" VALUES-SPECIFY VALUES WANTED
Ohms Ohms Ohms Ohms Ohme Ohms Ohms Ohm

| Ohms | Ohms | Ohms | Ohm: | Ohm | Onms | Ohm: | 0 (0) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1.0 | 15 | 120 | 500 | 1800 | 4700 | 8.200 | 25,000 27000 |
| 1.5 | 20 | 150 | 600 | 2000 | 5000 |  |  |
| 2.0 | 25 | 200 | 700 | 2200 | 5600 | 10.000 | 33,000 |
| 3.0 | 30 | 220 | 750 | 2500 | 6000 |  |  |
| 4.0 | 33 | 250 | 800 | 2700 | 6800 | 15.000 | 40,000 |
| . 0 | 40 | 300 | 900 | 3000 | 7500 | 20,000 | 47.000 |
| 7.5 | 50 | 330 | 1000 | 3300 3000 | 8000 | 22,000 | 50,000 |
| 10.0 | 75 100 | 400 | 1500 | 4000 |  |  |  |

## IRC FUSE RESISTORS

Type FR 7.5. A highty retiable plugsta type reatator with characteristics of a slow.blow fuse. Used extensively in late model television sets employing series sively filament circuits. Preventa tube damage in case of overload. Insulated ceramic borly. Resistance 7.5. ohms. Replaces similar units in RCA Motorola, Zenith, etc. Wi.. 3 oz.
2 M 77 H . NETEACH
Type FR 6. Same as above, but 5 olums. 3 oz .
2M773. NETEACH
Typo FR 5.6. Same as above, but 5.6 ohms. $3 \mathbf{~ o z}$.
TYM 772. NET EACH..

.45

Specify Ohms and Wattage on Resistor Orders

# Ohmite Resistors 



# Resistors-Audio and TV Controls 

## OHMITE TYPE FR $71 / 2$-OHM FUSE RESISTOR

A hishly-dependable $71 / 2$-ohm fuse resistor. May be used to replace many fuse resiszors used in television circuits. $1 / 2$ tinned wire leads make replacement appliration easy and nuick. Supplied with convenlent. plux-In bakelite mounting strip-or can be wired directly into circuit of tiv set. 1/40". Shyg. wt.. 3 oz . 2 M 063. NET.
.45


## G-C SURGISTORS

Surge resistors for increased recelving tube, CR tube and component lire. Comine the functions of a resistor and a to $25 \%$ of normal. yet allow full voltage after warm-up. Connect directly into the power Fine. For nse with 117 v., AC-DC. Av hhpe kt 7 oz


| G-C GLO-BAR "THERMISTORS" |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Popular thermistors used in series string fiament circulta of RCA, Crosley, Plitico, and other TV sets. A necessary service replacement item. "Matched pair; replaces fila-ment resistors of G.E., M'rola, Philco. etc. Av. wt., 1 oz. |  |  |  |  |  |  |
| Stock No. | Type | Ohm: |  | Replace | NET EACH <br> 1.9 <br> $10-U_{0}$ |  |
|  |  | Hot | Cold |  |  |  |
| M | 25.912 | 20 | 250 | GE RRWOS 1 | . 88 |  |
| 2 M 067 | 25-914 | 75 | 950 | GE RRWW041 | 1. | 1.0 |
| 2 M 068 | ${ }_{2}^{25-916}$ | 31 | 260 460 | GE RKW054 | 1.12 | 1.01 |
| 2 MO 069 | 25-918 |  |  |  |  |  |
| $2 \mathrm{MOS3}$ | $25-920$ | $\begin{aligned} & 11 \\ & 50 \end{aligned}$ | 250 1050 | $\begin{aligned} & \text { M'rola 6A735941 } \\ & \text { Philco } 33.1343 .3 \end{aligned}$ | 1.47 .94 | .34 .85 |
| $2 \mathrm{mos4}$ | 25-922 25-924 | 10500 | 125 V . | G.E. RRW052 | 1.88 | 1.67 |
|  |  |  |  |  | 47 | 1.32 |
| M 070 |  | $43$ | 200 |  |  | 析 |
| 2 M 2 M 071 | 25.928 $25-910$ | 40 | 375 | *(see above) | 1.76 | 1.5 |

## G-C TV FUSE RESISTORS

Rellable, low-cost replacement units for series-string TV tube circuits. Replace similar units in Raytheon, KCA Motorola. Sylvania, Zenith and other red receivers, Aick units are less than an inch in lenkth; timn
and easy Installation. Av. shpg. wt., $10 z$ or


| Stock No. | Type | Onms | Llst | 1.9. EACH | 10.Up, EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2 \mathrm{MO21}$ | 25-980-BU | 4.7 | \$.65 |  |  |
| $2 \mathrm{MO22}$ | 25-984-BU | 5.6 | 65 | 29 | 24 |
| $2 \mathrm{MO}{ }^{2} 3$ | 25-988-BU | 7.5 9 | . 65 | 9 | 24 |
| 2 M 024 | 25-990-BU | 22.0 | 65 |  |  |

2 M 026. Type 25-996 Fuse Resistor Kit. Contains 6-7.5; 1-4.7;
HANDY OHM'S LAW CALCULATOR
Easy-to-use calculator. Solves problems in Ohm's Law and DC power. Shows power. koltage and current when resistance is resistance can be determined. Also has parallel resistance calculator Size. 9x $3^{*}$. Sheg. wt., 3 oz.
2 M 780 . NET
2 M 781 . Deluxe Plastic Model. NET

## ALLIED'S COLOR-CODE GUIDE

Corle colors may be set to show resistance or resistance values may be set to show colors. Aze, $23 / 4 \times 3 / 4{ }^{2}$ values. Free with order for 20 or mors resistors. Shpe. wt.. 2 or 2 M 770 . NET
. 15


## CENTRALAB "COMPENTROLS"

Closely follow the curves of the FletcherMunson cfiect. Low added amplification.


TYPE C-1. Combination volume control and tone compensator. 1 m proves apparent bass and treble response of TV sets, ratios, hi-h. etc., when volume is at low level. rephacest 00 Sa Types C1-60-S and C1-70-S have $136^{\circ}$ Lody dia. Shpg. wt., 5 oz.

| Stock No. | $\begin{aligned} & \text { Mr's } \\ & \text { Type } \end{aligned}$ | Ohms | $\begin{gathered} \text { NET } \\ \text { EACH } \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| 30 M 421 | C1. 60 | $1 / 2 \mathrm{meg}$ | 2.40 |
| 30 M 422 | C1-60.S | $1 / 2$ mex | 2.85 |
| 30 M 423 | C1 | 1 meg | 2.40 |

TYPE C2-100 "SENIOR." Simlar to C-1, lelt. Dual concentric type for replacing 250 K to 2 meg volume controls in amplifiers. TV sets etc. Pernits any degree of compensation at low thstening levels. Shaft length. $7^{\circ}$. $113 / 16^{\circ}$ dla. With 2 knols. 6 Oz. 3.30 30 M 436. NET EACH.. 3.30 TYPE C2-200. Same as C2-100 Compentrol above, except in Fastatch design. Front ans rear shafts to desiret length. 8 oz . 30 M 437 . NET EACH ... 3.30

## MALLORY CONTROLS

## SPEAKER CONTROLS



T Pad Attonuators. Present constant source fmpedance as well as constant load at all control settings. Size: $11 / 6^{\circ}$ dia., $111 / 6^{\circ}$ deep.

L Pad Attenuators. Present a constant load impedance at all control settings. Size: $15 / 3^{\circ}$ dia. $11 \%$ deep.

Typs

| Stoak No. | Typo |
| :---: | :---: |
| 29 M 883 | 12 |
| 29 M 884 | 1. |
| 29 M 2985 | ${ }_{\text {L }}$ |
| 29 M 886 | Lis |
| 29 M 887 | 1.50 |
| 29 M 920 | 1100 |
| 29 M 888 | 1200 |
| 29 M 889 | L250 |
| 29 M 890 | 1500 |
| 29 M 921 | 1600 |
| 29 M 922 | 11000 |
| 29 M 891 | 12000 |
| 29 M 923 | L3000 |
| 29 M 708 | 14000 |

"Tי" Pads. NET EACH... 3.09 "L" Pads. NET EACH... 2.73

## THEATER SPEAKER CONTROLS

Precision units developed especially as controls in drive-in theater speaker installations. Withatand extremes of temperature and humidity. TSA-10 is an L-pad with 10 -ohm input and 4 -ohm output. TSA-35 is a 35 -ohm scries-type potentiometer. TSA- 6 is a 6 -olsm shunt-type attenuator. $11 / 6^{\circ}$ dia. cases. Shafts are $1 / 2^{\prime \prime}$ long: "steel (kuurled), †brass. shpg. wt., 402.

| Stock No. | MPr' Type | Doscription | EACH |
| :---: | :---: | :---: | :---: |
| 29 M 847 | *TSA-10 | L-pad | 1.47 |
| 29 M 848 | *TSA-35 | Potentiometer | 1.08 |
| 29 M 849 | +TSA-6 | Shumt-type Attenuator | 1.08 |

## STEREO AND MONOPHONIC L-PAD CONTROLS

Constant finpedance attenuators. Use as level controls in low-impedance. low-level audio circuits. LL-8. LL-16. LL-50 are dual-tandem for stereo balance or master volume i othersior Bushing: $1^{\text {m }}$ by $3 / \mathrm{m}^{*}$ dia. $11 / 2^{*}$ shaft. Wt., 5 oz.


## VOLUME CONTROL ACCESSORIES



| Stock No. | Type | Fig. | Description |
| :---: | :---: | :---: | :---: |
| 29M676 | RH249 | A | Meg. bracket, Mtg. Curs 21 |
| 29 M 675 | R B248 | A | Mtg. bracket. Mts. Ctrs. $13 /$ |
| 29 M 661 | EB247t | C | Extender ${ }_{\text {Wrench for }} 1 / 2 * \%{ }^{\prime \prime}$ v.c. hex nuts |
| 29 M 665 | 178 | E | Ext shaft. $4 \times 1 / 4 \times 1 / p^{2}$ flat. |
| 29 M 655 | $\begin{aligned} & \mathrm{RS} 242 \\ & \mathrm{RS} \mathrm{~S} 243 \end{aligned}$ | $\stackrel{\text { F }}{\text { F }}$ | Ext. shaft. $4 \times 1 / 4 \times 3 / 40^{-}$ |
| 29 M 656 29 M 657 | RS244 | F | Ext, shaft, $4 \times 3$ ¢ $x^{1} 0^{n}$ flat. |
| 29 M 658 | RS245 |  | Ext. shaft. $2 \times 1 / 4^{\prime \prime}$ with $3 / z^{\prime \prime}$ slot. |
| 29 m 672 | EC240* | ${ }^{\mathbf{H}}$ | Coupling |
| 60 H 390 | UB241 | D | Busthing for panel moun |

## JENSEN SPEAKER VOLUME CONTROLS

Two-section L-pads designed for controlling volume at individual speakers. Have no effect on volume of other speakers or total impedance. Feature rusgel construction with special alloy windings and solder lug terminals. Provide smooth. gradual volume control. Single hole panel mounting. Wlth lock nut. pointer kis.


| Stock | Mir's | Ohms | Watts | NETH |
| :---: | :---: | :---: | :---: | :---: |
| No. | Type | OACH |  |  |
| 33 M 942 | ST-760 | $3-4$ | 15 | 2.85 |
| 33 M 940 | ST-276 | 6.8 | 15 | 1.91 |
| 33 M 938 | ST-837 | 15.15 | 35 | 3.38 |

## CTS-IRC Controls

## - CONTROLS WITH UNIVERSAL SHAFTS



Knurled, flatted and slotted. $3^{\prime \prime}$ universal shaft can be lang desired length. $15 / 6^{\prime \prime}$ body dia. $3 / 0^{*}$ bushing. 270 ohmooth . extremely quict operation. Includes Sce taper explanations below. Av. ahpg. wt., 4 oz

| Stock No. | Type | Ohms | Taper | Stock No. | Type | Ohms | Taper |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 30 M 395 30 m 300 | Q11.201 | 250 | A | 30 M 318 | Q13-128 | 100 K | C |
| 30 m 377 | O11-105 | 750 | ${ }_{\text {A }}$ | 30 M 388 | 911-228 | 125 K | A |
| 30 M 441 | 817-105 | 750 | ${ }_{\mathbf{P}}$ | 30 m 875 | 811-328 | 150 K | A |
| 30 M 301 | Q11.108 | 1000 | A | 30 m 374 | Q13-129 | $\begin{aligned} & 150 \mathrm{~K} \\ & 200 \mathrm{~K} \end{aligned}$ |  |
| 30 M 379 30 m 874 | 817-108 | 1000 | P | 30 m 319 | 011-130 | 250 K | A |
| 30 M 442 | 811-109 | 1500 | Q | 30 M 320 | Q13-130 | 250K | C |
| 30 M 380 | 817.109 | 1500 | O | 30 M 445 | Q11-131 | 300 K | A |
| 30 m 302 | Q11-110 | 2000 | A | 30 M 876 30 M 21 | 811-132 | 350K | ${ }_{\text {A }}$ |
| 30 M 373 | 813-111 | 2500 | C | 30 m 322 | Q11-133 |  |  |
| 30 M 381 | 817-111 | 2500 | 9 | 30 M 323 | 013-133 | 500 K |  |
| 30 M 303 | Q11-112 | 3040 | A | 30 m 324 | ¢14-133 | 500 K | D |
| 30 M 382 30 M 304 | 817-112 | 3000 | 0 | 30 M 397 | ¢17-133 | 500 K | $\bigcirc$ |
|  | Q11-114 | 5000 | A | 30 M 398 | Q11-134 | 600 K | A |
| 30 M 383 30 m 384 | 813-114 | 5000 5000 | C | 30 M 390 | 011-136 | 750K | A |
| 30 M 305 | 811-115 | 7500 | A | 30 M 325 30 M 326 | Q11-137 | 1 meg | ${ }^{\text {A }}$ |
| 30 M 306 | 811-116 | 10 K | A | 30 M 326 30 m 327 | 813-137 | 1 meg | C |
| 30 M 307 | Q13-116 | 10 K | C | 30 M 327 30 m 877 | ¢14-137 | ${ }_{1} 1 \mathrm{meg}$ | D |
| 30 M 308 | Q14-116* | 10K |  | 30 M 328 |  |  |  |
| 30 M 385 | Q17-116 | 10K | Q | 30 M 329 | 811-139 | 1.5 meg |  |
| 30 M 309 | 811-119 | 20K | A | 30 m 330 | 813-139 | 2 meg | ${ }_{\text {A }}$ |
| 30 m 311 | ¢16-1190* | 20 K | Spec. | 30 M 399 | ¢17-139 | 2 meg | $\bigcirc$ |
| 0 M 443 |  |  |  | 30 M 331 | Q11-239 | 2.5 meg | A |
| 30 M 312 | 014-120* | 25 K | D | 30 M 332 | 011-140 | 3 meg |  |
| 30 m 313 | 811-121 | 30 K | A | 30 M 333 | O13-140 | 3 meg |  |
| 30 M 396 | Q11-122 | 35 K | A | 30 M 446 | Q17-140 | 3 meg | 9 |
| 30 M 314 | Q11-123 | 50 K | A | 30 m 30 | 811-141 | 5 meg |  |
| 30 M 315 | Q13-123 | 50K |  |  | Q12-141 | 5 meg | Spee |
| 30 M 316 | ¢14-123* | 50 K | D | 30 M 392 | Q13-141 | 5 meg | C |
| 30 m 387 | ¢11-125 | 75 K | A | 30 30 M 393 | 817-141 | 5 meg | 0 |
| 30 M 317 | Q11-128 | 100 K | A | 30 M 394 30 M 35 | O11-142 | . 5 meg | A |
|  |  |  |  |  | Q11-143 | 10 meg | A |

NET EACH.
1.02

TAPPED Q CONTROLS WITH UNIVERSAL SHAFTS

| $\begin{aligned} & \text { Stock No. } \\ & 30 \mathrm{M} 879 \end{aligned}$ | $\frac{\text { Type }}{013.118 x}$ | $\frac{\text { Mags }}{015}$ | Taps. Ohms | Taper | Stock No. | Type | Mogs | Taps, Ohms | rapet |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 30 \mathrm{M} 879 \\ & 30 \mathrm{M} 386 \end{aligned}$ | $013.118 x$ $013-118 x x$ | .015 .015 | 10k $5 \mathrm{k} / 10 \mathrm{~K}$ | Spec. | 30 M 349 | 018.137X | 1.0 | 100K | Spec |
| 30 M 337 | 018.130 x | . 25 | 60\% |  | 30 M 350 30 m 351 | 018-137xx $019.137 x$ | 1.0 | $250 \mathrm{~K} / .5 \mathrm{Meg}$. | Spec. |
| 30 M 336 | Q13-130x | . 25 | 125 K | Spec. | 30 M 352 | OvC-539x | 1.0 | . 5 Mes | Spec. |
| 30 M 340 | Q18.132 ${ }^{\text {P }}$ | . 35 | 75K |  | 30 m 391 | 013-138x | 1.5 | $\begin{aligned} & .5 \text { meg } \\ & .25 \mathrm{meg} \end{aligned}$ | Spec Spec |
|  |  | . 5 | 25 K 50 K | Spec. | 30 M 355 | 017.139x | 2.0 | 150k | Spec. |
| 30 M 343 | $018-133 x$ $013-133 x$ | . 5 | 50k | Spec. | 30 M 357 | 018.139xX | 2.0 | 250K/.5 Meg | Spec |
| 30 M 344 | 019-133 X | . 5 | 250 K |  | 30 | 013-139x ${ }^{\text {di }}$ | 2.0 | . $5 \mathrm{Meg} / \mathrm{M} \mathrm{Meg}$ | Spec |
| 30 M 345 | 018.133xx | . 5 | 100K/200k | Spe | 30 M 353 | O13.139 | 2.0 | ${ }^{5} \mathrm{Meg}$ |  |
| 30 M 346 | Q13-137x | 1.0 | 250k |  | 30 <br> 30 | 018.139 0 | 2.0 | 1 Meg | Spe |

NET EACH

## TYPE 76 ATTACHABLE SWITCHES FOR Q CONTROLS

Blue bakelite enclosure. Easily attached. Type
$76-4$ is make-one, break-one for TV spot killing. U.L. Approved. Shpg. wt., 2 oz.

## EXPLANATION OF TAPERS

Taper A. Linear
Tapor C. Logarithmic curve for audio circuit control or antenna shunt control
Taper O. Tapered at both ends to provide Used where control of and antenna circuit.
importance in control of grid bias is of prime
importance in controlling gain.

30 M 359. Type 78-1. SPST. NET
30 M 591 . Type 76-2. DPST NET
30 M 591. Type 76-2. DPST. NET
30 M 888. Type 76-4. SPDT. NET

Taper H. Tapped logarit hmic curve. Audio evel control for bass compensation.
Taper P. Semi-logarithmic curve with reverse taper. For use in contrast and picture control circuits in television.
Taper $Q$. Same applications as Taper $P$ above, but has slightly steeper curve.

## $L$ AND T.PAD SPEAKER CONTROLS

Handle 10 watts audio. L pads provide constant input imped; $T$ pads, T pads, $127 / 2^{2} .3 / 8^{\prime \prime}$ bushing. $1 / 4^{\prime \prime}$ long. With knob. Av. shpg. wt.. 6 oz.


| Pad | Ohms | EACH |
| :---: | :---: | :---: |
| L | 4 |  |
| L | 8 |  |
| L | 15 | 3.21 |

## TYPE HLC TV HEIGHT CONTROLS

Quality potentiometers for controlling picture height (vertical size) in TV receivers. Have same specs as most original equipment. 1-watt power rating; 750 y. mals. Nylon shaft slotted and knuried; designed for and knuried; designed for led in any set. Tab mtg. Bia., is//6". Wt.. 4 oz ,

| Stock No. | Type | Megohms | Stock No. | Type | Megohms |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 30 M 861 | - | 2.0 | 30 M 864 | 4 | 4.0 |
| 30 M 862 | 2 | 2.5 | 30 M 865 | 5 | 5.0 |
| 30 Mr 83 | 3 | 3.0 | $30 \mathrm{MB66}$ | 6 | 7.5 |

NET EACH.

| Stock No. | Type | Pad | Ohms | EACH |
| :---: | :---: | :---: | :---: | :---: |
| 30 M 884 | TP4 | T |  |  |
| 30 30 308885 | TP8 | T | 8 | 63 |
| 30 m 887 | TP500 | T | 500 | 3.63 |



## TV SIGNAL ATTENUATOR

Type QJ-3. Economically priced Lpad television signal attenuator. For llse with sets having 300 -ohm twin line antenna input. Minimizes interstation interference, definition loss and sound bars caused by excessive signal strength. Diminishes buzz or hum due to high signa! level in inloading effects in strong signal area. In many cases, corrects or reduces horizontal or vertical jltters; also picture and sound "break over." Very useful device to simulate fringe-area signals. A nearly constant 300 -ohm load is maintalned on antenna lead-in. With mtg. bracket and instructions. $76^{* \prime}$ diameter, $1^{*}$ deep. Shaft:




SWITCHES FOR ABOVE CONTROLS
Easily attached switches for WPK, WPS, WP and WPRL controls above. Shpg. witio 2 oz 30 M 219 . Type 76-12. DPST. EACH... 75

## TYPE WM MULTISECTION CONTROLS

Rugkedly constructed 4-watt "add-on" control sections. Can be attached to the WPK. WPS WP or WPRL controls, listed above, to form dual control units. All have linear taper. excepa type 7500 L , which has left-hand logarithmic taper for TV focus. $5 / 0^{*}$ deep. Specify Typo and Ohms. Shpg. wt.. 2 oz .

| Ohms | Ohms | Ohms | Ohms | Ohms |
| :---: | :---: | :---: | :---: | :---: |
| 50 | 250 | 1500 | 3000 | 7500 L |
| 100 | 500 | 2000 | 5000 | 10,000 |
| 200 | 1000 | 2500 |  |  |

30 MM 860. NET EACH ............... . 1.32


30 MM 216 . NET EACH

30 MM 199. NET EACH
$30,000|40,000| 50,000 \mid$
30 MM 856. NET EACH .............. 1.83
TYPE WPS CONTROLS

| 25 | 500 |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| 40 | 500 L | 2500 | 2250 L | 4000 |
| 60 | 1000 | 2250 | 2500 | 4000 L |
| 250 | $\ldots . .$. | 3000 | 5000 |  |

30 MM 217 . NET EACH ............... 1.32
TYPE WP CONTROLS

| 2 | 15 | 60 | 400 | 2500 |
| ---: | ---: | ---: | ---: | ---: |
| 3 | 20 | 75 | 500 | 3000 |
| 5 | 25 | 100 | 750 | 4000 |
| 6 | 30 | 200 | 1000 | 5000 |
| 8 | 40 | 250 | 1500 | 7500 |
| 10 | 50 | 300 | 2000 | 10.000 |

30 MM 215 . NET EACH 1.32

30 MM 857. NET EACH
$30.000|40.000| 50.000$
1.83

## TYPE WPRL CONTROLS

Locking-type controls with screw-driver slot shaft. $1 /{ }^{\text {a }}$ : dia. and approximately
long from mounting face. With $3 / 6^{*}$ locking-type bushing and locking nut. Limear taper. Specify Type and Ohms. Shpg. wt., 4 oz .

| Ohms | Ohms | Ohms | Ohms | Ohms |
| :---: | :---: | :---: | :---: | :---: |
| 2 | 15 | 60 | 400 | 2500 |
| 3 | 20 | 75 | 500 | 3000 |
| 5 | 25 | 100 | 750 | 4000 |
| 6 | 30 | 200 | 1000 | 5000 |
| 8 | 40 | 250 | 1500 | 7500 |
| 10 | 50 | 300 | 2000 | 10.000 |

30 MM 859. NET EACH
1.56

30 MM 889. NET EACH
1.83
$30.000|40,000| 50.000$
204
30 MM 890 . NET EACH
.04

## Number When Ordering Controls

# Ohmite Rheostats and "AB" Controls 

## WIREWOUND RHEOSTATS

Smooth. dependable controls with solid ceramic cores. Each turn. core and base is bonded by vitreous enamel. Copper-serapliste contact brushats. except full setting. Typug H, J, K, and $L$ mount on panels up to $1 / 4$ thick; Type $N$ on panels up to $11 / 4^{\circ}$ thick. Specificationa: Type 11, dia. ihto depth behind panel $13 / 0^{\prime \prime}$. Type J. dia. $2 \%_{0} 0^{\circ}$ depth behind panel $13 / 8^{*}$ Typr k. dia. $31 /{ }^{*}$ depth behind panel $13 / 4^{\circ}$ : Type L. dia. $4^{3}$ depth behind panel $2^{\circ}$; Type N , dia. $6^{\prime \prime}$ depth behlnd panel $2 \frac{3}{a^{*}}$. All are less knobs (see listing below Type N). Av. shps, wt., 10 oz .


25 WATT-TYPE H



300 WATT-TYPE N


## KNOBS AND HANDWHEEL FOR RHEOSTATS

Black bakelte knolss for Olimite rheostats. All are fluted except * which
 Type 5000 Dlal Plate. For Type H, J. K and L. $2^{2}$ /化 diameter. Handsomely finished with bright figures and lines on etched black background, 0-100 scale. Shps. wL. 2 oz ,
74 M 405. NET
Type 6001. Dial Plate. For Type N rheostats, above. $51 / 2^{\circ}$ diameter. U. $1(0)$ scale divisiun. Slupg. wi.. 3 oz .
74 M 407 . NET.

74 M 407. NET.
Type 5007 Dlal Plate. For Type E rheostats, above right. $11 / 40$ diameter. U-lOU se le division. Shps, wL. 2 oz .
74 M 344 . NET.......................29
"AB" TWO-WATT POTENTIOMETERS


Sealed element, carbon slider for noise-free operation. Size: $15 / 3 z^{\prime \prime}$ dia. $x$ /6": except Type CCU, $15 / 3 \times 117 / 4^{\circ}$. $1 / 6^{\circ}$ hole mtg . to $1 / 4^{\circ}$ panels. $1 / 4^{\circ}$ shaft. $2^{2}$ long except CLU locking slotted shaft. Linear taper except clockwise log. $\dagger$ counter-clockwtse log. $\pm 10 \%$ except $\ddagger=20 \%$. 5 oz .

## TYPES CA, CB, CU



28 M 524. CS-1 SPST Switch. For AB pots. 3 oz. NET.......... 66

TYPE E $121 / 2$-WATT MINIATURE RHEOSTATS
Extremely compact, $121 / 2$-watt power rheostats for $\lim -$ ited space applications. Rupked, all ceramic and metal construction. Built to operate at maximum hot mpot metaraphite contact brushes provide perfect contact. metal-graphite contact Drushes provide perfect contact.
 Kequire $1 / 2$ behind panel. Have bushing $1 / 4$ diang. $1 / 6$ dianer shaft is $3 / 0$ long. Less knoles (below, left). Av, shpg, wt., 2 oz .

| Stock No. | Typo | Ohms | EACH | Stock No. | Typo | Ohms | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 51 M 820 | 0101 |  | 4.63 | $51 \mathrm{M} \mathrm{B32}$ | 0113 | 125 | 4.11 |
| 51 M 821 | 0102 | 2 | 4.63 | 51 M 833 | 0114 | 175 | 4.11 |
| 51 M 822 | 0103 | 3 | 4.63 | 51 M 834 | 0115 | 250 | 4.11 |
| 51 M 823 | 0104 | 6 | 4.63 | 51 M 835 | 0116 | 350 | 4.11 |
| 51 M 824 | 0105 | 8 | 4.63 | 51 M 836 | 0117 | 500 | 4.11 |
| 51 M - 25 | 0106 | 10 | 4.63 | 51 M 637 | 0118 | 750 | 4.11 |
| 51 M 826 | 0107 | 15 | 4.11 | 51 M 838 | 0119 | 1000 | 4.63 |
| 51 M 827 | 0108 | 25 | 4.11 | 51 M 639 | 0120 | 1500 | 4.63 |
| 51 M 828 | 0109 | 35 | 4.11 | 51 M 840 | 0121 | 2500 | 4.63 |
| 51 M 829 | 0110 | 50 | 4.11 | 51 M 841 | 0122 | 3500 | 4.90 |
| 51 M 830 | 0111 | 75 | 4.11 | 51 M 842 | 0123 | 5000 | 4.90 |
| $51 \mathrm{MB31}$ | 0112 | 100 | 4.11 |  |  |  |  |

## TANDEM COUPLING KITS

Kits for assembling Ohmite rheostats in tandem. Each kit consists of a steel U" irame, mica washer.
 Type 6533 Tandem Coupling Kit. Large frame designed for Type K or L rheostats. Will accommodate Model II or $J$ in rear position. Maximum panel thic

 or J . and will accommodate Type K or L in the rear posilion. Maximum panel thickness. $3 \mathrm{sin}^{\circ}$. Frame is $25 / 2_{2}{ }^{\circ}$ long and $11 / 4^{\text {en }}$ wide. 5 oz .

CIt Couples Two E rheostats.
Typo 6591 Tandom Coupling Klt. Couples two Type E rheostats.


## Mallory Controls

## NEW STA-LOC UA UNIVERSAL CONTROLS



New UA universal single control provides snap cogether. ridged colsituction for assembling any in less than ten seconds without any tools. Order sliaft froitt list below. Choice of SPST, DPST, and SPDT switclies, UA controls cover every popular control from 100 ohins to 10 inesolims, untapped tapped and double-tapped, with choice of tapers. and industrial carbon elements fuifill radio. TV and industrial needs, Replaces older style U. UT, mtg. nut. Less shaft and switch (see below). 2 oz .

## UNTAPPED (Less Shaft)

| Stock No. | Type | Ohms | Taper | Stock No. | Type | Ohms | Taper |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | UA12L | 100 | 4 | 28 MO 015 | UA54R | 50K | 2 |
| 28 M OOI | UA52L | 500 | 4 | 28 MOL 6 | UA753A | 75K | 1 |
| 28 M 002 | UA52R | 500 | 2 | 28 MO 17 | UA15A | 100k | 1 |
| 28 M 003 | UA75IR | 750 | 2 | 28 MOI 8 | UA15L | 100K | 4 |
| 28 M 004 | UAI3L | 1 K | 4 | 28 MO 019 | UA15R | 100k | 2 |
| 28 M 005 | UA13R | 1K | 2 | 28 M 020 | UA1253L | 125K | 4 |
| 28 M 006 | UA152L | 1500 | 4 | $28 \mathrm{MO21}$ | UA154A | 150K | 1 |
| 28 M 007 | UA152R | 1500 | 2 | 28 M 022 | UA25L | 200k | 4 |
| 28 M 008 | UA231 | 2 K | 4 | 28 M 023 | UA254A | 250 K | 1 |
| 28 M 009 | UA252R | 2500 | 2 | 28 M O 24 | UA254L | 250 K | 4 |
| $28 \mathrm{MO1O}$ | UA33L | 3 K | 4 | $28 \mathrm{M} \mathrm{O25}$ | UA254R | 250K | 2 |
| 28 MOII 28 MOI | UA33R | 3 K | 2 | 28 M 026 | UA55A | 500K | 1 |
| 28 MOIL 28 MOI | UA53A | 5k | 1 | 28 M 027 | UA55L | 500 K | 4 |
| 28 MOIJ 28 MOI | UA53L | 5K | 4 | 28 M 028 | UA754A | 750K | 1 |
| $28 \mathrm{MOl4}$ | UAIAA | 10K | 1 | 28 M 029 | UA16A | 1 Meg | 1 |
| 28 M 030 | UA14L | 10K | 4 | 28 M 042 | UAIGL |  |  |
| 28 MO 31 | UA14R | 10K | 2 | 28 M 043 | UAIGR | 1 Meg | 2 |
| 28 MO 22 | UA153A | 15k | 1 | 28 M 044 | UA155L | 1.5 Meg | 4 |
| 28 MO 03 | UA153R | 15K | 2 | 28 M 045 | UA26A | 1.2 Meg | 1 |
| 28 M 034 | UA24A | 20k | 1 | 28 M 046 | UA26L | 2 Meg | 4 |
| 28 MO 55 | UA24L | 20 K | 4 | 28 M 047 | UA255L | 2.5 meg | 4 |
| 28 M 036 | UA253A | 25k | 1 | 28 M 048 | UA36A | 3 Meg | 1 |
| 28 M 037 | UA2531 | 25 K | 4 | 28 M 049 | UA36L | 3 meg | 4 |
| 28 M O 38 | UA253R | 25k | 2 | 28 M 050 | UA56A | 5 Mas | 1 |
| 28 M 039 | UA34L | 30 K | 4 | 28 MOSI | UA56L | 5 Meg | 4 |
| 28 M 040 | UA54A | 50K | 1 | 28 M 052 | UA56R | 5 Meg | 2 |
| $28 \mathrm{M} \mathrm{O41}$ | UA54L | 50k | 4 | 28 M 053 | UA17L | 10 Mes | 2 |

Less shaft (Ilsted below). NET EACH

## EXPLANATION OF TAPERS

Taper No. 1: For use in audio or antenna shunt circuits. Tapor No. 2: For ser ies circuits or cathode voltage controls. Tapor No. 4: Limear. For voltage control.

## TAPPED (Less Shafi)

| Stock No. | Type | Ohms | Tap | Stock No. | Type | Ohms | Tad |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $28 \mathrm{MOS4}$ | UA153T14 | 15K | 10K | 28 M 064 | UA16T35 | 1 Mea | 300K |
| 28 M 055 | UA34T253 | 30k | 25k | 28 M 065 | UA16T454 | 1 Meg | 450K |
| 28 M 056 | UA254754 | 250K | 50K | 28 M 066 | UA26T1253 | 2 Meg | 125 K |
| 28 M 057 | UA254T154 | 250 K | 150K | 28 M 067 | UA26T254 | 2 Meg | 250 K |
| 28 M 058 | UA354T74 | 350K | 70K | 28 M 068 | UA26T45 | 2 Meg | 400 K |
|  | UA55T54 UASST15 | 500 K 500 K | 50k |  | UA26T65 | 2 Meg | 600K |
| $28 \text { M } 060$ | UASST15 | 500 K 500 K | 100 K | 28 MO 0 | UA26T95 | 2 Meg | 900K |
| $\begin{aligned} & 28 \mathrm{M} \mathrm{O6I} \\ & 28 \mathrm{M} \mathrm{O} 2 \end{aligned}$ | UASST154 <br> UA55T2253 | 500 K | 150 K | 28 MO 11 | UA36T95 | 3 meg | 900 K |
| 28 M 062 <br> 28 MO | UAS5T2253 | 500 K | 225 K | 28 M 072 | UA3254I34 | 3.25 Meg | 300K |

Less shaft (listed below). NET EACH ...........
DOUBLE-TAPPED (Less Shaff)

| Stock No. | Type | Ohms | Tap \$1 | Tap 2 |
| :---: | :---: | :---: | :---: | :---: |
| 28 M 073 | UA55DT25 | 500 K | 100 K | 200K |
| 28 M 074 | UA16DT55 | 1 Meg | 250 K | 500 K |
| 28 M 075 | UA155DT55 | 1.5 Meg | 225 K | 500 K |
| 28 M 076 | UA2254DT5S |  |  | S00K |
| 28 M 077 | UA2254DT16 | 2.25 Me | 500 K | 1 Meg |
| 28 M 078 | UA335DT155 | 3.3 Meg | 300 K | 1.5 Me |

[^17]
## SHAFTS FOR UA CONTROLS

(A).
(B)
(0)

Shafts for virtually every application. Type SL3500 (Fig. E) universal shatt and Type SL2500 (Fig. D) plain round, are easily cut to shorter Type SL2500, meets industrial needs for plain round shafts. Under "Description," figure preceding FMS indicates length from assembled front mounting surface. Av. wt., 2 oz

| Stock No. | Type | Fig. | Description | Made of: | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 28 M 079 | SF1000 | A | 1/4* dia. $\times 1{ }^{\circ} \mathrm{FMS}$ (Flalled) | Brass |  |
| 28 M 080 | SK1000 | 8 |  | Brass |  |
| 28 MOPI | SN1000 | C | $1 / 4$. dim. x 1/ FMS | Nylon | 39 |
| 28 M 082 | SL2500 | 0 | 1/4. dia. $\times 21 /{ }^{\prime \prime}$ FMS (Plain Round) | Alumanum |  |
| $28 \mathrm{MOB3}$ | SL3500 | $E$ | 1/4* dia. $\times 3 y^{\prime}$ FMS (Universal) | Atuminum |  |

## SWITCHES FOR UA CONTROLS

These switches may be mounted on any of the above controls. Three types are available: US41 (SPST). US42 (DPST), and US43 (SPDT) Switches attach to controls firmly and easily with locking collar included. control leads on UA controls or vice-versa. Shpg. wt.. 2 oz . unsoldering $\begin{array}{r}\text { control leads on } \\ \hline \text { Stock No. }\end{array}$

28 M 084
28 m 085
Mr's Type
US41
US42
US43
$-\quad \mathrm{A}$

| Action | NE |
| :--- | :--- |
| SPST |  |
| DPST |  |
| SPDT |  |

NET .42
.42
.54

"M" AND "MT" WIRE WOUND CONTROLS For industrial and laboratory use as bias controls and voltage dividers. Also for replacement of posltioning hold. focus and other TV-set controls. 4 watts. Arm insilated from alraft. $294^{\circ}$ rotation. Knurled $1 / 4^{\circ}$ shaft is to accept DS 36 shewalt siver slot. M . shaft is hollow
 Linear taper. Slipg. wh.. 4 oz. $9 / 16^{*}$. Mount in $3 / 6^{\prime \prime}$ hole

POTENTIOMETERS


$\left(\begin{array}{l}19-2 \\ 102\end{array}\right.$

## 2-WATT TV CONTROLS

Two-watt wirewound potentiometers designed especially for replacement of teievision controls. Also excelent for use as voltage dividers and blas controis. Incontactor mechanism. 900 volts Ac insulation tial dual contactor mechanism. 900 volts AC insulation between
resistance element and chassig. $297^{\circ}$ rotation. Taper 4 . resistance element and chassis. $297^{\circ}$ rotatlon. Taper 4.
$1254^{\circ}$ in diameter. Knuried stub shaft has screwdriver slot. Center-tapped. $3 / /^{\text {P }}$ bushing. Shpg. wt. 4 oz .

| Stock No | Type | hm | NE | ck No. | Typo | Ohms | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 229 M | R20L | 20 | 93 | 29 M 842 | R1000L | 1000 |  |
| 29 M 83 | R25L | 20 25 | . 32 | 29 M 84 | R1500L | 1500 | 93 |
| 29 M 838 | R30L | 30 | 9 | 29 M 846 | R2500L | 2500 3000 | 3 |
| 29 Mr 89 | R 30C | 30 | 1.32 | 29 M 845 | R5000L | 5000 |  |
| 29 M 840 | R50L | 50 |  | 29 M 692 | R7500L | 7500 |  |
| 29 M 864 | R100L | 100 |  | 29 M 693 | R10ML | 10.000 |  |
| 29 M 84 29 M 83 | K250L | 250 |  | 29 M 694 | R15ML | 15.000 | 88 |
| 29 M | R500L | 500 |  | 29 M 69 | R20ML | 20.000 | 8 |
| 29 M 985. OS-36 Speclal 3* Extension Shaft. For tubular shaft TV 2 -watt controls, and Type " M " pots. Wt., 2 oz , NET |  |  |  |  |  |  |  |
| 29 M 997 . EB-214 Spoolal Buahing. Dimensions $1 / 2^{\circ}-28$ thread, $23 / 16^{\prime \prime}$ |  |  |  |  |  |  |  |

## NEW TYPE VW WIREWOUND 5-WATT CONTROLS



Miniature 5 -watt potentiometers. Very for limited sor thls wattage rating; ideal for limited space applications. Case size only $3 / 4^{\circ}$ in diameter by $7 / /^{\prime \prime}$ in depth. Bushing: $3 / 8 \times 3 / 9^{\circ}$ diameter and lensth. Has $1 / /^{\prime \prime}$ plain round shaft. $21 / 2^{\circ}$ long from mounting surface. Linear taper. Toler$275^{\circ}$ electrical rotation. High-quality construction throunhout for de pendable operation and stability. Av. shpg, wt., 4 oz .

| Stoek No. | Type | Ohms | EA. | Stock No. | Type | Ohms | EA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 M 087 | VW-1 | 1 | 1.38 | 28 M 105 | VIV-300 | 300 | 1.38 |
| 8 M 088 | VW-2 | 2 | 1.38 | 28 M 106 | VW-400 | 400 | 1.38 |
| 28 M 089 | VW-3 | 3 | 1.38 | 28 M 107 | VW-500 | 500 | 1.38 |
| 28 M 090 | VU-5 | 5 | 1.38 | 28 Mliog | VW-600 | 600 | 1.38 |
| 28 M 091 | VW-6 | 6 | 1.38 | 28 m 109 | VW-750 | 750 | 1.38 |
| 28 M 092 | VW-8 | 8 | 1.38 | 28 M 110 | VW-1K | 1 K | 38 |
| 28 MO 093 | VW-10 | 10 | 1.38 | 28 M 111 | VW-1PSK | 1.5K | 1.44 |
| 28 MO 094 | VW-15 | 15 | 1.38 | 28 M 112 | VW-2K | 2 K | 1.44 |
| 28 M 095 | VW-20 | 20 | 1.38 | 28 M 113 | VW-2P5K | 2 P 5 K | 1.44 |
| 28 M 096 | VW-25 | 25 | 1.38 | $28 \mathrm{Ml\mid} 4$ | VWV-3K | 3 K | 1.44 |
| 28 M 097 | VW-30 | 30 | 1.38 | 28 M 115 | WW-4K | 4K | 44 |
| 28 M 098 | VW-35 | 35 | 1.38 | 28 m 116 | VW-5K | 5 K | 1.44 |
| 28 M 099 | $V W-50$ | 50 | 1.38 | 28 Ml 17 | $V W-7 P 5 K$ | 7 P 5 K | 1.50 |
| 28 M 100 | VW-60 | 60 | 1.38 | 28 M 118 | VWV-10K | 10K | 1.50 |
| 28 MlO | VW-75 | 75 | 1.38 | 28 M 119 | $V W-15 K$ | 15 K | 1.56 |
| 28 M 102 | VV-100 | 100 | 1.38 | 28 M 120 | $\overline{\mathrm{V}} \mathrm{W}-20 \mathrm{~K}$ |  |  |
| $28 \mathrm{MlO3}$ | VW-200 | 200 | 1.38 | 2 Cm 121 | VW-25K | 25 K | $\begin{aligned} & 1.56 \\ & 1.65 \end{aligned}$ |
| 28 M 104 | VW. 250 | 250 | , | , |  |  |  |

## Outstanding Buys in Resistors and Capacitors

## SAVE UP TO $80 \%$ ON SELECTED VALUES AND BARGAIN ASSORTMENTS

## PKG. OF 100 INSULATED CARBON RESISTORS

Giant Saving Only $\$ 89$

Pkg. of 100

- Assorted Values
- $1 / 2$ - Watt and I-Watt Here is your chance to build up your revistor inventory at a fraction of what it
would normally cost. End delays on building project and service jobs due to inissing resistors. Each kit contains one hundred insulated reaistorgfifty $1 / 2$-watt and fifty 1 -watt values in a wide
variety of ohmages to cover almost any need. varlety of ohmaces to cover almost any need. All are American made and have standard identification. Slipg. Wt., 6 oz
28 M 50 Pkg. of 100.0 NLY1.89


## VOLUME CONTROL PACKAGE



- Popular Values
- Standard Sizes


A handy kit of 10 volume controls inciuding $500,2000,250 \mathrm{~K}, 1$ mes and 5 megohm walues in each kit. plus 5 other assorted values. Latest ed bushing types are included with a variety of shaft lengths. Shpg. ivt. 12 oz .
28 M 551 . Pkg. of 10 . $\mathrm{O}^{2} \mathrm{Y}$.

BARGAIN CAPACITOR BUY

## Reg. <br> $\$ 1.20$ 98

Exact Replocement
For 8 Values
Stock un on this dual section electrolytic capacitor. It's an exact replacement for 8 popular standard 150 WVDC types
commoniy used in printed commoniy used in printed
circuit home radio receivers. circuit home radio receivers.
Nominally rated 40 to 80 mid antl 30 to 60 infd with common negative. Replaces $50-30,70-30,75-30$. $60-40,80-40,50-50,70-50$ and $80-50 \mathrm{mfd}$, as well as single electrolytics within its voltage rating. Order several of these versatile units
now. $21 / 2 \times 1^{\circ}$. Shpg. wt., 6 oz .
19 L. 415 . ONLY WL., 602.


## CENTRALAB CERAMIC DISC

 CAPACITOR ASSORTMENTPkg. of 20

## Save <br> Only <br> $65 \%$ <br> 99.

Regularly, $\mathbf{5 3 . 0 0}$. Now you can have a stock of these stable, high-quality disc capacitors at lowest price. Each assortment includes $\mathbf{K a p s}^{\circ}$ ranging from is to 5000 mmf in 600 to 1000 WVDC ratings. $1 / 2 \times 512^{2 \prime}{ }^{1}$ lb.
58 L 448 . Pkg. of $20 . \mathrm{N}^{2}$
 .99

MAKE ALLIED YOUR HEADQUARTERS FOR BARGAIN VALUES IN HIGH-QUALITY ELECTRONIC PARTS

LOW-PRICED, LOW-VOLTAGE MINIATURE ELECTROLYTICS


## Save Save

(A) Axlal Lead Minlatures. $\$ 5.00$ A. value Use as cathode bypass 80\% and in transistor and other low Each assortment contains 10 mfd
 WVDC, 1 mfd 50 VVDC plis 5 other 3 to 50 WVDC values. Wt., 12 oz .99
if L 130. Pho. of 10 . ONLY.......... 99 [B] Upright MInlature Electrolytics. \$5.00 B) valuel For printed circuits. American made. Each assortment includes 50 mid ( 3 WVDC, 40 mfd 9.5 WVDC. 15 mfd a. 15 WVDC. 8 infd ( 3 to 50 WVDC values. Wt 12 oz 99 other 3 to 50 WVDC values. Wt 12 oz .99
II L I 26. Pkg. of 10 . ONLY........... 99

## PLASTIC TUBULAR CAPACITORS

## Save

$50 \%$
Pkg.
of 10

## Only 696

Ten of the most popular capacitor Ten of the most popur in 200 and 400 WVDC ratings at a real saving. Famousbrand American made plastlc tub-ulars-8orry, wanergis name at thls price. Molded in extra hard. non-inflammable bakelite; resistant to inoisture. high temperature and shock. With extra strong copper-weld leads. Shpg. wt. 1 th
|| 167 . Pkg of 10 . ONLY

69
½-WATT CARBON RESISTOR ASSORTMENT
Only $53^{69}$ - Most Popular Values

## Pkg. of 100

 - Latest Production Run $6800,10 \mathrm{~K}, 15 \mathrm{~K}, 1500,2700,3300,3900,4700,5600$. $68 \mathrm{~K}, 100 \mathrm{~K}, 270 \mathrm{~K}, 3 \mathrm{~K}, 27 \mathrm{~K}, 33 \mathrm{~K}, 39 \mathrm{~K}, 47 \mathrm{~K}, 56 \mathrm{~K}$, 1 mes, 3.3 mes, 3.9 meg, $4.7 \mathrm{meg}, 5.6$ meg, 6.8 meg . $10 \mathrm{meg}, 15$ meg, 18 meg. and 22 meg .Most other values and wattages can be obtained by adding these values fin serles or parallel. An outstanding bargain-order several packakes now and have $28 \mathrm{M} 554 . \mathrm{Pkg}$. of 100 . $\mathrm{O}^{\mathrm{NL}} \mathrm{LY}^{1}$.


Only 50 Assorted Resistors. Same first-quality carbon composition resistors as above but only 25 different values. two of each. Values are mose useful ones: $10,33.47,68,100$. 220, 470, $560.680 .1000^{\circ} 2700 \mathrm{~K}, 330 \mathrm{~K} 390 \mathrm{~K} 470 \mathrm{~K}$ and $6800,10 \mathrm{~K}, 33 \mathrm{~K}, 39 \mathrm{~K}, 47 \mathrm{~K}, 100 \mathrm{~K}, 33 \mathrm{~K}, 39 \mathrm{~K}, 47 \mathrm{~K}$ and 1 mes. Make additional values by putting these in series or parallel. Order this assortment as well as the one above, If Pkg. of 50 you want to maintain a balanced inventory of resistors ratlug. Slipg. wt., 10 oz . ONLY
28 M 555 . Pkg. of 50 .
1.98

Only 25 Assorted Aesistors. Same first-quality carbon compo-
25 Assorted Aesistors. Same furst-quality carbon compoof each value. Values are $10,33,47,68,100,220,470$. $560,680,1040,2700,33010,3910,4700$, 5000 . $68(00,10 \mathrm{~K}$. $33 \mathrm{~K}, 39 \mathrm{~K}, 47 \mathrm{~K}, 106 \mathrm{~K} .330 \mathrm{~K} .390 \mathrm{~K}, 470 \mathrm{~K}$, and i meg. Make additional values by putting these in series or


TUBULAR ELECTROLYTIC CAPACITORS
IN MOST POPULAR VALUES


## Sprague Ceramic Capacitors



## ＂CERA－MITE＂DISC CERAMIC CAPACITORS

Ultra－compact ceramic disc capacitors．In EIA（RETMA）and other nopular values High by－pass efficency in critical circuits．Moisture－proof coating．Tolerances： 1000 thru $68 \mathrm{mmf} .=10^{\circ}$ ：thru $500 \mathrm{mmf}, 20^{\circ}$ ．All caparitors are＂tagget＂for easy iden：


SERIES 5GA－1000 WVDC －Designates Mfrl

| lockNo | Type | Mmi | St | Type | Mmi |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 16 L 300 | V50 | 5 | 16 L 330 | T25 | 250 |
| 16 L 301 | V60 | 7 | 6 L 331 | T27 | 270 |
| 16 L 302 | V75 | 7.5 | 16 L 332 | T30 | 300 |
| 16 L 303 | V80 | 8 | 16 L 333 | T33 | 330 |
| 16 L 304 | Q10 | 10 | 16 L 334 | T35 | 350 |
| 16 L 305 | 012 | 12 | 16 L 335 | T36 | 380 |
| 16 L 306 | 015 | 15 | 16 L 336 | T39 | 390 |
| 16 L 307 | $\mathrm{O}^{2} 8$ | 18 | 16 L 337 | T40 | 400 |
| 16 L 308 | Q20 | 20 |  |  | 470 |
| 16 L 309 | Q22 | 22 | 16 L 339 | T50 | 500 |
| 16 L 310 | $\mathrm{Q}^{25}$ | 25 | 16 L 340 | T56 | 560 |
| $16 L 311$ | $\bigcirc 27$ | 27 | 16 L 341 | T60 | 600 |
| 16 L 312 | 030 | 30 | 16 L 342 | T68 | 680 |
| 16 L 313 | C33 | 33 | 16 L 343 | T75 | 750 |
| 16 L 314 | Q39 | 39 | 16 L 344 | T80 | 800 |
| 16 L 315 | 047 | 47 | 15 L 345 | T82 | 820 |
| 16 L 316 | Q50 | 50 | $15 L 670$ | $D 10$ | ． 001 ＊ |
| 16 L 317 | Q56 | 56 | $16 L 347$ | D12 | ．0012＊ |
| 16 L 318 | ¢68 | 68 | $16 L 348$ | 1313 | ．0013＊ |
| $16 L 319$ | 075 | 75 | 15 L 671 | D15 | 0015＊ |
| 16 L 320 | O82 | 82 | 16 L 350 | 1）16 | ．0016 ${ }^{\circ}$ |
| 16 L 321 | ¢91 | 91 | 16 L 351 | 1318 | ． 0018 ＊ |
| 16 L 322 | T10 | 100 | 16 L 352 | D20 | 0020＊ |
| 16 L 323 | T12 | 120 | 16 L 353 | I）22 | 0022＊ |
| 16 L 324 | T13 | 130 | 16 L 354 | D25 | 0025＊ |
| 16 L 325 | T15 | 150 | 16L 355 | ［ ${ }^{27}$ | 0027＊ |
| 16 L 326 | T18 | 180 | 16 L 356 | D30 | 0030＊ |
| 16 L 327 | T20 | 200 | 16 L 357 | D33 | 0033． |
| 16 L 328 | T22 | 220 | 16 L 358 | D39 | 0039＊ |
| 16 L 329 | T24 | 240 | 16 L 359 | D40 | 0040＊ |
| NET EACH |  |  |  |  |  |
| Stock No． |  | Type | Mid |  | EAC |
| $16 L 360$ |  | 43 | 0013 |  | ． 18 |
| 16 L 361 |  | 47 | 0047 |  |  |
| 16 L 362 |  | 50 | 005 |  |  |
| 16 L <br> 16 L |  | 10 | 01 |  |  |

SERIES 3OGA－3000 WVDC

| StockNo． | Type | Mmp | to | Type | Mmf |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 162387 | V15 | 1.5 | 16 L 377 | T12 | 100 |
| $1 \begin{aligned} & 162370 \\ & 162531\end{aligned}$ | ${ }^{V 10}$ | ${ }_{10}^{4}$ | 16 L 378 | T12 |  |
| 162372 | 815 | 15 |  | 118 | 180 |
| 16 L 374 | O30 | 30 | 16 L 382 | T22 | 220 |
|  |  | 39 50 |  |  | 250 |
| 162375 | 850 | 5 | 16 L 3 |  |  |
| 16 L 376 | ¢68 | 68 | 16 L 386 |  | 500 |

NET EACH
SINGLE AND DUAL HIGH－K TYPES SERIES 5HK－500 AND 1000 WVDC

| Stock No． | Type | Mrd | WVDC | NET |
| :---: | :---: | :---: | :---: | :---: |
| 15 L 672 | D20 | ． 002 | 1000 | 15 |
| 156673 | D50 | ． 005 | 1000 | .15 |
| 15 L 674 | S10 | ． 010 | 500 | ． 18 |
| 19 L 950 | S20 | ． 02 | 500 | ． 36 |
| 194951 | S30 | ． 0.3 | 500 | ． 39 |
|  | \＄40 | ． 04 | 500 | ． 42 |
| 19 L953 | S50 | ． 05 | 500 | ． 42 |
| 19 L 954 | P10 | ． 1 | 500 | ． 96 |
| 15.675 | 2D10 | 2x． 001 | 1000 |  |
| 15 L 676 | 2 D 15 | 2x．0015 | 1000 | ． 24 |
| 154677 | 2 D 20 | 2x．002 | 1000 | ． 24 |
| 15 L 678 | 2D40 | 2x． 004 | 1000 | 27 |

## 4． 1 DOORKNOB CAPACITORS <br> High－voltage， $\mathbf{5 0 0}-\mathrm{mmf}$ plastic capacitors for replacement use in all types of TV sets．Moisture－ resistant，thermosetting molded plastic．Molded puard molded crease surface leakage path． Ca pacitor body has threaded ends 200 VK－T5＇s of screw－in terminals． 200 k supplier with 4 term <br> 自祭寊备 inals（ 2 of each type shown）．Type indicated by $*$ ．Shyg wt．． 4 oz ． <br> 

## ＇TC＇CALCULATOR

Handy slide－rule．Determines values of NPO and N750 ceramics to be oonnected in paralle： coefficient and capacity．Shpg．wi．， 4 oz． 15

## SERIES IOTCC NPO CERAMICS

Zero temperature－coefficient capacitors． 1000 WVDC．All capacitors listed below are of the disc type．Av．shpg．wt．， 2 oz．

Stock No．Type Mmi／Stock No．Type Mmi $19 L 955$ V10 $1.0 \mid 19 \mathrm{~L} 961 \quad 01010.0$ | 19 | $L$ | 956 | $V 15$ | 1.5 | 19 | $L$ | 962 | 015 | 15.0 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 19 | $L$ | 957 | $V 22$ | 2.2 | 19 | $L$ | 963 | 020 | 20.0 |
| 19 | $L$ | 958 | $V 33$ | 3.3 | 19 | $L 964$ | 22 | 22.0 |  |
| 19 | $L$ | 959 | $V 47$ | 4.7 | 19 | $L$ | 965 | 25 | 25.0 |

NET EACH．．．．．．．．．．．．．．．．．．．．．．．． 30

| Stock No． | Type | Mmi | EACH |
| :---: | :---: | :---: | :---: |
| $19 L 967$ | $Q 39$ | 39.0 | .33 |
| $19 L 968$ | $Q 47$ | 47.0 | .33 |
| $19 L 969$ | $Q 50$ | 50.0 | .33 |
| $19 L 970$ | 068 | 68.0 | .33 |
| $19 L 971$ | $Q 75$ | 75.0 | .33 |
| $19 L 972$ | $T 10$ | 100.0 | .33 |
| $19 L 973$ | $T 12$ | 120.0 | .36 |
| $19 L 974$ | T15 | 150.0 | .36 |
| $19 L 975$ | T175 | 175.0 | .30 |
| $19 L 976$ | $T 22$ | 220.0 | .42 |
| $19 L 977$ | $T 27$ | 270.0 | .48 |

## SERIES IOTCU N750 CERAMICS

A negative temperature coefficient capacitor with a negative change of 750 parts per million per degree Centigrade． 1000 WVDC．All capaci－ tors listed below are dise type except trectangu－ lar．Av．shpg．wt．． 2 oz ．

| tack No． | Typel | Mrnt | Stock No． | Type |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 19 L 978 | V50＊ | 5 | 19 L 9 | 0 | 88 |
| 91979 | 010 | 10 | 19 L987 | 075 | 75 |
| 9 L980 | 015 | 15 | 19 L 988 | 710 | 100 |
| $19<981$ | 820 | 20 | 19 L 989 | T15 | 150 |
| 196982 | 822 | 22 | 19 L990 | T20 | 200 |
| 19 L983 | 825 | 25 | 9 L991 | T22 | 220 |
| 196984 | 833 | 33 | 9 L 992 | T33 | 330 |
| 19 L 985 | Q47 | 47 |  |  |  |

## NET EACH <br> 30

| Stock No． | TYpe | MPd | EACH |
| :---: | :---: | :---: | :---: |
| 19 L 993 | T47 | 470 | .42 |
| 19 L 994 | T68 | 680 | .48 |

## SERIES BL BUFFER CERAMICS

2000 WVDC disc ceramic type capacitors for buffer applications．Tiny．rugged construction Moisture－proof coating assures high dependa bility．Perfect for use in highly compact equip－ ment．Tolerance，$\pm 20 \%$ ．Av．shpg．wt．． 2 oz

| Stoch No． | Mfr＇s <br> Type | Mifd | Stock No． | $\begin{aligned} & \text { Mir's } \\ & \text { Type } \end{aligned}$ | M1d |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 162290 | BL－D10 | ． 001 | 16L295 | BL．060 | ． 006 |
| $16 L 291$ | BL．D20 | ． 002 | 164296 | BL－D70 | ． 007 |
| $16 L 292$ | BL－D30 | ． 003 | 164297 | BL－D75 | ． 0075 |
| 16 L 293 | BL－040 | ． 004 | $16 L 298$ | BL－080 | ． 008 |
| 16 L 294 | BL－D50 | ． 005 | 164299 | BL－S10 | .01 |

NET EACH
.21

| $\frac{\text { SPRAGUE }}{\text { UAK－1 }}$ |
| :---: |
| 1 |
| 1 |
|  |

## UNIVERSAL CERAMICS

Offers large variety of ratings Includes complete instructions Guaranteed minimum valuc； have tolerance of $\pm 20 \%$ ．Rated at
500 WVDC．Av．shpg．wt． 3 oz ．

|  | $\begin{aligned} & \text { Mlr"s } \\ & \text { Type } \end{aligned}$ | Capacity Range，Mfd | Size |  |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 15 L 216 \\ & 15 L 217 \\ & 15 L 218 \\ & 15 L 219 \\ & \hline \end{aligned}$ | ＊uHK－1 <br> －UHK－2 <br> tUGA－2 | $\begin{aligned} & .001 .004 \\ & .0025 .015 \\ & .00040 .0013 \\ & .0006 .0027 \end{aligned}$ | 13\％x 25x 143 | \％ |

## CERAMIC CAPACITOR KIT

CK－4．Hanclles $90 \%$ of all ceramic，molded tubular，and mica replacements． 3 each：

3.96

## CAPACITOR INDICATOR



TypoC－751．Readscolor codes directly in capac． itance．tolera uce，and voltase．Wt． $2 \mathrm{oz} . \quad 21$

## TEMPERATURE－STABLE CERAMICS

 These dependable ceramics are ex－
cellent for use wherever minimum cellent for use wherever minimum capacitance change，with variation in temperature，is an important consideration．Compact size Der－ mits easy installation．even in tigit spaces．St andard capacitance orking volts DC Diameter ranges at 1000 from is to $7=$ DC．Diameter ranges in size rom $85^{\circ} \mathrm{C}$ ．＊Rated in mid．Av．shog．wt．． 2 oz ．
Stoek No．Typo M mf iStock No．Type M mi


NET EACH
.15

$28 \mathrm{~L} 962 \mathrm{D} 43 \quad 004.3 * 128 \mathrm{~L} 967 \mathrm{D75} .0075$ | 28 | $L$ | 963 | $D 47$ | $0047 *$ | 28 | $L$ | 968 | SiO | $01 *$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 28 | $L$ | 964 | D50 | $.005 *$ | 28 | $L$ | 969 | Si5 | 015 |



NET EACH ． 18

CERAMIC CAPACITORS FOR TRANSISTORIZED CIRCUITS


Especially deajaner for circults requiring extremely small com－ ponents．deeal for sigtor－tyjpe radios，etc Provide very depend able service in byeass and coupling applics tlons．Have excellent humidity resistance．
（A）Type TG．Have beavy，protective coating Have tolerance of $+80 \%$ to $-20 \%$ excep S25，which is $+80 \%$ to $-30 \%$

| Stock No | Type | Mid | Dia． | Wt． | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 151995 | D50 | ． 005 | － | 2 oz ． | 27 |
| 154996 | S10 | ． 01 | $2{ }^{10}$ | 3 oz ． | ． 39 |
| $15 L 997$ | S25 | ． 025 | 190］ | 3 oz ． | ． 39 |
| 151998 | 550 | ． 05 | 18 \％ | 3 oz ． | ． 42 |
| 154999 | P10 | 1 | $3{ }^{3}$ | 4 oz ． | .54 |

[^18] （B）block construction assures excellent lumid ity resistance，Rated 25 working volts．DC Temperature rating，$-55^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ ．Tol crance． $20 \%$ ．Size． $1 / 2 \times 1 / 2 \times 1 /{ }^{2}$ ．Shpg．wt． 2 oz

| Stock No． | Type | Mfd | NET |
| :--- | :--- | :--- | :--- |
| $16 L 698$ | $5 C 9$ | .22 | 1.06 |
| $16 L 699$ | $5 C 10$ | .33 | 1.20 |
| $16 L 825$ | $5 C 11$ | .47 | 1.38 |
| $16 L 823$ | $5 C 12$ | .68 | 1.48 |
| $16 L 824$ | $5 C 13$ | 1.0 | 1.96 |

\footnotetext{
［A Hypercon Type．Highly dependable，ultra－ A miniature ceramic discs．Superior to elec－ trolytic capacitors of aimilar capacitance values，due to very low power factor．Tolerance， guaranteed minimum value． $11!$ ar
working volts，DC．Shpg．wit．， 2 oz ．

| Stock No． | Type | Mfd | Dia． | NET |
| :---: | :---: | :---: | :---: | :---: |
| $16 L 671$ | HY－120 | 1 | ． $22.5{ }^{\circ}$ | 54 |
| $16 L 672$ | HY－12．5 | ． 22 | ． $275{ }^{\prime \prime}$ | 33 |
| $16 L 673$ | $11 \mathrm{Y}-130$ | ． 47 | ． $400^{\circ}$ | 33 |
| $16 L 674$ | HY－135 | 1.0 | ．595＊ | 45 |
| $16 L 675$ | HY－150 | 1. | － |  |


＂ORANGE DROP＂ CAPACITORS ＂MYLAR＂－PAPER
Extremely small tubu－ lar capacitors．Dual di－ electric windings，rock
hard case，radial leads Double－dipped in orange epoxy resin to guard Dainst heat and moisture $\neq 10 \%$ ．Wi．． $20 z$


## ＂BLACK BEAUTY＂－＂MYLAR＂PAPER TELECAPS

Hi－temp molded plastic cased tubulars．Highly resistant to heat and moisture，ruggedly built；completely insulated． Features special＂DIFILM＂（＂Mylar＂paper）type dielec－ tric． 200 to 10110 v ．types operate to $105^{\circ} \mathrm{C} ; 1600 \mathrm{y}$ ．and up types，operate to $85^{\circ} \mathrm{C} .1000-6000 \mathrm{~V}$ ．types are oll inipres－ nated．All are $\pm 10 \%$ tolerance．Av．shpg．wt．， 3 oz ．

## 200 VOLTS DC WORKING

| ck No | Type | id | Size | EACH |
| :---: | :---: | :---: | :---: | :---: |
| 20 | 2TM－S20 | 02 | $3 / 8 \times 11 /{ }^{\prime \prime}$ |  |
| L 000 | 2TM－S22 | ． 022 | 8 |  |
| 5 L 149 | 2TM－S47 | ． 047 | 7／66 $\times 1{ }^{\prime \prime}$ |  |
| 5 L 21 | 2 TM －S50 | ． 05 | 7／16x11\％ |  |
| 15 15122 | $\begin{aligned} & 2 \mathrm{TM-P10} \\ & 2 \mathrm{TM} \mathrm{PI} \end{aligned}$ | .15 | 1／2×11／20 | ． 21 |
| 15 L 146 | 2TM－P22 | 22 | $6 \times$ | 24 |
| 15 L 147 | 2 T M－P25 | 25 | $5 / 10$ |  |
| 5 L 148 | 2TM－P47 | ． 47 | $3 / 4 \times$ | 3 |
| 5 L 123 | 2TM－P50 | ， | 3／4 $\times 2$／4＂ |  |
| 5 L 124 | 2TM－M1 | 1.0 | 3／4 $\times 21 / 4^{\prime \prime}$ |  |

## 400 VOLTS DC WORKING

| StockNo． | Type | MIf | Slze | EA． |
| :---: | :---: | :---: | :---: | :---: |
| 15L125 | 4TM－S10 | ． 01 | 1／6x11／4 | ． 15 |
| 15 L 001 | 4TM－S15 | 015 | $3 / 8 \times 1$ | ． 15 |
| 15 L 126 | $47^{\circ} \mathrm{M}-\mathrm{S} 20$ | ． 02 | $3 / 8 \times 1 / 4$ | ． 15 |
| 15 L 013 | $4 \mathrm{TM}-\mathrm{S} 22$ | ． 022 | $1 / 4$ | ． 18 |
| 15 L 002 | $4 \mathrm{TM}-\mathrm{S} 25$ |  | $7 / 6 \times 1 / 4^{\prime \prime}$ | ． 18 |
| 15 L 003 | 4TM－S30 | 03 | $76 \times 11 /{ }^{\circ}$ | 8 |
| 15 L 004 | $4 \mathrm{TM}-540$ | ． 04 | 7／16 ${ }^{161 / 4}$ | ． 18 |
| 15 L 014 | 4 I M－S47 | ． 047 | 7／6x110 | ． 18 |
| 15 L 127 | 4TM－S50 | ． 05 | 1 | ． 18 |
| 15 L 015 | 4 I M－S68 | ． 068 | $1 / 2 \times 11 / 2$ | .21 |
|  | TTM1－P10 | 1 |  |  |
| 15 L 011 | $4 T M-P 15$ | ． 15 | $3 \times 17=$ | ． 24 |
| 15 L 21 | 4TM－P20 | ． 2 | 5／2x17\％ | 27 |
| 15 L 012 | 4 TM －P22 | ． 22 | 5／6x $1^{7 / 8}$ | 27 |
| 15 L 129 | 4TM－P25 | ． 25 | $3 / 4 \times 21 / 4$ | 30 |
| 15L005 | TTM－P47 |  |  |  |
| 15 L 010 | 4TM－PS0 | ． 5 | $3 / 4 \times 21 / 4$ | ． 44 |
| 1520091 | $4 \mathrm{TM-M1}$ | 1.0 | $1 \times 21 / 2$ | ． 75 |


| Stock | Type | Mfd | Size | EA． |
| :---: | :---: | :---: | :---: | :---: |
| 16 L 250 | 6TM－T10 | ． 0001 |  |  |
| $16 L 251$ | 6TM－T25 | ． 00025 |  |  |
| $16 L 252$ | 6TM－T40 | ． 00004 | 3／6x ${ }^{\circ}$ | ） |
| $16 L 253$ 15 | 6TM－TS0 | ． 00005 |  |  |
| 15 L 070 | 6TM1－D10 | ．001 |  |  |
| 151084 | 6TM－D15 | ． 0015 |  |  |
| 15 L 071 | 6TM－D20 | ． 0022 |  |  |
| 15 L 092 | 6TM－D22 | ． 0022 | $5 / 16^{\times 17}$ | 15 |
| 156072 | 6TM－D30 | ． 003 |  |  |
| $15<522$ | 67M－D33 | ． 0033 |  |  |
| 154073 | 6TM－D40 | ． 1004 |  |  |
| $15 L 093$ | 6 M M－D47 | ． 0047 | $3 / 8 \times 11 / 4^{n}$ |  |
| 156074 | 6TM－D． 0 | .005 .006 |  |  |
| $15 L 075$ | 6 T M－D60 | ． 006 |  |  |
| 16 L 254 | 6TM－D68 | ． 0068 |  |  |
| 156523 | 6TM－D80 | ． 008 | $1 / 8 \times 1 / 4$ |  |
| $15 L 076$ | 6 TM－S10 | ． 01 | 1／8×11\％ | 8 |
| 5 L094 | 6TM－S15 | 015 | 3／8×11\％ | 18 |
| $15 L 077$ | 6TM－S20 | ． 02 | $7 / 6 \times 1 \%$ |  |
| $.16 L 255$ | 6TM－S22 | ． 022 | 7 $66 \times 1 /{ }^{\circ}$ |  |
| 15 L 078 | 6TM－S30 | 03 | 7／6．$\times 1 / 4{ }^{\circ}$ | ． 21 |
| 15 L 26 | 6TM－S33 | ． 033 | 7／46 $\times 11 / 4$ | ． 21 |
| $15 L 006$ | 6T M－S35 | ． 035 | 7／6x11／4＂ | ． 21 |
| 54079 | 6TM－S40 | 04 | $1 / 2 \times 1$ | .21 |
| 15 L 098 | 6T M－547 | 047 | $1 / 2 \times 11 / 2$ | ． 24 |
| 15 L 080 | 6TM－S50 | ． 05 | $1 / 3 \times 1$ | 24 |
| 15 L 081 | 6TM－S60 | ． 06 | $1 / 2 \times 1 / 2$ | ． 24 |
| 154007 | 6TM－S68 | ． 068 | $1 / 2 \times 11 / 2$ | ． 27 |

## 600 VOLTS DC WORKING（Cont＇d）

| ＊No． | Type | Mid | Slze |  |
| :---: | :---: | :---: | :---: | :---: |
| 5 L 082 |  |  | 5／6x17\％ | 27 |
| 5 L 524 | 6TM－P15 | 15 |  |  |
| ， | 6TM－P22 | 22 |  | $\begin{array}{r}42 \\ 39 \\ \hline\end{array}$ |
| 5 | 6TM－P20 | 2 | ＂ | 39 |
| 5 L 083 | 6TM－P25 | 25 |  |  |
|  | 6TM－P47 | 47 |  |  |
| 6 | 6TM－P50 |  |  |  |
| 64 | 6 TM－M | 1.0 | $1 \times 21{ }^{\circ}$ |  |



|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 16t270 | MB－T5 | ． 00005 | 3／3x19190 |  |
| 16L271 | MB－D15 | ． 0015 | 3／141 | ． 39 |
| 16L272 | M $\mathrm{B}^{\text {－}}$－ 22 | 0.0022 | \％x14． |  |
| 15L159 | MB－D3 | ${ }^{.003}$ | 1， |  |
|  | M $\mathrm{B}-\mathrm{D} 33$ | ． 0033 | 1／12 |  |
| 15 15627 | $\mathrm{MB-D4}^{\mathrm{MB}-\mathrm{D} 47}$ | ． 00047 | 推紬 | ． 39 |
| 15L161 | MB－D5 | ． 005 | 14x1 |  |
|  | M |  | 1／5×1 $1 / 3^{\circ}$ |  |
| 162275 | MB－D68 |  |  |  |
| 156164 |  | ． 00075 | 1／5x130 | 39 |
| 15 L 165 | MB－D8 | ． 008 |  |  |
| 5 L 166 | MRS15 | ${ }^{.015}$ | 3¢x13 |  |
| SL168 | M B－S2 | ． 02 |  | 42 |
| $\begin{array}{r}156224 \\ 162277 \\ \hline 16\end{array}$ | $\mathrm{MB}-\mathrm{S}_{2}$ | ． 023 | 3／6x17／9＊ |  |
| 278 |  | 04 |  | 42 |
| 6 L 280 | TR－15 | 05 |  |  |

6000 VOLTS DC WORKING
15 L 853 is rated at $10,000 \mathrm{DC}$ wkg．volts


## TYPE TE＂LITTL－LYTIC＂SUBMINIATURE CAPACITORS

ure joints to cause open

An extenslve selection of intra－small 30 Deries electrolytics．Excelent ortermittent circuits．Exiremely low leak
or use in ape recorders，metically sealed alumlnum enclosed．All welded con－
age curient and long sheff life．IIthstand
Size given in table below is dimmeter $x$ length．

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { Type } \\ & \text { TE. } \end{aligned}$ | Mid | WVDC | Sire | $\begin{aligned} & \text { NET } \\ & \text { EA. } \end{aligned}$ | Stock No． | Type | Mid | WVDC | Size | $\begin{aligned} & \text { NET } \\ & \text { EA. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 L 736 | 1051 | 2 | 3 | 1／4 $\times^{11 / 180}$ | 75 | 16 L 043 | 1118 | 25 | 10 | $1 / 4 x^{1} 1 / 16$ | 81 |
| 16 L 028 | 1055 | 25 | 3 | $1 / 4 x^{1 / 16}$ | ． 75 | $16 L 621$ | 1119 | 50 | 10 | \％ 611 | 0 |
| $1 L 746$ | 1057 | 40 | 3 | $1 / 4 x^{11 / 16}$ | ． 75 | 16 L 622 | 1119.3 | 100 | 10 | ／8 $\times 1 / 16^{1 / 16}$ | 1.02 |
| 11 L 747 | 1058 | 50 | 3 |  | ． 75 | 16 L L 23 | 1119.6 | 200 | 10 | x11／4＂ | 1.20 |
| 111749 | 1059.5 | 100 | 3 | 1／4 $\times^{11 / 46}{ }^{1 / 4}$ | ． 84 | 16 L 044 | 1127 | 5 | 12 | $1 / 4 \times^{11 / 160}$ | 81 |
| 16 L 654 | 1064 | 200 | 3 | 3／0x ${ }^{1 / 46}$ | 90 | 16 L 045 | 1128 | 10 | 12 | $1 / 4 \times^{11 / 16}$ | 81 |
| 162656 | 1066 | 300 | 3 | \％$\times^{13 / 16 *}$ | ． 99 | 111767 | 1133 | 50 | 12 | $1 / 8 \times 11 / 66^{\prime \prime}$ | 3 |
| 16 L 658 | 1068 | 500 | 3 | ／8×11／2＊ | 1.05 | 111769 | 1135 | 100 | 12 | \％$\times$ 36 | 5 |
| 161030 | 1080 | 1 | 6 | 1／4 $\times^{11 / 16}$ | ． 75 | 11L770 | 1136 | 150 | 12 | ／$\times 11 / 8$ | 4 |
| 16 L 031 | 1081 | 2 | 6 | $1 / 4 x^{11 / 48}$ | ． 75 | $11 L 771$ | 1137 | 200 | 12 | $3 / 8 \times 11 / 4^{\prime \prime}$ | ． 23 |
| 161032 | 1082 | 3 | 6 | 1／4 x $^{11 / 46}$ | ． 75 | 111772 | 1138 | 250 | 12 | $3 / 8 \times 11 / 2^{\circ}$ | 1.32 |
| 161033 | 1083 | 4 | 6 | ／4x $x^{11 / 16 "}$ | ． 75 | $11 L 773$ | 1148 | ， | 15 | 1／4 $\times 116$ | ． 75 |
| 16 L 034 | 1084 | 5 | 6 | ／4 $\mathrm{x}^{1110 \%}$ | ． 75 | 111776 | 1151 | 4 | 15 | $1 / 4 x^{1}$ | ． 78 |
| 112750 | 1085 | 6 | 6 | $1 / x^{11} \times$ | ． 75 | 161624 | 1152 | 5 | 15 | 4 $\times^{1116}$ | 82 |
| 161036 | 1087 | 10 | 6 | 1／4 $x^{11 / 46}$ | ． 81 | 112777 | 1153 | 6 | 15 | $1 / 4 \times^{11 / 46}$ | 84 |
| 161037 | 1089 | 15 | 6 | $6 x^{11 / 46}$ | 81 | 161625 | 1155 | 10 | 15 | 1／4x11／6 | 84 |
| 16 L 038 | 1091 | 25 | 6 | $4 x^{1}$ | 81 | 16 L 626 | 1156 | 15 | 15 | ／4x | 87 |
| 161039 | 1092 | 30 | 6 | $\times 1114$ | 84 | 16 L 628 | 1157.1 | 25 | 15 | $16{ }^{1}$ | 87 |
| 161041 | 1100 | 50 | 6 | \＄46x ${ }^{1 / 2}$ | 84 | 16 L629 | 1158 | 30 | 15 | $16 \times 1$ | 90 |
| 16 L 026 | 1101 | 60 | 6 | K6x ${ }^{1} 148$ | 84 | 16 L L 31 | 1180 | 50 | 15 | ／101／10＂ | 96 |
| 116753 | 1102 | 100 | 6 | $3 / 8 x^{11 / 6}$ | 90 | $16 L 633$ | 1162 | 100 | 15 | $3 / 3 \times 1960$ | 1.08 |
| 111754 | 1103 | 150 | 6 | 18x146＂ | 94 | 16 L 634 | 1163 | 150 | 15 | $\times 1$ | 1.17 |
| 161661 | 11116 | 300 | 6 | $3 / 18$ | 1.08 | 16 L 635 | 1161 | 214 | 15 | $\times 1$ | ． 26 |
| 111756 | 1114 | 10 | 10 | $11 / 4 x^{16 / 46}$ | ． 81 | 16 L 046 | 1202 | 5 | 25 | $11.4{ }^{1} 146$ | 84 |


| Stock No． | $\begin{aligned} & \text { Type } \\ & \text { TE } \end{aligned}$ | Mfd | WVDC | Slze | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 111779 | 1200 | 4 | 25 | $1 / 4 x^{1 / 46}$ | 75 |
| 11.780 | 1201 | 2 | 25 | 1／4 $\times^{1 / 46}$ | 75 |
| 16 L 048 | 1204 | 10 | 25 | $1 / 4 \times 11 / 4$ | 87 |
| 16 L 049 | 1205 | 15 | 25 | $546 \times 11 / 40^{\prime \prime}$ | ． 87 |
| 16 L L 66 | 1206 | 20 | 25 | $3 / 8 x^{11 / 60}$ | ． 90 |
| 161637 | 1207 | 25 | 25 | 1／6x $x^{11 / 16}$ | 93 |
| 16 L 638 | 1208 | 35 | 25 | \％$x^{13} 16$＂ | ． 99 |
| 161639 | 1209 | 50 | 25 | 1／8 $x^{16} 6^{\circ}$ | 1.08 |
| 16 L 641 | 1211 | 100 | 25 | $1 / 4 \times 11 /{ }^{\prime \prime}$ | 1.26 |
| 161642 | 1301 | 2 | 50 | 1／4 $\times^{11 / 48}$ | 81 |
| $16 L 643$ | 1302.1 | 4 | 50 | 1／6．16\％ | ． 81 |
| 11 L 786 | 1303 | 5 | 50 | 1／4 $\times 1^{1} 166^{\prime \prime}$ | ． 87 |
| 11 L 78 | 1303.3 | 8 | 50 | ／6x ${ }^{1146}$ | ． 90 |
| 111789 | 1304 | 10 | 50 | 516x＇1作＂ | 90 |
| $16 L 644$ | 1305 | 20 | 50 | $3 / 8 x^{1 / 180}$ | ． 90 |
| 161662 | 1306 | 35 | 50 | x11／4． | 1.02 |
| 16 L L 65 | 1307 | 50 | 50 | $3 / 8 \times 11 / 2$ | 1.11 |
| $16 L 647$ | 1407 | 10 | 100 | ／ $6 x^{13 / 86^{\prime \prime}}$ | .93 |
| 161649 | 1409 | 20 | 100 | $3 / 8 \times 11 / 2^{\prime}$ | 96 |
| 111798 | 1501 | 2 | 150 | 1／8 $\times^{15 / 46}$ | 87 |
| 114799 | 1503 | 4 | 150 | $3 / 6 \times 18 / 16^{\prime \prime}$ | 87 |
| 16L651 | 1504 | ， | 150 | $5 / 8 x^{1}$ | 93 |
| 11 L 801 | 1506 | \＄ | 150 |  | 96 |
| 161652 | 1507 | 10 | － 50 | $11 / 2$ | 96 |

## Sprague Capacitors



## TVA AND TU ATOMS－MIDGET ELECTROLYTICS

Very compact dry electrolytics．All are metal－cased except tcardboard con－ struction．Engincered eapecially for replacements in tough TV applicaticns－ withstand the bigh aurge voltages and hlgh dpole currents commonly foum in television clrcuits．Very low leakage．Opmrate efficlently at emperatures as high as $85^{\circ} \mathrm{C}$ ．TU type．scparate negative leada

## A SINGLE SECTION

| Stock No． | $\begin{aligned} & \text { TVA } \\ & \text { Type } \end{aligned}$ | Mifd | $\begin{aligned} & \text { W V } \\ & \text { DC } \end{aligned}$ | Stize | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 15 L 981 | 1100 | 50 | 6 | 3／311／ | 57 |
| 16 L 230 | 1101 | 100 | 6 | 1／2x170 | ． 72 |
| 16 L 231 | 1102 | 250 | 6 | 5／817／6＂ | 81 |
| 162232 | 1103 | 500 | 6 |  | 93 |
| 16 L 233 | 1105 | 1500 | 6 | $1316 \times 21366$ | 1.26 |
| 151861 | 1106 | 2000 | 6 | $13 / 16 \times 215 / 16^{\circ}$ | $\overline{1.38}$ |
| 162234 | 1130 | 100 | 12 | \％6x13＊ | ． 72 |
| 151862 | 1131 | 250 | 12 | 5／8111／6＂ | ． 87 |
| $15 L 863$ | 1132 | 500 | 12 | 3／4x11／40 | 1.02 |
| 16 L 235 | 1133 | 1000 | 12 | $13 / 6 \times 23 / 16^{\circ}$ | 1.35 |
| $16 L 236$ | 1160 | 100 | 15 | 5／8×13／16＂ | ． 75 |
| $16 L 237$ | 1161 | 250 | 15 | 5／6x11／15＂ | ． 93 |
| $16 L 238$ | 1162 | 500 | 15 | $1146 \times 238^{\prime \prime}$ | 1.05 |
| 161239 | 1163 | 1000 | 15 | 7／6 $\times 23 / 15^{\circ}$ | 1.38 |
| $15 L 207$ | 1203 | 5 | 25 | 3／8x $11 / 4$＂ | ． 60 |
| 15 L 205 | 1204 | 10 | 25 | 3／8x11／4 | ． 60 |
| 156206 | 1205 | 25 | 25 | $3 / 8 \times 11 / 4$. | ． 60 |
| $15 L 208$ | 1206 | 50 | 25 | \％6x174＂ | ． 66 |
| 156867 | 1207 | 100 | 25 | 96x11／18＊ | ． 81 |
| 154868 | 1208 | 250 | 25 | 3／8×11／10 | 1.02 |
| $15 L 869$ | 1209 | 500 | 25 | $5 \times 2 \frac{1685}{}$ | 1.38 |
| 151870 | 1300 | 1 | 50 | $3 / 6 \times 11 /$ | ． 54 |
| 156871 | $\pm 301$ | 2 | 50 | 3x11／4 | ． 54 |
| 151200 | 1303 | 5 | 50 | $3 / 8 \times 11 / 4$ | 60 |
| 15 L 201 | 1304 | 10 | 50 | 3／8x1／4＊ | 60 |
| 15 L 202 | 1306 | 25 | 50 | $7 / 6 \times 1 \frac{1}{6}$ | 63 |
| 154203 | 1308 | 50 | 50 | 96x $1^{11108}$ | 72 |
| 156876 | 1310 | 100 | 50 | 3／4x11／6 | ． 84 |

（B DUAL SECTION

| Stack No． | TVA or TU＊ Type | Mid | WVDC | Size | $\begin{gathered} \text { NET } \\ \text { EACH } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $15 L 255$ | 2315 | 10－10 | 50 | 7／8×1760 | $.84$ |
| 154245 | 2415 | 8－8 | 150 | $7 / 18 \times 176$ | ． 90 |
| $15 L 254$ | 2420 | 16－16 | 150 | $78 \times 126^{\prime \prime}$ | 1.08 |
| 151247 | 2428 | 20－20 | 1.50 | $7 / 8 \times 1 \%{ }^{\circ}$ | 1.08 .99 |
| $15<253$ | 2421 | 30－20 | 150 | 7／1811／＊ | 1.02 |
| 15 L 252 | 2438 | 40－20 | 150 | 76x111／6＂ | 1.05 |
| $15<251$ | 2434 | 30.30 | 150 | 7／1／8116＊ | $1.08$ |
| 151249 | ＋420 | 40－204 | 150 | $1148 \times 25 / 8$ | $1.32$ |
| 15 L L 50 | 2442 | 40.30 | 150 |  | 1.08 |
| 15 L 243 | 2445 | 40.40 | 150 | 7／8×11／6＊ | 1.11 |
| 15 L 244 | 2450 | 50－30 | 150 | 7／8×15／16 | 1.17 |
| $15 L 305$ | 245.3 | 50－50 | 150 | 7／8×27／10． | 1.26 |
| 151306 | 2460 | $80-30$ | 150 | $7 / 10 \times 271{ }^{\circ}$ | 1.32 |
| $16 L 259$ | 2462 | $80-50$ | 150 | 7／108156． | 1.41 |
| 161262 | 2464 | 100－100t | 150 | $13 / 8 \times 31 / 8{ }^{\text {c }}$ | 1.92 |
|  | 2467 | 200－5t | 150 |  |  |
| $18 L 221$ | 2640 | 140－5 | 350 | $11 / 4 x, 3 / 8$ | 2．49 |
| 151220 | 2720 | 8－8 | 450 | 7／8x1196． | 1.12 |
| 151221 | $\begin{array}{r}* 88 \\ \hline 725\end{array}$ | 8－8 ${ }^{8}$ | 450 | 11／6x $31 /{ }^{\text {c }}$ | 1.29 |
| 15 L 222 | 2725 | 16－8 | 450 | $7 / 6 \times 23 / 6$ | 1.20 |
|  | 2722 | 10－10 | 450 | $7 / 8 \times 1156$ |  |
| $15 L 215$ | －1616 | 16－16t | 450 | $1 \% \times 31 /$ | 1.68 |
| 15 L 227 | 2730 | $20-20$ | 450 | $7 / 8 \times 215160$ | 1.50 |
| 15 L 986 | 2735 | 30－30 | 450 | $1 \times 33 / 15^{\circ}$ | 1.80 |
| $15 L 987$ | 2740 | 40－40 | 450 | $1 \times 315$ 亿6 | 2.04 |
| 18 L 220 | 2711 | $80.100 \uparrow$ | 450－50 | $11 / 8 \times 41 / 0$ | 2.22 |


| Stock No． | $\begin{aligned} & \text { TVA } \\ & \text { Type } \end{aligned}$ | Mid | $\begin{aligned} & \text { WV } \\ & \text { DC } \end{aligned}$ | Sixe | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 15 L 88 | 1311 | 150 | 50 | 3／4×11／46 | 93 |
| 15 L 859 | ［312 | 250 | 50 | 1968111／10＊ | 1.05 |
| 15 L 192 | 1402 | 4 | 150 | $3 / 6 \times 11{ }^{\circ}$ | 60 |
| $16 L 241$ $15 L 193$ | $1403$ | $\begin{array}{r}5 \\ 8 \\ \hline\end{array}$ | 150 | 3010， | 60 |
|  |  | 8 | 150 | 1／8×11／ | ． 63 |
| 15 L 226 | 1406 | 10 | 150 | $3 / 8 \times 13 / 4{ }^{\prime \prime}$ | ． 63 |
| 15 L 194 | 1407 | 12 | 150 | 1／2x15／8． |  |
| 152195 | 1409 | 16 | 150 | 96x $\times 1116$ | 9 |
| $15 L 196$ $16 L 242$ | 1410 1411 | 20 | 150 150 | 56x11／16． | 2 |
| 15 L 197 | 1412 | 30 | 150 | 5x1 | ． 78 |
| 15 L 198 | 1413 | 40 | 150 | 3／4×11／46 | ． 81 |
| 15 L 199 | 1414 | 50 | 150 | 13／6x ${ }^{11166^{\prime}}$ | ． 84 |
| 16 L 243 | 1415 | 60 | 150 | 7／6×11160 | ． 90 |
| 15 L 878 | 1418 | 80 | 150 | 7／6x $\times 15 / 16^{\circ}$ | 96 |
| 16 L 619 | 1420 | 100 | 150 | 7／6×23／6 | 1.05 |
| 6 L 240 | 1422 | 150 | 150 | $1 \times 2 \mathrm{~K}$ | 1.14 |
| 16 L 244 | 1423 ＋ | 200 | 150 |  | 1.32 |
| 6 L 245 | 1425 † | 300 | 150 | 13／6x3700 | 1.53 |
| 16 L 246 | 1480 | 200 | 200 | 13／9 $\times 31 / 8{ }^{\prime \prime}$ | 1.74 |
| 15 L 185 | 1501 | 4 | 250 | 7／6， $15 / 8$ | ． 60 |
| 15 L186 | 1503 | 8 | 250 | $1 / 2 \times 15{ }^{\circ}$ | ． 69 |
| $16 L 617$ | 1504 | 10 | 250 | 96x11146＂ | ． 72 |
| 15 L 197 | 1505 | 12 | 250 | 76x1116 | ． 75 |
| 15 L 188 | 1507 | 16 | 250 | 5／2x11／6 | ． 78 |
| 15 L 189 | 1508 |  | 250 | $1{ }^{16} \times 11{ }^{6}$ | ． 8 |
| $16 L 618$ | 1510 | 30 | 250 | $11 / 6 \times 23 / 16^{*}$ | 7 |
| 15 L 190 | 1511 | 40 | 250 | $1 / 4 \times 2315^{\circ}$ | 93 |


| Stock No． | $\begin{aligned} & \text { TVA } \\ & \text { Type } \end{aligned}$ | Mid | $\begin{aligned} & \text { WV } \\ & \text { DC } \end{aligned}$ | Slze | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 16 L 24 | 15754 | 140 | 300 | $13 / 8 \times 31 / 5^{-}$ | 1.89 |
| 162616 | 1601 | 4 | 350 | $1 / 2 \times 1 \%$＂ | 63 |
| 15 L 181 | 1603 |  | 350 | 8／8x111／${ }^{\text {c }}$ | 72 |
| 15 L184 | 1608 | 20 | 350 | $13 / 15 \times 111 / 16^{\prime \prime}$ | 87 |
| 15 L 983 | 1611 | 40 | 350 | $7 / 8 \times 27 / 16^{\circ}$ | 1.05 |
| 15 L 984 | 1613 | 60 | 350 | $1 \times 27 / 16^{7}$ | 1.17 |
| $16 L 615$ | 1701 |  | 450 | 7／10x13／ | ． 66 |
| 15 L 170 | 1702 | 4 | 450 | $916 x t^{11 / 16}$ | 69 |
| 15 L 171 | 1704 | 8 | 450 | 11／6x 11116 | 75 |
| 15 L 225 | 1705 | 10 | 450 | 11／bx $\times 11 / 66^{\prime \prime}$ | 78 |
| 15 L 72 | 1706 | 12 | 450 | 1／4x $1^{11 / 16} 6^{\prime \prime}$ | 81 |
| 151173 | 1708 | 16 | 450 | 3／4 $\times 23 / 16^{\prime \prime}$ | ． 87 |
| 15 L 174 | 1709 | 20 | 450 | $1 / 4 \times 23 / 8$ | ． 93 |
| 151169 | 1711 | 30 | 450 | $7 / 6 \times 23116^{\prime \prime}$ | 1.02 |
| 15 L 178 | 1712 | 40 | 450 | 7／8 $\times 211 / 16^{\prime \prime}$ | 1.08 |
| 15 L 991 | 1713 | 50 | 450 | 7／8×33／10 | 1.26 |
| 16 L 248 | 1714 | 60 | 450 | $1 \times 31116$ | 1.41 |
| 151985 | 1716 | 80 | 450 | $1 \times 31816^{\prime \prime}$ | 1.68 |
| 18L219 | 1718 | 100 | 450 | 13／641／ | 1.92 |
| 16 L 613 | 1802 | 10 | 475 | $1 / 4 \times 115 / 4{ }^{\prime \prime}$ | 81 |
| $16 L 64$ | 1804 | 20 | 475 | 7／6x2／16 | ． 96 |
| $15 L 175$ | 1902 | 8 | 500 | 7／8x11／4＊ | ． 78 |
| $15 L 176$ | 1905 | 16 | 500 | $1 \%_{16} \times 23_{6}{ }^{\prime \prime}$ | ． 90 |
| 15L177 | 1906 | 20 | 500 | $1 \times 23 / 6^{\circ}$ | ． 96 |
| $16 L 249$ | 1962 | 8 | 600 | $1 \times 31 / 6{ }^{\prime \prime}$ | 1.71 |
| 16 L 256 | 1963 | 10 | 601 | $1 \times 346^{\prime \prime}$ | ． 77 |
| 164257 | 1965 | 16 | 600 | 1 $\times 3116$ | 2.07 |
| 16 L 258 | 1966 | 20 | 600 | $1 \times 31 / 1{ }^{*}$ | 2.13 |

（C）TRIPLE SECTION

| Mid | WVDC | Size | NET |
| :---: | :---: | :---: | :---: |
| 20－20－20 | 150 | 76x1110 | 1.50 |
| 40－30－20 | 150 | $518 \times 29$ |  |
| 40－40－40 | 150 | 1×2\％ | 1.68 |
| 50－30－20 | 150 | 1×21年 |  |
| $80-40.20$ | 150 | $1 \times 2{ }^{16}{ }^{\prime \prime}$ | 1.74 |
| 20－20－20 | 150－150－25 | 76x17／4 |  |
| 40－30－20 |  | 76x1490 | 1.50 |
| 40.40 .100 | 150－150－25 | 2 $\times 2 \times 1$ 何 | ＋．68 |
| 50－30－20 | 150－150－25 | 5／82 $\times 1$ | 1.59 |
| 50－30－200 | 150－150－25 | 182 ${ }^{1 / 2}$ | 1.65 |
| $50-50-20$ | 150－150－25 | 1190210 | 1.65 |
| 80－40－20 | 150－150－25 | 18119 | 1.68 |
| 12－12－20 | 450－450－25 | 1×15 ${ }^{\text {c／}}$ | 1.38 |

QUADRUPLE SECTION
Not illustrated．

| Stock No． | $\begin{aligned} & \text { TVA } \\ & \text { Type } \end{aligned}$ | Mfd | WVDC | Sizo | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 16 L284 | 45761 | 140－5－200－30 | 300－300－200－150 | 13， 546 | 3.63 |
| 16 L 287 | 4618 ＋ | 80－60－40－20 | 350－350－300－150 | $11 / 2 \times 4$ | 3.54 |
| 16 L 288 | 46594 | 80－10－40－100 | 400－400－300－50 | 116x44＊ | 3.27 |
| 18 L 224 | 47081 | 10－80－40－40 | 450－300－250－250 | 15／643\％ | 2.97 |
| $18 L 225$ | 4748 t | 40－20－20－10 | 450 | 196x4 ${ }^{\circ}$ | 2.82 |
| 1548561 | 47504 | 40－40－20－20 | 450 | $13 / 3 \times 4{ }^{\prime \prime}$ | 3.27 |



## VL VERTI－LYTIC ELECTROLYTICS

－Ideal for Replacement in Original Equipment －Hove long Shelf Life
A selection of top－quality electrolytle capaci－ tars especlally designed for replacement of units of the same type found on printed circuit boards in original equipment．These rugged． extremely small capacitors feature unusually low leakage currents and exceptionally long clectrolyte will not become contaminated：it

－In Siurdy，Pre－Molded
Phenolic Cases
－Low Current Leakage
also protects capacitors against internal drying or the entrance of external moisture．Units are housed in sturdy，premolded phenolic
cases．Have unique contact design that makes cases．Have unique contact design that makes it virtually impossible，polarity wise，to install identified by their larger diameters．Av．shpg． wt．． 3 oz．

## PW PRINTED CIRCUIT ELECTROLYTICS

| Stock No． | $\begin{gathered} \text { VL } \\ \text { Type } \end{gathered}$ | Mid | WVDC | Size | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 161685 | 1167 | 10 | 15 | $3 / 6 x^{3 / 4}$ | ． 90 |
| 164572 | 1168 | 15 | 15 | 3／0 $\times^{3 / 4}$＂ | ． 93 |
| 164686 | 1169 | 20 | 15 | 1／8x ${ }^{3 / 4}$ | ． 93 |
| 164573 | 1170 | 25 | 15 | $3 / 3 \times 3 / 4$ | ． 93 |
| $16 L 687$ | 1174 | 50 | 15 | 1／6x ${ }^{1 / 8}$ | ． 99 |
| 16 L688 | 1180 | 90 | 15 | 1／2x ${ }^{7}$ | 1.17 |
| $16 L 575$ | 1201 | 2 | 25 | 3／8x19 | ． 90 |
| 16 L 90 | 1204 | 5 | 25 | 3／6x ${ }^{1 / 2}$ | ． 99 |
| $16 L 591$ 16592 | 1207 | 10 | 25 | 3／ax | ． 99 |
| 16 L 682 |  | 25 | 25 |  |  |
| 16 L 684 | 1215 | 50 | 25 | 1／2x | 1.05 |
| $16 L 676$ | 1302 | 3 | 50 | $3 / 8 x^{1 / 4}$ | ． 93 |
| 16 L678 | 1304 | 5 | 50 | $3 / 8 \mathrm{x} / 4^{*}$ | ． 99 |
| $16 L 679$ | 1307 | 10 | 50 | 3／6x ${ }^{1 / 81}$ | ． 99 |
| $16 L 593$ | 1308 | 15 | 50 | 7／16x | ． 99 |
| 16 L 680 | 1309 | 20 | 50 |  | ． 99 |
| 16 L 681 | 1310 | 25 | 50 | $1 / 2 x^{7}$ | ． 99 |



New dual－section，upright mounting dry elec－ trolytic capacitors．Small and compact：de－ signed for exact replacement use in clock ra－ dios，thi－fi amplifiers，phonographs，and other devices having printed circuit board construc－ tion．Ideal for use by serviceinen as replace－ ments for＂off－brand＂capacitors with poor service histories．Consist of aluminum electro－ ytic capacitor sections，wrapped in insulating plastic film and housed in Kraftboard tubes． llave wax end－seals and pin－type terminals sulitable for mounting on printed circult boards． All have voltage ratings of 150 WVDC．Maxi－ dia．$\times 21 / 2^{2}$ long．Shpg．wt． 3 oz

| Stock No. | $\begin{aligned} & \text { PW } \\ & \text { Type } \end{aligned}$ | Mid | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 112110 | 2450 | 50.30 | 1.41 |
| 112111 | 2453 | 50－50 | 1.47 |
| 112112 | 2454 | 60． 40 | 1.47 |
| 112  <br> 112 114 | 2455 2456 | 70－30 | 1.47 |
|  | 2456 | 70－50 | 1.53 |
| 11  <br> 11 15 <br> 15  | 2457 | 75－30 | 1.50 |
| 112117 | 2461 | 80－40 | 1.53 |
| 116118 | 2463 | 100－50 | 1.62 |

## Sprague and Aerovox Capacitors

## SPRAGUE CAPACITORS

## AM MOTOR-STARTING CAPACITORS

 An electrolytic capacifor 110 volt eapacitorstart AC motors. Care fully engineered to pass the correct amount of current for the maximum frossible startink orque. In tighty sealed aluminum cans with insulating outer cardboard tubes for high efficiency and dependability. Provided with lug Lerminals for quick, easy installation. Screw's are removable for soider connections if desired. When in question as to proper size. choose the next larger value of capacitance. *Minimummaximum capacitance values replaceable with these units. Av. shyg. wt., 10 oz.

|  | $\begin{aligned} & \text { Mrr's } \\ & \text { Type } \end{aligned}$ | * Mid | 5120 |  |
| :---: | :---: | :---: | :---: | :---: |
| $5 L 948$ | T105 | 3 |  |  |
| 5 L 579 | 1106 | 47-56 | $1 \times 21 /{ }^{\prime \prime}$ | 76 |
| L580 | 1107 | 53-64 |  |  |
| 5 L | 1108 | $64-77$ |  | 81 |
| 15.58 | 1109 | 72-88 |  |  |
| 15L583 | 1110 | 8-108 | $1 \times$ | 78 |
| L 584 | 1113 | 108-130 | $13 / 3$ |  |
| L | 1116 | ${ }^{124-149}$ | $13 / 8$ |  |
| 15 L 587 | 1119 1122 | $130-156$ $145-175$ | $13 / 4 \times$ |  |
| 15 L 588 | 1125 | 101-193 | $13 / 7 \times 25 / 8$ |  |
| $5\llcorner 570$ | 1128 | 189-227 | 13/0x | . |
| 15 L 51 | 1130 | 200-240 | $13 / 18$ |  |
| 15 L 572 | 1131 1134 | 216-2 |  |  |
| 15 L574 | 1137 | 243-292 | $13 / 8$ | 1.41 |
| $15 L 575$ | 1140 | 270-324 | 11/6x | 1.43 |
|  | 1142 | 324-388 | $13 / 8$ | . 6 |
| 5 57 | 1143 | 340-408 | 13/6x | . 67 |
| 15 L 589 | 1146 | 378-440 | $13 / n \times 4$ | . 80 |
| 15L578 | 1149 | 400.480 |  | 1.8 |
| 5 L 949 | 1152 | 430-516 | $13 / 4 \times 41$ | . |

## "BLACK BEAUTY" CAPACITOR KITS



TK-1. 72 ' Black Beauty" capacicase. All are 600 volt Compartmented case con-$\frac{1}{8-002,2-.005,15-0047 .}$. $8-05,15-01$.
$5-.047,12=.03$
$8-11$
$11 / 4 \times 11 \times 61 / 2^{\prime \prime}$. Shpg. wt., $21 / 2 \mathrm{lbs}$
58 L 515 . NET
14.70

TK-3. 36 "Black Beauty" buffer capacitors 0 the mos used Bealigs. From , 001 to 03 $11 / 4 \times 11 \times 61 / 2^{2}$. Shpg, wt., $21 / 2 \mathrm{lbs}$.
58 L 517 . NET
14.25

TK-5. Steel cabinet complete with 59 molded tubulars in 9 popular ratings. Values range

12.75

## 9 L 645 . NET

TK.6. 2-dratver steel cabinet whth a melection rom 001 to 25 mifd at 600 WVDC. Size, $41 / 2 x$ $7 \times 91 / 2^{\circ}$. Shpg. wt., 8 lbs.
19646 . NET.
24.00

## ELECTROLYTIC CAPACITOR KITS



SK-106 Atom Electroyate Capaelior Kle. An excellent investment er. Ham, etc. Contains one each of the following TVA types: 11205 . 308. 131. 1304, 1306 $\begin{array}{llll}1308, & 1310, & 1410 . & 1422, \\ 1704, & 1705, & 1708, & 1709\end{array}$ $\begin{array}{llll}1711, & 1712, & 1713, & 1716 . \\ 2428, & 2450, & 2453, & \text { Sup- }\end{array}$ plied in sturdy, compartmented welded metal inventory cabinet, at no capacitors. Compact cabinet easily fits any work bench. $103 / 8 \times 9 \times 51 / 4^{\circ}$. Wt.. 5 lbs.
58 L 514, NET
18.42

EK-1 Atom Electrolytle Capaclior Kle. Consists of the following types of TVA capacitors: 1 each-11205, 1303 , 1304. 1410. 1709 1712. Capacitors are small in size; rated at $80^{\circ}$ C. or $185^{\circ} \mathrm{F}$. Supplied in crystal-clear compartinented plaatıc case-each capacitor is
clearly ldentified. Case size, $11 / 4 \times 11 \times 61 / 2^{\circ}$. Shps. clearly Identified. Case size, $1 / 4 \times 11 \times 61 / 2$.. Shps. 58 L516. NET.
13.98

## AEROVOX QUALITY CAPACITORS

## TYPE PRS "DANDEE" MINIATURE ELECTROLYTICS



[A]-single section (Coni'd)

| Stock No. | Mid | Voles | Slye | NET |
| :---: | :---: | :---: | :---: | :---: |
| 13 L 389 | 20 | 450 | 146x13/4 | . 93 |
| 13 L 395 | 30 | 450 | 146x2 ${ }^{1 / 4}$ | 1.02 |
| 13 L 396 | 40 | 450 | $11_{6} \times 21 / 2^{\prime \prime}$ | 1.08 |
| 12 L 620 | 60 | 450 | 11/6x314" |  |
| 12 L 621 | 80 | 450 | 11/6x $31 / 4{ }^{\prime \prime}$ | 1.68 |
| 12 L 622 | 100 | 450 | 11/16x $31 / 4{ }^{\prime \prime}$ | 1.92 |
| 13 L 632 | 8 | 600 | "716x346" | 1.71 |
| 13 L 635 | 16 | 600 | 11/6x $\times 3 \%{ }^{\prime \prime}$ | 2.07 |
| $13 L 639$ | 8 | 700 | $13 / 16 \times 31 /{ }^{\circ}{ }^{\circ}$. | 1.74 |
| 13 L 640 | 10 | 700 | 11/6x $31 / 46^{\circ}$ | 1.83 |
| 13 L 642 | 16 | 700 | 11/6x3\%6" | 2.10 |

B-DOUble section

| 3 L 439 | 20-20 | 150 | 136 | ) |
| :---: | :---: | :---: | :---: | :---: |
| $2 L 625$ | 30-20 | 150 | $136 \times 21 / 4$. | 02 |
| 12 L 626 | 40-20 | 150 | 1916x13\% | 1.05 |
| $12 L 627$ | 30-30 | 150 | $1596 \times 11 /{ }^{\circ}$ | 1.08 |
| 12 L 628 | 40-30 | 150 | ${ }^{1516 \times 21 / 4}$ | 1.08 |
| 13 L 442 | 40-40 | 150 | 15/6x $\times 1 /{ }^{\circ}$ | 1.08 |
| 2 L 629 | 80-40 | 150 | 13/16x ${ }^{1 / 4}$ |  |
| 3 L 853 | 50-30 | 150 | 13/6x $\times 21 / 4$ |  |
| 13 L 85 | 50.50 | 150 | 1565x21/9 | 1. |
| 12 L 635 | 10-10 | 250 | 13/6x $613 / 4^{\circ}$ | . 99 |
| 12 L 636 | 16-16 | 250 | 1316 | 1.02 |
| 13 L 852 | 20-20 | 250 | 13/6x21/4 | 1.1 |
| 12 L 637 | 30-30 | 250 | $5 / 6 \times 21 / 4$. | 1.35 |
| 13 L 391 | 8 8-8 | 450 | "36. ${ }^{1 / 2}$ \% | 1.0 |
| $13 L 392$ | 16-8 | 450 | 14/6x ${ }^{1} 1 \%^{\circ}$ | . 2 |
| 13 L 397 | 10-10 | 450 | 79/6x $\times 21 / 4$ | 1. |
| 12 L 638 | 16-16 | 450 | 1166 $\times 1 /{ }^{\text {a }}$ | 1.3 |
| 12 L 639 | 20-20 | 450 | ${ }^{1516 \times 316}{ }^{\circ}$ | . 5 |
| 12 L 640 | 30-30 | 450 | 11/6. $31 / 4$. | . 80 |
| 12 L 641 | 40-20 | 450 | 1116x ${ }^{1 / 4}{ }^{\text {a }}$ | . 77 |
| 13 L 851 | 40-40 | 450 | $1766 \times{ }^{\circ}$ | 2.0 |
| 12 L 642 | 50-30 | 450 | 11684* | 2.0 |

C. -triple section


TYPE P83Z MICROMINIATURE METALLIZED-PAPER TUBULARS

Ultra-small. metalized-paper dielectric capacicors ideally suited for coupling and bypass applications in radio. TV and other electronic equipment. Units are hous d in humidityresistant. molded thermo-glastic cases and are completely Hyvol $K$ impregnated to protect against enerance of moisture. improved metalized foil serves as both dielectric and recStock No. Mid. WVDC Size EACH

|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 13 L 492 | 004 | 200 | 3/6x $\times 16$ | . 21 |
| $13 L 885$ | . 005 | 200 | 3/16x ${ }^{1 / 66^{\circ}}$ |  |
| 13 L 886 | 01 | 200 | $3 / 16 \times 360$ | . 27 |
| $13 L 493$ | 02 | 200 | 1/14 $\times 1 / 6^{\text {² }}$ | . 27 |
| 13 L 494 | 04 | 200 | 1/4x96" | 7 |
| $13 L 887$ | 002 | 400 | $3 / 6 \times 3 / 56$ | . 21 |
| 13 L 888 | 003 | 400 |  | 27 |
| 13 L 495 | 008 | 400 | 1/4 $\times 16^{\prime \prime}$ | 27 |
| 13 L 889 | 01 | 400 | 1/4 $\times \frac{8160}{}$ | . 27 |
| 13 L 890 | 0005 | 600 | $316 \times 1 / 16^{\circ}$ | . 21 |
| $13 L 496$ | ONOS | 600 | 716x $3 / 16^{\circ}$ | . 21 |
| 13 L 891 | 001 | 600 | Y/6x $\times 1 / 6^{\prime \prime}$ | . 21 |
| 13 L 892 | 002 | 600 |  |  |
| $13 L 497$ | 0022 | 600 600 |  | 27 |
| 13 <br> 13 | ${ }_{0}^{0} 004$ | 600 6010 | /4x916 | 27 |

## AEP PLUG-IN ELECTROLYTIC

 CAPACITORS Hermetically sealed. 1,2 and 3 -section dry elec-rolytics. In aluminunt cans with
nsulated, 4-pin
octal tube type bases. Fit all standard octal tube sockets; keyed guide pins insure correct Installation and polarity. Designed for use in applications where continuous service $i s$ important; can be quickly replaced by simply plugging in a new unit. All units are vented for safety; have etched aluminuin foil construction. Have common nesative leads. Operating temp. to $+65^{\circ} \mathrm{C}$. Av. wt.. 5 oz .

SINGLE SECTION

| Stock No. | Type | Mod. | WVDC | Size | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 13 LO 9 | 8 J | 40 | 450 | 13/02 ${ }^{1 / 9}$ | 2.77 |
| 13 L 040 | 161 | 80 10 | 450 600 |  |  |

## DUAL SECTION

## 

TRIPLE SECTION


## Aerovox Capacitors

## TYPE V84C-V161 "AEROFILM" MYLAR CAPACITORS



An excellent selection of higls Huality tubular capacitors. Have rusged, humidlty-proof polycap cases. Ejoxy end fill will not flow, soften, or melt at any operating temperature. Have exceptionally ligh insulation resistance as well as low dielectric absorptlon and power factor. Extreniely stable, have a relatively small capacitance change with ternperature variations over the range of $0-85^{\circ}$

| Stock No. | Mid. | Size | EACH |
| :---: | :---: | :---: | :---: |
| 12 L 105 | 0047 | $9 / 33^{15} / 16^{\circ}$ |  |
| 12 L 106 | . 0068 | $93 x^{19} \%^{\circ}$ |  |
| $12 L 107$ | . 01 | $981515 / 16$ | .15 |
| 12 L 108 | . 015 | $9^{3} 8^{15} 516^{\circ}$ |  |
| $12 L 109$ | . 022 | 5/16x10 |  |
| $12 L 115$ | 047 | $5 / 6811 / 16^{\circ}$ |  |
| $12 L 116$ | . 05 | $516 \times 1116$ | . 15 |
| $12 L 117$ | . 068 | $113 \times 11$ (180 | . 18 |
| $12 L 118$ | . 1 | 81/x11/4. | .21 |
| 12 L 119 | . 15 | $13 / 18 \times 1 / 40$ | . 24 |
| $12 L 129$ | . 25 | $1 / 2 \times 1 / 40$ |  |
| 12 L 132 | . 47 | $916 \times 1 \%^{\circ}$ | .39 |
| $12 L 133$ | . 68 | 198213". | . 51 |
| $12 L 134$ | 1.0 | ${ }^{13} 16 \times 1 \%$ 。 | . 57 |
| 400 WVDC |  |  |  |
| Stock No. | Mid. | Size | EACH |
| $12 L 136$ | $\begin{aligned} & .0047 \\ & .0068 \end{aligned}$ | $\begin{aligned} & 9 / 12 x^{15} / 15^{\prime} \\ & 9 / 42 \times 15 / 16^{\prime \prime} \end{aligned}$ |  |
| $12 L 138$ | 01 | S/16x $\mathrm{I}^{3 \times 16}$ | .15 |
| 12 L 139 | . 015 | $5 / 6$ x1" |  |
| 12 L 142 | . 02 | S/16211/16 |  |
| $12 \mathrm{~L} \mid 43$ | . 022 | 11/32x11/6" | . 15 |
| 12 L 144 | . 03 | 1/8011/15 | .18 |
| 12 l 145 | . 047 | 1/21140 | . 18 |
| 12 L 146 | . 05 |  | . 18 |
| 12 L 147 | 1 | 1/2x1190 | .21 |
| 12 L 148 | . 25 | 9/6811/9* | . 39 |
| $12 L 149$ | . 33 | \%x11/4 | . 51 |
| 12 L 162 | . 47 | 11/16 $\times 2$ ' | . 66 |



PTT-PWE POLYCAP PLASTIC-CASED ELECTROLYTICS


Ruggedly constructed miniature, "Polycap" cased electrolytic capacitors. Especially recommended for use in all applications wersonal transistorized radios, hearing aids instruments and a wide varicty of electronic equipment with crowded chassis. All electrolytics are encased in sturdy, plastic tubes, Speclal plastic end-fill binds ends securely to case to extend working life of Capacitors. Temperature range is from $-30^{\circ} \mathrm{C}$ to $+65^{\circ} \mathrm{C}$. Capacity tolerance at $25^{\circ} \mathrm{C}$ is $-10 \%,+250 \%$. Sizes are dia. x length. Wi., 2 oz

| Code |  | Sixe |  |  | Code |  | Sixe |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \hline \mathbf{A} \\ & \mathbf{B} \\ & \mathbf{C} \\ & \mathbf{D} \end{aligned}$ |  | $\begin{aligned} & 1 / 4 x^{1 / 40} \\ & 1 / 4 x^{7 / 6} \\ & 3 / 9 \times 3 / 4 \\ & 3 / 8 \times 7 / 80 \end{aligned}$ |  |  | $\begin{aligned} & \frac{\mathrm{E}}{\mathrm{~F}} \\ & \mathrm{G} \\ & \mathrm{H} \end{aligned}$ |  |  |  | $\begin{aligned} & 1{ }^{\circ} \\ & 11 /{ }^{\circ} \\ & 13 / 8 \\ & 11 / 2^{\circ} \end{aligned}$ |  |
| 3 WVDC |  |  |  |  | 12 WVDC |  |  |  |  |  |
| Stock No.  <br> 1 1 $L$ $\mathbf{8} 51$ | Type | Mfd | Cod | IEA. | Stock No. | Type | Mfd |  | Code | EA. |
|  | 3002 | 2 | A | . 75 | 116992 | 12005 | 5 |  | A | . 75 |
|  | 3005 3010 | 5 | A | 75 .75 |  | 15 WV | DC |  |  |  |
|  | 3050 | 50 | B | . 75 | 11 L 993 | 15005 | 5 |  |  |  |
|  | 3100 | 100 | C | . 84 | $11 L 994$ | 15008 | 8 |  |  | 75 |
|  | 3500 | 500 | G | 1.05 | 11 L 995 | 15030 | 30 |  |  |  |
| 6 WVDC |  |  |  |  | 25 WVDC |  |  |  |  |  |
|  | $\begin{aligned} & 6002 \\ & 6003 \\ & 6005 \\ & 6010 \end{aligned}$ |  | $\begin{aligned} & \mathbf{A} \\ & \mathbf{A} \\ & \mathbf{A} \\ & \mathbf{A} \end{aligned}$ | .75 | $1 \mid$ 4 872 <br> I 6 873 <br> I 6 874 <br> I 1 875 | $\begin{aligned} & 25005 \\ & 25008 \\ & 25010 \\ & 25015 \\ & \hline \end{aligned}$ | 5  <br> 8  <br> 10  <br> 15  |  | A$\mathbf{A}$$\mathbf{B}$$\mathbf{C}$ | .75 |
| $11 L 990$ |  | 3 |  |  |  |  |  |  |  |  |
| 11 <br> 11 <br> 11 <br> 1860 |  | 5 |  |  |  |  |  |  |  |  |
| 112860 |  | 10 |  |  |  |  |  |  |  |  |
|  | 6025 6040 | 25 | B | . 75 | 114876 | 25020 | 20 |  | C | . 75 |
| $11 L 863$ | 60050 | 40 50 | C | 75 | 114877 | 25025 | 25 |  | C | 75 |
| 1)L864 | 6100 | 100 | E | . 90 | 11L880 | 25040 25050 | 40 50 |  | D | .81 |
| 10 WVDC |  |  |  |  | 11 L 881 | 25100 | 100 |  | H | 1.02 |
| $11 L 8651$ | 10002100051001010020 | $\begin{array}{r} 2 \\ 5 \\ 10 \\ 20 \end{array}$ | $\begin{aligned} & \mathbf{A} \\ & \mathbf{A} \\ & \mathbf{A} \\ & \mathbf{B} \end{aligned}$ | $.75$ | 50 WVDC |  |  |  |  |  |
| 1) 188661 |  |  |  |  | $\mid 1$ $L$ 882 <br> 11 $L$ 883 <br> 11 6 84 <br> $1 \mid$ 1 885 | $\begin{aligned} & 50001 \\ & 50002 \\ & 50003 \\ & 50005 \end{aligned}$ |  |  |  | 75 |
| 1168671 |  |  |  |  |  |  | 1 | A |  |  |
| 11 L 9961 |  |  |  |  |  |  | 3 | A | A |  |
| 1168681 | 10025 | 25 | C | . 75 |  |  | 5 | $B$ | 8 |  |
| II L8691 | 10040 | 40 | C | .75 | 114886 | 50008 | 8 | C |  |  |
| 1148701 | 10050 | 50 | D | . 75 | 112889 | 50020 | 20 | D | 5 | .75 |
| 1168711 | 101 (\% | 100 | E | . 90 | 112890 | 50025 | 25 | F | F | .81 |

## VBC TYPE VIBRATOR BUFFER CAPACITORS



## MICA CAPACITORS



Molded in low-loss bakelite coses

An excellent selection of extremely stable capacitors. for a wide variety molded in low-loss pact and precision-made, these capacitors are molded in low-loss bakelite. impregnated and color-coded. Feature are ideal for IV, low-power transmitters. Types 1468 LS and 1467 LS 1652 L is a heavy-duty mica capacitor, with threaded mounting. I ype

## TYPE 1469-SILVERED MICA

500 WVDC. $\pm 5 \%$ tolerance

| Stock No. | Mmt | $\begin{aligned} & \text { MIL } \\ & \text { Mo. } \end{aligned}$ | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 12 L 300 | 5 | CM-20C-050 |  |
| 12 L 301 | 10 | CM-20C-100 |  |
| $12 L 302$ | 12 | CM-20C-120 | 24 |
| 12 L 303 | 15 | CM-20C-150 |  |
| 12 L 304 | 18 | CM-20C-180 |  |
| 12 L 305 | 20 | CM. 20C-200 |  |
| $12 L 306$ | 24 | CM-20C-210 |  |
| 12 L 307 | 27 | CM-20C-270 | 24 |
| 12 L 308 | 30 | CM-20C-300 |  |
| 12 L 309 | 33 | CM-20C. 330 |  |
| 12 L 11 | 39 | CM-20C-390 |  |
| 12 L 12 | 43 | CM-20C-430 | 24 |
| 12 L 313 | 47 | CM-20C-470 |  |
| 12 L 14 | 50 | CM-20C. 500 |  |
| 12 L 15 | 51 | CM-20C-510 |  |
| $12 L 316$ | 56 | CM-20C.560 | .24 |
| 12 L 317 | 62 | CM-20C-620 |  |
| 12 L 18 | 68 | CM-20C-680 |  |
| $12 L 319$ | 75 | CM-20C. 750 |  |
| 12 L 20 | 82 | CM-20C-820 | 24 |
| 12 L 22 | 100 | CM-20C-101 |  |
| 12 L 323 | 150 | CM-20C-151 |  |
| 12 L 224 | 180 | CM-20C-181 |  |
| 12 L 225 | 200 | CM-200-201 | 27 |
| 12 L 326 | 220 | CM-200-221 |  |
| 12 L 27 | 240 | CM-200-241 |  |
| 12 L 228 | 270 | CM-200-271 | 33 |
| 126329 | 300 | CM-200-301 | 33 |
| 12 L 30 | 360 | CM-200-361 |  |

TYPE 1464-SILVERED MICA
B 500 WVDC , except $* 300,75 \%$ $53 / 64 x^{3} / 6 x^{2} / 64$. Shpg. wi., 2 oz


## TYPE 1467 LS

(B) 500 WVDC. except *300
(1) $20 \%$ tolerance. $5 \% x^{5} / 4 \times x / 2 z^{\prime}$

| Stack No. | Mmf | $\begin{aligned} & \text { MIL } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 2 L 78 | 560 | CM-308-561 |  |
| $12 L 779$ | 680 | CM-308-681 |  |
| $12 L 781$ | 1000 | CM-308-102 |  |
| $12 L 782$ | 1500 | CM-308-152 |  |
| $12 L 783$ | 2000 | CM |  |
| $12 L 784$ | 2200 | CM-30B-222 |  |
| $12 L 785$ | 2500 | CM-308-252 |  |
| $12 L 786$ | 2700 | CM-30B-272 | . 30 |
| $12 L 787$ | 3000 | CM. $308 \cdot 302$ |  |
| 12 L 788 | 3300 | CM-308.332 |  |
| $12 L 789$ | 4700 | CM. 308-472 | . 3 |
| $12 L 790$ | 5000 | CM-308-502 | . 42 |
| 12 L 71 | 5600 | CM-30B-562 | . 42 |
| $12 L 794$ | 8200 | CM-308.822 | 6 |
| $12 L 795$ | 10000* | CM-30B-103 |  |

TYPE 1652 L [C] 2500 WVDC. $11 / 4 \times 15 \%$ tolerance.

| Stock <br> No. | Mid. | NET <br> EACH |
| :---: | :---: | :---: |
| $12 L 485$ | .0001 | 1.14 |
| $12 L 486$ | .0002 | 1.26 |
| $12 L 490$ | .0005 | 1.53 |
| $12 L 491$ | .001 | 1.74 |
| $12 L 493$ | .002 | 2.55 |
| $12 L 496$ | .005 | 3.72 |
| $12 L 497$ | .01 | 4.38 |

## SRE BANTAM ELECTROLYTICS



Extremely sinall dry electrolytic. metal tubular capacitors handle full-sized loads. Ideal for limited snace applications as in hearing aids, portable rados, TV receivers voltage miniaturized circults. Hermetically-sealed in aluminu m cans and furulshed with an external wax-impregnated insulatink sleeve. Negative grounded to can. $0^{\circ} \mathrm{C}$ to $85^{\circ} \mathrm{C}$ at rated voleages. Available in a wide range of capacitances and DC working voltages. Shpg. wt., 2 oz .

| Code | Slue | Code | Sixe |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \hline \mathbf{A} \\ & \mathbf{B} \\ & \mathbf{C} \end{aligned}$ | $\begin{aligned} & 3 / 8 \times 1{ }^{\circ} \\ & 3 / 8 \times 11 / 8 \\ & 6 \times 158 \end{aligned}$ | $\begin{aligned} & \mathbf{D} \\ & \mathbf{E} \\ & \hline \end{aligned}$ | $\begin{aligned} & 1 / 2 \times 1^{\circ} \\ & 1 / 2 \times 11 / 8^{\circ} \\ & 1 / 2 \times 13 / 8^{\circ} \end{aligned}$ |


| Stock | Mfd. | WVDC | Code | EA. | Stock | MId. | WVDC | Code | EA. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13L834 | 100 200 | 3 | $\stackrel{\text { A }}{\text { A }}$ | . 66 | 132824 | 25 | 25 | A | . 60 |
| 132837 | 500 | 3 | F | . 64 | +3L825 | 50 100 | 25 | D | 66 |
| 134842 | 25 | 3 | A | . 51 | 13 1847 | 10 | 50 | $\stackrel{\text { A }}{ }$ | . 81 |
| 134838 | 50 | 6 | E | . 57 | 134848 | 2 | 50 | A | . 54 |
| 13 L820 | 100 | 6 | F | . 72 | 134849 | 5 | 50 | A | . 60 |
| 134843 | 250 | 6 | A | . 81 | $13 L 827$ | 10 | 50 | A | . 60 |
| 134821 | 50 | 12 | B | . 60 | 134828 | 15 | 50 | E | . 60 |
| 134822 | 100 | 12 | D | . 72 | 134829 | 25 | 50 | D | . 63 |
| 136823 | 200 | 12 | F | . 81 | 132830 | 5 | 150 |  |  |
| 13L844 | 5 10 | 25 25 | A | . 60 | 136831 | 10 20 | 150 150 | C | . 63 |
| 134846 | 20 | 25 | A | . 60 | 134833 | 25 | 150 | $\underset{F}{\text { F }}$ | . 75 |

## ＂BLUE BEAVER＂TUBULAR ELECTROLYTICS

Iubupar electrolytic capacitors specifically designed for service re－ placement applications．Especially popular for cramped space Installa－ cions in TV receivers，hearing aids，minature radios and other small tion against heat and humidity，and have cardboard outer sleeves．All have a common negative terminal which is grounded to the can．Rated for operation up to $+85^{\circ} \mathrm{C}$ ．except 500 volt types which are rated for
cemperatures up to $+65^{\circ} \mathrm{C}$ ．Av．shpg．wt． 4 oz ．

|  | SINGLE SECTION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stock No． | Type | Mid | W．V | size In． | NET |
| 19 L 202 | 5－6 | 5 | 6 | 3／6x1／16 | ． 48 |
| 19 L 203 | 25－6 | 25 | 6 | 3／2x1／66 | 51 |
| 19 L 204 | 50－6 | 50 | 6 | $3 / 81 k_{6}$ | ． 57 |
| 192205 | 100－6 | $\begin{array}{r}100 \\ 250 \\ \hline\end{array}$ | 6 | 1／2x1．16 | $\begin{array}{r}72 \\ 81 \\ \hline\end{array}$ |
|  |  |  |  | 11／2x1766 | 93 |
| 19 L 286 | 100006 | 1000 | 6 | $5.811 / 16$ | 1.14 |
| 19 L 287 | 2000－6 | 2000 | 6 | $3 \times 2 \times 2$ | 1.38 |
| 19 l 272 | $\begin{aligned} & 250-15 \\ & 500-15 \end{aligned}$ | $\begin{aligned} & 250 \\ & 500 \end{aligned}$ | 15 | $1 / 3 \times 11 / 6$ | 1.95 |
| 19 L 274 | 1000－15 | 1000 | 15 | 3／6x 111／6 $^{1}$ | 1.38 |
| 19 L 284 | 2000－15 | 2006 | 15 | 3／4x2 |  |
| 19 L 207 | 100－15 | 100 | 15 | 1／2×11／16 | 5 |
| 19 L 216 | 10－25 | 10 | 25 | 3／61146 | ． 60 |
| 19 L 217 | 20－25 | 20 | 25 | 3／8×1价 | ． 60 |
|  | 25－25 | 25 | 25 | 3／3×11／6 | ． 60 |
| 19 L 219 | 50－25 | 50 | 25 | $1 / 3 \times 11 / 16$ |  |
| 19 L 208 | 100－25 | 100 | 25 | 1／3 $\times 1 / 16$ | ． 81 |
| 19L270 | 250－25 | 250 | 25 | $1{ }^{1217 / 16}$ | 1.02 |
| 19 L 271 | $5(8)-2.5$ | 500 | 25 | 5／8111／6 | 1.38 |
| 19 L 209 | 1－50 |  | 50 | 1／9x1168 | ． 54 |
| 19 L 210 | 2．50 | 2 | 50 | 3／8ㅈN16 | ． 54 |
| 19 L 11 | 4－50 |  | 50 | 3／8x11／6 | ． 60 |
| 19 L 222 | $5-50$ $10-50$ | 5 | 50 50 |  | ． 60 |
| 19L224 | 25．50 | 25 | 50 | 1／2x11／6 | ． 63 |
| 19 L 147 | 100－50 | 100 | 50 | $1 / 2 \times 1$ 价 | ． 84 |
| 19 L 148 | 150－50 | 150 | 50 | $5 / 8{ }^{11} 96$ |  |
| 19 L 149 | 250.50 | 250 | 50 | 3／4196 | 1.05 <br> 1.44 |
| 19L269 | 500－50 | 500 | 50 | 1／2x111／16 | 1.44 |
| 19 L 214 | 4－150 | 4 | 150 | 3／9x11／6 | ． 60 |
| 19 L 249 | 8－150 | ${ }_{10}^{8}$ | 150 150 | $1 / 2 \times 11 / 26$ | ． 63 |
| 19 L 226 | －${ }_{\text {12－150 }}^{12-150}$ | 12 | 150 | － $1 \times 2 \times 1 / 16$ | ． 63 |
| 19 L 248 | 16－150 | 16 | 150 | $1 / 2 \times 17 / 16$ | ． 69 |
| 19 L 225 | 20－150 | 20 | 150 | 1／2x17／6 | ． 72 |
| 19 L 145 | 25－150 | 25 | 150 | $3 / 8 \times 1 / 6$ | ． 75 |
| 14 L 045 | 30150 | 30 | 150 | 3x146 | ． 78 |
| 14 L 046 | 40－150 | 40 |  | 3／4x11／64 | ． 81 |
| 14 L 047 | 50－150 | 50 | 150 | 3／4x111／16 | ． 84 |
| 19 L 146 | 60－150 |  | 150 | 7／8x11／16 | 90 |
| 14 L 039 | 80－150 | 80 | 150 | 7／0x11／6 | ． 96 |
| 14 L 056 | 100－150 | 100 | 150 | 7／8x ${ }^{2}$ | 1.05 |
| 14 L 1457 | 150150 $200-150$ | 150 | 150 150 | ${ }_{1 \times 3}^{1 \times 21 / 6}$ | 1.32 |
| 14 L 543 | 300－150 | 300 | 150 | 1x31716 | 1.53 |
| 19 L 227 |  |  | 250 | 1／2x1／16 |  |
| 19 L 228 | 8.250 | 8 | 250 | $1 / 2 \times 1 / 16$ | ． 69 |

## A SINGLE SECTION

TYPE NLW＂ELECTOMITE＂SUBMINIATURE ELECTROLYTICS Tiny aluminum foil capacitors her－ metically spaled into ultra－small tubu－ ized or printed circuitry in miniatur－ lzed equipment．Cans are tightly fitted with an outer transparent plastic sleeve for freedom from＂shorts＂with adjacent components．Terminal connections are securely welfed．Surge voltages may be $20 \%$ higher than working voltages．Tolerance：$-10 \%$ to $+150 \%$ ．Lrakage： $0.1 \mu \mathrm{a} / \mathrm{mfd}$／ volt，or less．Operating temperature：

| Stock No． | Mfd | $\begin{aligned} & \text { Slxe } \\ & \text { In. } \end{aligned}$ | $\begin{gathered} \text { NET } \\ E A C H \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| 18 L 640 | 25 | 1／4x | ． 75 |
| 196612 | 50 | 1／4 $x^{3}$ |  |
| 19 L 775 | 100 | $3 / 0 x^{3}$ | 84 |
| 19 L 595 | 125 | $3 / 8 \times 5 / 8$ | ． 84 |
| 18 L 641 | 200 | $3 / 6 \times 7$ | ． 90 |
| 19 L 776 | 250 | $3 \times 1$ | ． 96 |
| 191777 | 450 | 3／8×11／2 | 1.05 |
| 6 WVDC |  |  |  |
| 18 L 64 | 10 | 3／6x | 80 |
| 15 L 994 | 15 | 1／4x | 101 |
| 19 L 74 | 30 | 1／4x | 4 |
| 19 L 597 | 125 | 5／8x $3 / 4$ | 90 |
| 10 WVDC |  |  |  |
| 181652 | 25 | 1／4x ${ }^{5 / 8}$ | 87 |
| $18 L 653$ | 50 | 5．4x ${ }^{3 / 4}$ |  |
| 19 L 773 | 125 | $3 / 8 \times 7 / 8$ | ． 1 |
| 15 WVDC |  |  |  |
| 18 L 655 | 5 |  | 84 |
| $18 L 656$ | 10 | 1／4x ${ }^{3 / 3}$ | ． 84 |
| $18 L 657$ | 20 | 1／4 $\times^{5 / 3}$ | ． 87 |
| $18 L 658$ | 30 | 5／16x ${ }^{5 / 6}$ | ． 90 |
| 191765 | 40 | 3／8× ${ }^{3 / 8}$ | ． 93 |
| 19 L 766 | 50 | $3 / 6 x^{3 / 4}$ | 96 |
| $19 L 767$ | 75 | $3 / 8 \times 3 / 4$ | 1.02 |
| 19 L 768 | $1(4)$ | 3／6x ${ }^{1 / 2}$ | 1.08 |
| 19 L 770 | 150 | 3／8×1／4 | 1.17 |
| 19 L 772 | 2010 | $3 / 8 \times 11 / 2$ | 1.26 |



| StockNo | Type | Mid | w．V． | Size In | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 19 L 220 | 2202 | 20－20 | 25 | 18，$\times 1716$ | ． 84 |
| 19 L 250 | 115 | 10－10 | 50 | $11.6 \times 13$ | 84 |
| 19 L 252 | 2215 | 2020 | 150 | 13／4x ${ }^{1} 1 / 1 /$ |  |
| 19 19254 | 4215 | － $40-20$ | 150 | 15／101 | 1．08 |
| 19 L 257 | 4415 | 40.40 | 150 | 10， $10 \times 29$ | 1 |

（B）DUAL SECTION（Cont＇d）

| StockNo． | Type | Mid | w．V． 1 | Size In | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 19 L 258 | 5315 | 50－30 | 150 |  |  |
| 19 L 259 | 5515 | 50.50 | 150 | $11 / 5 \times 2$ |  |
| 19 L 26 | 8415 | 80.40 | 150 | $11 / 1 x^{1}$ |  |
| $18 L 609$ 196288 | 0183.71 | 100－50 | 150 |  |  |
| $18 \mathrm{L610}$ | 0196 | 200－5 | 200 | 183916 | 2.10 |
| 19 L 289 | $8{ }^{2} 25$ | 8－8 | 250 | 11 价 5 |  |
| 192263 | 2225 | 20－20 | 250 | 11／6x1／4 | 1 |
| 19 L 296 | 3325 | 30－30 | 250 | $11 / 10{ }^{2}$ |  |
| 18 L 614 | 0286 | 50－100 | 300 | 13／6x ${ }^{\circ}$ 仵 | ．15 |
| 9L265 | $8{ }^{1} 45$ | 8.8 | 450 | 15 的1316 | 1.02 |
| L 268 | 2245 | 20－20 | 450 | 11／4x $\mathrm{c}^{3} 14$ |  |
| 19 L 297 | 3345 | $30-30$ | 450 | $11 / 10 \times 34$ | 1.80 |
| 192221 | 4445 | 40－40 | 450 | 131343 | 2.04 |
| $181617$ | 0652 | 40． 50 | $450,5$ |  | $80$ |

TRIPLE SECTION

| Stock No． | Type | Mid | W．V． | Sizein fn． | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 191230 | 22215 | 20－20－20 | 150 | ／8x13／10 | 1.32 |
| 191231 | 32 V 215 | 30－25－20 | 150 | \％ 12 | 1.35 |
| 19 L 33 | 42215 | 40－20－20 | 150 | ｜x｜1516 | 1.35 |
| $\begin{aligned} & 19 L 234 \\ & 91235 \end{aligned}$ | 43215 44215 | $40-30-20$ $40-40 \cdot 20$ | 150 150 |  | 1.41 1.41 |
| 191236 | 44415 | $40 \cdot 40 \cdot 40$ | 150 | 1×23／16 | 1.47 |
| 191298 | 84215 | 80－40－20 | 150 | 1×3 | 1.65 |
| 19 L 238 | 3315 C | 30－30． 20 | 150． 25 | 1／42 | 1.32 |
| 191239 | 4215C | 40－20． 20 | 150． 25 | 1x｜${ }^{11 / 16}$ | 1.29 |
| 191241 | 4415C | 40－40． 20 | 150.25 | ｜x｜${ }^{11 / 16}$ | 1.35 |
| 191242 | $4415 \times 25$ | 40－40． 250 | 150． 10 | $1 \times 23 / 16$ | 1.56 |
| 191243 | 5315C | 50－30． 20 | 150． 25 | 1×1 ${ }^{11 / 16}$ | 1.41 |
| 191245 | 8415 C | 80－40， 20 | 150． 25 | 1×21／2 | 1.59 |
| 191276 | 5315C10 | 50－30， 100 | 150． 25 | $1 \times 2$ 3／10 | 1.47 |
| 191279 | 4225C | 40－20． 20 | 250， 25 | $1 \times 21 / 10$ | 1.50 |
| $18 L 621$ | 0185 | 40－40， 40 |  | 116x3 |  |
| $18 L 626$ | 1411 | 30．50． 100 | 1450．150． 2 | $11 / 4 \times 3$ | 2.22 |

## （C）OUADRUPLE SECTION

\section*{| Slock No．Type Mrd | W．V． | Size in In． | NET |
| :--- | :--- | :--- | :--- | 19290 $19 L 293$ 44315C 46 － $40-30.20 \quad 150.25 \quad 1221 / 21.80$


}

## ECPB MINIATURIZED ELECTROLYTICS

Aluminum－foll units sealed in phenolic cases with single ended parallel leads．Well suited for transiatorized and printed circuitry．Toler－ ance
$-20^{\circ}$ to $+65^{\circ} \mathrm{C}$ ．Av，slipg．wt．， 2 oz ．

| Stock No． | $\begin{aligned} & \text { Mir's } \\ & \text { Type } \end{aligned}$ | Mid | $\begin{aligned} & \text { Size } \\ & \text { In. } \end{aligned}$ | $\begin{aligned} & \text { NET } \\ & \text { EA. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 13 L 480 | 15 | 50 | $3 / 6$ | 93 |
| 18210 | 17 | 100 | 3／8x ${ }^{7 / 8}$ | 1.05 |
| 18 L 21 | 18 | 125 | $7{ }^{7} \times 6 \times 7 / 8$ | 1.05 |
| 18 L 212 | 19 | 150 | 7／6x ${ }^{7 / 8}$ | 1.05 |
| 18 L 213 | 20 | 175 | $1 / 3 x^{7 / 8}$ | ． 08 |
| 18.214 | 21 |  | $1 / 3 \times 7 / 6$ | ． 08 |
| 18 L 226 | 22 | 250 | $1 / 181$ | 1.17 |
| $18 L 227$ | 23 | 300 | 1／2x！ $1 / 4$ | 1.20 |
| 18 L 228 | 24 | 350 | $1 / 2 \times 1 / 4$ | 1.23 |
| 6 WVDC |  |  |  |  |
| 136481 | 115 | 50 | 3／3x ${ }^{1 / 4}$ | ． 93 |
| 13 L 482 | 117 | 100 | 1／61／4 | 1.05 |
| 13 L 483 | 119 | 150 | 1／2x $\times 1 / 3$ | 1.14 |
| 13 L 484 | 121 | 200 | 1／781 | 1.17 |
| 13 L 485 | 122 | 250 | 1／2×11／4 | ． 20 |
| 15 WVDC |  |  |  |  |
| 18 l 16 | 401 | 1 | $1 / 6 x^{3 / 6}$ |  |
| 18.117 | 402 | 2 | 1／3x ${ }^{3 / 8}$ | 87 |
| 18 ¢ 118 | 403 | 3 | $3 / 8 x^{3 / 4}$ | 87 |
| 18L159 | 404 |  |  |  |
| 18 L 169 | 405 | 5 | $30 \times$ |  |
| $18 L$ $18 L 160$ 181 | 406 | 8 | 1／8x $\times^{5 / 4}$ | 90 |
| 18 L162 | 408 | 10 | $3 / 3 \times 5 / 8$ |  |
| 8 L 163 | 409 | 15 | 3／6x ${ }^{3 / 6}$ |  |
| 18 L 164 | 410 | 20 | $3 / 8 x^{3 / 8}$ |  |
| $18 L 168$ | 411 | 25 | $3 / 6 \times 5 / 6$ | 93 |
| 18 L 169 | 412 | 30 | 3／8x $5 / 8$ |  |
| 18L175 | 413 | 35 | 3／8x ${ }^{3 / 4}$ | ． 93 |
| 18 Cl 176 | 414 | 40 | $3 x^{7 / 8}$ | 96 |
| 186177 | 415 | 50 | $3,3{ }^{3} / 6$ |  |
| 18 L 178 | 416 | 75 | Ftx | 1.08 |
| 18 C 179 | 117 | （0） | $1 / 2 \times 16$ | 1.17 |



## 15 WVDC（Cont＇d）

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { Mir's } \\ & \text { Type } \end{aligned}$ | Mid | $\begin{aligned} & \text { Size } \\ & \text { In. } \end{aligned}$ | $\begin{gathered} \text { NET } \\ \text { EA. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| 18 L 198 | 418 | 125 | 1／2x1 | 20 |
| 18 L 199 | 419 |  | 1／2x $11 / 4$ |  |
| 18 L 208 | 420 | 175 | 1／2x11／4 | 26 |
| 18 L 209 | 421 | 200 | 2 x |  |
| 25 WVDC |  |  |  |  |


| 13 L 486 | 602 | 2 | $13 / 8 \times 3 / 6$ | 90 |
| :---: | :---: | :---: | :---: | :---: |
| $13 L 487$ | 605 | 10 | $3{ }^{3} 8$ |  |
| 13 L 488 | 608 | 10 | $3 / 8 \times 5 / 8$ |  |
| 13 L 489 | $611$ | 25 50 | 3／9x $x^{7 / 8}$ | ． 05 |
| 13 L 491 | 617 | 100 | $1 / 2 \times 1$ |  |

50 WVDC

| So wvoc |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 18 L 229 | 808 | 10 | 3／6x $\mathrm{x}^{5 / 8}$ | 9 |
| 18 L 230 | 809 | 15 | $3 / 6 x^{7 / 6}$ | ． 99 |
| 18 L 306 | 810 | 20 | 7／16x ${ }^{3 / 4}$ |  |
| 18 L 307 | 811 | 25 | 7／16x ${ }^{1 / 7}$ | 99 |
| 18 L 308 | 812 | 30 | 7／46x ${ }^{7 / 6}$ | 1.02 |
| 18L309 | 813 | 35 | 1／2x ${ }^{7 / 6}$ | 1.05 |
| $18 L 317$ | 814 | 40 | $1 / 2 \times 7 / 18$ | 1.0 |
| 18 L 318 | 815 | 50 | 1／2x1 | 1.05 |
| 181319 | 816 | 75 | 1／2×11／4 | ． 1 |


| 8 | 901 | 1 | 3／6x5／2 |  |
| :---: | :---: | :---: | :---: | :---: |
| 18 L 328 | 902 | 2 | 3／8x\％ | 5 |
| 18 L 329 | 903 | 3 | 3／0x | ． 75 |
| 18 L 333 | 904 | 4 | \％x |  |
| 18 L 334 | 905 | 5 | 1／8 $\mathrm{x}^{7 / 8}$ | ． 78 |
| 18 L 337 | 906 | 6 | $7 / 6 \times 3 / 4$ | ． 78 |
| 18 L 338 | 907 | 8 | 3／6x $\times 1 / 5$ | ． 78 |
| 18 L 339 | 908 | 10 | Sex 1 | ． 81 |
| 18 L 398 | 910 | 15 | $1 / 2 \times 1$ | ． 81 |
| 18 L 399 | 911 | 20 | $1 / 2 \times 11 / 4$ |  |

Cornell-Dubilier Capacitors

NEW "BLACK CAT" PKM CAPACITORS
Dual delectric, extra hard molded tubulars combining "Mylar" and Kratt dielectrics. Highly reliable; moisture resintant. Operate from $-40^{\circ}$ to $+125^{\circ} \mathrm{C}$. without derating.
Tol. $=10 \% .2 \mathrm{oz}$. 200 WVDC


## 1600 WVDC

| 14L | 001 | $4{ }^{\text {a }}$ | $.39$ | 14 | 6\$12 | . 012 |  | 42 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $14.25316 \mathrm{Dz2}$. | . 0022 | <11\% |  | 141261 | 16515 | . 015 |  |  |
| 14255416039 1425516047 | . 00047 | 3/1/11/0, |  | 14262 | 16 S 22 | . 022 |  |  |
| 14L25516D47. | . 0047 | 3/6x11/4* |  | 14L263 | 16 S33 | . 033 |  |  |
| 1425616056 | . 0056 | 1/8×11/4* | . 39 | 14L264 | 16S47 | . 047 | $3 \times 17 /{ }^{1 / 2}$ |  |
| 14125716068. | . 0068 | /10x11/* | . 39 | 14.265 | 16556 | . 056 | $11 / 6 \times 11516^{\circ}$ | 42 |
| 1425816082 $14.259 .16 S 1$ | . 0082 | $\times 11 /{ }^{\circ}$ | . 39 | 14L266 | 16 S 68 | . 068 | $3 / 4 \times$ |  |

## 6000 WVDC

 10,000 WVDC
14L269100T5 000 12,500 WVDC

## DPMS PAPER "MYLAR"



Quality side-lead tubulars offering high insulation resistance, high operating temperature, range, and dualdielectric. Constructed with "Mylar" polyester. film
tokether with a film of the highest grade paper. The tokether with a film of the highest grade paper. The combination of these two substances provides a compact
capacitor that is Ideal for use in printed and transistorcapacitor that in ideal for use in printed and transistor
ized
circuits. "Fixfi" Impregnant will not crack soften or flow. even at maxinum operating temperatures. Wire leads are held rigidly at fixed spacings Tough. durabie enoxy case has $h_{2 g h}$ humidity resist unce. hing dielectric strength against grounding. and is unaffected by accidental contacts with soldering irons. Temperature range: $-5.5^{\circ} \mathrm{C}$ to $+125^{\circ} \mathrm{C}$. Derate voltage $25 \%$ at $+125^{\circ} \mathrm{C}$ Capacity tolerance: $=10 \%$. Av. shpg. Wt.. 4 oz

## 200 WVDC

| Stock | Type | Mrd | Size | EA. | Stock | Type | Mld | Size | EA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 191785 \\ & 194781 \\ & 191782 \end{aligned}$ | $\begin{aligned} & 2 S 2 \\ & 2 S 47 \\ & 2 \$ 5 \end{aligned}$ | $\begin{aligned} & .02 \\ & .047 \\ & .05 \end{aligned}$ |  | $\begin{aligned} & 15 \\ & .18 \\ & 18 \end{aligned}$ |  | $\begin{aligned} & 2 \mathrm{P} 1 \\ & 2 \mathrm{P} 15 \\ & 2 \mathrm{P} 25 \end{aligned}$ | .15 <br> .15 <br> 25 |  | . 21 |
| 400 WVDC |  |  |  |  |  |  |  |  |  |
| 191787 | $4 \mathrm{S1}$ | . 01 |  |  | 19L790 | 4 Pl |  |  | 24 |
| 9L788 | $4 \mathrm{~S}^{2}$ | . 02 | ${ }^{25} 96 x^{53,4}$ | .18 | $19 L 793$ | 4 P 22 | 22 |  |  |
| $19 L 792$ | 4S22 | . 022 |  | - 1 | $19 \mathrm{L791}$ | 4 P 25 | . 25 | 21 | . 36 |
| 19 L 789 | 4S5 | . 05 | 27 | 21 |  |  |  |  |  |
| 600 WVDC |  |  |  |  |  |  |  |  |  |
| 16L851 | $6{ }^{61}$ | 001 | $11 / 4 x^{1 / 46}$ | 5 | $16 L 858$ | 6075 | . 0075 |  |  |
| 16 L852 |  | . 0015 |  |  | 162859 | $6 \mathrm{~S}_{1}$ | . 01 |  |  |
| $16 L 853$ | $6{ }^{6} 2$ | . 002 | $115 \times 1166^{\circ}$ |  | $16 L 860$ |  |  |  | -18 |
| 191.794 |  | . 0022 | $11,4 \times 1106$ | . 15 | $16 L 861$ | 6S22 | . 022 |  |  |
| $16 L 854$ | $6{ }^{6} 3$ | . 103 | $3{ }^{11} 105^{6}$ | .15 | $16 L 868$ |  | . 03 | 7 |  |
| 19 L 795 | 6D33 | C033 | 3/81/16 | . 15 | $16 L 862$ | 6 633 | . 033 | $7 / 16 \times 15 / 2^{\prime \prime}$ |  |
| 16 L 850 | 604 | . 004 | $1 / x^{14 / 40^{\prime \prime}}$ | . 15 | 16L863 | 6S47 | . 047 | $31.6 \times 1{ }^{15} 9$ | 2 |
| $16 L 855$ | 6 D 47 | . 0047 |  | . 15 | $16 L 864$ | 6S5 | . 05 |  | 2 |
| 16485 | 6D5 | . 005 |  | . 15 | $16 L 865$ | 6S68 | . 068 | ${ }^{35} 6 \times 19{ }^{\text {a }}$ | . 27 |
| $16 L 857$ $16 L 867$ | $6 D 6$ 6068 | . 006 |  |  | 16 L866 | $61^{1} 1$ |  | $41 / 6 \times 15 / 16^{\circ}$ | . 27 |





## TUBULAR CAPACITOR KITS

PKM Klt. Assortment of 80 PKM "Black-Cat" cubulars in the most popular values. Includes: 10 each. . $001, .005 .02$. 047 and $11 \mathrm{mfd}: 12$ ances of $\pm 10^{0 \%}$. In clear plastic hinged box $17 / 4 \times 11 \times 61 / 2^{\prime \prime} .31 \mathrm{bs}$. 15.60
DPMS KIt. Same values, ratincs and plastic box as above, but includes 80 dipped Paner and "Mylar" DPMS tubulars. Shpg, wt.. 3 lbs.
I8 R 343. NET.

## WMF "MYLAR" FILM-ENCASED TUBULAR CAPACITORS

Combine small size with ex. ceptional strensth and durawide temperature ramge and long life. Heature higli insula tion resistance: low thower fac tor. Temprange: $-55^{\circ}$ to $+125^{\circ} \mathrm{C}$. Derate voltage $10^{\circ} \%$ at $100^{\circ} \mathrm{C}$ $50 \%$ at $125^{\circ} \mathrm{C} . ; \mathrm{full}$ voltage to $85^{\circ} \mathrm{C}$. Tolerance. $=10 \% . \mathrm{Av}$. wt., 2 oz.
100 WVDC

| Stk. No. | Mid | SIze | EA. | Sth. No. | Mifd | Sizo | EA. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $16 L 975$ | . 101 |  |  | $16 L 985$ | .047 | $17 / 4 \times 1 / 4{ }^{\text {" }}$ | 27 |
| $16 L 976$ | . 015 |  |  | $16 L 986$ | . 068 | $7{ }^{7} \times 1 / 4$ | 27 |
| 164977 | . 0022 | $5122 \times 1 / 2^{\prime \prime}$ | .21 | $16 L 987$ | 1 | $194 \times 7 /{ }^{\circ}$ | 36 |
| $16 L 978$ | . 0033 |  |  | 16 L988 | 15 | 21/4, ${ }^{7 / 8}$ | 36 |
| $16 L 979$ | . 0047 |  |  | 164989 | 22 | $254 \times 1$ " | 39 |
| 16 L 980 | . 0068 | $11 / 4 \times 1 / 2$ | .21 | $16 L 990$ | 33 |  |  |
| 16 L 981 | . 01 | $136 \times 1 / 2$, | 21 | $16 L 991$ | . 47 | 1/9301/* | 51 |
| 16 L 982 | . 015 | ${ }^{15} / 8 \times 1 /{ }^{\text {" }}$ | .21 | 164992 | . 68 | 31/4x11/4* | 57 |
| 16 L 983 | . 022 | $912 x^{3}$ | 24 | 164993 | 1.0 | 3/8×11/2 | 87 |
| 161984 | . 033 | 196x ${ }^{\prime \prime}$ | 24 |  |  |  | , |


| 200 WVDC |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sth. No. | MId | Size | EA. | Sth. No. | Mid | Slze | EA. |
| $16 L 877$ | . 001 | $5 / 4 x$ |  | 16 L 888 | . 068 | $17 / 2 \times 3 / 4$ | 27 |
| $16 L 878$ | . 0015 | Stax |  | $16 L 889$ | . 1 | $11 / 32{ }^{1 / 8}$ | 36 |
| $16 L 879$ | . 0022 | $5 / 4 \times 1 / 2$ |  | $16 L 890$ | . 15 | $1 / 8 x^{7 / 8}$ | 36 |
| 16 L 880 | . 0033 | $11 / 4 \times 1 / 2$ | 21 | $16 L 891$ | 22 | $1 / 2 \times 11 /$ | . 3 |
| 162881 | . 0047 |  |  | 164892 | . 33 |  | . 45 |
| 164882 | . 0068 | $13 / 4 \times 1 / 2{ }^{\prime \prime}$ |  | 161893 | . 47 | $19 / 38 \times 1 /{ }^{\prime \prime}$ | 5 |
| 164883 | . 01 | 15/64 1 $^{1 / 3}$ | .21 | $16 L 894$ | 68 | $21 / 32 \times 15 / 1$ | 57 |
| $16 L 884$ | . 015 | 1\% $6 \times 1 / 2$ | . 21 | $16 L 895$ | 1.0 | $3 / 4 \times 11 / 4$ | . 87 |
| 164885 | . 022 | 2/82 $x^{5 / 3}$ | .24 | 164897 | 1.5 | 29/3x ${ }^{1 / 1 / 4}$ | 1.23 |
| 164886 | . 033 | $17 / 4 x^{3 / 4}$ | .24 | $16 L 898$ | 2.0 | $1 \times 17 /{ }^{\text {a }}$ | 1.50 |
| 161887 | . 047 | $5 / 8 \times 3 /{ }^{2}$ | . 27 | 16L89 |  | $1 \times 1$ | 1.5 |


| Stk. No. | Mfd | Sixe | EA. | Stk. No. | M/d | Sixe | EA. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16 L 226 | . 001 | \%2x ${ }^{3 / 4}$ | . 21 | $16 L 837$ | 068 | 2368x19 | 33 |
| 161827 | . 0015 | $88 \times 5$ | .21 | 162838 | 1 | 1/73x1" | . 33 |
| 161828 | .0022 | 52x ${ }^{\circ}$ | .21 | 162839 | 15 | $31 / 6 \times 11 / 4^{4}$ | . 36 |
| $16 L 829$ | . 0033 | 146x ${ }^{1 / 4}$ | . 24 | 16 L 840 | 22 | 9/6 $\times 13 /$ | . 42 |
| 16 L 830 | . 0047 | $11 / 4 \times 5 / 8{ }^{\prime \prime}$ | . 24 | 16 L 41 | 33 | 193201\%" | . 66 |
| 16 L 831 | . 0068 | $1 / 4 \times 5 / 3^{\prime \prime}$ | .24 | $16 L 842$ | . 47 | 45/6x15\% | . 78 |
|  | . 01 | $19.4{ }^{19}$ |  | 16 L 443 | 68 | $51 / 6 \times 13 / 4{ }^{4}$ | 96 |
| 161833 | . 015 | 21/4x ${ }^{3 / 4}$ |  | 161844 | 1.0 | $7 / 1 \times 2^{\circ}$ | 1.20 |
| $16 L 834$ | . 022 | $5116 x^{3 / 4}$ | 27 | $16 L 846$ | 1.5 | $31 / 3 \times 21 / 4$. | 1.56 |
| $16 L 835$ | . 033 | $11 / 32 \times 78$ |  | 164847 | 2.0 | $11 / 4 \times 21 / 4$ * | 2.04 |
| 16 L 836 | 047 | $13 / 3 x^{7 / 8}$ | 30 |  |  |  |  |


| Sek. No. | Mfd | Siz* | EA. | Stk. No.l | Mfd | Slio | EA. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 20 L 604 | . 001 | $11 / 6 \times 1 / 4$ | . 24 | 201615 | . 068 | $1 / 2 \times 1$ | . 36 |
| $20 L 605$ | . 0015 | 1464 $1 / 4$ | .24 | $20 L 616$ | . 15 | 33/4x13/4 | 4 |
| 206606 | . 0022 | $316 x^{1 / 4}$ | . 24 | $20 L 617$ | .15 | $5 / 8 \times 11 / 8$ | 4 |
| $20 L 607$ | . 0033 | $11 / 4{ }^{3} /{ }^{\prime \prime}$ | 24 | 201618 | 22 | $21 / 9 \times 13 / 8{ }^{*}$ | 5 |
| $20 L 608$ 201609 | . 0047 | $1564 \times 3 / 8$ | .27 | $20 L 619$ | . 33 | $11 / 18 \times 2^{\prime \prime}$ | . 90 |
| 20 L 609 | . 0068 | 17/6x ${ }^{18}$ | . 27 | $20 L 620$ | . 47 |  | 1 |
| $20 L 610$ | . 015 |  | . 30 | $20 L 621$ | . 68 |  | 1.5 |
| 206611 | . 015 | $516 \times 7 /$ | $.30$ | 20 L 622 | 1.0 | $1116 \times 21 / 2$ | 2.5 |
| 201612 | . 022 | $21 / 6 \times 7 / 8^{\circ}$ | . 30 | $20 L 624$ | 1.5 | $1 \operatorname{lgx}^{\prime \prime}$ | 3.4 |
| $20 L 613$ | -033 | $11 / 42 \times 18$ | . 30 | $20 L 625$ | 2.0 | 115/32 ${ }^{3 \prime}$ | 4.38 |
| 20 L 614 | . 047 | 27/60 ${ }^{10}$ | . 33 |  |  |  |  |


"SILVER MIKE" DIPPED MICA CAPACITORS

## Replace Molded

Micos ar Ceromics

- Meet Mil-C-5B

Designed to replace molded mica or and ElA Spers highly critical circuits, these exceptlonally stable silver mica capacitors are multi-coated with tough phenolic to withstand extremes of heat and humidity. Silvered mica dielectric assures close temperature coefficients and high stability, Units oberate at termperatures ranging from $-55^{\circ} \mathrm{C}$ to $+125^{\circ} \mathrm{C}$ without derating, and to $+150^{\circ} \mathrm{C}$ with derating. All are rated at 500 working volts DC. Capacity tolerance is $\pm 5 \%$ or 0.5 mmif . whichever fs greater.


| Stk. No. | Code | Mmit | EA. | Sth. No. | Code | Mmf | EA. | Sth. No. | Code | Mimf | EA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 192995 | A | 1 |  | 20 L 024 | B | 110 |  | 20 L 050 | D | 1100 | 30 |
| 19L996 | A | 2 |  | 20 L 025 | B | 120 |  | 20 L 051 | D | 1200 | 33 |
| 19L997 | A | 3 | .12 | 20 L 026 | 8 | 130 | . 15 | 201052 | 0 | 1300 | 36 |
| 20 L 000 | A | 5 |  | 20 L 027 | B | 150 |  | 20 L 053 | 0 | 1500 | 9 |
| 204001 | A | 10 |  | 20 L 028 | 8 | 160 |  | $20 L 054$ | D | 1600 | . 42 |
| 20 L 002 | A | 12 |  | 20L 029 | 8 | 180 |  | 20 L 055 | D | 1800 | 45 |
| 20 L 003 | A | 15 |  | 20 L 030 | $B$ | 200 |  | 20 L 056 | E | 2000 | 48 |
| 20 L 004 | A | 18 | .12 | 20 L 031 | B | 220 | . 18 | 20 L 057 | E | 2200 | 51 |
| 20 L 005 | A | 20 |  | $20 L 032$ | B | 240 |  | 20 L 058 | E | 2400 | . 54 |
| 20 L 006 | A | 22 |  | 201033 | B | 250 |  | 20 L 059 | E | 2500 | . 57 |
| 20 L 007 | A | 24 |  | 20L 034 | B | 270 | . 21 | 20 L 060 | E | 2700 | 3 |
| 20 L 008 | A | 27 |  | 20 L 035 | B | 300 | . 21 | 201061 | E | 3000 | 69 |
| 202009 | A | 30 | .12 | 20 L 036 | B | 330 | . 24 | 20L062 | $F$ | 3300 | 63 |
| 201010 | A | 33 |  | 20 L 037 | B | 360 | . 24 | 204063 | $F$ | 3600 | . 66 |
| 20 L 011 | A | 36 |  | 20 L 038 | B | 390 | . 27 | 201064 | $F$ | 3900 | . 69 |
| 20 L 012 | A | 39 |  | 20 L 039 | C | 430 | . 18 | 201065 | $F$ | 4300 | 75 |
| 20 L 013 | A | 43 |  | 20 L 040 | C | 470 | . 21 | 201066 | 6 | 4700 | .75 |
| 20 L 014 | A | 47 | .12 | 20 L 041 | C | 500 | . 21 | 201067 | 6 | 5000 | 81 |
| 201015 | A | 50 |  | 20 L 042 | C | 510 | . 21 | 20 L 068 | 6 | 5100 | 81 |
| 20 L 016 | B | 51 |  | 20 L 043 | C | 560 | . 21 | 20L 069 | G | 5600 | . 87 |
| 201017 | 8 | 56 |  | 20 L 044 | C | 620 | . 21 | 20 L 070 | 6 | 6200 | . 93 |
| 201018 | B | 62 |  | 20 L 045 | C | 680 | . 24 | 20 L 071 | G | 6800 | 1.05 |
| 20 L 019 | B | 68 | .12 | 201046 | C | 750 | . 24 | 20 L 072 | 6 | 7500 | 1.11 |
| 20L020 | B | 75 |  | 20 L 047 | C | 820 | . 27 | 20 L 073 | G | 8200 | 1.23 |
| 202021 | $B$ | 82 |  | 20 L 048 | C | 910 | . 27 | 201074 | 6 | 9100 | 1.32 |
| $\begin{aligned} & 20 \mathrm{~L} 022 \\ & 20 \mathrm{~L} 023 \end{aligned}$ | $\begin{aligned} & 8 \\ & B \\ & \hline \end{aligned}$ | $\begin{array}{r} 91 \\ 100 \end{array}$ | . 12 | 20 LL 049 | D | 1000 | . 30 | 201075 | 6 | $\overline{10,000}$ | 1.44 |

# Capacitors-Capacitor Hardware-Interference Filters 

## CORNELL-DUBILIER

TJU-TJL HERMETICALLY SEALED TRANSMITTING CAPACITORS

| Quality Dykanol capacitors for dependable power supply filter applications in industrial, laboratory. and transmitting equipment. Hermetically sealed case; dielectric inpervious to heat. Similar to Nit Type CP70. *Type TJL, all others are Type TJU with universal inte. serap. Type TJL slncle mals. holes. Range: $-55^{\circ}$ to $+85^{\circ} \mathrm{C}$. Tolerance: $+10 \%$. Av. shpe. wi.. 5 tios. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| N | Mid | WVDC | Sixo | NET |
| $\begin{aligned} & 73 \text { L } 602 \\ & 73 \text { L } 603 \\ & 73 \text { L } 650 \end{aligned}$ | $\begin{array}{r} 4 \\ 8 \\ 10 \\ .5 \end{array}$ | $\begin{array}{r} 600 \\ 600 \\ 600 \\ 1000 \end{array}$ |  | $\begin{aligned} & 4.31 \\ & 6.18 \\ & 6.52 \\ & 2.66 \\ & \hline \end{aligned}$ |
| 73 L 614 |  |  |  |  |
| 3 L 605 | $\frac{1}{2}$ | 1000 1000 |  |  |
| L 6 | 4 | 1000 |  | 4.84 |
| 3 L | 8 | 00 |  |  |
| 73 L 651 | 10 | 1000 | $45 / 0$ |  |
| 73 L 665 | 15 | 1000 | 43/42 |  |
| $73 L 617$ |  |  |  |  |

## TYPE DYR PAPER CAPACITORS

 High-reliability, metal cased. Dykanol paper by-pass capacitors. Non-iF coupling circuits. Foret "F" claracteristics of JAN-C-5. Tolerance: $=10 \%$, 600 WVDC. $5^{\circ} \mathrm{Cxcept}+85^{\circ} \mathrm{C}$. Av. ahps. wt. 6 oz .| StockNo. | Typo | Mid | Size | EA |
| :---: | :---: | :---: | :---: | :---: |
| 14 L620 | 60 | 05 | 119,619740 | 72 |
| 14 L 621 | 6010 | . 25 |  | 1. |
| 144622 | $\begin{aligned} & 6025 \\ & 6050 \end{aligned}$ | . 25 |  | 1.8 |
| 14 L 624 |  | 1.0 | 2x1 ${ }^{3 / 6 \times 7 / 6}$ | 2.29 |
| 142625 | 6200 | 2.0 | $2 \times 2$ | 3.05 |
| 4 L 627 | 6011 | 1-1. 5 | ${ }^{*}$ |  |
| 14 L 629 | 6055 | . $5 . .5$ |  |  |
| 14 L 630 | 6110 | 1.0-1.0 |  |  |
| 4 L | 10025* |  | 1 |  |

## MOUNTING HARDWARE <br> 

Mounting hardware for all types of capacitors Carelully designed to kuit tubular and cantype capacitor installations-ataove as welated ilietal. 2 oz

| Stock No. | Fig. | Descilotion | Pkg. of 2 |
| :---: | :---: | :---: | :---: |
| 191478 | A | Mir. Ring: 11/0 die cans |  |
| 19 L 479 | A | Mis. Ring: 11/0 dia. cans |  |
| 19 L 480 | A | Mts. Rinne: 11/2 dia. Cans | .36 |
| 19 L 481 | 8 | Mre. Clip: y dia. cans |  |
| 19 L 482 | B | MIg. Clip, $1^{\prime \prime}$ dia, cans |  |
| 19 L 483 | 8 | Mtr. Clip; 1\%* dia. cans |  |
| 19 L 484 | c | "C". Clamp; 3/1/4" cans |  |
| 19 L 485 | C | "C"Clamp:y-1"cal |  |
| 192489 | 0 | Mis. Sirad: 1.D. \% |  |
| $19 L 491$ | D | Mtg. Strad : $1.0 .1 / 4^{\circ}$ |  |
| 19 L 492 | 0 | Mig Stiap: 10 \% $\mathbf{/ c}^{\circ}$ |  |
| $19 L 493$ | E | For 1/7-7/16. dia, cans |  |
| $19 L 494$ | E |  | 36 |
| $\begin{array}{r} 19 L 495 \\ 19 L 496 \end{array}$ | E | $\begin{aligned} & \text { For } 5.11 / 160^{\circ} \text { dia. cans } \\ & \text { For } 1 / 4-13 / 6_{0}^{\circ} \text { dia. cans } \end{aligned}$ |  |
|  |  | For $3 / 8$-13/10 $16^{\circ}$ dia. cans |  |
| 19 L 498 | E | For $1-11 / 16^{\circ}$ dia. cans | 36 |
| 19 L 499 | E | For $1316-1 / 46^{\circ}$ dia. cans |  |



CORNELL-DUBILIER Quitetone filters
Wired-in Types


F
Type 1F-7A. Designed for permanent inEyination at the source of interiercnce. Ca-pacitive-inductive type fiter sumpresses se on minerference to rados. burners. electric miotor posal units, washing machines, home work shop tools, etc. 1. or use with appilance operac Rated 5 amps. $6 \times 6 \times 4^{\circ}$. Shps. wt.. 9 lixe. 8.25 70 L 124. List. \$13.75
(G) Type IF-54, General-purpose capacativeG inductive filter for use in the home and in industry, Eliminates moderate interference from thuorescent fixtures motors-any appliance drawing 2 amps or less from power line. Miniature size permits easy installation on $11 / 4 \times 2 \times 2^{\circ}$. ${ }^{\text {and }}$.L. Approved. Wt.. 8 oz. NET 1.50 70 L 114 . List. $\$ 2.50$.
net 1.50
(H) Type 1F-24. Designed for permanent inise with mot ats the source of ine fixtures. etc. Miniaturized for easy Installation. Mounting strap has spade lug for casy connection. With flexible 7" leads. Size. $17 / \mathrm{sx}^{1 / 4}$. For oz. 75 or DC. U.L. Apploied. Wt.. 6 oz. NET 75

[J Type IF-18. Highly effective all wave ca-pacitive-inductive type of filter especially desisned for suppression of severe interierence. For use wherever venthlating or air conditioning units, washlng machines, or machine tnols interfere with reception. Bakelite casc. hx3yx $21 / 2^{2}$ with line cord and pus artached wire. binding post for attachment of ground wire. if used. Rated at 115 volts, AC-DC. 550 Supg. wt.. 4 lbs.
70 L 120. List. $\$ 9.20$.

NET 5.52
 vall; appliance or receiver plugs walo appliance or receiver plags
 70 L 125 . List. $\$ 1.25$.

Type IF-6. Convenient plug-in filter designed for elimination of moderate interference. Especially suitable for suppression of interterence caused by fluorescent lights. electric shavers. and similar devices. Connects between mower
 $138^{\circ} \mathrm{L}$ lia., $2^{\prime \prime}$ lonk, Shis. Wt.. 6 oz . NET 1.17

## AEROVOX INTERFERENCE FILTERS


(1) Type IN-27. Plug-in unit for slisht inter-


Tyne IN-28. Not illustrated. For use in applications where ground is at a considerable distance, Provides most efficient fitering action when mounted on appliance causing in terference. Supplied with conventent mounting bracket. Similar to Fig. L. Dianeter. $11 / \mathbf{s}^{\prime \prime}$ | lenkth. $2^{\circ}$. Wi.. 8 oz. |
| :--- |
| 70 L |
| 097 . List. $\$ 2.00$ |

NET 1.20
(M) Type IN-30. Popular, hiphly-effective [M] plug-in unit for variable noise sources; cash

(N) Type INo42. Heavy-duty unit for use Whiere serious Interference is present from power transitission lines. oi burners. rearikerators, drills, shavers. cte. Plugs into power ine outiet. Appliance or radin pluss into filter, Vith monntink ring. Rated $110-120$ volts AC. Diameter, $21 / 2^{\prime \prime}$. $31 / 4^{\circ}$ lonk.

net 4.50
Type in-105. Rugged, low-impedance delta-connected capacitor. Designed to eliminate intericrence caused by fuorescent fixtures. electric drims, larse motorn. et. nects either across to kround Combypass from line co size $11 / 4 \times 1 \times \frac{1 / 4}{4}$ fiigh. Shpg. Wi.. 6 oz. 70 L 307. List. \$1.7... NET 1.05


Type IN-106. As above, but for use where many fuorescent fixtures are in use, Alsofor adding machines. miner install inside enuipment and wank mach One fiture in serice generating noise. where power cidse, 125 y AC or DC: 2.6 ampm . our irande She wi 0z. 2.28

net 2.28

## SPRAGUE NOISE FILTERS

Type IF. Compact, mult section filers for suppressing man-made radio and TV interference. Sinall and completely sell-con-
 drills, thermostats. arcing
 220 voits. AC or DC shpg wt. 8 oz


Fitterol Types Spectally despned Cones and coils. Connect in series lincs of industriat ines of industria
ducing devices.

yrovides higli attenuation at freouencien above meracyeleg Single-hole mounting. Rated at

| Stock No. | Mri's Type | Amas. | Fle. | Size | $\begin{gathered} \text { NET } \\ \text { EACH } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 70 L 092 70 L 094 | $\frac{2}{4}$ | 10 20 | T | $\begin{aligned} & \frac{116 / \pi 2 \times 2^{\circ}}{1^{\circ}} \operatorname{din} . x 1^{113 / 48^{\circ}} \end{aligned}$ | 8.88 1.83 |

## FEDTRO "TV TROUBLE TRAPPER"

Constant "K" type high-pass fiter Greatly reduces interference caused b) signals below 54 mc . Qulckly and essily attached to the antenna terminalls of any TV set. Eliminates Ama tesur signals, diathermy and ot her in destrial interference, iknition noises. etr. Alcenuation of unlesired nignale Shose wt $120 \%$ $70 L 184$
net 1.20

# Cornell-Dubilier, Sprague, Mallory Electrolytic Capacitors 

CORNELL-DUBILIER UP AND UPE CAPACITORS

Efficient. electrolytic capacltors in her metically sealed. seamiss alumi-
num cans. Ideal for use in num cans. Ideal for use in
all types of orivinal equipall types of original equip-
ment as well as for exact replacement in radio. TV, audio, and other electronic equipment. Up to 50 WVDC , capacity 350 WVDC, tolerance is $-10 \%$, trom 51 to from 351 to 450 WVDC, tolerance is $-10 \%$ to $+50 \%$. Up to 450 WVDC, temperature range to $+85^{\circ} \mathrm{C} ; 500$ WVDC types, rated to $+65^{\circ} \mathrm{C}$ All are UP types except UPE types designed for selenium rectifier circuits. Av. wt., 5 oz .

## SPRAGUE TVL AND PCL MIDGET CAN CAPACITORS

 ly sealed, aluminueticalcapacitors, Withstand ex tremely high temperatures, ripple currents, and surge voliages. For use in selenium rectifier circults. $\$$ PCL types are for use in printed circuits. With both bakelite and metal mounting washers. All types rated $+85^{\circ} \mathrm{C}$. p $t 0150$. to $+100 \%$; above $150 \mathrm{WVDC},-10 \%$ to $+50 \%$ Can is common megative. Terminals are weided ing. Vapitor cathodes and tinned for easy solderplacement clearly marked to eliminate replacement error. Av. Shpg. wh., 6 oz .

MALLORY TYPE EP, PFP, AND WP CAPACITORS


For fiecr audio by-pass, and TV circuits. Suitable for use with selenium rectifies. Stable under high ripple current, surge volt FP types have fabricated and temperatures have etched-plate anodes. ftPFP and PWP types are for printed circuits. Tolerancen: $0-50$ $-10 \%$ to $+100 \%$; over 350 WVDC, $-10^{\circ} \%$ to
$+50 \%$. All typer rated to $+85^{\circ} \mathrm{C}$. Supplied complete with insulating washer. Can is com. mon nerative. For mounting hard wate see previous page. Av. wt., 6 oz .

## Twist-Prong Capacitor Size Chart



SINGLE SECTION-Specify Stock Number and Manufacturer's Type Number When Ordering

| Stock No. | Cap. Mfd. | DC | A, XA* |  | TVL |  | FP, WPI. PFP+ |  | $\begin{gathered} \text { NET } \\ \text { EACH } \end{gathered}$ | Stock No. | $\begin{aligned} & \text { Cap. } \\ & \text { Mird } \end{aligned}$ | $\mathrm{DC}$ | $\frac{C \cdot D}{A, \times A^{*}}$ |  | $\begin{gathered} \text { SPRAGUE } \\ \text { TVL } \end{gathered}$ |  | $\frac{\text { MALLORY }}{\text { FP }}$ |  | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Type | Size | Type | Size | Type | Size |  |  |  |  | Type | Sizo | Type | Size | Type | ze |  |
| 70LL952 | 2000 1000 | 15 | 0040 | $b$ | 1115 1165 | D |  |  | 1.83 | 70LL930 | 200 | 250 | 0318 * | Sizo | 1547 | M | Type | ze |  |
| 70LL950 | 2000 | 15 | 0070 | , | 11168 |  | 039A | 8 | 1.53 | 70LL921 | 80 | 300 |  |  | 1573 | F | 128 | D | 2.1.53 |
| 70LL951 | 3000 | 15 | 0080 |  | 1170 | L | 042 A | J | 2.07 | $7{ }^{7} 70 L 922$ | 100 | 300 | ${ }_{0}^{0340}$ * | L | 1578 | H | 129.1 | D | 1.74 |
| 70LL947 | 500 | 25 | 0120 | C | 1220 | C | $057 \mathrm{~A}+$ | B | 2.55 1.53 | 70LL924 | $\begin{aligned} & 150 \\ & 250 \end{aligned}$ | 300 | 0355* | 1 | +1584 | M |  |  | 2.10 |
| 70LL948 | 1000 | 25 | 0130 | J | 1230 | 1 | 059 $\dagger$ | J |  |  |  |  |  |  |  |  |  |  | 3.33 |
| 70LL942 | 100 500 | 50 50 | 0140 0160 | A | 1317 | A |  | J | $\begin{array}{r}2.93 \\ \hline .99\end{array}$ | 70LL917 | 50 | 350 | 0380 0390 | E | 1621 1622 | C | 137 |  |  |
| $70 L L 944$ | 1000 | 50 | 0170 | N | 11338 | M | $065 \dagger$ | J | 1.59 | 70LL918 | 80 | 3.50 | 0401* | K | 1630 |  | 138 |  | 1.71 |
| $70 L 6945$ | 1500 | 50 | 0174 | R | 1341 | P | $068 \dagger$ | L |  | 70LL919 | 125 150 | 350 | 0411 * | L | 1638 | M | 140 | K | 2.37 |
| 70LL933 | 50 | 150 | 0200 |  |  |  | 115 A | B |  | 70LL920 | 150 | 350 | 0415* | ${ }_{\text {N }}$ | 1642 | P | 140.6 | K | 2.37 |
| 70LL934 | 80 | 150 | 0231* | C | 1420 | D |  | B | 1.99 | 70LL907 | 10 | 450 | 0430 | C | 1705 | C | 142 | A | 93 |
| 70 LL935 | 100 | 150 | 0241* | D | 1423 | D | 116 A | B | 1.20 | 7 70LL909 | 25 | 450 | 0450 | C | 1709 1714 | c | 143 | ${ }_{8}^{8}$ | 1.02 |
| 70 L936 | 120 | 150 | 0250 | J | 1425 | D | 116.5A | C |  |  | 30 | 450 |  | ¢ | 1714 |  | 145 | C | 1.08 |
| 70LL937 | 140 | 150 |  |  | 1428 | E | $116.8 t+$ | E | 1.29 | 70LL911 | 40 | 450 | 0470 0480 | E | 1720 <br> 1725 <br> 1728 | ${ }_{\text {E }}$ | 145 146 | D | 1.17 |
| 70LL938 | 150 | 150 | 0261* | E | 1429 | E | 117A | C | 1.29 | 70LL912 | 50 | 450 | 0490 | E |  |  |  |  |  |
| 70LL940 | 200 | 150 | 026 | K | 1430 | L |  |  | 1.29 | 70LL913 | 80 | 450 | 0510 | K | 1735 | K | 149 | K | 1.8 |
| 70LL941 | 300 | 150 | 0263 | L | 1434 | M | 118 19 | J | 1.47 | 70LL914 | 100 | 450 | 0512 | L | 1750 | L | 150 | L | 2.07 |
| 70LL931 | 120 | 200 | 0265.3* | J |  |  |  | ${ }_{J}$ | 1.68 | 70 LL 915 | 125 | 450 | 0514 | P | 1760 | P |  |  | 2.31 |
| 70LL932 | 160 | 200 |  |  |  |  | 122†t | K |  | 70LL901 | 10 | 500 | 0520 | C | 1940 | C | 171A | $B$ | 1.02 |
| 70LL926 | 20 | 250 | 0270 | C | 1509 | C | $122+1$ | ${ }^{\circ}$ | 1.89 .96 | 70LL901 | 20 30 | $\begin{aligned} & 500 \\ & 500 \end{aligned}$ | ${ }^{0530} 0$ |  |  | D | 173 | C |  |
| 70LL927 | 40 | 250 | 0291 | C | 1519 | C |  |  | 1.08 | 70LL903 |  | 500 | ${ }^{0541} 0$ | $\underset{\mathrm{E}}{\mathrm{E}}$ | 1947 | E | 175 | D | 1.20 |
| 70LL928 | 100 | 250 | 0312* | E | 1535 | E |  |  | 1.62 | 70LL904 | 80 | 500 500 | 0550 0560 | $\stackrel{\mathrm{F}}{\mathrm{L}}$ | 1950 | F | 177 | E | 1.50 |
| 70LL929 | 150 | 250 | 0315* | K | 1540 | K | . |  | 1.86 | 70LL905 | 20 | 500 | 0560 |  | 1958 | M | 187 | 6 | 2.16 2.10 |

DUAL SECTION-Specify Stock Number and Manufacturer's Type Number When Ordering

| Stock No. | Cap. Mid. | $\begin{aligned} & \mathrm{DC} \\ & \mathrm{WV} \end{aligned}$ | $\frac{B, x}{\text { Type }}$ | B* | TVL, PCL 8 |  | FP. WPA. PFPt |  | $\begin{aligned} & \text { NET } \\ & \text { EA. } \end{aligned}$ | Stock No. | Cap.Mfd. | $\begin{aligned} & \text { DC } \\ & \text { WV } \end{aligned}$ | C. 0 |  | $\frac{\text { SPRAGUE }}{T V L}$ |  | $\left\|\frac{\text { MALLORY }}{F P}\right\|$ |  | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 70LLB13 | 1000-1000 | 15 | 0040 | D | 2160 |  |  |  |  |  |  |  | Type | Slze | Type | Size | Type | Slze |  |
| $70 \mathrm{LLB10}$ | 50-50 | 50 | 0080 | C | 2320 | $\stackrel{\mathrm{C}}{ }$ | $202.1+$ | B | 12.64 | 70LL963 | $\begin{aligned} & 10-10 \\ & 20-10 \end{aligned}$ | 450 | 0370 | C | 2750 | C | 231 | C |  |
| 70 LL997 | 100-100 | 150 | ${ }^{0085}$ | C | 2320 | C | $202.5 \mathrm{~A}+$ | ${ }_{8}^{8}$ | 1.26 | 70LL965 | 15-15 | 450 | 0380 | $\stackrel{\text { D }}{ }$ | 2754 | D |  |  | 1.35 |
| 70LL998 | 30-30 | 150 | 0110 | $\stackrel{\text { C }}{ }$ | 2422 | C |  | 8 <br> 8 | 1.02 | 70LL966 | 20-20 | 450 | 0400 | D | 2755 | E | 234 A | D | 1.53 |
| 70LL999 | 40-20 | 150 | 0120 | B | 2425 | C | 210A |  |  |  | 30-10 | - | 0410 | E | 2757 | E |  |  | 1.44 |
| 70 LLE 800 | 40.40 | 150 | 0141 | B | 2428 | ${ }^{\text {D }}$ | 212 A | B |  |  | - $\begin{aligned} & 30-30 \\ & 40-20\end{aligned}$ | 450 | 0430 | K | 2759 | K | 237 | K | 1.83 |
| $70 \mathrm{LL801}$ | 50-30 | 150 | 0150 | C | 2432 | D | 213 A | B | +.20 | 70LL970 | $40-20$ | 450 | 0440 | K | 2762 |  |  |  | 1.95 |
| 70LL802 | $50-30$ $50-50$ | $1 \begin{aligned} & 150 \\ & 150\end{aligned}$ |  |  | 24328 | C | 213.1 tt | C | 1.20 | 70LL972 | 50 | 450 | (1) 0450 | $\stackrel{\text { K }}{\text { K }}$ | 2764 2767 | L | 238 A 240 | K | 2.07 |
| 70LL804 | 70-30 | $\frac{150}{150}$ | 0161* | D |  | D | 214A | B | 1.29 | 70LL973 | 60-40 | 450 |  |  | 2770 | M |  |  |  |
| 7041805 | 80-40 | 150 | 0181* | c | 2439 2442 | D | $214.3 \dagger \dagger$ | C | 1.32 | 70LL974 | 60-60 | 450 |  |  | 2772 | M | 242.5A | M | 2.70 |
| 70LL806 | $80-50$ | 150 |  |  | 2442.1 | D |  |  | 1.44 | 70LL975 | 80-10 | 450 |  | L | 2776 |  |  |  | 2.16 |
| 70 LL807 | 200-5 | 150 |  |  | 2444 |  | 216.14 | J | 1.44 | 70LL97\% | 80-20 | 450 | O473 | $\stackrel{N}{N}$ | 2776.5 |  | 245.2 | L | 2.34 |
| 70LL808 | 200-200 | 150 | 89 | K | 2447 | P | 216.4 A | $k$ | 2.40 | 70LL978 | (100-40 | 450 | 0480 0483 | N | 2778 2780 |  |  |  | 3.03 |
| 70LL809 | 200-200 | 150 |  |  |  |  | 216.4 tt | L |  |  |  |  |  |  |  | P | - |  | 2.91 |
| 70LL995 | 200-5 | 200 | 0196* |  | 2470 |  | 216.4. |  | 2.83 | 70LL980 | $10-20$ $80-100$ | 450-25 | 0630 | C | 2701 | C |  |  | 1.02 |
| 70LL992 | 20-20 | 250 | 0210 | 13 | 2515 | C | 217A | B | 1.14 | 70LL958 | 80-100 |  | 0722 | $\stackrel{\text { L }}{ }$ | 2711 | L |  |  | 2.25 |
| 70LL993 | 40-40 | 250 | 0241* | C | 2520 |  | 2214 | C | 1.50 | 70LL959 | 30-10 | 475 | 0488 | J | 2820 2824 | D |  |  | 1.41 |
| 70LL994 | 150-150 | 250 | 0250 | R | 2535 | P | 217.7A | K | 3.09 | 70LL960 | 40-40 | 475 |  | J | 2824 2830 | L | $\begin{aligned} & 259 \\ & 262 \end{aligned}$ | $\underset{\mathbf{E}}{\mathbf{E}}$ | 1.56 3.24 |
| 70LL989 | $10-10$ $40-40$ | 300 300 | 0254* |  | 2565 2575 | C | 17.87 |  |  | 70LL961 | 80-40 | 475 |  |  | 2850 | P | 264.5 |  |  |
| 70LL991 | 80-80 | 300 | 0270 | L | 2585 | 1. | 17.87 |  | 2.25 | 70 LL 962 | 80-50 | 475 | 0489 | $\stackrel{1}{2}$ | 2851 | P | 266 | R | 3.78 3.12 |
| 70LL984 | 15-15 | 350 | 0290 | C | 2625 | c | 22.5 A | c |  | $70 \mathrm{CL953}$ | 10-10 | $\begin{aligned} & 500 \\ & 500 \end{aligned}$ |  |  | 2933 | D |  |  | 1.17 |
| 70 LL985 | 20-20 | 350 | 0300 | C | 2626 | E | 227A | C | 1.74 | 70LL954 | $20-20$ $30-30$ | $\begin{aligned} & 500 \\ & 500 \end{aligned}$ |  | K | 2935 | K |  |  | 1.71 |
| 70 LL986 | 30-30 | 350 | 0310 | $E$ | 2628 |  | 227.3A | D |  |  |  |  |  |  | 2937 | L | 284 | K | 1.95 |
| 70LL988 | 100-100 | 350 | 0332 | R | 2641 | P | 227.7A | K | 3.69 | 70LL957 | 40-40 | $\begin{aligned} & 500 \\ & 500 \end{aligned}$ | 0530 | L | 2940 |  | 288 | L | 2.58 |
| 70LL982 | 80-60 | 400 | 0354 | N | 2677 | 1 |  |  |  |  | 60-40 | 500 |  |  |  | I |  |  | 2.76 |

TRIPLE SECTION-Specify Stock Number and Manufacturer's Type Number When Ordering

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | Cap. Mid. | $\begin{aligned} & D C \\ & W V \end{aligned}$ | $\frac{C . D}{\text { C. } \mathrm{XC}}$ |  | $\begin{aligned} & \text { SPRAGUE } \\ & \hline \text { TVI. PCIS } \end{aligned}$ |  | $\left\lvert\, \frac{\text { MALLORY }}{\text { FP. WP Y.PFP } \mid+1}\right.$ |  | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ | Stock No. | Cap. Mid. | $\begin{aligned} & \mathrm{DC} \\ & \mathrm{WV} \end{aligned}$ | $\frac{C-D}{\text { C. } \mathrm{XC}^{*}}$ |  | $\frac{\text { SPRAGUE }}{\text { TVL. PCL }}$ |  | MALLORYFP. PFPTI |  | EAEH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Type | Size | Type | Size | Type | Size |  |  |  |  |  |  |  |  |  |  |  |
| $70 L L 895$ | $\underline{20-20-20}$ | 25 | 0010 | c | 3210 | c |  |  |  |  |  |  | Type | Size | Type | Size | Type | Size |  |
| 70 LL 896 | 40-40-40 | 150-150-10 |  |  | 3230 | C | s20A1 | B | 1.92 | 70LL889 | 50.50-20 | $\begin{aligned} & 150-150-25 \\ & 150-150-25 \end{aligned}$ | 0580 |  |  | c | 309A | c | 1.62 |
| 70LL893 | 80-60-250 | 150-150-10 | $0615 \%$ | K | 34115 3414.38 | c | 302.38 +t | D | 1.68 | 70LL312 | 60-40-200 | 150-150 25 |  | 0 | 34313 | C |  | c | 1.59 |
| 70LL894 | 90-40-400 | 150-150-10 |  | K | $\frac{3414.38}{34145}$ |  | 302.5A | D | 2.04 | 70 LL 891 | 70-30-20 | 150-150-25 |  |  | 3431.15 | D | 31i.121t | D |  |
| $70 L 686$ | 80-20-100 | 150-150-25 | 0490 | C | 3414.5 3423 | K |  |  |  | $70 L 1875$ | 20-20-20 | 150 | 6041* |  | 3433 | C | 311.2 A | 8 | 1.38 |
| 70LL887 | 40-40-20 | 150-150-25 | 0551 * | c | 3426 | 0 | 310a | 8 | 1.50 | 70LL876 | 40.20-20 | 150 | 0071* | c | 3437 | D | $311.4 A$ | 8 | 1.38 1.44 |
| 70LL838 | 40-20-200\| | 150-150-25 |  |  | 34232 | 0 | 314 A |  | 1.44 1.62 | $70 \mathrm{LL877}$ | ${ }^{40-30-20}$ | 150 | 0080 |  | 3438 |  |  |  | 1.44 |
|  |  |  |  |  |  |  |  |  |  |  |  | 150 | 0090 | c | 3440 | F | 311.5A |  |  |

Cornell-Dubilier, Sprague, Mallory Electrolytic Capacitors
TRIPLE SECTION Cont'd-Specify Stock Number and Manufacturer's Type Number When Ordering


FOUR SECTION - Specify Stock Number and Manufacturer's Type Number When Ordering

| Stock No. | Cap. Mfd. | WV | $\frac{C-D}{D}$ |  | $\begin{gathered} \text { SPRAGJE } \\ \text { TVL } \end{gathered}$ |  | MALLORY FP, WP $\dagger$ |  | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Type | Sle | Type | Slue | Type | Size |  |
|  |  |  |  |  | 4410.7 |  |  |  |  |
| 70 LL 757 | $50-40-160-40$ $60-40-20-200$ | $150-150-25-25$ $150-150-150-10$ | 0300 |  | 4414 |  | 408 | J | 2.07 1.86 |
| 70 LL 749 | $30.30-30-40$ $40-40-30-20$ | $150-150-150-25$ $150-150-150-25$ | 0210 0240 |  | 4415 4420 |  | 409 |  | 1.86 |
| 70 LL 750 70 LL 752 | $40-40-30-20$ $80-40-30-100$ | $150-150-150-25$ $150-150-150-25$ |  |  | 4430 | K | 411 A | J | 3.33 |
| 70 LL 753 | 80-40-40-20 | 150-150-150-25 | 0325 | k | 4431 4434 | k | ....... | $\cdots$ | 2.13 2.25 |
| 70 LL 754 | $80-40-40-100$ | $150-150-150-25$ $150-150-150-50$ |  |  | -4440 |  |  | $\because$ | 3.21 |
| 70 LL 748 | $250-200-10-25$ $40-40-40-30$ | 150-150 | 0010 | 1. | 4441 4445 | 1. | 412A | j | 1.98 2.79 |
| 70 LL 747 | 100-80-60-40 | 150 | 0014 |  |  |  |  |  | 3.09 |
| 70 LL 746 | 100-40-10-100 | $250-250-250-50$ $300-300-300-150$ | 0360 0370 | N | 4516 4575 | L |  | $\because$ | 2.94 |
| 70 LL 742 | 40-40-40-20 | $300-300-300-150$ $300-300-150-150$ | 0866 | S | 4561 | $\stackrel{P}{p}$ | 419.4A | L | 3.54 |
| 70 LL 743 | $100-10-200-30$ $150-10260-30$ | (300-300-150-150 |  | K | 4561.3 4579 | $\mathrm{M}$ |  |  |  |
| 70 LL741 | 40-40-20-10 |  |  | K |  |  | 419.67A |  | 3.93 |
| 70 LL 740 | 60-100-60 40 | ${ }^{350-350-200-75} 350$ | . $\cdot$ |  | 4609 | ii | 419.66 A | K | 3.03 |
| 70 LL 739 70 LL 738 | $60-40-60-20$ $40-40-20.20$ | $350-350-350-25$ | 0430 | L | 4621.6 | L | 419.3 A |  | 2.79 3.84 |
| 77 <br> 70 LL 736 <br> 705 | 80-60-40-20 $40-80-100-25$ | 400-350-200-50 |  |  | $\begin{aligned} & 4635.7 \\ & 4654 \end{aligned}$ | P | 420.45 A | M | 3.50 |
|  | 40-80-100-25 $80-40-10-20$ | 400-400-400-25 | 0477 | N | 4669 | P |  |  | 3.18 3.57 |
| 70 LL 733 | 80-40-30-40 | $4(14)-400-400-25$ | 0478 | R | 4670 4703.7 | L | 413 x | 1 | 2.94 |
| 70 LL 731 70 LL 730 | $40-40-40-20$ $20-15-20-20$ | ${ }_{450-450-25-25}$ |  |  | 4712 4723 | J | 426 |  | 2.07 1.89 |
| 70 LL 723 | 10-10-10-20 | 450-450-450-25 | 0480 | J | 4723 |  |  |  | 2.49 |
| 70 LL 724 | 20-20-20-20 | 450-450-450-25 | 0520 | K | 4724.2 4734 | M | 429 | $L$ | 2.70 |
| 70 LL 726 | $40-30-10-20$ $40-20-20-40$ | 450-450-450-25 | 0630 | L | 4732 | L |  |  | 1.82 |
| 70 LL 728 | $40-410-10-20$ $40-40-40-40$ | $450-450-450-25$ $450-450-450-25$ | 0663.2 | N | 4736 4739 | L | 430.6 A | M | 3.30 |
| 70 LL 729 | 90-40-40-40 |  |  |  | 4742 | L | . . . . . | . | 2.73 |
| 70 LL 722 | $30-30-15-30$ $40-40-10-100$ | 450-450-450-100 | 0660 | N | 4747 4759.7 | M | $433.6 \dagger$ | 1 | 1.80 |
| 70 LL 711 | $5-5-5-5$ $10-10-10-10$ | 450 450 | 0080 0090 |  | 4760 | 1 | 434 | ) | 2.01 |
| 70 LL 712 | $10-10-10-10$ $20-10-10-10$ | 450 450 | 0120 | $k$ | 4761 |  | 434.5 |  | 2.22 |
| 70 LL 714 | 20-20-20-20 | 450 | 0130 | L | 476.3 4769.4 | 1 | 444 44.8 | L | 2.82 3.12 |
| 70 LL 715 | $30-30-20-20$ $35-35-10-5$ | 4.50 4.50 | O144 | N | 4771 | M | 445 | L | 2.76 |
| 70 LL 717 | 40 20-10-10 | 450 450 | 0170 0174 | L | 4773 | P | 447A | M |  |
| 70 LL718 | 40-40-20 20 | 450 | 0174 |  |  |  |  |  |  |
| 70 LL719 | 40-40)-30-30 | 450 450 | 6176 0177 | P | 4775 | P | . $\cdot$ | . | 3.87 |
| 70 LL 720 | 40-40-40-40 | 475-300-50-25. | 0900 | 1. | 4800 | L | . . . . . | . | 2.67 |
| 70 LL 710 70 LL 708 | 20-40-10080 $15-15-80-40$ | $475-475.300-50$ $475-475-475-300$ | 0840 0692 | $\stackrel{\text { L }}{\text { N }}$ | 4815 4827 |  |  |  | 3.36 |
| 70 LL 707 | 50-30-10-20 | 475-475-475-300 | 0692 |  |  | K |  |  | 2.61 |
| 70 LL 704 | 20-20.10-10 | 475 475 | 0179.3 0179.5 | L | 4834 | 1. | 475 | L | 3.06 |
| 70 LL 705 | 20-20-20-20 $40.20 .10-10$ | 475 | 0179.7 | L | 4840 | i |  | L | 3.06 2.52 |
| 70 LL 706 | 30-10-150-30 | 500-450-50-50 | O928 | K | 4917 | L |  | . | 2.10 3.10 |
| 70 LL 700 | 10-10-10-10 | 500 | 0180 0185 |  | 4944 | P | 495 A | M | 3.42 |

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passed facilities. High-speed conveyor belis, miles of pneumotic tubing, and newest communication and record-keeping equipment-assure you of fast, same-day shipment of all the stock ilems on your order. You can depend on Allied!

## Mallory Capacitors

METAL－CASED ELECTROLYTICS
Metal，tubular dry elec－ trolytic capacitors dependable capacitors de－ signed for use in radlos， equipinent，and many other general－purpose ap－ plications，Units rated up to eranceof $-10 \%$ to $+100 \%$ Capacitors rated above
$+50 \%$ ．All have a tolerance of $-10 \%$ to $+50 \%$ ．All units have external insulating chassis．Type TC has $3^{n}$ ．crowd copper leads of 22 gauge wire．Types TCD and TCT have

TYPE TC SINGLE CAPACITORS

| Stock No． | Type | Mid | WVDC | Size | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 18 L 804 | 304 | 200 | 3 | 13／6×11／4 | 9 |
| 171549 | 305 | 500 | $\cdot 3$ | 111／6x $11 / 2^{\prime \prime}$ | 4 |
| 17 L 463 | 310 | 1000 | 3 | $1566 \times 13 / 4^{\prime 2}$ | 1.02 |
| 17 L 461 | 605 | 500 | 6 | 1310x11／4 | ． .93 |
| 17 L 462 | 610 | 1000 | 6 | $113 / 16 \times 2$ | 1.14 |
| 17 L 642 | 1502 | 200 | 15 | \％ | 4 |
| 174460 | 1505 1501 | 500 1000 | 15 <br> 15 | 13，16x ${ }^{10}$ | 1.05 |
| 17 L 600 | 22 | 10 | 25 | 1／16x | ． 68 |
| 17 L 601 | 26 | 25 | 25 | 16x ${ }^{3 / 4}$ | ． 60 |
| 17 L 602 | 29 | 50 | 25 | $3 / 6 \times 1{ }^{1 / 2}$ |  |
| 17 L 500 | 2501 | 100 | 25 | $11 / 6 \times 1{ }^{1 / 4}=$ | .81 |
| 19 L 933 | 25015 | 150 | 25 | $1 \mathrm{~K}_{6 \times 13 / 4}$ | ．87 |
| 17 L 466 | 2505 | 500 | 25 | $116 \times 21 /{ }^{\prime \prime}$ | 1.38 |
| 19 L 932 | 31 | 1 | 50 | $1 / 4 \times 11 / 6{ }^{\text {a }}$ | ． 54 |
| 17 L 639 | 302 | $\frac{2}{5}$ | 50 | $5.60{ }^{3 / 8}$ | 4 |
| 17 L 623 | 30 | 5 | 50 |  | ． 60 |
| 17 L 603 | 32. | 10 | 50 |  | ． 60 |
| 17 L 604 | 36 | 25 | 50 |  | ． 63 |
| 17 L 605 | 39 | 50 | 50 | ${ }^{11} \times 140$ | ． 72 |
| 17 L 641 | 3501 | 100 | 50 | 11／50 $\times 13 / 8$ | ． 84 |
| 18 L ¢ 32 | 50025 | 250 | 50 | 156x13／4 | ． 05 |
| 17 L 458 | 40 |  | 150 |  | ． 60 |
| $17 L 624$ | 41 | 8 | 150 | 7 | ． 63 |
| 174459 | 42 | 10 | 150 | ＂夈 $\times 11 / 40$ | 63 |
| 17 L 608 | 44 | 16 | 150 | 119x11／9＂ | 9 |
| 174502 | 45 | 20 | 150 | 13／6x119＂ |  |
| 7 7 610 | 47 | 30 | 150 | 12／6x 13.5 | ． 78 |
| 17 L L 611 | 48 | 40 | 150 | 15／6x13＂ | 81 |
|  | 49 | 50 | 150 | 18，413 | 84 |
| 640 | 492 | 80 | 150 | $1{ }^{16} \times{ }^{\prime \prime}$ | ． 96 |
| 18 L 802 | 493 | 100 | 150 | $1^{1 / 1 / 4 \times 2}$ | ． 05 |
| 17 L L 242 | 495 | 150 | 150 | 11，4x ${ }^{1 / 4}$ | 1.14 |
| 19 L 931 | 499 | 200 300 | 150 150 | $11 / 4 \times 2 \times 1 / 8$ | 1.58 |
| 17 L 626 | 50x | 5 | 250 | 11／0x1／6 | ． 63 |
| 17 L 627 | 51 | 8 | 250 | 11／61\％ | ． 69 |
| 17 L 457 | 52 | 10 | 250 | 11／9x13＂ | ． 72 |
| 19 L 930 | 53 | 12 | 250 | 13／6x11\％＂ | ． 75 |
| 17629 | 54 | 16 | 250 | ${ }^{11}$ 隹1： | ． 78 |
| 17 L 505 | 55 | 20 | 250 | 13自x $3 \%{ }^{\prime \prime}$ | 81 |
| 17 L 633 | 58 | 40 | 250 | 11／4x1\％ | 93 |
| 17 L 243 | 59 | 50 | 250 |  | ． 02 |
| 17 L 249 | 1265 | 100 | 250 | $11 / 6 \times 2^{7 / 8} 8^{\prime \prime}$ | 1.47 |
| $19 L 927$ | 595 | 2 | 350 | 7／6x $\times 11 / 2^{\circ}$ | 1.26 |
| 17 L 634 | 60 | 5 | 350 | 1边1 | 3 |
| 17 L L 635 | 61 | 10 | 350 | 18 18x | ． 72 |
| 19 L 929 | 64 | 16 | 350 | ${ }^{18} 6 \times 1$ | ． 75 |



TC

polarized type．All capacitors Ilsted are equipped with fixed mounting straps except units have an oper that＂ $3 / \mathrm{s}^{\prime \prime}$ in diameter．All units have an operating range of up to $85^{\circ} \mathrm{C}$ ．ex－
cept TC types 81.83 and 84 ，which have an operating range to $65^{\circ} \mathrm{C}$ ．Av，shpg．wt．． 4 oz ．
TYPE TC SINGLE CAPACITORS（Cont＇d）


## TCD COMMON－NEGATIVE DUALS

| 18 L 081 | ＊ 16 | $\left\|\begin{array}{c} 500 \\ 100 \\ 100 \end{array}\right\|$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 17 | 26 | 25－25 | 25 | ${ }_{15}^{1516 \times 13 / 2}$ | ． 88 |
| 17450 | 45 | 20－20 | 150 150 | 19，6x13／ | 1．99 |
| 17 L 480 | 485 | 40－20 | 150 | 15／6x19\％ | 1.05 |
| 17 L 478 | 48 | 40－40 | 150 | 116 $6 \times 2$ | 1.11 |
| 174482 | 497 | 50－30 | 150 | ${ }^{19} 16 \times 2^{\prime \prime}$ | 1.17 |
| 17 L 481 | 49 | 50－50 | 150 | 11／6x21／8＊ | 1.26 |
| 18 l | 498 | 80－50 | 150 | $11 / 6 \times 23 / /^{\prime \prime}$ | 1.41 |
| 17 L 475 | 52 | 10－10 | 250 | $1{ }^{196} 6 \times 2^{\prime \prime}$ | 99 |
|  | 55 | 20－20 | 250 | ${ }^{17} 66 \times 2 \times$ | 1.11 |
| 17 l 1744 | 65 | 20－20 | 350 | $116 \times 23{ }^{\prime \prime}$ | 1.35 |
| 174507 | 72 | 10－10 | 450 | 11／6x2＂ | 1.11 |
| 17 L 468 | 78 | $20-20$ <br> $40-40$ | 450 450 |  | 1.50 |

TCT TRIPLE COMMON NEGATIVE
 $\begin{array}{llllllll}18 L 374 & 3114 & 40-20 & 150 & 11 / 4 \times 2 \text {／4 } & 1.41 \\ 150 & 20 & 150 & 11 / 4 \times 21 / 4 & 1.35\end{array}$

 | $18 L 375$ | 3115 | $40-40$ | 150 | $116 \times 21 / 4 *$ | 1.41 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 150 | 150 | 150 | $116 \times 21 / 4^{*}$ | 1.47 |  |

## PVC＂MYLARS＂


cuits requiring high reliability and moisture heat．Temperature range：$-40^{\circ}$ soldering iron tolerance：$\pm 10 \%$ ．Av．shpg．wt． $2 \mathrm{oz} .105^{\circ} \mathrm{C}$ ．

$28 L 8331133$


| $\frac{28 L 836}{28 L 837}$ | $\frac{101}{1025}$ | $\frac{10}{.25}$ | $\frac{100}{100}$ |
| :--- | :--- | :--- | :--- |
| $\frac{112 x^{7} / 16 x^{27} / 12^{\circ}}{11 / 2 x^{3} 56 x^{13}}$ |  |  |  |


$\begin{array}{r}.30 \\ .39 \\ .57 \\ .78 \\ .96 \\ \hline\end{array}$
$\frac{2}{2}$

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GEM MOLDED TUBULAR PAPER CAPACITORS


General－pur－ tubular pa－ per capaci－ tors mants－ tured to ex－ tremely high standards．Rugged mincral－filled bakelite cases and resin sealing effectively pre－ against mechanical moisture and protect units tinned copprwical shock．All have double－ mfd throuph in leads．All types from ．001 film＂paper－mylar so range：$-40^{\circ}$ to $+85^{\circ} \mathrm{C}$ ．Capacity tolerance： $20 \%$ except ${ }^{2} 10 \%$ ．Av．shpg．wt．． 5 oz ．

600 VOLTS DC WORKING

| Stock No． | Type | Mfd | Size | EACH |
| :---: | :---: | :---: | :---: | :---: |
| 18L546 | 621 | ． 001 | S／6x．1＂ |  |
| $18 L 547$ | 6215 | ． 0015 | 8／6x1＂ |  |
| $18 L 548$ | 622 | ． 002 | $5 / 16 \times 1{ }^{\text {c }}$ | 15 |
| $18 L 549$ | 6222 | ． 0022 | ${ }^{5} 16 \times 1$ |  |
| $18 L 550$ | 6225 | ． 0025 | S／mx1＊ |  |
| $18 L 551$ | 623 | ． 00.3 | 5／16x1 ${ }^{\text {／}}$ |  |
| $18 L 552$ | 6233 | ． 0033 | $516 \times 1$＂ |  |
| $18 L 553$ | 624 | ． 004 | S601＊ |  |
| $18 L 554$ | 6247 | ． 0047 | \％16x1＂ |  |
| $18 L 555$ | 62.5 | ． 005 | 3／81／4＂ |  |
| $18 L 556$ | 626 | ． 006 | $3 / 8 \times 1 / 4^{\circ}$ |  |
| $18 L 557$ | 6268 |  | $3 / 6 \times 11 / 4$ |  |
| $18 L 559$ | 628 | $008$ | $3 \times 11 /=$ |  |
| $18 L 560$ | 6282 | ． 0082 | $3 / 8 \times 1 / 80$ | 18 |
| $18 L 561$ | 611 | ． 01 | $3 \times 11 / 4$ |  |
| $18 L 562$ | 6112 | ． 012 | $3 / 8 \times 11 / 4$ |  |

1600 VOLTS DC WORKING（Conl＇d）

| Stock No． | Type | Mid | Size | EACH |
| :---: | :---: | :---: | :---: | :---: |
| $18 L 755$ | 162\％${ }^{\circ}$ | ．0．7 | $1 / 2 \times 11 / 2^{\prime \prime}$ | 39 |
| $18 L 757$ | 1628＊＊ | ． 008 | $1 / 2 \times 11 / 2^{\prime \prime}$ | 39 |
| 186758 | 16282＊ | ． 0082 | $1 / 2 \times 11 /{ }^{\prime \prime}$ | 39 |
| 181759 | 1611＊ | ． 01 | 1／2×11／2 | 42 |
| $18 L 761$ | 1612＊ | ． 02 | 5／1817\％ | 36 |
| $18 L 325$ | 16122＊ | ． 022 | 3／8×17／8＂ | 45 |
| 184385 | 1613＊ | ． 03 | $5 / 8 \times 17 / 8$ | 42 |
| $18 L 386$ | 1614＊＊ | ． 04 | $3 / 4 \times 21$ | 42 |
| 181762 | 1615＊ | ． 05 | 1／8×21 | 42 |
| 3000 VOLTS DC WORKING |  |  |  |  |
|  | 3021 | 001 |  |  |
| 18 L | 3023 | ． 003 | $1 / 2 \times 11 / 2=$ | 66 69 |
| 18 L 970 | 3025 | ． 005 | $5 / 8 \times 17 \%$ | 69 |
| $18 L 971$ | ． 3011 | 01 | 5／8×17\％ | ． 84 |
| 18 L 972 | 3013 | 03 | $1 \times 21 /{ }^{\prime \prime}$ | 84 |
| 18 L 973 | 3015 | 05 | $1 \times 23$＂ | 96 |
| 6000 VOLTS DC WORKING |  |  |  |  |
| 18 L 976 | $6 \times 22$ |  |  | .87 |
| 18 L 978 | $6 \times 25$ | ． 005 | 1／4221／4 | 1.11 |
| 18 L 980 | $6 \times 11$ | ． 01 | $1 \times 21 /{ }^{\prime \prime}$ | 1.26 |

10,000 VOLTS DC WORKING

## 

 12,500 VOLTS DC WORKING 15,000 VOLTS DC WORKING

# Printed Circuit Kits and Capacitor Hardware 

(B)



These kits permit the experimenter or hobbylst to gain actual experience in the layexperience in the lay-
out and deslgn of printed circu:ts.

(A)Micro-Clrcuits $\mathbf{5 2 1}$ Kit. Lets you creste A. all types of miniature-sized electronlc enu pment. Make resistors. capacitors. connecting wires and many other components, Kit also allows you $o$ paint your own radio circuit and make repairs on primted circuits. Includes: bruslt: silver-collducting paint: :niw, meflum. high and very high resistance paints: Insulating lacquer; solvent; brush cleaner; the manus!: plus otlier literature. Wi., $11 / 4$ lhs. NET 18.11 $11 L 146$.G-C Electronies 683 Repair Kit. Youill bent of printed circuit components with ths ment of printed circuit compronents with then hanty repair kit. Permits quick repair oh, obs, resistors, capacitors. coils, wiring. nockets, l ,
 cluse tool for tixhtening contacts etc.: fiberglas brush, 6 oz spray can of silicone resim Iacquer; solvent for removing solder; tweezers $31 / 2^{2}$. Shpg. 2 . 2.1 fb .
$1 / \mathrm{L}^{2} \mathrm{~L}$ 138. List. S13.95.
NET 9.31

C
Kepro Model PL-2A Photo Layout KIt. by use of meclanical negative materials and prevsure sersitive tapes, dots, letters, and numerals. Layout fime reded for conventional methods. Errors in artwork arr easily corrected witholte destroyIng orivinal work. Materials may be used di-
rectly as ne mative. Contents: One card each of rectly as negative, Contents: One card each of and assorted sizes letters and nimperals; I acetate shiet: 1 mechanical negative; 2 graph paPersi instructions and data. Wt.. 1 NET 3.95
Kepro Model PL-200 Master Layout Kie. (Not illus.) Uses same time-saving methorls as PL-2A kit above, but includes materials to make $18 \times 24^{*}$ artwork. Contents: 2 pcs $-18 \times 2$ $24^{*}$. matte surface "Mylar"; ${ }^{2}$ nes. $-18 \times 24^{4}$

 conductor strips: 1 rltera; opaģuin data. Shink wt. 4 lbs.
net 36.30
(D) New Kepro SC-601 Photo Screen Klz. D. Contains all necessary materials to produre 3 silk screens with print areas up to $7 \times 4$ each. Materials produce lacquer resistant film type photo stencils. No dark room is required. Designed for screen printing production guanttins of etched circuit boards, nameplates, instrument panels or decorative printing. Ircludes: screen frame with silk, $10 \times 12^{\prime \prime}$; 2 pieces of screen silk, $14 \times 16^{\circ} ; 1$ roll $8 \times 30^{\circ}$ stencil film; 1-\$2 photoflood; stencil developing and short stop chenicalsj developing and short stop trays: $81 / 2 \times 111 / 3^{\circ}$ print frame; thermometer; black and white acreening inkj plus othe accensories, With instructions. 20 NET 35.00

Kepro NP-303A Enamel Nameplate
Nameplat Eanel and natural aluminum nameplates in a enaniel and natiral 4 -minute process. Includes 2 shects os $8 \times 10 x .107^{* \prime}$ sensitized enamel plate, accessories. W't.: 1 lb NET 7.25
Kepro NP-404 Anodized Alumlnum Nameplate and Panel Klt. (Not illus.) Ntilizem a photographic process to fabricate black anodized aluminum panels with desired nomenclature for dials, panel overlays, moter faces. ete. Printins is nerinanently etcherl in surface of metal, and finished plate withstands wrath ering. abrasion. and solvent. hirnd alimishects of $3 x 0 x .01$, menicized anodized ansure numt plate: $3-3 \times 6$ acetate wherts, priare sensitue leers and mathe of ething powder: developer; clamps, pachase ond plastic ptching ahray. With instructions and data sheet. Shng WL... $11 / 2$ Lhs. NET 6.55

## NP-404 MATERIALS

Slock No. Tyoe Descrlption
II $1: 32$ SA36 Anod. Alum. Plate 11 L 134 D-1PT Developer

| Size | NET |
| :--- | :--- | | $3 \times 6^{\circ}$ | .75 |
| :--- | ---: |
| $12 \times 12^{\circ}$ | 4.90 | NP-303A MATERIALS


$\qquad$
2

IIL 140 D-2A $\begin{aligned} & \text { Developer }\end{aligned}$

F
G Bircuit Lab Kepro L.505A Printed Cireuit Lab. quirements a wider range of Pirounard re-proments-irom prototypes thronsh short production runs. Kit contalns: 15 assorted photosensitized, copper-clad phenolic XXX boards; 4 unsensitized boards, developing and etching trays; safelight; photoflood lanp, print ing frame: PL-2A layout kit; mechanical nesa tive; etching and developing solution: pain resist and thinner; plastic and aluninum urays cyelet assortimett; cleaning pad, intructions plus descriptive iterature. Reavy duty processing equipment ho lides boand inches. Shps. wt., 20 lbs

## 11 LU 105.

NET 34.75

Grav
Kepro P-101A Profossional Etohed CirGult Kit. Produces professionat photiengravitng quality etched photographically or mechanically with negative materials supplied. Contains: 3 slueets of sensitized phenolic board; 2 sherts of mechanical negatives; aluminum developing tray; plastic etching tray; 1 cleaning pad; 1 bottle of developer; 2 bottles of etch solution; 1 print glass; 2 frame clamps; and instructions. Shps. wt.. 3 lbs. 11 L 109.

NET 5.85
Kepro S-101A Standard EtchIng Kit. (Not illus.) An econoiny etching kit designer to nge in the development of a circuit pattern. Ideal for the beginner or for bread-boarding unp engineers. Contains: 3 unsensitized copperclad plienolic boards; I bottle ctching remat.; 1 package assorted rapes and dots: brish; I cleaning pad; 1 bottle etching solution; and easy-to-follow instructions. Wt.. $1 / 2 /$ NET 3.95

## KEPRO PRINTED

 CIRCUIT MATERIALSA selection of quality printed circult materials etther for replacement use in Kepro PC kits or for those currently engaged in printed circuit development. llave $001,35^{\prime \prime}$ thick copper coating. All sheets have foil on both sides. except which have coating on one side only. Av. shps. wit. of sheets. 3 oz .; 2 oz . solutions, 6 oz ; pint solutions. 3 lis.

## XXXP $1 / 1 G^{\prime \prime}$ PHENOLIC SHEETS

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { Mirrs } \\ & \text { Tyue } \end{aligned}$ | Description | Size | $\begin{aligned} & \text { NET } \\ & \text { EACH } \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 116649 | P1-1212 | Unsensit |  | 8 |
| 11L655 | P2-1212 | Unsensllized | 12x12 ${ }^{\circ}$ |  |
| 112131 | ${ }^{\text {P1-36PB }}$ | Perf. Unsen.* | ${ }^{3 \times 1}{ }^{3 \times 6^{\circ}}$ |  |
| 112149 |  | Pert ${ }^{\text {Light sensstive }}$ * | ${ }_{3 \times} 3^{\circ}$ | 6 |
| 11L656 | (1-36 | Light sensitive* | $3 \times 6$ |  |
| L658 | S1-66 | Light sensitiva* | 6x6 ${ }^{\circ}$ |  |
| 114659 | S1-1212 | Lipht sensitive* | 12x120 |  |
| T1 | S1.710 | Light sensitive* | ${ }^{7 \times 10^{\circ}}$ | 3 |
| 112661 | \$2.33 | Light sensitive | $3 \times 3$. |  |
| 111662 | \$2.36 | Lisht sensitlve | $3 \times 66^{\circ}$ $6 \times 66^{\circ}$ |  |
| 11.663 | $\begin{aligned} & \mathbf{S} 2-66 \\ & \mathbf{S 2 - 1 2 1 2} \end{aligned}$ | Light sensitive Light senslitive | $6 \times 1$ $12 \times 12$ | . 43 |
| 112 | $\begin{aligned} & \mathbf{S 2 - 1 2 1 2} \\ & \mathbf{S} 2-710 \end{aligned}$ | Lght sensitive | $12 \times 12$ | . 85 |
| G-10 1/1\%" GLASS EPOXY SHEETS |  |  |  |  |
| 11 | ${ }^{\text {P1-1212G }}$ | Unsensitized* | 12 |  |
| 112667 | ${ }^{\text {P2 } 21212 G ~}$ | Unsensitized | ${ }_{\substack{2 \times 12^{\circ} \\ 3 \times 3}}$ |  |
| 11L668 | \$1.336 | Llight sensitive* | $\begin{aligned} & 3 \times 3^{\circ} \\ & 3 \times 6^{\circ} \end{aligned}$ | 1.52 |
| 11L669 | \$1 | Lighi senstive* |  |  |
| 112 | S1-121 | Light sensitive* |  |  |
| 112671 | \$2-336 | Light sensilive Light sensitive | $\begin{aligned} & 313^{\circ} \\ & 3 \times 6^{\circ} \end{aligned}$ | 1.06 |
| $\begin{array}{r}11 \\ 112672 \\ \hline\end{array}$ | $\begin{aligned} & \$ 2-36 \mathrm{G} \\ & \mathrm{~S}-12!2 \mathrm{G} \end{aligned}$ | Light sensitive | 12x $12{ }^{\circ}$ | 2.84 |
| CHEMICALS |  |  |  |  |
|  | R-2 | Paint resist | 202 |  |
| 11 2675 | T-2 | Resist thinner | 202. |  |
| $11 L 676$ | D. IPT | velopink sol | Plnt |  |
| 112161 | D-IG | Developing S | Gal. | 5.00 |
| 11L677 | E IPI | Etching solutron | Pin |  |
| 1dL 160 | E-16 | Etchins solution |  | 3.00 |

MALLORY CAPACTOR HARDWARE


For mountlng Mallory Type FP or WP capaci-
tors use MP. BP, PS and MW-100 units listed In Tables below. For Type TUbular capacitors use VR brackets for mounting or TH spling cllps where horizontal
M

(N) *Metal. +Plieno
slipg. wt., 3 oz .
Stoch No. Type $18 L 4 \mid 4$ MP-2


| Stock NO. | Type | Fig. | Size | EACH |
| :---: | :---: | :---: | :---: | :---: |
| 171531 | PS-4 | L | 1 | 42 |
| 171532 | PS-6 | L | $13 / 8{ }^{*}$ | . 54 |
| 17 L 402 | VR-1 | M | 1 to 11/40 | . 09 |
| 17 L 413 | VR-3 | M | $13 / 8$ to $17 \% 6^{\prime \prime}$ | . 09 |
| 17 L 414 | VR-4 | M | $11 / 2$ to $196^{\circ}$ | . 1 |
| 17 L 415 | VR-6 | M | $13 / 4$ to $113 / 66^{\prime \prime}$ | 5 |
| 174416 | VR-8 | M | 2 to $21 / 6^{\circ}$ | . 18 |
| 17 L 412 | TH-25 | K | $1^{3 / 3}$ to $1^{1 / 15}$ | . 06 |
| 171417 | MW-100 | N | Mtg. Wrench | 1.05 |
| ype capacitors. Av. shpe, wt., 2 oz. |  |  |  |  |
| Stock No. | Type |  | Size | EACH |
| 17 L 515 | CE-7 |  | $\times 21 / 8$ | . 06 |
| 172517 172518 | $\mathrm{CLE}_{\text {ce }}$ |  | $13 / 0 \times 21 / 2^{2}$ | . 06 |

## Centralab Capacitors and Printed Circuits

## TC TEMPERATURE-COMPENSATING CAPACITORS



Employ special coating to Minimize time lag bet ween
temperature change and capacity compensation. ComPly with JAN-C-20A specs. stant from -20 to $+85^{\circ} \mathrm{C}$ cient of 750 parts $/ \mathrm{miflion} /{ }^{\circ} \mathrm{C}$. A variet A . her coefficients may be obtained by necting both types of capacitors in parallel. All units listed are rated 600 working volts DC.

TC CAPACITOR SIZES

| TYPE TCN |  | TYPE TCZ |  |
| :---: | :---: | :---: | :---: |
| Cap. Mmi | Size | Cap. Mmp | Size |
| $3.3 \text { to } 100$ | 1364 ${ }^{1 / 1 / 22^{7}}$ | 0.5 to 39 | 13/4813/3 |
| 110 to 2200 | ${ }^{13} 18 \times 11 / 6^{\circ}$ | 43 to 82 | 1316 |
| 300 to 560 | $9 / 4 \times 11 / 60^{\circ}$ | 110 to 220 |  |
| 620 to 750 | $9 / 8 \times 1 \%^{1 / 80}$ | 240 10 300 |  |

TYPE TCN (N750)

| Stock No. | Mmi | EACH |
| :---: | :---: | :---: |
| 111241 | 5 |  |
| 11.250 | 10 |  |
| 11 l 251 | 12 | . 30 |
| 11 L 253 | 15 |  |
| 11 L 254 | 20 |  |
| 11 L 255 | 22 |  |
| 1) 14.44 | 25 | . 30 |
| If 257 | 27 |  |
|  | 30 |  |
| 1) 11259 | 33 39 |  |
| 11.263 | 47 | . 30 |
| 11 L 495 | 50 |  |
| 11 L 264 | 51 |  |
| 111265 | 56 |  |
| 11 L 267 | 68 |  |
| IL 2671 | 82 100 | . 30 |
| \|11273 | 120 |  |
| 111275 | 150 |  |
| $11 L 276$ | 160 |  |
| 11.277 | 180 | . 30 |
| 112280 | 240 |  |
| 111282 | 300 | 45 |

## PACKAGED ELECTRONIC

 CIRCUITS (PEC)

Complete, printed electronic circuits - with resistors. capacitors, and in some the replacement or Ideal for cult sections in radio and cirsets. The printed circuit wiring and all component are bound to a ceramic bas and sealed against moist ure physical shoch. These perature change and blies are widely used in original equipment ap plications-especially in TV chassis. Excelleut for use by experimenters and those engaged in new design. Offer space-saving features of miniaturization as well as circuit stability at very low cost. All types listed are standard throughout the electronics industry, always stocked easily replaced. Designed for quick mounting.
pg. we., 2 oz
18L 893. PC-6 Packaged Eloctronic CIr. Cuit Guide, Contains compiete data

|  | No. | Type | Doscription | NET |
| :---: | :---: | :---: | :---: | :---: |
|  | 147 | PC-50 | Diode Load Filter | \% |
|  | L 148 | PC-5 | Diode Load Filter | 0 |
|  | L 150 | PC-70 | Triode Couplate |  |
|  | L152 | PC-80 | Triode Couplate | 0 |
|  | L 153 | ${ }^{\prime} \mathrm{C}-81$ | Triode Couplate |  |
|  | 1165 | PC-84 | Triode Couplate | . 60 |
|  | L 154 | PC-90 | Pentode Couplate | 0 |
|  | L 155 | ${ }^{\prime} \mathrm{C}-91$ | Pentode Couplate |  |
|  | $L 166$ | $\mathrm{P}^{+} \mathrm{C}-92$ | Pentode Couplate | . 90 |
|  | L 156 | PC-100 | Vertical Integrator |  |
|  | L 157 | ${ }^{\text {P }} \mathrm{C}$ - 101 | Vertical Integrator | 1.05 |
|  | L 356 | C-104 | Vertical Integrator |  |
|  | L 357 | PC-105 | Vertical Integrator | . 75 |
|  |  | C-106 | Vertica! Integrator | . 75 |
|  | L 350 | $\mathrm{PC}-110$ $\mathrm{P}^{2} \mathrm{C}-150$ | VIF Fitter | 60 |
|  |  |  | Audio/Det Couplate |  |
|  | L 359 | ${ }^{\text {C-15 }}$ | Audio/Det Couplate | . 9 |
|  | L 360 | C-157 | Audio/Det Couplate | . 90 |
|  | L 361 | PC-158 | Audio/Det Couplate | . 90 |
|  | L 362 | PC-159 | Audio/Det Couplate | . 90 |
|  | L 171 | 1 'C-160 | Pentorle/Det Couplate | . 20 |
|  | L 368 | ${ }^{\mathrm{P}} \mathrm{C}-165$ | Pentode/Det Couplate | . 20 |
|  | L 369 | PC-262 | Couplate |  |
|  | L 380 | P-263 | Sync Takeott Coundate | 0 |
|  | L 901 | C-314 | Sync Takeoff Couplate | .90 |
|  | L 908 | C-327 | Pentode/Det Couplate | . 75 |
|  | L 352 1 | C-331 | Audio/De-t Couplate | 75 |
|  |  | 35. | Syc Couplink Net | 1.05 |
|  | L 354 | C-378 | Eertical lmegrator | . 90 |
|  |  | C-378 | one Control Network | 90 |
|  | 36 | H-408 | 1. De-Colngling Net | 1.05 |

## CERAMIC CAPACITOR KITS



DDK-200 CeKitcCapacitor disc Ceramle primarily ed for by intend coupling or filt ervice. Congist of 200 Type disc ceramics. All 1000 10 $47,50,68,120,150,180,220,250,270,300,330$ $390,470,500,680,1500,3000,4700,10,000$ ( 600 v ) mmf. 10 each - $100,200 \mathrm{mmf} 15$ of each- $1000.5000 ; 20.000\left(600 \mathrm{v}_{\mathrm{j}}\right) \mathrm{mmf} .20$ of each- $10,000 \mathrm{mmf}$. Cabinet size. $4 \times 6 \times 11^{\circ}$ Shpg wt., ${ }^{6} \mathrm{Ibs}$. 912 NET
34.10

HVK-150 Ceramic Capacitor Klt. Contains 150 DD Series disc ceramics In a singledrawer steel cabinet. Values: DD 30 ( 5 of each) each) $-82,100,500,1000 \mathrm{mmf}$; DD 600 ( 5 of (10 of each) $-3000,4000$. 1500 minf: DD 5000 $\begin{array}{llll}7500 \text {. } 8000,10.500, ~ \mathrm{mmf} \text {; DD } 16 & (20), 10.000\end{array}$

D6K-200 Ceramle Ca paclitor Kit. In assorted sizes-includes 200 Type D6 BC tubular ceramic capacitors (see facing page) In 1 -drawer steel cabinet-values from 5 to $10.000 \mathrm{mmf}, 5$ of each included. except 10 or 15 each of the most popular values. Cabinet size, $4 \times 6 \times 11^{\circ}$
18 L 914 . NET
30.95

TCK-80 TC Ceramle Capaeltor Kit. Conains 80 temp each of 20 TCN values from 3.3 to 750 mmi and 2 each of 20 TCZ values from .68 to 180 $-20+85^{\circ} \mathrm{NPO}$ capacity contant from 750 parts $/$ million $/{ }^{\circ} \mathrm{C}$. All are 600 WVDC . In steel cabinet. $4 \times 6 \times 11^{\circ}$. All are 600 WVDC. In 18 L 915 . NET $41^{\circ}$. Wit.. 6 lbs.
26.90

## PEC KIT IN CABINET

PCK-40. 40 most popular printed crrcuits in a steel cabinet. Includes: 2 PC-51; $2 \mathrm{PC}-8 \mathrm{~F} ; 10$ $106 ; 5 \mathrm{PC}-150 ; 2 \mathrm{PC}-151 ; 2 \mathrm{PC}-158: 2 \mathrm{PC}-165$; 2 PC-387; 2 PC 408 . Wt., 6 lbs
34.25

## PRINTED CIRCUIT BOOK

PRINTED CIRCUITS, By Morris Moses (Gernsback). Thoroughly covers printed cir cuits and miniature equipment. Chapters inPrinted eclinigues And Materials; Repair Of $39 \times 279$. Pastpald In U.S.A. ........ 2.90

CERAMIC-DIELECTRIC TRIMMERS


25
Compact, stable trimmer capaci ors with ceramic dielectric. Light driver, easily mounted. Screw. driver adjustment. Provide a full can, mear rate of change rull capacity range with $180^{\circ}$ 829 rotation. Balanced rotor and eat spring pressure for excel under conditions of hamical stability, even fired to stator and heavy vibration. Silver is flat optically ground surfice make contact on space. All types factor: less than $\pm 0.2 \%$. have ceramic base 822 , mc. Types 820 827 phenolic base, 829 and 823 steatite base, (with mounting screw and put) 820 ceramic bracket. letter N in Type Not). 820-E is less ive temperature coefficient, ietter $Z$ negaNo. indicates zero iemperature 2 in cype *Body length. Av. shpg. wt., 1 oz. coefficient.

TYPES 820 AND 822

| $\begin{gathered} \text { Stoek } \\ \text { No. } \end{gathered}$ | $\begin{aligned} & \text { Mrres } \\ & \text { Typp } \end{aligned}$ | Mmi Range | $\begin{aligned} & \text { Base } \\ & \text { Sire } \end{aligned}$ | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{r} 11 L 383 \\ 11 L 384 \\ 11 L 690 \\ \hline \end{array}$ | $\begin{aligned} & 820-B \\ & 820-C \\ & 820-E \end{aligned}$ | $\begin{aligned} & 5-20 \\ & 7-35 \\ & 35-55 \end{aligned}$ | 3/8x ${ }^{27 / 4}$ | 8 |
|  | $822-\mathrm{DN}$ $8222-\mathrm{EN}$ $822-\mathrm{CN}$ $822-\mathrm{BN}$ $822-\mathrm{AN}$ | $\begin{aligned} & 2-6 \\ & 4-30 \\ & 4.5-25 \\ & 7-45 \\ & 8-50 \end{aligned}$ | 27/32 ${ }^{4} / 66^{6}$ | 1.05 |
| $\begin{array}{llll} 11 & L & 653 \\ 1 & L & 1 & 29 \\ 1 & L & 1 & 28 \\ 1 & L & 654 \\ 1 & L & 1 & 27 \\ \hline \end{array}$ | $\begin{aligned} & 822-\mathrm{EZ} \\ & 822-\mathrm{CZ} \\ & 822-\mathrm{BZ} \\ & 822-\mathrm{FZ} \\ & 822-\mathrm{AZ} \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.5-7 \\ & 2-7.5 \\ & 2.5-13 \\ & 3.12 \\ & 4.5-25 \end{aligned}$ | 27/20 ${ }^{4} / 64$ | 1.05 |

TYPES 823, 827 AND 829

| Stock No. | Mir's Type | Mmi Range | Base Size | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{\|lll} \hline 11 & 5 & 50 \\ 11 & 513 \\ \hline \end{array}$ | $\begin{aligned} & 823-A N \\ & 823-A Z \end{aligned}$ | $\frac{\text { vany }}{20-125}$ |  |  |
| 11 $L$ 516 <br> 11 $L$ 517 <br> 11 1 518 <br> 11 1  <br> 1 519  | $\begin{aligned} & 827-\mathrm{A} \\ & 882-\mathrm{B} \\ & 827-\mathrm{C} \\ & 827-\mathrm{D} \end{aligned}$ | $\begin{aligned} & 2.5-7 \\ & 3.5-12 \\ & 6-30 \\ & 7-3.5 \end{aligned}$ | 17/323/40 | 5 |
| $\begin{array}{ll} 11 & L \\ 1100 \\ 1 & L \end{array} 001$ | 829-3 $829-4$ $829-6$ $829-7$ $829-10$ | 5-3 $1-4$ $1-6$ $1-7.5$ $1.5-10$ |  | 30 |

## 4-STAGE PACKAGED AMPLIFIER



An ultra-miniature, 4-stage, mplifier. Has 78 db bain aud 1 kc; 30 db S/N ratio with 25 input. Freq. resp.0 $=5 \mathrm{db} 300$ cycles- 20.000 cycles. Power un to .5 mw into 1000 olims impedance @ 1 kc . Input Impedance 2500 ohms. Powered by $1.34-\mathrm{v}$. mercury batecry at approx 2 ma Recommended control: 25 K ohms with audi aper. Thoroughly sealed to prevent any kind of damage. Body size is $17 / 32^{\circ}$ dia.x $1 / 4^{\circ}$. Less batif LC 298. NET.................... 45.00

HI-VO-KAP UNIVERSAL CAPACITOR

rype TV-207. High-voltage T. 20 ceramic capacitor With set of 7 attachable ter minals. Ideal for servic hops-provides maximum overage with a minimum 500 inventory. Capacitance 35,000 volts Rated 20.000 working volts DC; 35,000 volts test. Moided plastic insulation, Migh- $\mathrm{K}^{\prime \prime}$ ceramic insulaTolerance: $-20 \%$ threaded-hole terminal studs Tolerance: $-20 \%$ to $+50 \%$. Size, ${ }^{10}$ dia. 1/LOに. NET.
TVK-50. Hand
TVK-5-50. Handy serviceman's kit of Hi-Vokinged clear plastic and attachable terminals in Each kit contains 5 by with six compartments Ench kit contains STV-20 high-voltage capacltachable term each of the above pictured at tachable terminals. Covers practically all types hat IIREOIT. NET

## Centralah Ceramic Capacitors

## LOW-VOLTAGE CAPACITORS



Extremely compact, hitsh-capacity, low-voltage, ceramic capacitors. Have durable "Durez" resin Insulation. Designed especially for transistor circuits and other silbminiature appind
cations. Reslst effects of heat. molsture and cations. Resist effects of heat.
vibration. Av. shpg. wt.. 2 oz. Type DA: $1 / 2 \times 1 / 2 x x_{16}$ thick. To
to $+100 \%$ Rated to 30 WVDC.
Type DDA: $5 / 0$ "diameter $\times 7 /{ }^{2}$ "thick. Tolerance $-30 \%$ to $+80 \%$. Rated at 75 WVDC
 Rated at 150 WVDC.
Type CK: diameter as indicated; s/o" thick. Tolerance -20 to $+80 \%$. Rated at 50 WVDC.

## TYPE DA

| Stock No. | Type | Mrd | EACH |
| :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & 203 \\ & 503 \\ & 104 \end{aligned}$ | $\begin{aligned} & .02 \\ & .05 \\ & .1 \\ & \hline \end{aligned}$ | $\begin{array}{r} .36 \\ .81 \\ 1.35 \\ \hline \end{array}$ |
| TYPE DDA |  |  |  |
| 11.6 | 503 <br> 104 <br> 1 | ${ }^{.05}$ | . 30 |
| TYPE DM |  |  |  |
| 11 11 11 1 11 633 635 636 115 |  | .0001 .0002 0002 0001 | . 30 |
| 112637 | $202 *$ $302 \dagger$ $502 \dagger$ $103+$ 104 | .002 .003 .005 .01 | .30 .30 .30 .60 |


\section*{TYPE CK} Stock No. Type $|$| Mrd |
| :---: |
| 0.005 |


| Stock No. | Typo | Mrd | Dia. | EACH |
| :---: | :---: | :---: | :---: | :---: |
| 11 L 642 | 502 | . 005 | 3\% | 1 |
| L 643 | 103 | . 01 | 3/2" | . 21 |
| -644 | 253 | . 0225 | \%\% | - 21 |
| L 646 | 303 503 503 | . 03 | \%\%\% | -21 |
| L 648 | 104 | ${ }^{105}$ | $5 / 8$. | . 60 |

## FEED-THRU HI-KAPS

Tiny ceramics for singlehole mountins. Specifically in hish freguency circuits. Ratert 500 WVDC. Type F. has $12-28$ mointing nut and $050^{\circ}$ dia. tinnerl copper leads with hookerl ends MiFT has $1 /{ }^{\prime \prime}$ dla. hole and MFT FT solfers to chassis (has No. \$ $10 \%$ : quaranteed minimum value. Shpg. we., 2 oz .

| Stock No. | Type | M mif | EACH |
| :---: | :---: | :---: | :---: |
| 11 L 390 | FT- 500 | - 500 |  |
| 112391 | FT-1000 | -1000 | 75 |
| 114392 | FT-1500 | $+1500$ |  |
| 114393 | FT-1800 | +1800 |  |
| 112394 | FT-2300 | +2300 |  |
| TYPE MFT MINIATURES |  |  |  |
| 111488 | MFT T-50 | 8.501 |  |
| 111489 | MF-T-100 | 8100 | O |
| 111490 | M FTT-500 | + 500 | 30 |
| 11 L 491 | MFFT. 1000 | \$1000 |  |

## 850 TRANSMITTING CAPACITORS

Iteal for RF power circults in high-voltage. high frequency circuits. Silver electrobles fire to ceramic. tNeg. temp coet ficient 750 parts/million ${ }^{\circ}{ }^{\circ} \mathrm{C}$. Zero temp
 $30^{\circ}$ temp. rise. 850 eypes are \% \% oleran hex sturs $1 /{ }^{1 / 2}$ shpg. wt., 2 oz .

| Slock ilio. | $\begin{aligned} & \text { Mif's } \\ & \text { Tyoe } \end{aligned}$ | Mmi | WVDC | $\begin{gathered} \text { 1RF L L OAd } \\ 30 \mathrm{Mc} \\ \hline \end{gathered}$ | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1100 | 850S. $252^{*}$ | 25 | 7500 | 7 amps |  |
| 1il 101 | 850 S 502* | 50 | 7500 | 10 amps | 2.70 |
| 116102 | 850S-50N | 50 | 7500 7500 | 8.8 | 2.70 |
| 112103 | 850S-75NT | 75 | 7500 |  |  |
| $L 104$ | 850S-100N |  | $\begin{aligned} & 5000 \\ & 5000 \end{aligned}$ | 9.8 amps | 2.70 |
| L 107 | 8585.500 | 1000 |  |  |  |

## SERIES DD DISC CERAMICS

An extensive selection of Series DD ceramic capacitors in a wide variety of values and worklng voltages to suit practically any need. Engincered for circuitry requiring high capacity, low inductance and rellable perionsively in compact radlo and television structer, these reramic capacitors are usel extensill types. These dise ceramic capaciassemblies as well as in high furelity equiptnent of all yos Teses and higher capacities tors offer hisher dielectric constants, greater breakdown voltages as are No. 22 tinned In less space than similarly rated paper of mis cap * $10 \%$. Buaranteed minimum copper. Tolerances are $\pm 20 \%$ except 10 and copper. vabration. Av. shpg, wt., 2 oz .

| No. | Type | M mi | No. | Type | Mmi |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 111406 | 3R3t | 3.3 | 11.431 | 471* | 470 |
| 114007 | 050* |  | 114706 | 4716: | -70 |
| 115520 | 060 ${ }^{\text {0\% }}$ | 6.8 | $11 L 432$ | 501** | 500 |
| $11 \mathrm{L408}$ | 6R8 ${ }^{\text {* }}$ | 6.8 | 111433 | 561 . | 560 |
| 111522 | 080* |  | 115536 | 661: | 610 680 |
| 114409 | 100** | 10 | I IL434 | ${ }_{751} \mathbf{6 8 1}$ | 750 |
| 11L523 |  | 12 | 114436 | 8015 | 800 |
| 11641 | 200* | 20 | 11553 | 821 * | 820 |
| 112525 | 220* | 22 | TL685 | $911^{\circ}$ | 970 |
| IU412 | 250** | 25 | 114437 | 102G ${ }^{102}$ | 1000 1000 |
| 11L527 | ${ }^{270} 30^{*}$ | 33 |  | 122** | 1200 |
| 116414 | 390* | 39 | 11438 | 152* | 1500 |
| ILL415 | 470* | 47 | 116709 | 152G: | 1500 |
| 11 L 16 | $500{ }^{\circ}$ | 50 | 114540 | 162** | 1600 |
| 114417 | 560* | 56 | 11.541 | 182* | 1800 2000 |
| 11248 | 680* | 75 | 114439 | 2288 | 2200 |
| 11 L 49 | $750^{*}$ | 82 |  |  | 2.500 |
| 11L529 | 820** | $\stackrel{82}{100}$ | 115543 | 2728, | 2770 |
| 11.420 | 101** | 120 | 114440 | 3028 | 3 mm |
| 114221 | $121 *$ $131 *$ | 120 | 11.640 | 3325 | 33010 |
| 116422 | 151** | 150 | 112601 | 3928 | 3900 |
| 116423 | 181* | 180 | 11602 | 4026 | 4000 |
| 116424 | 201* | 200 | 116603 | 4329 472 | 4300 4700 |
| 11.425 | 221. | 220 | 115441 | 472 G | 4700 |
| 11 L 426 | $251 *$ | 270 | $11 L 037$ | 5026 | 5000 |
|  | 301 * | 300 | 116604 | 5625 | 561019 |
| 114429 | 331* | 330 | 111605 | 6828 | 6800 7500 |
| 11.534 | 361* | 360 | 114606 | ${ }_{5022} 75$ | 7504 5000 |
| 11L430 | 391** | 390 400 | I'1L442 | 1032 | 5000 10,000 |
|  |  |  |  |  |  |
| NET EACH (All excepl Type 1032) <br> Type 1032. NET EACH <br> DD 600 VOLTS |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Stock No. |  | Typa | M mi |  | ACH |
| 11.686 |  | 153** | 15.000 |  | . 24 |
| 111042 |  | 203*** | 30.000 |  |  |
| 115 | 687 |  |  |  | $.45$ |
| 112 | 688 689 | 403** $503 * *$ | 40.00050.000 |  | $\begin{array}{r} .45 \\ .45 \end{array}$ |

UK "ULTRA-KAP" MINIATURE DISC CAPACITORS
Disc reramic capacitors designerl to meet the small size and high capacitance requirements of transistor circuitry. Specifically engineered ap
 plications. Present extremely ow power factors. Insulated with double coating of to withstand extreme premperatures, humidity and vlbration. 5 " thick. UK types are

WVDC; UK10 types are 10 WVDC Tolerance -20 to $+80 \%$. Guaran teed minimum value. Av. shpg. Wh., 2 oz. Stock No. Type Mid Dia. EACH | $510 c k$ |  |
| :--- | :--- |
| 1 | $L$ |
| 1 | 2 |
| 1 | 1 |
| 1 | 2 |
| 11 | $L$ |
| 1 | 1 |
| 1 | 2 |
| 1 | 2 |
| 1 | 2 |
| 1 | 2 |
| 1 | 2 | 52

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## Potter \& Brumfield Relays and Accessories

[^19]
## PR HEAVY-DUTY POWER RELAYS



For induntrial applications U.L. Aprew terminals. All PR1/AL5, neither. All have 25-mup silver contacts excontacts. Auxiliary SPD ${ }^{\text {T }}$ are $21 / 2^{\prime \prime}$ wide; PR3, PR $5,21 / 32 \times 21 / 2^{\prime \prime} ;$ PR7, $21 / 2 \times$


MR MEDIUM-DUTY POWER RELAYS


For general applications. Siver contacts rated 8 amp: amps. AC coils for 60 cyel Si actions normally open Size: MR3 and MR5, ipen. $1,3 \times 231 / 2^{2}: M R 11: 2 \times 216 x$
$210 / 3^{2}: M R 14: 2 \times 23 / 16 x$

| tock No. | Type | Volts | Action | NET |
| :---: | :---: | :---: | :---: | :---: |
| 75 P975 | MR3A | 6 AC | SI'ST | 3.85 |
| 75 P978 | MR3A | 24 AC |  |  |
| 75 P665 | M R 3A | 115 AC | SPST |  |
| 75 P983 | MR3D | 6 DC | SPST | 3.50 |
| 75 P 187 | MR3D | 12 DC | SPST |  |
| 75 P988 | MR3D | 24 DC | SPST |  |
| 75 P610 | MR5A | 6 AC | S | 3 |
| 76 P 757 | MR5A MR5A | 12 AC | SpD |  |
| 75 P614 | MR5A MR5A |  |  |  |
| 75 P 657 | M R5A | 115 AC | SPDT |  |
| 75 P 61 | MRSD | 6 DC | SPDT |  |
| 75 P 188 | MR5D | 12 D | SPDT |  |
| 75 P 989 | MR5D | 24 DC | SPDT |  |
| 76 P 760 | MR5D | 110 DC | SP1)T | 0 |
| 75 P612 | MR11A | 6 AC | DPDT | 4.85 |
| 76 P 758 | MR11A | 12 AC | DPDT | 4.8 |
| 75 P616 | MRIAA | 24 15 AC |  |  |
| 75 P 659 | MR11A | 240 AC | DPDI |  |
| 75 P985 | MRIIO | 61 C | DPDT |  |
| 75 P190 | MRIIT | 12 DC | DPDT | 4.60 |
| 75 P991 | MR1ID | 2410 | DPDT |  |
| 76 P 761 | IRIID | 110 DC | DPDT | 5.10 |
| 75 P 976 | MR14A | 6 AC | 3PDT | 5.8 |
| 76 P 759 | MR14A | 12 AC | 3 PDT | 5.80 |
| 75 P982 | MR14A | 24 AC | $3 P D T$ | 5.8 |
| 75 P 972 | MR14A | 115 AC | 310 DT |  |
| 75 P974 | MR14A | $23.1 \mathrm{AC}^{\text {c }}$ | 31PDT | 6.20 |
| 75 P 986 | MR14D | 610 | 31PT | 5.45 |
| 75 P 191 75 P 992 | MR1 $M R 14 D$ M | 12 HC | 3P1)T | 5.45 |
| 76 P 762 | MRI4D | 24 DC | $3 P \mathrm{~T}$ | 5.4 |
| 6 P 762 | MR14D | 110 DC | $31 . \mathrm{LT}$ | 9 |

## KRP ENCLOSED RELAYS



Completely enclosed compact relays in hi-impact.
iransparent. plastic cases fully dust-proof and eather-proof for long. trouble-free operation,

plug into atandard octap plugs into 11 -pin socket sockets; Type KRP14 contacts rated 5 amps at 115 V AC. 60 -cycle resistive. $113 / 3 \times 113 / 2 \times 2^{\prime \prime}$. \begin{tabular}{l}
Stoch No <br>
\hline 75 P 214 <br>
\hline $75 \mathrm{PRP5A}$

 

75 P $2: A$ \& KRP5 <br>
75 \& 215 <br>
75 \& KRP5A <br>
5 \& 213 <br>
\hline
\end{tabular}






Cold Compact, general purpose relays for transmitters, nower supply control, etc. Noiscontacts rated Heavy-rluty AC colls for 60 cycles. are U.L. Approved. o.32 mounting sturi. $17 / 1 / 6 \times 127 / 2 \times$ " $/ 2^{2}$. Slips

| Actian | NET |
| :---: | :---: |
| SPDT | 3.20 |
| SPDTT | 3.20 |
| SPIJT | 3.20 |
| SPDT | 3.20 |
| SPDT | 3.60 |
| SPDT | 3.05 |
| SPDT | 3.05 |
| SPDT | 3.05 |
| SPDT | 3.65 |
| DPDT | 3.85 |
| DPDT | 3.85 |
| DPDT | 3.85 |
| DPDT | 3.85 |
| D1DDT | 4.25 |
| DPDT | 3.40 |
| DPDT | 3.40 |
| DPDT | 3.40 |
| DPDT | 4.00 |
| 3PDT | 4.25 |
| 3PDT | 4.25 |
| 3PDT | 4.25 |
| 3PDT | 4.25 |
| 3PDT | 4.40 |
| 3PDTT | 3.85 |
| 3PDT | 3.85 |
| 3PDT | 3.85 |
| 3PDT | 4.45 |

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.85
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85
45

PC IMPULSE RELAYS
Compact, pulse-operated ng applications or reversing applications. Pulses may nes at 5 cps Goldiliseconds at
silver contacts. Gold-flashed
rated amps at 115 volts sistive load. Size: $21 / 6 \times 215 / 2$

| Stoch No. | Type | Ohms | Ma | Actlo | HET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 75 P 287 | KCP5 | 00 | 2 | SPDT |  |
| 75 P 288 | KCP5 | 5000 | 5.0 | SPDT | 5.90 6.00 |
| 75P 289 | KCP5 | 10,000 | 3.6 | SpDt | 6.40 |
| 75P290 | KCP11 | 2500 | 10.0 | DPDT | 6.30 |
| 75P292 | KCP1! | 10,000 | 7.2 5.0 | ${ }^{\text {DPD }}$ DPD | 6.40 |
| 75 P097 | KCP14 | 2500 |  |  |  |
| 75 P 098 | KCP14 | 5000 | 8.7 | $3 \mathrm{3PDT}$ |  |
| 75 P 099 | KCPI4 | 10,000 | 6.1 | ${ }_{3 P D T}$ | 8.85 |

## RELAY ACCESSORIES



## RELAY CASES

For PR Relays. Steel base with aluminum covconduit. Mtg. $3 \rightarrow \mathrm{No}$ holes on $17 / 8 \times 4 \mathrm{~V} / 3^{3}$ center 10 Size, $31 / 3 \times 55 / 16 \times 33^{\prime \prime} / 8^{\circ}$. Shps 76 P 777 . NET 300 For MR and MS Relays. Steel base with aluminum cover. 2 - knockouts for $3 / g^{2}$ conduit Nounts on pre-drilled holes. We.. $1 / 216$. Amphenol 77 Mips Socket. For KRP 90 KCP relays, For all relays except KRP14 and KCl 14 . Ocial type. Reluires $15 / 12$ hole. Aitg. centera, $112^{\circ}$. Wt., 5 oz . 40 HO28. NET

15
Amphenol 77M1P11 Soeket. For KRP14 and $1 \%$, hole thas Molded bakelite. Mounts in $1 / 1 z^{2}$ hole; has $11 / 2^{2}$ mtg. centers. Wt., 2 oz .20
40 H 033 . NET CLEANING SPATULAS

SINGLE SPATULAS

| $\begin{gathered} \text { Stock } \\ \text { No. } \end{gathered}$ | $\begin{aligned} & \text { Mpr's } \\ & \text { Type } \end{aligned}$ | $\begin{aligned} & \text { For } \\ & \text { leaning: } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: |
| 77 P 328 | 200 | Industrial Relays |  |
| 777 P 329 | 300 | In | 4.9 |

## SPATULA KITS

| Stock No. | Mir <br> Type | Consists of Above Types: | $\begin{aligned} & \text { PER } \\ & \text { KIT } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 77 P 285 | 234 | 1 ea.-200, 300, 400. |  |
| 77 P 288 | 222 33 | 3 each-200. |  |
| 77 P 289 | 444 | 3 eacn-30 |  |

# Potter \& Brumfield, Advance, B-T Relays 

## POTTER \& BRUMFIELD RELAYS

## AB APPLIANCE RELAYS

Ineal for appliance applfand quiet operation
DIDD stvercontactsrat 3 ed at 10 anps. Size: ${ }^{13 / 3 x}$ screw terminals provided. Two 8-32 mig. lioles on proved. 5 oz

| Stock No. | Type | Volts | NET |
| :---: | :---: | :---: | :---: |
| 75 P 399 | AB11AV* | 6 AC | 5.30 |
| 75 P 418 | AB11AY* | 24 AC | 5.30 |
| 75 P 419 | AB11AV* | 115 AC | 5.30 |
| 75 P 448 | ABIIAY* | 230 AC | 5.70 |
| 76 P 768 | AB11D | 12 DC | 5.20 |
|  |  |  | 5.20 |
| 76 P 769 75 P 449 | ABIID | 10 DC | 5.7 |

## ABC MEDIUM-POWER RELAYS

For small motors, industrial controls, etc. Have DPDT
silver contacts rated at 10 mol terminalsaresupplied. Have
chassis: $131 / 4 \times 225 / 32 \times 23 / 22^{2}$. Single No. 8-32 mounting stud $3 / 8$ = long and locating tab. *U.L. Approved Av. slipg wi. 7 oz

| 75 P 431 | ABCl1AY* | 6 AC | 6.40 |
| :---: | :---: | :---: | :---: |
| 75 P 432 | ABC11AY* | 24 AC | 6.40 |
| 75 P 433 | ABCl1AY* | 115 AC | 6.40 |
| 75 P 464 | ABCifAY* | 230 AC | 6.80 |
| 76 P 770 | ABCIID | 6 DC | 6.30 |
| 76 P 771 | $A B C 11 D$ | 12 DC | 6.30 |
| 76 P 772 | ABCild | 24 DC | 6.30 |
| 75 P 465 | ABC11D | 110 DC | 6.80 |

MB MINIATURE DC POWER RELAYS
Rugged telephone type relays. Designed for very high current applications. Contact arms are heavy orass with large sllves contacts; molder terminais. Ratd 60 amps, SIST: double break, normatiy open. Size: $1 / 1$ -axis". Mountink: Four No centers. Av, shopg. wt., 5 oz .

| 75 P 059 | MB3D | 6 DC | 5.40 |  |
| :--- | :--- | ---: | ---: | ---: |
| 75 P 065 | M B3D | 12 | DC | 5.50 |
| 75 P 066 | M B3D | 24 | DC | 5.50 |
| 75 P 067 | MB3D | 110 DC | 5.90 |  |

## MS MOTOR-STARTING RELAYS

For capacitor-start. inductionan motors. Adjustable puil-in. Apes rated at $3 / 4 \mathrm{HP}$; M S4 at 31fP. ${ }^{\text {Hited }}$ Have double-break conlacts. U.L. Approverl. 21/a $\times 2^{1} / 2 \mathrm{zx}$ Oz.



## GP "PIC AND BUILD" SERIES

Units available can be com bined to produce twenty dif ferent relays, each easily sensitivity or switching arrangement in minutes. The mately 5000 ohms. The mately
2500,5000
5000
ohms.
10.000 ohm
 coils may be used in plate circuit applications and can be adjusted to
 diameter switch contacts are rated at 5 ampas. Has tapped core to permit mounting with sinkle


## LB-S PLATE CIRCUIT RELAYS

Small, fast-acting circuit relays. For any circuit supplying. only a few milliwatts of mimimum. Silver contacts are of $\|$, rated 60 -cyele resistive. All units
 have SpDT action. Adjusted by bending tailspring hook. Size, $221 / 2 \times 11 / 4 \times 13 / 1^{\prime \prime}$. For DC op eration only, Shps.. wt., 5 oz.

| Stock No. | Ohms | Ma | NET EACH |
| :---: | :---: | :---: | :---: |
| 75 P 625 | 2500 | 9 | 2.45 |
| 75 P626 75 P 774 | 5000 10.000 | 6.3 4.5 | 2.65 2.85 |

LM PLATE-CIRCUIT RELAYS


For pliotoelectric and similar circuits. Medium-cost. high quality, current-actuated relaya. Pull-in adjus screw. DC coils only. Silver contacts rated 5 amps, 115 V ., 60 cycles, non-inductive load. llave 100 milliwatt sensitivity for single-pole, -SPDT: tDPDT, Sizes are: LM5, $246 \times 1 / 4$. $27 / 16^{\circ}$; LM11. $27 / 16 \times 25 / 12 \times 21 / 2^{\prime 2}$. Av. shpg. wt., 9 oz

| Stock No. | Type | Ohms | Ma | NET |
| :---: | :---: | :---: | :---: | :---: |
| 75 P 673 | LMS* | 2500 | 6.3 | 3.90 |
| 75 P 674 | LM5* | 5000 | 4.5 | 4.10 |
| 75 P 675 | LM5* | 10.000 | 3.2 | 4.40 |
| 75 P 682 | LM11 | 2500 | 9.0 | 5.55 |
| 75 P683 | LM11 | 5000 | 6.3 | 5.75 |
| 75 P 684 | LMil | 10,000 | 4.5 | 6.30 |

AP RATCHET IMPULSE RELAYS
An extrennely fast acting relay for applications re
quiring on-off or reversink action on alternate int pulses. Operate: on im pulses as short as $n 0 \mathrm{~ms}$
Intermittent duty. Con
wound on molded bobbins. Phenolic cams, hardened steel pawl and ratchet with pin hinged armature. Tinnerl solder terminala.
 triangular centers. Size: $25 / 6 \times 21 / 4 \times 33 / 4$
types for $50-60$ cycle. Shpg. wt.. 12 oz .

| Stock No. |  | Volts | Action |  |
| :---: | :---: | :---: | :---: | :---: |
| P 997 | APIIA | AC | DPDT |  |
| P 581 | AP11A | 12 AC | DPDT |  |
| 75 P 995 | APIIA | 24 AC | DPDT |  |
| 5 P993 | AP11A | 115 AC | DPDT |  |
| 76 P 583 | AP11A | 230 AC | DPDT |  |
| P | AP11D | 6 DC |  |  |
| 5 P 999 | AP11D | 24 DC | DPDT |  |
| 6 P 589 | APIID | 110 DC | DPDT |  |
| P 996 | AP17 | 24 AC |  |  |
| 75 P994 | AP17A | 115 AC | 4 PDT | 10. |
| 6 P 588 |  | 12 DC | 4PDT |  |
| 5 P 778 | AP17D | 24 DC | 4 PDDT |  |
| 6 P 590 | AP17D | 110 DC | 4PDT |  |

## BS SERIES

Long-coil telephone type relays. Ideal for computer and automatic test equipment. Tinned solder terminals for rear panel mount-
 ing. Have 4-amp,6PDT and BS23L are plate circuit relays; $\uparrow 5.5 \mathrm{ma}$, holes on $1 / 4^{\prime \prime} \mathrm{mtg}$. centers. Shpg. wt. 11 oz .

| StockNo | Type | Volts | Onms | EACH |
| :---: | :---: | :---: | :---: | :---: |
| 76 P 646 | BS17D | 24 DC* | 1000 | 7.40 |
| 76 P 649 | BS17L | $\dagger$ * | 10,600 | 8.00 |
| 76 P648 | Bs23. | 115 AC | 71 | 10.50 |
| 76 P647 | B523D | 24 DC | 1000 | 8.95 |
| 76 P 312 | BS23D | 48 DC | 1600 | 9.30 |
| 76 P313 | B523D | 110 DC | 6500 | 9.50 |
| 76 P 499 | BS23L | 8 | 10,000 | 9.50 |

KT ANTENNA-SWITCHING RELAYS

| For selecting tennas or fo antenna from mitter and vi for RF applic insulatlon Will switch are DPDT. tacts. Size: | either ol switchi receiver e-versa. ations: g ininim 100-olim tg.: 6-32 $1 / 4 \times 15 / 8 \times 1$ | wo ansingle otransesigned ass base m loss. ine. All tud. Silv /o". Slip |  |
| :---: | :---: | :---: | :---: |
| Stock No. | Type | Volts | NET EACH |
| $\begin{aligned} & 76 P 373 \\ & 76 P 374 \\ & \hline \end{aligned}$ | $\begin{array}{llll} \mathrm{K} \\ \mathrm{KT} & 1 \end{array}$ | $\begin{aligned} & 6 \mathrm{AC} \\ & 115 \mathrm{AC} \end{aligned}$ |  |
| $\begin{aligned} & 76 P 375 \\ & 76 P 376 \end{aligned}$ | $\begin{aligned} & \mathrm{KT} 111 \mathrm{~J} \\ & \mathrm{KT} 111 \mathrm{D} \end{aligned}$ | $\begin{aligned} & 6 \mathrm{DC} \\ & 12 \mathrm{DC} \end{aligned}$ |  |

## ADVANCE RELAYS

## TYPE CB COAXIAL RELAYS

Designed to meet the problems of coaxial cable switching. For use with 52 -ohm RG coaxial cables at RF outputs of up to 800 watts
on lines with low SWR. For use in on lines with low SWR. For use in mobile, aircraft, and fixed-station installions. less than $1.08: 1.00$ at 150 me. Extremely low-loss at very frequencies up to 300 mesacycles. Intemal contacts are niade of heavy quarter-inch fine silver.

All have SPDT internal contacts directly con nected to Amphenol 83-1 R connector. In addition, all Types CB/IC2C have external DPDT cacts for for use wih auxilary circuis. All contacts rated at 5 amps. An inspection port in the anodized housing pernits access to internal contacts, With two tapped mounting holes: 6.32


| No | Mir's Type | Volts | Ohms | NET |
| :---: | :---: | :---: | :---: | :---: |
| 87 P 902 | CB/1C/115A | 115 | 280 | 21. |
| P910 | CB/1C2C/115A | 115 v. AC | 280 |  |
|  | CB $1 \mathrm{C} / 6 \mathrm{~V}$ V | 6 v . OC | 18 |  |
| 0 | CB 1C2C/6VD | 6 v. DC | 18 | 23.60 |
| 88 P 305 |  | $12 \mathrm{v.OC}$ | 70 |  |
|  |  | 12 | 10 |  |
| - | $\mathrm{CB} / 1 \mathrm{C} / 24 \mathrm{VO}$ | 24 v. OC | 280 |  |
| P | CB/1C2C /24 | 24 r . |  |  |

## GH GENERAL PURPOSE RELAYS

Efficient midget re
lays. GHP Types en
lays. Gilp Types enclosed in transparent standard octal plus for 1 C and $2 \mathrm{C}, * 11$ pin plug for 3C. GHA
 types have solder

Open
Closed amp contacts, non-inductive load. GHA: $\mathbf{1 4}^{47} / \mathrm{mx}$

 | $\begin{array}{c}\text { Stock } \\ \text { No. }\end{array}$ | $\begin{array}{l}\text { Mir's } \\ \text { Type }\end{array}$ |
| :---: | :---: | 87 P 914

87 GHA/IC/24AC
87

| Coil Volts | Action | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: |
| AC | SP | 5 |
| 115 AC | SPDT |  |
| 24 DC | SPDT | 3.05 |
| 24 AC | SPDT | 5.10 |
| 115 AC | SPDI |  |
| 24 OC | SPDI | 5.15 |
| 24 | DPDI |  |
| 115 AC | DPDT |  |
| 24 OC | DPDT | 3.35 |
| 24 AC | DPDT | 5.75 |
| 115 AC | DPDT |  |
| 24 DC | DPDI | 5.65 |
| $24.4 C$ | 3 PDT | 4.05 |
| 115 AC | 3PDT | 4.05 |
| 24 DC | 3PDI | 3.75 |
| 24 AC | 3 PDI | 7.05 |
| 115 AC | 3 PDT | 7.05 |
| 24 DC | $3 P$ |  |

## TYPE AM ANTENNA RELAYS

Compa Compact "transmit-receive" RF use. DPDT silver contacts 6.5 VDC resistive, Mounting stud. Size, $19 / 16 x^{i s / 6} \times 1 / 3 / 6$ Shpy. wt., 6 oz
Stock No Mif's Type Volts |NET $37 \mathrm{P} 994 \overline{\mathrm{AM} / 2 \mathrm{C} / 6 \mathrm{VA}}-6 \mathrm{v} \cdot \mathrm{AC} \overline{4.70}$ $37 \mathrm{P} 995 \mathrm{AM} / 2 \mathrm{C} / 6 \mathrm{VD}$ 877 P 996 AM/2C/12VD


## BLONDER-TONGUE THERMO RELAY

 Model TR-3A. Replacement re lay used in boosters and converters which automatically turn on and of with the TV set. When iv set is turned on. current drawn by the sce the relay. heating in. and casing the relay to close thus supplying power to the by set is turned off relay. Whens and he converter or relay opens, and he converter or booster is turned ofl. Siver contacts are adjustable for time delays of to seconds 200 volts, AC. Provide exceptionally uniforn operation ovel current tange of 1 to 3 anps. operation ovel current iange of a to 3 amps.Size. $21 / 4 \times 1 \times 1 / 6$. Shpg. Wt. ${ }^{2}$ oz. 1.30


## Guardian，Dow－Key and Amperite Relays



Universal interchanceable parts for assembling custom relays，Listlngs inrlurle AC．DC，and plate roils，and swisch contact assemblies．Complete relay renuires one roil ant one contact assembly．For additional contacts use tlie contart switch narts kit．Contact ratings given are at 115 v .60 cycle AC，non－iniluctlve Inat．Tre two 6.32 acrews for mounting．Overall sizt：With atantarit rontact assembly $2 \% \times 11 / x^{2} 8^{\circ}$ ；mitiget contact as sembly． $2^{2}$ 保 ${ }^{1} 4 \times 1$ b／2＂．Av．slipg．wt．， 4 oz

| AC Colls |  |  | DC Colls |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stock No． | Voles | NET | Stock No． | Volts | NET |
| 75 P 709 | 12 | 1.75 1.75 | 75 P 713 | 6 | 1.90 |
| 75 P 711 | 24 | 1.75 | 75 P 714 75 P 715 | 12 | 1.90 |
| 75 P712 | 115 | 2.05 | 75p716 | 32 | 1.90 |
| 75 P 888 | 230 | 2.70 | 75 P 717 | 110 | 2.50 |

75 P 779 ．Type $200-5000 \mathrm{D}$ plate Coll． 5000 ohms EACH 2.20

## SERIES 200 SWITCH CONTACT ASSEMBLIES



## X300－ER OVERLOAD RELAY

Protects akainst surges or overload．Has re－ mote electrical reset and overloarl adjust－ ment．Adjustable from $250-750 \mathrm{ma}$ ．I）C $30(0) v$ insulation Auxiliary contarts for nilot light inclicates＂overload＂or＂clear＂ position．For industrial panel installation or remote protection of machines and re
placing fuses．Contacts rated 1500 w ，non－inductive， 1 kw inductive，at 75 P． 640 cycles． 2000 VET ．insulation． $43 / 4 \times 13 / 6 \times 2^{\circ}$ ． $11 / 4 \mathrm{lbs}$
8.85

ALLIED CAN SUPPLY THE COMPLETE GUARDIAN LINE．Only the nost widely used Guardian relays are shown on this page． Contact us for prices and other information on any types not listed－you will receive a prompt reply to your inquiry．


## DOW－KEY COAX ANTENNA RELAYS

Compact coax alstenna relays for swicchin one antenna between transmitter and recriver etc．letter $G$ in type no．indicates shielding that provides foo do isolation between trans－ mitter anl receiver．P＇ure silver contacts rated to 1 kw．Breakdown v．．over 1000 v ．rms．Imp． 50 ollms．loss，less than 0.0 .3 db at 400 mp throughs for high insulation．Have DPDT 5 －amp external contacts． Size， $23 / 4 \times 31 / 4 \times 11 / 2{ }^{*}$ ．Av．shpg．wt．， 11 oz ．
76 P II4．Type DK60．For 12 v．DC．NET
12.45

76 P 115 ．Type DK60．For 110 v ．AC．NET
12.45

75 P 953．Type DK60－G．For 12 v ．DC．NET
13.70

75 P 955．Type DK60－G．For 110 v ．AC．NET
13.70

76 P 119．Type DK60．G2C＊．For 12 v．DC．NET
15.65

16 P $1 / 9$ ．Type DK60－G2C＊．For 110 v ．AC．NET
15.65

DK60－DPDT Switch．Auxillary DPDT switeh．5－amp contacts． Mounts externally on DK60－G relay above；is actuated by built－in 75 P843．NET．Shpt．wt．． 202
1.95

Type DKF－2 Connector．Double male．Mounts relays directly to out－ put of transmitter．Heavy silver ilating．For indoor use．Locking type 75 P 946 ．NET
1.25

12VDC Coil．Model DK60－M． 12 volt relay coil for converting DK $60 . G$ ideal for 12 relay ur DK60－G 110 volt AC relays for 12 volt DC use．

2.90

## 2200 AND 2210 POWER RELAYS

Heavy－duty power relayg for motor starting．heater loarls and other heavy－duty uses．Series 2200 are DPDT；Series 2210 are DPST normally open．All have comtacts rated at 25 amps．cont inuoun duty． 2.30 v ．AC with $75 \%$ nower factor load．Operating power requirement． 9.5 va；coil drain．approx．Os0 amps at 115 v ．， 60 cycles．Size：Series $2200,3 \frac{1}{3} \times 2 \frac{1}{2} \mathrm{x}$ $21 / 6^{\circ}$ ：series 2210 ， $211 / 16 \times 21 / 2 \times 21 / 16^{\circ}$ ．Av．shps．wt．，relays． 12 oz ．

| Volts$A C$ | 2200 Relays |  | $\begin{aligned} & \text { Volis } \\ & \text { AC } \end{aligned}$ | 2210 Relays |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Stock } \\ \text { No. } \end{gathered}$ | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |  | Stock No． | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| $\begin{array}{r} 26 \\ 115 \\ 230 \\ \hline \end{array}$ | $\begin{aligned} & 75 \text { P083 } \\ & 75 \text { P } 084 \\ & 75 \text { P } 085 \\ & 75 \text { P } 086 \end{aligned}$ | $\begin{aligned} & 6.10 \\ & 6.10 \\ & 6.10 \\ & 6.50 \end{aligned}$ | $\begin{array}{r} 6 \\ 24 \\ 115 \\ 230 \\ \hline \end{array}$ | $\begin{array}{l\|l\|l} 76 & P & 85 \\ 76 & P & 86 \\ 76 & P & 87 \\ 76 & P & 88 \\ \hline \end{array}$ | $\begin{aligned} & 5.25 \\ & 5.25 \\ & 5.25 \end{aligned}$ |

CS－2200．Switch Parts．Switch assemblies for 2200 relays only．
75 p 563 means as vietved at armature end，contacts up．Wt．． 4 oz
75 P 563 ．Reft Assembly．NET．
75 P 564 ，Right Assembly．NET


## 1A1－18 SERIĖS INDUSTRIAL SOLENOIDS

 Intermittent－duty types for applications not re－ quiring energization for more than 5 minutes with sufficient time between cycles for cooling．Should $24^{\circ} \mathrm{C}$ permitted to rise more than $85^{\circ} \mathrm{C}$ athove $24^{\circ} \mathrm{C}$ ambient without sufficient time to cool．Con－ tinuous duty types will not rise more than $85^{\circ} \mathrm{C}$16，18 asove the $24^{\circ} \mathrm{C}$ ambient temp．When uperater at

| StockNo． | Type | Voles | Stroke | Oz， | Slze | ． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 75 P 890 | 1A1＊ | 115AC | $3 / 1 / 10^{\circ}$ |  | $1 / 4 x 13 x^{12} 0^{\circ}$ | 4 | 2.8 |
| 75 P891 | lalt | $115 A C$ $115 A C$ | $\text { 有- } 10 .$ | $3$ |  | 4 |  |
| P15 | $2+$ | 115AC |  | $\begin{aligned} & 27 \\ & 10 \end{aligned}$ |  | \％ |  |
| P 892 | 4 $=$ | 115 AC | 4－11 |  | $\begin{aligned} & 1 \% \times 1.6 \times 18 \\ & 159 \times 2 \times 1^{17} / 4 \end{aligned}$ | 1 |  |
| 75 P 893 <br> 75 | $\begin{aligned} & 4+ \\ & 12 \end{aligned}$ | 11 | 3／1\％ | 6 | 15＊2 $\times 1{ }^{19}$ |  |  |
| P5 | 12＋ | $115 A$ |  | 22 | $170 x 15 x$ |  |  |
| 75 P 5 | 11 ＊ | 6 | 36－1＊ | 39 |  |  |  |
| 76 P 318 | 11＋ | 615 | 4．10 | 21 | 10010 |  |  |
| P | 11＊＊ | 24 D | 4－1： | 39 | 13／0x $14 / 8 \mathrm{x}$ |  |  |
| 76 P 319 | $11+$ | 24 D | 4．1． | 21 |  |  |  |
| 75 P 894 | 14＊＊ | 115 AC | 40－1 11. | 110 | $2^{1} 10 \times 21 / 10$ | 1 | 5. |
| 75 P 895 | 14t | 115 AC |  | 65 | $21,0 \times 210 \times 170$ | 11 |  |
| 75 P 156 | $16^{\circ}$ | 115 AC | 1／8－3／4 ${ }^{\text {a }}$ | 96 | $1510 \times 15 \times 10^{\circ}$ | 1／4／4 | 3.2 |
| 75 P 885 | 164 |  | K． | 60 | 6x1析×1 |  |  |
| P | 164 | 230 AC | 40． | 60 | $\times 15 \times 1$ | 1. | 3.4 |
|  | 18 | 115 |  | 304 | 25x1 |  |  |
|  |  |  |  | 145 |  |  |  |
|  |  |  |  |  | $\times 1$ |  |  |

## MER－115 MIDGET STEPPING RELAY

Electrical－reset stepping relay with 21 active positions；remets from ex－ ternal control or own contacts．Contacts rated 1 amp at 115 v ． 60 cycle． non－inductive．Steppilig athd rexet coils 115 v ．， 60 cycle AC．Minimum set pulse， 50 ms ；reset． 10 ms ．Recommended for experimental purposes，

75 P 282．NET EACH
14.00

## AMPERITE DELAY RELAYS

Hermetically sealed in glass envelope with ortal base． Heater draws 2 ＂att．Contacts：Sl＇ST． 3 amps at 115 v．AC， 1 amp at 220 v．AC．Voltake Breakriown：Con－ tacts， 1000 v i Heater－to－Contact． 1500 v ，except＊ 250 v ．and 500 y ，for delays of 10 sec ．or less．imbient tem－ peralures from $-55^{\circ}$ to $470^{\circ} \mathrm{C}$ ．Size．Dia．， $172^{\circ}$ ； Herght less prongs． 29 Shyg．Wt．． 4 oz．Be sare to

| Delay Seconds | Type No．Normally Open |  |  | Type No．Normally Closed |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 6.3 v． | 26 v | 115 v | $6.3 \%$ ． | 115 v ． |
| ${ }_{5}^{2}$ | 6 NO 2 6NO5 | 26 N 02 | 115N02 | $6 \mathrm{C}^{2}$ | 115 C |
| 10 ＊ | ${ }_{6} \mathbf{6 N O 1 0}$ | 26N05 | 115N05 | ${ }_{6}^{6 C 5}$ | 11505 |
| 15 | 6 N015 | 26N015 | 115 NO 5 | $6 \mathrm{6C15}$ | $115 C 10$ $115 C 15$ |
| 20 | 6 NO 20 | 26 NO20 | 115 NO 20 | 6 C 20 | 115 C 20 |
| 30 | 6NO30 | 26N030 | 115 N030 | 6 C 30 | 115 C 30 |
| 45 | $6 \mathrm{NO45}$ | $26 \mathrm{NO45}$ | 115 NO 45 | 6 C 45 | 115 C 45 |
| 60 75 | 6N060 | 26N060 | 115 N060 | 6 C 01 | 115 C 60 |
| 75 90 | 6N075 | $26 \mathrm{NO75}$ | 115 N075 | 6 C 75 | 115 C 75 |
| 90 | 6N09） | 26 NOPO | 115 No90 | $\mathrm{CCO}_{0}$ | 1150 |
| 120 | 6N0120 | 26 N 0120 | 115 NO 20 | 6 CC 20 | 115 Cl 20 |
| 150 | GN0I50 | 26N0150 | 115 N0150 | 6 C 150 | 115 C 50 |
| 180 | 6N0180 | 26NO181） | 115 N0180 | $6 C^{180}$ | $115 \mathrm{Cl} \mathbf{1}^{1}$ |

75 PP 295．NET EACH
2.40

Miniature Rolays．All types ahove also ayailable in minlature size except $115 \mathrm{C} 150,115 \mathrm{C} 180$ ， 115 NO 150 ． 115 NO 180 ．9－pin，为 $\times 2$ sis．Shpg． Ext． 3 oz．Specify type no．，adding letler＂T＂fullowing type nimber．
75 PP 296．NET EACH
2.40
Q4pers

\begin{abstract}
A Type 4F. A wide selection of plate circuit A relays for any 20 or 50 mw . sensitivity appider terninal and coil lead connection. SpDT der terninal and coil lead connection. Section, burglar alarms. etc. $11 / 2 \times 15 / 8 \times 19 / 33^{*}$. 3 oz .

| Stock No. | $\begin{aligned} & \text { Mrr's } \\ & \text { Type } \end{aligned}$ | m: | $\begin{aligned} & \mathrm{Ma} \\ & \mathrm{DC} \end{aligned}$ | NET |
| :---: | :---: | :---: | :---: | :---: |
| 76 P 126 | 4F-200-S/SIL |  | 10.0 |  |
| 76 | 4F-1000-S/SIL | 1000 | 5 |  |
|  |  | 2500 | 3.0 |  |
| 66 P 379 | 4F-5000-S/SIL | 5000 | 2.0 |  |
|  | 4F-8000-S/SIL | $800$ | 1.6 |  |

(8) Type 5F. General-purpose DC or AC with contacts rated at 1 amp. Withstand sliock up to 100 G . Units are unenclosed, with screw mounting and solder terminal connection. Size, $13 / 4 x$ 156x $111 / 10$. Shpg, wt., 5 oz .

| 76 | $P$ | $380 \mid 510-1000-S / S l L$ | 1000 |  |
| :--- | :--- | :--- | :--- | :--- |
| 76 | $P$ | 381 | $5 \mathrm{~F}-2500-S / S I L$ | 2500 | | 76 | P 381 | $5 F-2500-S / S I L$ | 2500 |
| :--- | :--- | :--- | :--- |
| 76 | P 382 | $5 F-5000-S / S I 1$ | 5000 |
| 76 | P 372 | $5 F-8000-S / S I L$ | 8000 | | 76 | P 372 | $5 \mathrm{~F}-8000-S / S I L$ | 8000 |
| :--- | :--- | :--- | :--- |
| 76 | p | 38 | $5 \mathrm{~F}-10000-\mathrm{S} / \mathrm{SIL}$ |

CModel 8RCOIA Photorelay, 5 -pin plug-in SPDT contacts rated at 5 amps. $21 / 4=11 / 2$ For 120 V., $50-60$ cycle AC. 5 oz . NET 15.00 Type 11 F . Small, low-cost DC relay. 50 and 200 mwv senaitivity: SPDT contacts

| Stoek No. | Typu | Onms | $\begin{aligned} & D C \\ & M a . \end{aligned}$ | NET |
| :---: | :---: | :---: | :---: | :---: |
| $\overline{79}$ P 658 | 1tFr-250-G/SIL | 250 | 14.0 | 1.75 |
| 79 P659 | 11F-550-G/SIL. | 550 | 9.5 | 1.75 |
| 75 P 068 | $11 \mathrm{~F}-1000 \mathrm{G} / \mathrm{SIL}$ | 1000 | 7.0 | 1.75 |
| 75 P 069 | $11 \mathrm{~F}-2300 \cdot \mathrm{G} / \mathrm{SIL}$ | 2300 | 4.6 | 1.75 |
| 75 P 074 | $11 \mathrm{~F}-6000 \mathrm{G} / \mathrm{SiL}$ | 6000 9000 | 2.9 | 1.95 2.15 |
| 75 P 075 | 11F-9000-G/SIL | 9000 | 2.4 | 2.15 |


[G] Series 42. DPDT relay with octal piug-in Grom 101 to 200 mw on DC and 0.30 to 0.50 .60 from 100 to 200 mw on AC . Silver contacts rated 1 to 5 amps at 28 V DC or 120 V . AC tor 100.000 operations. 28 C . AC units are designed for AC cycle Withend shock in 100 G Pin connections are on cover $\mathrm{upp}_{2 / 66} \times 13 / 6 \times 15 / 6^{7}$. Shpg, wt.. 4 oz

| Slock No. | $\begin{aligned} & \text { Mir's } \\ & \text { Type } \end{aligned}$ | $\mathrm{V} / \mathrm{Ohms}$ | Ma . |  |
| :---: | :---: | :---: | :---: | :---: |
| 76 P 401 | 42R02-8 ACG/SIL | 6 V |  |  |
| 76 P914 | 42ROZ-25-ACS/SIL | 6 VAC |  |  |
| 76 P 403 | 42R02-200-ACG/SIL |  |  |  |
| 76 P 908 | 42 |  |  |  |
| P ${ }^{\text {P }} 404$ | 42R0Z. 4000 -ACG/SIL |  |  |  |
| 76 P 907 76 P 406 | $\begin{aligned} & 42 R 02-7000-A C S / S I L \\ & 42 R 0.5 \cdot 6 / S 11 \end{aligned}$ | 50 hms | 55 |  |
| 76 P 407 | \$2RO-50-6/SIL. | 50 ahms | 65 |  |
| 8 | 42RO-200-6/SIL | 200 ohms |  |  |
|  | 42R0-1000-G/SIL | 1 K ohms |  |  |
| 76 P 410 | 42RO.5000-6/SIL |  |  |  |
| 76 P 41 ! | 42RO-10000.G/SIL | 10 K |  |  |

(H) Serles 72 . Sensitive, magnetic latclaing reing telegraphy up 500 puliws, per eecond- designed to withstand tremendous shocks. SPsigned contacts rated 0.06 amp. Require 50 VDC and 15 ma . Have octal plug in base and removable dust cover. Trip Ma in table for removable coil, either polarity. Size, $17 / 6 \times 25 / /^{\prime \prime}$. elther woil, 5 oz.
 76 F912 $72 \mathrm{AOZ}-100 \mathrm{TS}$ STCP 1.4
 (J) 26F-8000-C DS/PAL Relay. General-pur. but higher efficiency rating. Has SPDT conbut higler efficiency rating. Has SPD or 120 tacts, rated 0.5 amp at 28 voits $D C$ or 120 ma. Silpg. wh $7^{7}$ oz
9.75

## IT \& T CONTACT PROTECTORS

Effective protection for relay contacts controlling
 For loads operating up to 40 times per second, and drawing up to 600 ma For loads operating up to 40 times per s.
operating current. Av, shpg. wt., 6 oz.

| Stook | Type | Max. V. | Max. Ma | Min. V. | Size | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 76 P 257 | 8A1PS1 | 26 AC | 200 | 0 AC | ${ }^{23} 46 x^{5 / 60}$ | 9 |
| 76 P 328 | $8 \mathrm{8A2PS1}$ | 44 DC | 250 | 23 DC |  | . 90 |
| 76 P 323 76 P 258 | $\begin{aligned} & 8 \mathrm{~A} P \mathrm{SS}_{2} \\ & 8 \mathrm{~A} 3+\mathrm{S} 1 \end{aligned}$ | 52 AC 66 DC | 200 250 | 45 DC | ${ }^{23 / 40 x} 3 / 4^{\prime \prime}$ | 1.07 |
| 76 P 296 | 8A4PS1 | 88 DC | 250 | 67 DC | 73/4x ${ }^{3 / 4}$ | 8 |
| 76 P 297 | $8 \mathrm{A5PS1}$ | 110 DC | 250 | 89 DC | (0x $1 /{ }^{\text {a }}$ |  |
| 76 P 326 | $8 \mathrm{A5PS5}$ | 130 AC | 200 | 105 AC | ${ }^{25} / 18 \times 1966^{\prime \prime}$ | 1.40 |
| 76 P 298 | 8AGPS 1 | 132 DC | 250 | 111 DC | ${ }^{23} 40 \times 15 / 16^{\prime \prime}$ |  |
| 76 P 299 | $8 \mathrm{A7PS} 1$ | 154 DC | 250 | 133 DC |  | 1.26 1.94 |
| 76 P330 | $15 A 2 P S 1$ $15 A 3 P S 1$ | 44 DC | 600 600 | 45 DC | ,ax |  |
| 76 P 348 | 15A3PS 1 | 110 DC | 600 |  |  |  |
| 76 P 356 76 P 327 | 15ASPS1 15ASPS5 | $\begin{aligned} & 110 \mathrm{DC} \\ & 130 \mathrm{AC} \end{aligned}$ | $\begin{aligned} & 600 \\ & 400 \end{aligned}$ | 89 105 AC | (1/2x ${ }^{1 / 4}{ }^{\circ}$ | $\begin{array}{r}1.36 \\ 1.56 \\ \hline\end{array}$ |
| 76 P 364 | $15 A 6 P$ S1 | 132 DC | 500 | 111 DC | $1 / 2 \times 1516$ | 1.37 |

## HURST SYNCHRONOUS MOTORS

New CA Series- 100 Inch. Ounce ReversIble. For continuous timing applications in alarm systems, displays, process controls, etc. Instantly reversible with SPDT switching: maintain accuracy both clockwise and counter-clockwise. Torque; 100 inch-ounce at 1 rom. Case, $21 / 2$ dia. $x 21 / 5$
is long flatted. Power drain: 5 watts. For
 SM Series-4.inch-Ounce Unidirec. tlonal. Shaded pole, cio of 40 inch-ounce at stant start at foll torgue of 40 inch-ounce at 1
rpm . Power drain: 5 watts. Case, $21 / 2^{*}$ dia. $\times 13 / 4^{*}$. Shaft, $3 / 6^{\circ}$ dia. by $1^{*}$ long. For $95-130$ v., 60 cycle AC. Shpg. wt., 1 lb .

## OUTPUT SPEEDS IN RPM

| $1 / 3$ | $21 / 2$ | 8 | 20 | $331 / 3$ | 64 | 160 | 800 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 2^{*}$ | $3^{*}$ | $10^{*}$ | 24 | 40 | 80 | 200 | 1000 |
| $1 w^{*}$ | $4^{*}$ | 12 | 25 | 48 | 100 | 240 | $\ldots$ |
| $11 / 2$ | $5^{*}$ | $15 *$ | $30^{*}$ | 50 | 120 | 400 | $\ldots$ |
| $2{ }^{*}$ | $6^{*}$ | 16 | 32 | $60^{*}$ | 150 | 600 | $\cdots$ |

[^20]77 PP 152.5 M Serles. A vailable only in speeds indicaled by
*aster isk in table abose-Specify Speed.................EACH 9.08

## GENERAL CONTROLS CO. COUNTERS



High-quality electric counters for commercial and industrial applications. For 60-cycle operation.
Prefix CE-40. Sniall counters for coln-operated devices and light to moderate-duty industrial applications. Minimum make time 0.04 sec., break time 0.06 sec. Raterl at 600 CPM. Enclosed in tamper-proof case. Reset units count to 4 digits, non-reset to 5 . Shpr. wt., 1 lb .
Prefix CE-600. Sniall counters for general industrial purposes. Have Prefix CE-600. And break time of 0.030 sec . Enclosed in dust-resistant minimum make and 0 reak ${ }^{\prime} \mathrm{M}$, $50-\mathrm{million}$ count life. Have continuousduty coils. 6 disits. Shps, wt., 1 lb.
Prefix CE-800. Heavy-daty counter, For use on drill and punch presproof aluminum case. 6 digits. Continuous duty coils. Wt., 5 lis.

RESET TYPES

| No. | Type | Fig. | V. AC | Size | Mount | Mitg. Cirs. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 77 P099 | CE-408S 01 | M | 24 | $113 / 6 \times{ }^{213} / 6 \times 2^{27 / 40}$ | Panel |  | 15.95 |
| 77 P 049 | CE-408S 402 | 1 | 120 | $113 / 16 \times 21316 \times 2 x^{27} 4^{\circ}$ | Panet | 19,6827/16. | 15.95 15.25 |
| 77 P 043 | CE-40AS 402 <br> CE-600AS601 | P | $\begin{array}{r} 120 \\ 24 \end{array}$ | $231 / 41^{13} 1 / 3221 / 4$ $21 / 2 x^{11} / 4 \times 31 / 3^{\circ}$ | Base Base | 195/6x ${ }^{23 / 4}$ | 21.10 |
| 77 P 23 | CE-600AS601 |  |  |  |  | $315 / 64 \times 1^{23 / 44}$ | 21.40 |
| 77 P 237 | CEE600A S602 | $\begin{aligned} & P \\ & \text { N } \end{aligned}$ | 120 24 | $\begin{aligned} & 21 / x \times 13 / 4 \times 3 / 8 \\ & 2^{13} / 6_{6} \times 1^{2} / 64^{7} / 6^{\circ} \end{aligned}$ | Base <br> Panel | 11/16x11/2 | 22.90 |
| 77 P 238 |  | N | 120 | $2136 \times 17 / 5 \times 47 / 16^{\circ}$ | Panel | ${ }^{1} 168 \times 14 \%$ | 22.90 |
| 778 P 29 | $\left\lvert\, \begin{aligned} & \text { CE-600B602 } \\ & \text { CE- } 800 C S 602 \end{aligned}\right.$ | R | 120 | $411 / 16 \times 31 / 855 / 8^{\circ}$ | Base | $51 / 1 \times 21 / \%^{\circ}$ | 43.00 |

## HON-RESET TYPES



Cutler－Hammer and Eagle Switches

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（1）

COMPLETE STOCKS OF SELECTED SWITCHES

A wide selection of finest quality， ruggedly built switches．

## AC－DC TOGGLE SWITCHES

## LIGHT－DUTY TYPE

Light－duty toggle switches featuriag exceptionally small size and unu－ sually high ratings．Ideal for small motor loads，radios and many ot her similar applications．Quick make and break contacta are suitable for AC panels，bousings and other flat surfaces of machines and appliances． Contacts are totally enclosed in an insulating black bakelite case All have ${ }^{\circ}{ }^{\circ} z^{2}$ diameter threaded stem．Solder Iug terminals except＂indi－ 10 amps at 24 volts，DC．All are U．L．Approved．Av．wt．， 3 oz．

| StockNo. | $\begin{aligned} & \text { Myr's } \\ & \text { Type } \end{aligned}$ | Fig． | Action | Amperes |  | Stem Length | NET EACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 125 V | 250 V |  | 1－9 | 10－UP |
| 34 B 52 | 7140－K6 | A | SPDT | 3 |  | $11 / p^{\prime \prime}$ | ． 45 | ． 37 |
| 34 8 527 | $8280 . \mathrm{K14}$ $8280-\mathrm{Kl5}$ | C | SPST |  | 3 | 14 | ． 52 | ． 43 |
| 34 B 500 | $8280-\mathrm{K} 16$ | C | SPST |  | $\begin{array}{r}3 \\ 3 \\ \hline\end{array}$ | 15\％ | ． 52 | ． 43 |
| 34 日 528 | 8282－K12 | C | SPDT | 3 |  | $1 /{ }^{2}$ | ． 66 | ． 55 |
| 34 日 501 | 8282－K14 | C | SPDT | 3 | 1 | $15 / 8{ }^{\circ}$ | ． 66 | ． 55 |
| 348783 | 8290－K15＊ | C | SPST |  | 3 | $11 / 3{ }^{\prime}$ | ． 64 | ． 52 |
| 34 B 784 | 8290－K16＊ | C | SPST |  | 3 | ${ }^{15120}$ | ． 64 | ． 52 |
| 348785 | 8295－K7 | D | SPST |  | 3 | 11／4＂ | ． 64 | ． 52 |
| 34 B 786 | 8295－K8t | D | SPST |  | 3 | 15／4＂ | ． 64 | ． 52 |
| 34 B 529 | 8360 K 6 | 1 | D1＇ST |  | 3 | $1 / 4^{\circ}$ | ． 95 | ． 79 |
| 34 B 502 | $8360-\mathrm{K} 7$ | B | $\mathrm{P}^{\text {PST }}$ |  | 3 | 1578 | ． 95 | .79 |
| 34 B 530 | 8363－K6 | B | 1PDT |  | 3 |  | 1.09 | ． 91 |
| 34 В 503 | 8363－K7 | B | DPDT |  | 3 | 13／3＂ | 1.09 | ． 91 |
| 34 － 792 | 8370－K 7 | B | DPST | 6 | 3 | $15 / 30$ | 1.02 | ． 85 |
| 34 B 632 | 8373－K7 | B | D1PIT | 6 | 3 | $15 / 22^{\prime \prime}$ | 1.18 | ． 97 |
| 34 日 794 | 8373－K8 | B | DPDT | 6 | 3 | 11／3． | 1.18 | ． 97 |
| 34 B 795 | 8375－k7† |  | DPDT | 6 | 3 | 1585 | 1.51 |  |
| 34 日 787 | 8381－K7 | D | SPST | 6 | 3 | 11／3＂ | ． 60 | ． 50 |
| 34 日 508 | 8381－K8 | D | SPST | 6 | 3 | 15／3＂ | 60 | 50 |
| 34 － 788 | 8391－K7＊ | C | SPST |  | 3 |  |  |  |
| 34 8 789 | 8391－K8＊ | C | SPST | 6 | 3 | $13^{1 / 22^{\prime \prime}}$ | ． 72 | 59 |
| 348791 | 8396－K8 ${ }^{\text {d }}$ | D | SPST | 6 | 3 | 15／22 |  |  |

## STANDARD AND HEAVY－DUTY TYPES

E For control of moderate horsepower motors on many small appliances and other similar appllcations．Incorporate C－H snuffer－type contact mechanism which is designed to minimize pitting caused by arcing on completely encloses the mechanism and terminals ure insulating barries．Have $15 / 2^{*}$ threaded stem．All switches are U．L．Ap－ proved except 8825－K5（Fig．1）which is JAN S －23，series STS2；also rated 20 amps at 28 v ．D．C．Av．shpg．wt．， 3 oz ．

| Stock No． |
| :---: |
| 34 B 545 |
| 34 － 408 |
| 34 в 520 |
| 348718 |
| 348516 |
| 348714 |
| 34 B719 |
| 34 B 517 |
| 348717 |
| 34 B 715 |
| 34 B 555 |


| Mrr＇s |  |
| :---: | :---: |
| Typ | A |
| $7320-K 3$ | D |
| $7321-\mathrm{K} 2$ | S |
| $7321-\mathrm{K} 3$ | S |
| $7360-\mathrm{K}$ | D |
| $7360-\mathrm{K} 8$ | D |
| $7361-\mathrm{K} 5$ | S |
| $7402-\mathrm{K} 3$ | D |
| $7402-\mathrm{K} 4$ | D |
| 8680 K 1 | D |
| $8690-\mathrm{K} 2$ | D |
| $8825-\mathrm{K} 5$ | D |


| Aetion |
| :--- |
| DPST |
| SPST |
| SPST |
| DPST |
| DPST |
| SPST |
| DPST |
| DPST |
| DPDT |
| DPDT |
| DPDT |


| ation | Amperes |  |
| :---: | :---: | :---: |
|  | 125 V | 250 V |
| PST | 12 | 6 |
| PST | 12 | 6 |
| PST | 12 | 6 |
| PST | 15 | 10 |
| PST | 15 | 10 |
| PST | 15 | 10 |
| PST | $11 / \mathrm{hp}$ | 20 |
| PST | $11 / 2 \mathrm{hp}$ | 20 |
| PDT | 10 | 5 |
| PDT | 15 | 10 |
| PDT | 20 |  |



\section*{NET EACH | 1.9 | $10 . U_{p}$ |
| :---: | :---: |
| 1.01 | .83 |
| 1.01 | .83 |
| 1.01 | .83 |
| 1.74 | 1.44 |
| 1.74 | 1.44 |
| 1.74 | 1.44 |
| 2.47 | 2.04 |
| 2.47 | 2.04 |
| 3.17 | 2.62 |
| 3.86 | 3.18 |
| 1.27 | 1.05 |}

## PUSH－BUTTON AC－DC TYPE

F For controlling current by opening or closing of a door；i．e．，turn Momentary and of in refrigerators，telephone booths．closets，etc． Momentary contact type．Have solder lugs except＂screw type．Nornally－ door open．Have with door closed；normally－closed zype is＂on＂with bution；flik＂stem，sush－push type bution，except thas $1 /{ }^{\prime \prime}$ stem，red Approved．Av．shpg．wt．， 3 oz ．

| StockNo. | $\begin{aligned} & \text { Mirese } \\ & \text { Type } \end{aligned}$ | Action | Amperes |  | NET EACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 125 V | 260 V | $1-9$ | 10．UP |
| 348691 | 7196－K1＊t | SPST－N．O． | 6 | 3 | 1.07 | ． 8 |
| 348519 | 7208．K48 | SPST |  |  | ． 81 | 68 |
| 348548 | 8411－K4 ${ }^{\text {841－K }}$ | SPPT－N．O． | ．75 | ． 25 | ． 36 | ． 32 |
| 348547 | 8411－K8 ${ }^{\text {8 }}$ | SPSTANC． | 75 75 | ． 25 | ． 36 | ． 32 |
| 348549 | 8440－K2 | SPST－NO． | $3^{.75}$ |  | ． 73 | .21 |

## SPST MIDGET TYPE

（H）Type 8098－K3．Minget switch．Recommended for control of AC AC fractional HP motors and electronic rquipment． 3 amps at 125 volts terminals．Threaded stein diance，and 6 amps at 24 volts DC．Screw lenginals．Threaded stein diancter，${ }^{153 / 22^{\prime \prime}}$ from stem length， $11 / 2^{*}$ ．Bat handle

10 UP，EACH

## AC TOGGLE SWITCHES

## LIGHT－DUTY TYPE（6A／125V－3A／250V）

J K Slow make and break AC gwitches．Simple contact structure de and 3 sign for lonk，dependable life．All are rated 6 amperes at 125 volth $\mathbf{K}$ ；double－pole are Fig．s．Single－pole awitches are illustrated by Fis． threaded stem diameter of is ${ }^{4}{ }^{* \prime}$ idicates center－ofi positions．All have threared stem diameter of $13 / / 2^{* \prime}$ ；stem length， $15 / \mathbf{z}^{*}$ ．All switches are U．L．
Approved．Av．shipg．wt．， 3 oz ． Approved．

| Seock No. | $\begin{aligned} & \text { Mfr's } \\ & \text { Type } \end{aligned}$ | Action | Term． | NET EACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 34 B 640 |  |  |  | 1.9 | 10．Up |
| 34 E641 | $7580-\mathrm{K} 6$ | SPST | Screw Solder | ． 52 | ． 43 |
| 34 <br> 34 <br> 34642 | 7581－K4 $\dagger$ | SPDT | Screw | ． 40 | ． 38 |
| 34 B 643 | 7581－K6 ${ }^{\text {¢ }}$ | SPDT | Solder | ． 49 | ． 41 |
| 34 E 644 | 7582－K4 | SPDT | Screw | ． 60 |  |
| 34 B 645 | 7582－K6 | SPDT | Solder | ． 49 |  |
| 34 <br> 348646 | 7590 K 4 | DPST |  | ． 81 | ． 67 |
|  | 7590 K 6 | DPST | Solder | ． 66 | ． 55 |
| 34 <br> 34 <br> 8648 | 7591－K4 | DPDT | Screw |  |  |
| 34 348649 34889 | 7591－K6 75 | DPDT | Solder | ． 73 | ． 61 |
| 348689 346690 |  | DPPUT | Screw | ． 96 | 79 |
| 34 B 690 | 7592．K6 | DIPDT | Solder | .73 | 61 |

STANDARD－DUTY TYPE（ $15 \mathrm{~A} / 125 \mathrm{~V}$－10A／250V）
Small，rugsedly built switches intended primarily for AC use．I＇rovide long，dependable service．Reduction in arcing permits use of the slow $15 / 3^{\prime}$ ． 1 ng of 10 amperest 250 volls AC and 15 aper U．L．Approved．Av．shog．wt． 3 oz ．amperes at 125 volts AC．All are

| Stock No． | $\begin{aligned} & \text { Mpr's } \\ & \text { Type } \end{aligned}$ | Fig． | Aetion | Term． | NET EACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 1－9 | 10．Up |
| 34 B 591 | $\begin{aligned} & 7500 \times 13 * \\ & 7500-K 14 \end{aligned}$ | L | SPST | Screw | ． 60 | ． 50 |
| 35 B 933 | 7501－K12＊ | 1 | SPST | Screw | ． 60 | 0 |
| 34 <br> 34 <br> 34 | $\begin{aligned} & 7501-\mathrm{ki} \\ & 7502-\mathrm{k} 13 \end{aligned}$ | $\underline{1}$ | SPST | Solder | ． 52 |  |
| 34 B 796 |  |  | SPPDT | Screw | ． 72 | ． 59 |
| 34 － 593 | 7504－K4 ${ }^{\text {7 }}$ | K | SPDT | Solder |  |  |
| 34 日 536 | 7505－K4 | k | SPDT | Screw | ． 72 | 9 |
| 34 日 594 | 7560 KS | J | DPST | Solder | ． 60 | ． 50 |
| 34 B 537 | 7561－K4 | J | DPST | Screw | ． 96 | 79 |
| 35 － 934 | 7561－K5＊ | J | DPST | Solder |  |  |
| 348596 | 7562－K4t |  | DPPDT | Solder | .80 1.19 |  |
| 348539 | 7563－K4 $\dagger$ |  | DPDT | Solder | ． 96 | ． 79 |
| 34 <br> 34 <br> 34555 | 7564－K6 |  | DPDT | Screw | 1.19 | ． 9 |
| 34 B 538 | 756．5－大5 |  | DPDT | Solder | ． .96 | ． 79 |
| 34 <br> 34 <br> 3 <br> B 597 | 7610－K2 | M | ${ }^{3 P S T}$ | Screw | 1.93 | 1.60 |
| 34 B 598 | 7611－K2 | M | 3 PST | Solder | 1.66 | 1.37 |
| 348523 | $7613 \mathrm{~K} 2 \dagger$ | M | ${ }^{3 P}{ }^{\text {PPDT }}$ | Screw | 2.45 | 2.03 |
| 348799 | 7614 K 2 | M |  |  | 2.04 | 1.6 |
| 34 日 798 | 7615－K2 | M | 3PDT | Screw Solder | 2.45 | 2.0 |
| ON－OFF PLATE <br> Type 827－228F3．Switch plate for＂On－Off＂Indication of toggle switches．Designed to fit slot in threaded stem．Se－ cured in position by mounting nut of switch．Mounts ver－ tically．Slipg．wt．，per pke．， 2 oz. <br> 34 B 504．Per Pkg of 2 <br> 08 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

－
Type 188．Momentary contact．6－leaf spider secures switch in $5 / \mathrm{a}^{\circ}$ hole．Ideal for signaling bells，lights，and similar uses． $1 / 2^{*}$ shank depth．Screw terminals．Contacts are SPST，normaily 55 日 $196.10-U p$, EACH．Wt．． 2 oz．

## EAGLE KNIFE SWITCHES

Rugged，low－cost knife switches for heavy duty applif－ cations in powes circuits．For motors．transmitters． mixing machines，or stage lighting．Provide smooth with screw cerminals and bakelite base except Type
 6t7．porcelain．Av．shpg．wt．， 5 oz ．

| Stock No． | Mir'sType | Action | Size | NET EACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1－9 | 10．Up |
| 34 B 884 | 612 | SPST | 15／8x＝ |  |  |
| 348886 | 613 | SPDT | $25 / 8 \times 1$ | .22 | $.20$ |
| 348887 | 614 | DPST | $11 / 4 \times 112$ | ． 32 | $.29$ |
| 346888 | 615 | DPDT | $25 / 18150$ | ． 36 | .33 |
| 34 E889 | 617 | SPST | 31／16x11／8＂ | .24 | .21 |

## A H \＆H，Grayhill，Ohmite Switches

## GRAYHILL MINIATURE SWITCHES

（A）Tap Switehes．Single pole switches 2 to 9 posi cions with bulte in stops or 10 position contimuous rota－ tion．Flatted shaft for knob． Fully enclosed，designed for minimum panel space，Non shorting or shorting type
 tacts．Break 1 amp ， 115 VAC．resistive，or carry 5 amps． $3 / 8-32$ bushing． ${ }^{\text {tacts．Break }} \mathbf{1 . 0 1}$ O．D．Shaft extends $312^{\prime \prime}$ ．Av．shpg．wt．， 2 oz

$$
1.01^{\circ} \text { O.D. Shaft extends }
$$

| Stock No. | $\begin{aligned} & \text { Mfr's } \\ & \text { Type } \end{aligned}$ | Taps | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 35 B 923 | 5－001－2 | ${ }_{3}^{2}$ | 1.30 |
| 35 35 3 | $5-001-3$ | $4$ | 1.40 |
| 35 B 925 | $\begin{aligned} & 5-001-4 \\ & 5.001-5 \end{aligned}$ | $\begin{aligned} & 4 \\ & 5 \end{aligned}$ | 1.45 |
| 358926 <br> 358927 | $\begin{aligned} & 5-001-5 \\ & 5-001-6 \end{aligned}$ |  | 1.50 |
| 35 日 928 | 5－001－7 | 8 | 1.55 |
| 358929 | $5.001-8$ | 8 | 1.65 |
| 35 <br> 35 | 5－001－10 | 10 | 1.70 |

LOCKWASHERS．Cadmium－plated brass，with non－turning tab；cad－ mium－plated lockwasher
above．Shpg．wt． 1 oz ，Washer．EACM
34 B 723．Non－Turn Washer．
34 B 724．Internal Tooth Lockwasher．EACH
B Type 40－1 Lighted Pushbutton Switch．Momentary contact B Type ${ }^{40.1}$ SPST，normally open Rated 1 ampere， 115 V．AC． $1-8 / 10^{\circ}$ long． $25 / 64^{\prime \prime}$ mt，hole．Solder terminals．Shpg．wt．， 2 oz
2.00 36 B 031 ．EACH

Type 30－1 Subminlature Pushbutton Switch．SPST，N．O． 1 C．amp． 115 v ．AC． $63 / 64^{7} \times 1 / 1^{\prime \prime}$ dia．Solder term．．red button． 2 oz ． .95 34 E966．EACH
34 E 967．30－2．As above，normally closed，black button．EACH．．． 95 Type 39－1 Ultra－Minlature Switch．N．O．SPST． $1 / 2$ an
AC． $14^{-1}$ dia．$x 19 / 32^{-1}$ long．Solder term．，red button． 2 oz ．
34 B 968 ．EACH
long $x$
Type 35－1 DPST Switch．N．O． $1 / 2$ amp， 115 v．，AC．1－17／64＂long $x$
34 B 964 ，EACH

## OHMITE POWER－TAP SWITCHES

Rugked power tap switches for a wide variety of high－ current applications．Single pole with up to 2 taps or positions．Non－8horting type Model 111 rated 10 amps silver contacta，ceramic body．Model 1212 rated 15 amps at 150 VAC ；dameter is $13 / 4$ ．${ }^{2}$ ．Two－in－tandem types． at ame as single units．U．L．Approved．Shpg．wt．． rated same as singe

MODEL 111


| MODEL 111 |  |  |  | MODEL 212 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Stock } \end{aligned}$ | Tape | Rotation | $\begin{array}{\|c\|} \text { NET } \\ \text { EACH } \end{array}$ | Stock No． | Taps | Rotation | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
|  |  | $30^{\circ}$ | 3.70 | 346238 | 3 | ＊ | 7.42 |
| 348227 | 3 | $60^{\circ}$ | 3.82 | 348239 | 4 4＊ | 90 90 | 7.60 18.50 |
| 34 日 228 | 4 | $90^{\circ}$ | 3.94 <br> 4.06 | 34 | $4^{4 *}$ | $120^{\circ}$ | 18.78 |
| 34 B 229 | 5 | $120^{\circ}$ | 4.06 | 34 B 240 |  |  |  |
| 34 旦220 | $5^{5}$ | $120^{\circ}$ 150 | 11.42 | $\begin{array}{llll}34 & B & 241 \\ 34 & B & 3\end{array}$ | $6^{6}$ | $150^{\circ}$ | 19．96 |
| 34 <br> 34 <br> 3 | 6 | ${ }_{180}^{150}$ | 4.18 4.30 |  | 7 | $180^{\circ}$ | 8.14 8.32 |
| 34 <br> 34 <br> 8 | 7 | $1810^{\circ}$ 210 | 4.42 | 34 日 243 | 8 | $210^{\circ}$ | 8.32 |
|  | 9 | $240^{\circ}$ | 4.54 | 34 244 | 9 | $240^{\circ}$ | 8.50 |
| 34 日 234 | 10 | $270^{\circ}$ | 4.66 | 34 日 245 | 10 | 270 3 3 ${ }^{\circ}$ | 8.68 9.04 |
| 34 8 235 | 11 | $300^{\circ}$ | 4.78 | $34 \quad 1247$ | 12 | $330^{\circ}$ | 9.04 |
| 34 日 293 | 11＊ | $300^{\circ}$ | 12.86 | $\ldots . . .$. ． |  | － | － |

## ECONOMY SLIDE SWITCHES

A selection of low－cost AC－DC slide switches．Ideal for general use in transmitters，receivers，instruments． and other electronic equipment．Alliavecadmium－ plated steel housing，except nickel－funished．Type plated sis a heavy－duty switch，rated 3 ampe at 250 volts and 6 ampe at 125 volts，AC or DC．Type S． 16 is rated 1 amp at 250 volts and 3 amps at 125 volts． AC or DC．Type 81574 is a midget slide switch with black phenolic lever；requires only $1 / \mathrm{s}^{3} \mathrm{x}^{17 / 22^{2}}$ cutout for instanation．All types ather than S－110－S have hot－tinned solder lug terminals；Types S．110－S has screw terminals．Sizes：all are $3564 \times 113^{\prime \prime}$ except Types S－110－S and S－316，which are $1 \%$＂x $9{ }^{\circ}$ ，and Typ
$17 / z^{\circ}$ ．U．L．Approved exceptt．Av．slige．wh． 3 oz ．

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | MPr． | $\begin{aligned} & \text { Mir's } \\ & \text { Type } \end{aligned}$ | Action | ${ }_{\text {A．}} 125$. | $\begin{array}{r} 1.9 \\ \text { EAC'H } \\ \hline \end{array}$ | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $34 \mathrm{B492}$ 36 B 448 | Continental－Wirt Continental－Wirt | $\begin{aligned} & \text { G725 } \\ & \text { G726 } \end{aligned}$ | $\begin{aligned} & \text { DPST } \\ & \text { DPDT } \end{aligned}$ | $\begin{aligned} & 0.5 \\ & 0.5 \end{aligned}$ | $\begin{array}{r} .17 \\ .20 \end{array}$ | .15 <br> .18 |
| 36 B 148 |  |  |  |  | ． 19 | ． 16 |
| 35 3 3 | Carling <br> A－H\＆H |  | $\begin{aligned} & \text { DPST } \\ & \text { SPST } \end{aligned}$ | 3.0 | ． 24 | 20 |
| $\begin{array}{r}33 \\ 35853 \\ \hline 989\end{array}$ | $\mathrm{A}-\mathrm{H} \& \mathrm{H}$ Continental－Wirt | ${ }^{\text {G13 }} 3$ | DPST | 3.0 | ． 22 | ． 20 |
| r <br> 34 <br> 3 | Carling | S 316 | DIPDT | 3.0 | ． 70 | 63 |
| 35 日 921 | Continental－Wirt | G－326 | DPDT | 3.0 | ． 22 | ． 20 |
| 35 B 922 | Continental－Wirt | G－369 | 3PDT | 3.0 | ． 46 | ． 09 |
| 34 B 422 | Carling | S60A | SPST | 4.0 | ．11 | ． 10 |
| 34 B 423 | Carling | ${ }_{\text {S }}^{\text {S }}$－110S | SPST | 6.0 | .49 | 44 |



PCWER－TYPE TOGGLE SWITCHES
Compact，toggleoperated power switches for motors and appliances ［f Compact，toggle operated power switche make and break with wiping blade action．Type 80600 rated HP 250 volts，U．L．Approved．Bakelite case．Screw terminals．Shank． $15 / 2^{\prime \prime}$ dia．s／is long．With metr，nuts．Shpg．wt．， 2 oz

| StockNo. |  | Action | Amps |  | NET | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mir＇s |  | 125 V | 260 V | 1－9 | $\underline{10-U p}$ |
| $\begin{array}{ll:l} 34 & \mathbf{8} & 36 \\ 34 & \mathrm{~B} & 135 \\ 34 & \mathrm{~B} & 137 \end{array}$ | $\begin{aligned} & 806101 \\ & 8060 \% \\ & 80612 \end{aligned}$ | $\begin{aligned} & \text { DPSTT } \\ & \text { SPST } \\ & \text { SPDT } \end{aligned}$ | $\begin{aligned} & 16 \\ & 12 \\ & 12 \end{aligned}$ | $\begin{aligned} & 8 \\ & 6 \\ & 6 \\ & \hline \end{aligned}$ | 1 | 3 |

## ROTARY SWITCHES

Maintained contact，rotary swltehes for replacement or new equipment Maintained concapliances，etc．Type 41047 is a direct replacement for many wall－type and desk－type lamps．It is equipped with．${ }^{\circ}$ wire＂eads，
 Types 81715－G ane 81727－G are ideal for medium current AC－DC appliances．They are equipped with solder lug terminals ${ }^{\prime} / 4^{*}$ spindle phenolic base，an＂az diameter shank projection $7 / \mathrm{m}^{\prime \prime}$ long．P．v．shpg．wt．， 2 oz

| Stock No． | Miri:Type | Fig． | Action | Amperes |  | NET | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 125 V | 250 V | 1－9 | 10．Up |
|  | 41047 |  |  |  |  | 1.45 1.27 | 41 06 |
| 34 <br> 34 <br> 34 | $81715-G$ $81727-G$ | $\begin{aligned} & \mathrm{H} \\ & \mathbf{H} \end{aligned}$ | $\begin{aligned} & \text { SPST } \\ & \text { DPDT } \end{aligned}$ | $6$ | $\begin{array}{r} 3 \\ 2 \end{array}$ | 1.86 | 1.54 |

## FUSH－BUTTON SWITCHES

All are momentary centact．except push on－push off types．\＄indicates Alty open．AC－DC．except $\$ \mathrm{AC}$ only，All have＇ $\mathrm{ha}^{7}$ diameter shanks； normaly opsept 80630 ， $36^{\circ}$ long．All have solder lug terminals $916^{\circ}$ lonsi 80 which has screw type terminals．Av．shpg．Wt．，oz

|  |  |  |  |  |  |  | NET | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Stock No． | Mfr＇s Type | Fg． | Action | Button Color | Amps | Volts | $1-9$ | 10－UP |
| No． | $\frac{\text { Type }}{3391-\mathrm{GL}}$ | 1 | SP | Black | 1 | 1258 |  | ． 61 |
| 34 B 119 | 3392 | E | SP2 SP2 SP |  | 1 | 125 | 90 |  |
| 34 B 124 | 3392 －AE | J | SP2 | Black <br> Red | 1 | 125 | .90 | ． 75 |
| 34 <br> 34 <br> 3 | $\begin{aligned} & 3392-A E E \\ & 3592 \end{aligned}$ | k | SPST ${ }^{\text {SPP }}$ |  | 3 | 250 | 1.02 | ． 84 |
|  |  |  | DPST＊ |  | 16 | 125 | 1.49 |  |
| 34 <br> 34 | 86710 | 5 | SPST |  | 3 3 | 250 250 | .94 1.12 | ． 78 |
| 34 B 161 | $86710-\mathrm{C}$ | J | SPST | Red | 3 3 | 250 250 | 1．12 | ． 92 |

LOCK SWITCHES
M Type 81715－L．Lock swith with key，for use on power tools，appli－ M］ances，etc．SPST centacts，rated 3 amperes st 250 volts； 6 amperes at 125 volts．Sleeve diameter． 12 remove key．Wh． 2 oz ． 1.63 $27 / 2 x x^{2} / 2^{\prime \prime}$ ．Switch must de open to remove kéch ．．．．．．．．．．．．．．．．．．．． 1.03
Exera Key for above．Shpg．wt．， 2 oz．

| Type $81716-$ E．Same as $81715-L$ switch above，but key removable |
| :--- |
| in open or closcd position． | 34 B i58．10－Up．EACH．

## SPST SLIDE SWITCH

Type 81569 Slide Switch，SPST indicating switeh
Typo 81569 Side Switch，SPST indrol panel，and designed for use in astions．Screw－type terminals． Requires $13 / x^{9} / 6^{\prime \prime}$ cutont for mounting．Ratings： 3 amps at 250 volts； 6 amps at 125 vols．Sil plate is $2316 \times 3 / 4^{4}$ ．Phencilic base and lever．U．L
Approved．Shpg．WEt．${ }^{2}$ EZ
34 B $153.1-9$
$10-U$ P，EACH

## ON－OFF SWITCH PLATES

N For Toggle or Potary Switches H $11 / 8^{*}$ dia．polished aluminum plate Has $1 / 2^{*}$ hole．Etched on black back ground．Shpg．We NE ${ }^{2}$ Oz E ACH ．．．．．． 39 20－UP，EACH

For Toggle Switches．Nickel－plated


P＂On－OA＂switch plate．Has $1 / 2^{\prime \prime}$ di－

ameter hole．Shpg．wt．\＆OZ．
.59 34 B 145．Package of 25，NETPPER PKG
33 B 857．Package of $2, N E T$ Fitchos．Nickel－plated brass stamping． R Keped to fit switch shank．Reads＂On－Off．＂For ${ }^{1 / 3 / 2 "}$＂diameter shank 2 per package．Shpg，wt．perPlig of 2.2 oz 34 B 157 ．Package of 2，NET PER PKG．

## Carling and Acro Switches



## CARLING TOGGLE AND PUSHBUTTON SWITCHES

## MOMENTARY AC TOGGLE SWITCHES

## 15A／125 V．－10A／250 V．

A selection of dependable bat－handle toggle switches designed tor AC applications．Circuit position．A spring returns handle is held in position when handle is released．Excellent for test equipment，control panels，instrumenta－ tion，erc．＊3－position with center＇Off．＂mo－ mientary either side．$\$ 3$－position with center ＂Off，＂One side momentary，ot her side main－ tained．Others are 2 －position，normally off．
 18／2＂${ }^{2}$ thread．Screw terminals．U．L．Ap－
proved．Shps．wt． 3 oz．


## MOMENTARY AC－DC TOGGLE SWITCHES

SPST with trigker handle．fdeal for use in
inscrumentation．test equipment．control Cinstrumentation，test equipment．control partels，etc．Normaily open；momentarily on，
spring return．Luxs are silver－plated．AC－DC spring return．LuNs are ailver－plated．AC－DC
rating： 6 amps． 125 volts； 3 amps． 250 volts. ratem length， $1 / 32^{\prime \prime}$ ．Stem dia．， $15 / 32^{\circ}-32$ thread． U．I．Approved．Shpg．wt．， 3 oz ．


## PLASTIC－TOGGLE AC SWITCHES

（D）Extremely compact heavy－duty SPST （D）switches for limited space applications．Re－ quire only $1 / 2^{\prime \prime}$ behind panel．Ideal for use in in－ strumentation，test panels and other electronic equipment．Available in two colors，black and 125 VAC $-71 / 2$ amps， $250 \mathrm{VAC} ; 1 / 2-11 P^{1 / 5} \quad 115-23$ VAC．Solder tug terminals． $15 / 22^{2}-32$ threaded stem；
wt．， $2{ }^{1 / 4}$
oz．

| Stock No． | Color | NET EACH |  |
| :---: | :---: | :---: | :---: |
|  |  | 1.9 | 10－99 |
| $\begin{aligned} & 34 \mathrm{~B} 312 \\ & 34 \mathrm{~B} 13 \\ & \hline \end{aligned}$ | Black Red | $\begin{array}{r} 48 \\ .51 \end{array}$ | .43 .46 |

## PUSHBUTTON SWITCHES

Low－priced，high－quality single－pole，single－ throws witches with convenient puslibutton op－ pancls．instrumentation，ece．All are momen－ tary contact，normally open switches，except ＂phich is normally closed，and $\uparrow$ which is a contacts）．Stems $15 / 2^{\circ}$ dia．．$\%_{6}{ }^{\circ}$ iong．SDoorbell type；black with white button． $21 / 2 \times 1 / 4^{\circ}$ with $2^{\prime \prime}$ mounting centers．All switches have screw ter－ minals．Av．shpg．wt．， $3 \mathbf{o z}$ ．

| Stock No． | Fig． | Amperes |  | NET EACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 126 V | 250 V | 1.9 | 10－99 |
| 358935 | E | 15 | 10 | ． 64 | ． 60 |
| 358936 | $\underset{\text { E }}{\text { E }}$ | 15 | 10 | ． 64 | ． 60 |
| 34 <br> 3585168 | $\underset{\mathrm{F}}{ }{ }^{+}$ | 6 | 3 | ． 95 | ． 85 |
| 35 B 527 | F | 1 | 8 | ． 15 | ：2 |

## WALSCO KNURL－TITE SWITCH WRENCHES



Extremely convenient nut－driver for knurled or milled－edge nuts．Has collet－type pressure jaws－ $1 / 4$ turn of handle gives vise－grip．Will barrel．Length： $61 / 2^{\text {nominal }}$ ．Wize．With hollow

| Stock No． | $\begin{aligned} & \text { Mir's } \\ & \text { Type } \end{aligned}$ | Dla．of Nut | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & 348089 \\ & 348090 \\ & 348091 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2581 \\ & 2582 \\ & 2583 \\ & \hline \end{aligned}$ |  | 4.83 |

## AC AND AC－DC TOGGLE SWITCHES

A large selection of rugged，highly dependable toggle switches for a wide range of medium and heavy－duty power applications．Choose from 2 － or ${ }^{3}$－prosition switches with a variety of actions． All toggle switches in tables below are main． tained－contact style．Have bat handles， $15 / 33^{\circ}$

## AC TYPES－2．POSITION－NO CENTER


stem length，except＊ball handle with $7 / \mathrm{m}^{\prime \prime}$ stem lengeth．Stem diameter is $15 / 32^{2}-32$ thread on al togyle switches．Andicates switches having screw terininals with 6 － 32 binding－head screws； thas wire leads；all others have solder lugs． AC－DC TYPES－2－POSITION－NO CENTER

| Stock No． | Flg． | Action | Amperes |  | NETEACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 126 | 250 V | 1－9 | 10．99 |
| 34 日 093 | J＊ | SPDT | 3 | 1 |  |  |
| 34 B 177 | J | SiPDT | 3 | 1 | ． 51 | ． 46 |
| 34 34178094 | I | DPST | 3 | 1 | .70 | 3 |
| 34 E 094 | ， | DPST | 3 | 1 | .81 | 3 |
| 34 B 179 | J | D1DT | 3 | 1 | 8 |  |
| 34 B 095 | J | DPDT | 3 | 1 | ． 85 | ． 80 |
| 348092 <br> 34 | － | SPST | 6 | 3 | ． 54 | ． 49 |
| 34 B 180 | $t$ | SPST | 6 | 3 | ． 46 | .41 |
| 34 E 175 | J | SPST | 6 | 3 | .43 | 39 |
| 34 E 096 | J | SPDT | 6 | 3 | .62 | 56 |
| 34 日 097 | J | DPST | 6 | 3 | .78 | ． 70 |
| 348098 | J | DPDT | 6 | 3 | ． 86 | ． 78 |
| 34 E 380 | H | SPST | 12 | 6 | ． 89 | 80 |
| 34 E 181 | 1 | UPST | 12 | 6 | ． 89 | ． 80 |
| 348379 | 11 | SPST | 15 | 10 | 1.49 | 1.34 |
| 348182 | H | DPST | 15 | 10 | 1.49 | 1.34 |

## ACRO SWITCHES



## MINIATURE SNAP－ACTION SWITCHES

Ton quality SPDT switches for a wide variety of applications where switches are actuated mechanically．Type ICMIDt－2AXX－A22 bas wire leaf accuator；Type 2CMDI－2AXX－A24 has a flat leaf actuator；all others are basic pin

\section*{ | 35 B 030 | 2CMDI－2AXX－A24 | N | 2.5 gr. |
| :--- | :--- | :--- | :--- |}


$|$| Fig． | Oper． <br> Force |
| :---: | :---: |
| $\overline{\mathrm{K}}$ | 3.6 oz. |
| K | 6.10 oz. |
| L | $20-27 \mathrm{gr}$. |
| L | $33-44 \mathrm{gr}$. |
| N | 2.5 gr. |
| M | 4 gr. |

plunger types．Operating force given in grams and oz it pre－travel in inches．Current ratings Approved Shock resist ane U．L．and C．S．A lite．Solder terminals．Av，with extremely long | Pres Basic Switch | NET EA |
| :---: | :---: | :---: | ACT

$10-19$

| travel |  |
| :---: | :---: |
| $\$ / 2$ |  |
| 1.040 | 1 |
| .040 | 1 |
| .750 | 3 |
| .750 | 2 |


| Basic Swlith Slize | Amps． |
| :---: | :---: |
| $15 / 8 \times 9 / 3 \times 5184^{01}$ | 10 |
| $13 \times \xi_{2} x^{5} 9$ | 10 3 |
|  | 3 | | 1.9 |
| ---: |
| 1.45 |
| 1.45 |
| 1.45 |
| 1.75 |
| 1.75 |

## B SERIES SWITCHES

 WITH MICRO EQUIVALENTSPopular，loms－life replacernents for micro－switch types shown in table be－ low．All are SPIST with step base de－ sinn and screw terminals except Type BRD2－5L．With flat base and solder terminals．Table shows operating force and pre－trave！necessary to actuate switch．Contarts rated 15 amps at $120-240-480 \mathrm{VAC}$ and 0.5 amps at 120
VDC．Av．slipg．wt．． 4 oz．

| Stack No． | Mir＇s Type | Mlero Equiv． | Fig． | Oner． Force | Pre－ |  | NET | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 338968 | BRD2－5L | BZ－2RL |  |  |  |  | 1－9 | 10－19 |
| 33 日 969 | BRD2－1A－1S |  | R |  | ${ }^{156}$ |  | 1.65 | 1.49 |
| 33 в 970 | BRD2－2M－15 | BZ-2RL2-A2 | $\stackrel{R}{\text { R }}$ | $9-13 \mathrm{oz}$. 5 oz. | ．020＊＊ |  | 1.65 | 1.49 |
| 33 B 971 | BRD2－51－1S |  |  |  |  | 21530113／2x140 | 2.25 | 2.03 |
| 33 B 972 | BRD2－70－1S | $\begin{aligned} & \text { BZ-2RL-A2 } \\ & \text { BZ } 2 R D-A 2 \end{aligned}$ | $\stackrel{\mathbf{T}}{\mathbf{w}}$ |  |  |  | 1.75 | 1.58 |
| 33 B 973 | BRD2－1P－1S | BZ－2RO1－A2 | X | 9－13 oz． | －010－025 | $11.16 \times 1316 \times 16$ | 1.95 | 1.76 |



## SNAP－ACTION PUSH－BUTTON SWITCHES

Top quality．panel mounting．momentary contact push－button mally mally ciosed； 1 ype QPD－5031 may，be wired either way．All are overtravel plunger types with solder lug terminals．Current ratings to actuate switch．With mig．hard waree and pre－travel necessary

| Stock No． | $\begin{aligned} & \text { Mir's } \\ & \text { Type } \end{aligned}$ | $\begin{aligned} & \text { Fig } \\ & \text { Type } \end{aligned}$ | Oper． Force | Pre－ | Action | Sle | Amps | NET | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 日 328 | PD－5031 |  |  |  |  |  |  | $1-9$ | 10－19 |
| $\begin{array}{lll} 35 & 0 & 028 \\ 35 & 8 & 029 \\ \hline \end{array}$ | $\begin{aligned} & 3 D 05-5 P \\ & 3 D C 5-5 P \\ & \hline \end{aligned}$ | $\begin{aligned} & i \\ & 2 \\ & \hline \end{aligned}$ | $\begin{array}{r} 8 \mathrm{oz} \\ 10-15 \mathrm{oz} \\ 10-15 \mathrm{oz} . \end{array}$ | $\begin{aligned} & .050^{\circ} \\ & .045-1^{\prime \prime} \\ & .03-.06^{\circ} \end{aligned}$ | $\left\lvert\, \begin{aligned} & \text { SPDTT } \\ & \text { SPST } \\ & \text { SPST } \end{aligned}\right.$ | ${ }^{3} 1 / 2 x^{2} 3 / z^{\prime \prime}$ dia $5 / x^{2} y^{2}$ ，dia． | $\begin{aligned} & 10 \\ & 12 \end{aligned}$ | $\begin{aligned} & 1.50 \\ & 1.75 \\ & 1.75 \end{aligned}$ | 1.17 |

## Centralab Switches

## UNIVERSAL AND INTERCOM SWITCHES

High－fuality rotary action switches．Have laminated thenolic sections＂4＂thick．Voltage breakdown is 1000 vhenolic sections rmind to Rround．Rating： 2.75 amp at 15 v ．DC： 230 mat ut 115 v ．AC．Metal is cadmium－plated．All are $30^{\circ}$ indexing except 1443 and 1445 which are $15^{\circ}$ ．Shafts ndexing except ${ }^{2}$ dia full round．Bushing， $3 / 8^{"-32}$ thread $3 / 8{ }^{\prime \prime}$ long． $1^{\prime \prime}$ behind $21 / 4$ long，$/ 4$ dia．full round． 8 Positive in 2 pos．，spring return in 3 rd．All are non－shorting except $\ddagger$ ．Av．shpg．wt．， 4 oz ．

| Stock No． | Type | Doscription | 1．4，EA． | 5－9，EA． |
| :---: | :---: | :---: | :---: | :---: |
|  | $1450 \dagger$ | 4PDT | 1.26 | 1.05 |
| 34 日 087 | $1451+$ | $4^{4 P D T}$ ，spring－return | 1.44 | 1.20 |
| 348071 | 1448＊ | 61． 3 jos．．spring－return | 1.98 | 1.65 |

## INTERCOM AND RADIO SWITCHES

Rotary switches for use in radio－phonos，P．A．channel selectors，meter switching．Intercom sk－liplated metal parts，Rated 2.75 ampsat 15 v spring brass clips；cadmum－plated $1 /{ }^{\circ}$ dia．． $21 / 4$＂long．Silorting contacts DC； 230 ma ， 1 except non－M－FM1 phono selector use．Av．shpg．w2．， 5 oz ．

| $\begin{aligned} & 34 \text { B } 080 \\ & 34 \mathrm{~B} 081 \\ & 34 \end{aligned}$ | $\begin{aligned} & 1460 \\ & 1461 \\ & 1462 \end{aligned}$ | SPDT phono－radio switch． <br> SI＇－3－position selector <br> DPDT bandswitch | 1.08 | 90 |
| :---: | :---: | :---: | :---: | :---: |
| 34 <br> 34 <br> 34083 <br> 35 | $\begin{aligned} & 1463^{*} \\ & 1464^{*} \\ & 1472{ }^{2} \end{aligned}$ | SPDT spring return DPDT spring return DP 3－position | 1.08 | O |
| B 235 | 1465 $\dagger$ | SP－4－position W／AC sw． | 1.80 | 1.50 |

## LEVER－ACTION SWITCHES

Dress up your equipment with these quality switches， SApring return．Positive 7005 are both．Rated $2.75 \mathrm{amps} @$ is v．，DC； 230 A－ 6115 AC Two $9-40 \mathrm{mtx}$ ．holes．With knob and have， $2 \mathrm{x}_{4} \times 13 / 4$ behind panel， 4 oz

| Shorting |  | Non－Shorting |  | Poles | Pos． | NETEACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Srock No． | Type | Stock No， | Type |  |  | 1.4 | 6. |
| 34 B 000 | PA－7000t | 34 B 006 | 1＇A－7001t | 2 | 3 | 1.05 | ． 88 |
| 34 B 001 | PA－7002＊ | 34 B 007 | PA－70013＊ | 2 | 3 | ＋ 1.26 | 1.0 |
| 34 B 002 | PA－7614＊${ }^{\text {＋}}$ | 34 B 008 | PA－70074 | 2 | 4 | 1.05 | ． |
| 34 日 003 | PA－7006t | 34 B 009 | PA－7009： | 4 | 2 | 1.26 | 1.0 |
| 34 B 004 | PA－7008＊ | 34 E 010 | PA－7011 ${ }^{\text {P }}$ | 4 | 2 | 1.05 |  |

MOUNTING PLATES．For single or multiple mounting of lever－ackion switches．Black wrinkle finish steel．＊Chrome－ plated．Av．shpg，wt．． 4 oz

| Stock No． | Type | Swliches | Slze | 1－4，EA． | 5－9，EA． |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | P1755 | －1 | $3 / 4 \times 23 / 8$. | 30 | 25 |
| 34 B 051 | P1756 | 2 | $11 / 3 \times 25 /{ }^{5}$ | ． 30 | ． 25 |
| 34 B 052 | P1757 | 3 |  | ． 30 | 25 |
| 348053 | P1758 | ${ }^{4}$ | $31 / 8 \times 11 / 2$ | ． 63 | .53 |
| 34 <br> 34 | $\mathrm{P}_{1222} \mathrm{P}^{2}$ ． | 1 | 26／4x4\％＂ | ． 63 | ． 53 |

SERIES 1400 SWITCHES－PHENOLIC INSULATION
Laminated phenolic－Insulated rotary switch for use in band e 1 f change and genera．Bu hings， $3 / 4 x^{3 / 4}$＂．Shafts． $21 / 4$
FAIS $1 / 2$ spacins between sections．except on 3 and 4 －section switehes Rating： 2.75 amps at $15 \mathrm{~V} . \mathrm{DC} ; 230 \mathrm{ma}$ at 15 V ．AC．Has positive $30^{\circ}$ intexing．With mtg．nut，washer． 14 knob．Av．Bhps．Wt．． 607.

| Shorting |  | Non－5horting |  | Sec-thons | Total Poles | Pole Pos． | NET EACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| tockNo． | Type | Stock No．l | Type |  |  |  | 1－4 | $5-$ |
| 35 日 182 | 1400 | 35 B 163 | 1401 | 1 | 1 | 2－6 |  |  |
| 35 日 183 | 1402 | 35 <br> 35 164 | 1403 | 1 | $\frac{1}{2}$ |  |  |  |
| B 184 | 1404 | 35 35 35 | 1405 | 1 | 3 | 2－3 |  |  |
| 35 в 186 | ＇i408＊ | 35 日 167 | 1409 | 1 | 4 | 2 |  |  |
| 5 B 187 | 1410 | 35 B 168 | 1411 |  |  | 2－6 |  |  |
| 35 日 188 | $1+12$ | 35 8 169 | 1413 | 2 | 2 | ${ }^{11}$ |  |  |
| 35 B 189 | 1414 | 8  <br> 8 170 <br> 1  | $\begin{aligned} & 1415 \\ & 1417 \end{aligned}$ | 2 | 4 |  |  |  |
| B191 | 1418 | 35 35172 | 1419 | 2 | 8 | 2 |  |  |
|  |  | 5 B 174 |  |  |  |  |  |  |
|  |  | － 175 | 1425 |  | 6 | $2 \cdot 5$ |  |  |
|  | 43 | B 17 | 1431 | 4 | 8 |  | 4.50 | 3.75 |

P－ 270 Series．Shaft and Index Assemblles．Complete hardware for 1400 Serles switches，above． Spacers，tie－roils，etc．）． $30^{\circ}$ minexing．Section

| Stock No． | Type | Shaft | Sections | 1－4，EA． | 5－9．EA |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 35 \mathrm{~B} 497 \\ & 35 \mathrm{~B} 498 \end{aligned}$ | $\begin{aligned} & \mathrm{P}-270 \\ & \mathrm{P} .271 \\ & \mathrm{P}-272 \end{aligned}$ | $\begin{aligned} & 2^{\prime \prime} \\ & 4^{\prime \prime} \end{aligned}$ | $\begin{gathered} 1-3 \\ 3-5 \\ 5-10 \end{gathered}$ | $\begin{aligned} & 1.65 \\ & 2.10 \\ & 2.85 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.38 \\ & 1.75 \\ & 2.38 \\ & \hline \end{aligned}$ |

## EDCO WALL SWITCHES

Delayed－Action Wall Switeh．Periect for ingtallation in porches，garages，stairwells．etc Light stays on almost a full minute atter swlith is snapped off．Fits standard switch box． Rated 10 ampa， 125 VAC．U．L．Approved． 5 oz. 35 B 526
New DImmer Switch．Three－position switcit：on full，center New and dim．Will dim lights to only $30 \%$ of normal lighting． Ideal for watching TV．entertaining，as a nipit light．etc．Fits standard switch box．Rated at 10 amps． 125 VAC．U．L．Ap－ proved．Slipg．wt．， 602.
35 B 390
Allied Gives You Lowest Prices－Highest Quality－Best Service

MINIATURE STEATITE SWITCHES
PA－ 2000 Serles．Precision ceramic rotary switches．High Q．low－loss ateatite body
 spacing between ser tions． $30^{\circ}$ indexing．Shart $3 /{ }^{\circ}-32$ thread． $3 / s^{\circ}$ long， 2042 has 1 $21 / 4$ ．prosressively shorting positions．Have adjustable stop．Include nut，lock washer ard $11 / s^{\prime \prime}$ black pointer knob．Av．wt．， 6 oz

| Shorting |  | Non－Shorting |  | Sec=tions | Total Poles | Pole Pos． | NET EACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| StookNo． | Typo | SrackNo． | Type |  |  |  | 1.4 | 5.9 |
| 35 － 095 | － 2012 |  |  | 1 | 1 | 2－10 | 2.1 | 1.80 |
| 34 E 900 | 2000 | $3<8921$ | 2001 | 1 | 1 | 2－12 | 2.37 | 1.9 |
| 34 B 901 | 2002 | 3488922 | 2003 | $\frac{1}{2}$ | 2 | 2－6 | 2．37 | 2.83 |
| 34 <br> 34 <br> 34 | 2000 | 34 <br> 34 <br> 34 | 2007 | 2 | 3 | 2－5 | 2.37 | 1.98 |
| 34 8 903 | 20008 |  |  | 3 | 3 | 2－12 | 4.32 | 0 |
| 34 B 904 | $\begin{aligned} & 2008 \\ & 2010 \end{aligned}$ | 34 <br> 34 <br> 3 | 2011 | 2 | 4 | 2.6 | 3.39 | 2.8 |
| 34 <br> 34 <br> 3 <br> B 905 <br> 906 | 2012 | 34 B 927 | 2013 | 4 | 4 | 2－12 | 5.19 | 4.33 |
| 34 B 907 | 2014 | 34 B 928 | 2015 | 1 | 5 | 2－3 | 2.37 |  |
| 348908 | 2016 | 348929 | 2017 | 5 | 5 | 2－12 | 6.21 | 5.18 |
| 348909 | 2018 | 348930 | 2019 | $\frac{1}{2}$ | 6 | 2 | 2.37 |  |
| 34 B 910 | 2020 | 34 B 931 | 2021 | $\frac{2}{3}$ | 6 | 2－5 |  | 2.83 3.60 |
| 34 B911 | 2022 | 34 B 93 | 20 |  |  | 2－12 | 4.20 | 6. |
|  |  | 34 <br> 34 | 2025 | 6 4 4 | 8 | 2－6 | 5.19 | 4.33 |
| 34 E 913 | 2026 |  |  |  |  |  |  |  |
|  |  | 34 <br> 34 | $\begin{aligned} & 2029 \\ & 203! \end{aligned}$ |  | 9 | 2－5 | 4.32 3.39 | 2.83 |
|  |  | 348936 | $\begin{gathered} 203! \\ 2039 \end{gathered}$ | ${ }^{2}$ | 15 | 2－3 | 4.68 | 3.90 |
|  |  | 34 34 3 B 940 | 2039 | － 3 | 18 | 2－3 | 4.68 | 3.90 |

## MINIATURE PH＇ENOLIC SWITCHES

PA－ 1000 Series．Rated 2.75 amps as 15 v ．DC． 230 ma（9． 115 v ．AC． $30^{\circ}$ indexing adjustable stop． $11 / 2 \times 15 / 6^{\circ}$ diameters； $1 / 2^{\circ}$ spacing between sections．Shaft． $21 / 4^{" F M S}$ M1／4＂；bushins $3 / 4 x^{3 / 2}$ Adjustable stop．Mtg．hardware and $11 / 4^{*}$ pointer knob．Shpg．wit， 5 oz ．

| Shorting |  | Non－Shorting |  | Sec． tions | Tozal Poles | Pole Pos． | NET | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| tockNo． | Type | Stock No． | Typo |  |  |  | 1.4 | 5.9 |
| B 050 | 1000 | 353065 | 1001 | 1 | 1 | 2－11 | 1.80 |  |
| B 051 | 1002 | 353066 | 1003 | 1 | 2 | 2－5 | 2.58 |  |
| 58052 | 1004 | 35 B 067 | 1005 | 2 | $\frac{2}{3}$ | 2－11 | 1.80 |  |
| 358053 | 1006 1008 | 35 <br> 35 <br> 35068 | 1007 1009 | $\frac{1}{3}$ | 3 | 2－11 | 3.24 | 2.70 |
| 35 B 054 | 1008 |  | 1011 |  |  |  |  |  |
| 358055 |  | 35 35 35 E 070 | 1011 1013 | 2 | 4 | 2－5 | 2.58 |  |
| B B 056 <br> B 057 | $\begin{aligned} & 1012 \\ & 1014 \end{aligned}$ | 35 35 EF 3 | 1015 | 4 | 4 | 2－11 |  |  |
| 35 B 059 | 1018 | 35 E 074 | 1019 | 2 | 6 | 2－3 | 2.58 | 2.15 |
| 35 B 060 | 1020 | 35 E | 102 |  |  |  |  |  |
|  |  | 35 E 077 | 1025 | 2 | 8 |  | $\frac{2}{3.58}$ | $\frac{2.15}{3}$ |
| 35 B 06 | 102 | 35 E 078 | 102 | 4 | 8 |  |  |  |

SEPARATE ASSEMBLIES FOR MAKING MINIATURE SWITCHES
Type PA Phenolle Sections Only．Carry the same ratings as above Type PA Phenolle Excellent RF character＇stics．Adjustable stop．Use with PA－300 series index assemblies．below．With hardware． 2 oz

| Shorting |  | Non－Shorting |  | Total Poles | Pole Pos． | NET EACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| StockNo． | Typo | StoskNo． | Type |  |  | 1.4 | 5.9 |
| 35 B 080 35 B 081 35 B 082 35 B 083 | $\begin{aligned} & 30 \\ & 32 \\ & 34 \\ & 36 \end{aligned}$ | $\begin{aligned} & 35 \\ & 35 \end{aligned} 085$ | $\begin{aligned} & 31 \\ & 33 \\ & 35 \\ & 37 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \end{aligned}$ | $\begin{aligned} & 2-11 \\ & 2-5 \\ & 2-3 \\ & 2 \end{aligned}$ | ． 87 | ． 73 |

Type PA Steatire Section：Only，Custom and standard switches can be assemblerd by using these sections．For use with PA－300 Series index assemblies，shown below．Adjustable stop．Shpg．wt．， 2 oz．

| Shorting |  | Nom－Shorting |  | Toral Poles | Pole Pos． | NET EACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| StockNo． | Type | StockNo． | Type |  |  | 1.4 | 5－9 |
| 358040 | PA－0 | 35 E 045 | PA－1 | 1 | 2－12 |  |  |
| 35 B 041 | PA－2 | 35 厚 046 | PA－3 | 2 | $2-6$ $2-5$ | 20 | 1.00 |
| 35 B 042 | PA－4 | 358047 | PA－5 | 6 |  | 20 | ． |
| 35 B 044 | PA－8 |  | PA－18 | 2 | 2－11 |  |  |

PA－ 300 Series．Shaft and Index Assomblecs．Contains index，pointer nob，adjustable stop pate，spacers and fiber washers，tie bolis，nuts． washers and instructions． $30^{\circ}$ indexing．Shpg．wt．， 3 oz

| $\begin{gathered} \text { Stock } \\ \text { No. } \end{gathered}$ | $\begin{aligned} & \text { Mir's } \\ & \text { Typo } \end{aligned}$ | Shaft Length | Sections | NET EACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1.4 | 5－9 |
| 8092 | 300 | $2^{\prime \prime}$ | 1－3 | 1.38 |  |
| （ ${ }^{5} \mathrm{~B} 093$ | 301 302 | $4^{\prime \prime}$ | $4-6$ $7-9$ | 1.88 2.37 | 1.98 |

2500 SWITCHES－STEATITE INSULATION
Rotary switches．Excellent for RF use．Switeh， 1 Kix diameter．spacing between sectiches over
2 sections．Bushling，＂dia．x $24^{*}$ long．Shaft， $21 / 4$ niting nut，lockwasher， Prositive $30^{\circ}$ index；adjusenble Av．shpg．wt．， 6 oz ．

| Shorting |  | Non－Shorting |  | Sce－ tions | Total Poles | Pole Pos． | NET EACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| StbekNo． | Type | Stock Mo． | Type |  |  |  | 1.4 | 5－ |
| 35 B 214 | 2500 | 35 B 235 | 2501 | 1 | 1 | 2－6 |  |  |
| 35 日 215 | 2502 | 35 日 2.36 | 2503 | 1 | 2 | 2－11 | 2.82 |  |
| 35 日 216 | 2504 |  | 2505 2507 | 1 | 3 | 2－3 |  |  |
| 35 B217 | 2506 | 35 B 228 |  |  |  |  |  |  |
| 35 日 218 | 2510 | 35 － 279 | 2511 | 2 | 2 | $2-6$ $2-11$ | 4.02 | 3.35 |
| 35 3 3 B 21929 | 2514 | 35 日 231 | ＇25is＇ | 2 | 4 | 2－5 | 4.02 |  |
|  |  | 35 日 232 | 2517 | 2 | 6 |  |  |  |
| 35 － 223 | 2522 | 35 B 201 | 2523 | 3 | 3 | 2.11 | 5.16 | 4.30 |

# Gang Switches, Foot Switches and Timers 

## MALLORY GANG SWITCHES

## 3100J AND 3200J SINGLE-GANG SWITCHES



Compact, enclosed, low-voltage switches. Have $2^{*}$ notched shaft; $3 / 8^{\circ}$ threaded bushing, $3 / 8^{\circ}$ long have adjustable stons. For $111 /{ }^{\prime \prime}$ base dia, types Use dial plates listed below. Shpg. wt., 4 oz.




## DIAL PLATES

Wide selection of dial plates for switches, potenti-
 12001 . 1300 L and for 3100 J and 3200 J with $11 / \mathrm{s}^{\prime \prime}$ bases; 453 to 486 for switches 3100 J and 3200 J wit $111 / 16^{\circ}$. bases. Eta. Ethed aluminum. Black backsround $13 / 6^{\circ}$ dla. $7 / 6^{\circ}$ hole. Slipg. wt., 2 oz.

| Type | arkin | yp | Marking |  | rk |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 372 373 | $120 \frac{2}{1}$ | 384 | Off 1 to 4 | 453 | 1 to 3 |  |  |  |
| 373 | 1 to 3 | 385 | Off 1 to 5 | 454 | 1 to 4 | 474 475 |  | 1 to 5 |
| 375 | 1 <br> 1 <br> 1 <br> to | 386 <br> 387 | Off   <br> Of 1 to 6 | 455 | 1 to 5 | 476 |  | 1 to 6 |
| 376 | 1106 | 388 | Off 1 to 8 |  | 1 to 6 |  |  | 1 to 7 |
| 337 | 1106 1107 | 388 | Oflter | 457 458 | 1 to 7 | 478 |  | 1 to 8 |
| 378 | 1108 | 390 | OEI to 10 | 459 | 1  <br> 1  <br> 1 to | 479 480 |  | 1 to 9 |
| 379 | 1 to 9 |  |  | 460 | 1 to 10 | 481 |  | 1 to 10 |
| 380 | 1 to 10 |  |  |  |  |  |  |  |
| 381 382 | 180 |  |  | 462 | $\begin{array}{lll}1 & 10 & 11 \\ 1 & 10 & 12\end{array}$ | 482 |  | $\begin{array}{llll}1 & 0 & 12 \\ 1 \\ 10 & 13\end{array}$ |
| 382 | 1 10 12 |  |  | 467 | 1 to 17 | 484 |  | 1 to 14 |
| 34 BB 600 . Spocify Typo. NET EACH <br> 34 BB 650. Spectfy Type. |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| FOR POTENTIOMETERS AND RHEOSTATS |  |  |  |  |  |  |  |  |
| Stock No. Type Description ${ }_{\text {N }}$ Ty |  |  |  |  |  |  |  |  |
| 34 8 670 <br> 34 8 620 <br> 34 822  <br> 34 8 624 <br> 34 8 623 |  | $\begin{aligned} & 369 \\ & 391 \\ & 393 \\ & 396 \\ & 394 \\ & \hline \end{aligned}$ | 0-100 plate for volume control Increase tyne plate for volume control 0.10 plate for rheostats and pots 0-10 plate for wire-wound controls 1.24 position. $15^{\circ}$ onening |  |  |  |  |  |
|  |  | . 21 |  |  |  |  |  |
|  |  | . 21 |  |  |  |  |  |
|  |  | . 21 |  |  |  |  |  |



## RECORA TYPE NF-2 "NEPTUNE" SWITCH

Easy-operating switch that can be operated by foot or toe. Frees hands or work. SPET contacts are rated $\frac{\mathrm{F}}{\mathrm{amps}}$ at 110 v . Waterproofed for indoor or outdoor use Durable brown plastic. With $6-f t$. cord. Size, 78 B292. NET ${ }^{\text {wl. }} 2$ lbs. into AC. controlled unit plugs into socket. NET..................... 6.27

## RECORA "SWITCHMATS"

Similar to "Neptune" above. except larger. Durable, corrugated brown finyl-plastic mat conceals normally-open SPDT switch. Sensltive to lores ondor use, For 110 v . non-inductive $78 \mathrm{BX} 355.14 \times 23^{\circ}$. Shpg. we. I4 ibs. NET
15.20

78 Bx 356. $18 \times 30^{\circ}$. Shpg. wt., 24 lbs. NET

## LINEMASTER MODEL T-5I-S "TREADLITE"

Compact foot switch for low amperage loads. SPDT momentary-contact base. Black 7 amps at $110-250 v$, Rubber treading; skid-proof rubber 78 B 383. NET. casing $1 \times 21 / 2 \times 1 / 2.7 \mathrm{oz}$
78 B 384, MODEL T-51-SC. As above, but with $6-f t$. cord and werieps
plug. Shpg. Wt.. 1 lb . NET.

## LINEMASTER MODEL 491-SC "COMPACT"

Lightweight, momentary-contact switch with SPI)T contacts rated 10 amps at 115 v . or 230 V ., AC only. Has steel housing, skid-proof base, 54 B 407. NET
4.75

1200 L AND 1300L MULTI-GANG SWITCHES

versatite multi-kang switches for servicing and industrial appilcations. Have 1 fixed and 1 adjuseatie stop, silver-plated cactacts, solid silver rotor conapringes, and phosphor-bronze all others and 4-gang spaced
 and hardware, less mtg, plate. Use 34 BB 600 hole. With bar knou additional "off" positions with all circuits open. Av. shpg. wt., 8 oz .

| Shorting | Non-shorting | Gangs | Total Poles | Pos. Per Pole | NET | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| StockNo. Type | Stock No. Type |  |  |  | 1.4 | 5.9 |
| 34820112111 | 348251 1311L | 1 | 1 | 2-11 |  |  |
| $34 \mathrm{~B} 20212151 . *$ | 34825213151. | 1 | 2 | 2-5 |  |  |
| $\begin{array}{lllll}34 & \text { B } & 203 & 12131\end{array}$ | 348825313131. | 1 | 3 | 2-3 | 2.10 | 1.75 |
| 4 B 204 12121.* | 34 B 254 t.312L** | 1 | 4 | 2 |  |  |
| $\begin{array}{llllll}34 & \mathrm{~B} & 206 & 12211 . \\ 34 & \mathrm{~B} & 207 & 1 & 2 & 251 .\end{array}$ | 348825613211. | 2 | $?$ | 2.11 |  |  |
| 34 В 20 日 122.3L. | 34 B 257 132 <br> 34 B 258 132 | 2 | 4 | 2-5 | 2.58 | 2. |
| 34 В $20912221 . *$ | 34 E 259 1322L* | 2 | 8 | $2-3$ |  |  |
| 34 B 21112311. | 34 B 2611331 L | 3 | 3 | 2-1] |  |  |
|  | 34 E 262 1335L. | 3 | 6 | 2-11 | 3.24 | 2.70 2.70 |
| 34 B 21412411. | 34 E 2641.341 L | 4 | 4 | 2-11 | 3.81 | 3.18 |
| 34 E 21512451. | 34 B 26511345 L * | 4 | 8 | $2-5$ | 3.81 | 3.18 |
| 3488161251 L | 3482661351 L | 5 | 5 | 2-11 | 4.11 |  |
| 34 B 2171256 L | 34 8 267 1/356L | 5 | 10 | 2-6 | 4.53 | 3.78 |
| 34 B 21812611 | 3488268 1361 L | 6 | 6 | 2-11 | 4.83 | 4.03 |
| 34 B 21912661. | 34 日 2691366 L | 6 | 12 | 2-6 | 5.52 | $\begin{array}{r}4.03 \\ 4.60 \\ \hline\end{array}$ |

 VAC. 1500 VDC. $31 / 2^{\circ}$ mitg depth. $3 / x^{3 / g^{\circ}}$ bushing, $2 x^{1 / 4}$ Rated 1000 nob, nue, and iockasher. Shpg wi. 608 34 - $318,5-9$, EACH
2.25 1-4, EACH
2.70

## $13124 L$ 24-POINT TAP SWITCH

Single circuit, 24 position, non-shorting switch. Continuous rotation. $3 / 3^{\circ}$ bushing. $2^{\prime \prime}$ grooved shaft. Useful in test equipment. $15^{\circ}$ indexing


## RB254 UNIVERSAL MOUNTING BRACKET

"L", shaped Unlversal Mounting Bracket for baseboard or rear supnort mounting of all Mallory circuit selector switches. volume controls and jacks. Shpg. wt. 2 oz.


MODEL 29000 "CLOCK WATCHER"
Spring-driven timer in attractive sculpturecl design. Times up to 60 min . with bell tone. White finisl2. Shpg. wt. 1/4 lbs.
78 B 380 . List, $\$ 3.95$. NET.

## 78105 PROFESSIONAL TIME SWITCH

Turns off current at any pre-set time up to 1 hr .10 amps . G-ft. cord.

5.95

MODEL 78174 PHOTO TIME SWITCH. As above, but for periods to 60 seconds. Adjustable stop for repeat seteings.
78 B 264 . List, $\$ 8.95$. NET.
6.72

## STANDARD BUILT-IN TIME SWITCHES

 SPDT switch easily spt for "off-type" or "on-type" use. Simple installa-tion. With hdwe. 28 amps. $125-2$ th VAC. U.L. Approved.

| Stock No. | Type | Timing Pange | Dia. $x$ Depth | Lbs. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 78 B 259 | 74701 | 0 to 15 min . |  |  |  |
| 78 <br> 78 <br> 78 | 74702 74703 | 0 to 30 min . | 29/16x $1^{17 / 82}$ | 1 | 5.96 5.96 |
| 78 B 268 | 74703 | 0 to 60 min . |  | 1 | 5.96 |



TEC-4 AUTOMATIC TIMER
Functlonal and economical-serves as boilt extension cord and time switch. insert up to 3 devices into outleta and Shet knob for up to 4 -hr. "On" cycle. Shuts off at end of cycle automatically.
10 amps . Cream and sold 10 amps . Cream and sold. 1 lb .
78 B 291 . NET.
5.21

## Switches and Timers

## SWITCHCRAFT QUALITY SWITCHES

## FF SWITCHES

Non-Locking Pushbutton Type Switehes with flat frame construction adapeable to any stack of contact springs. Rated at 3 amps. 120 v.. AC, Black button and shaft. $1 / s^{*} d i a$, tlureaded bushing. $1 / \mathrm{s}^{2}$ long. With nut and washer. In.o. or n.c. means normally open or normally closed. 3 oz .

| Stock No. | $\begin{gathered} \text { Mfr's } \\ \text { Type } \end{gathered}$ | Action ${ }^{\text {f }}$ |  | $\begin{aligned} & \text { NET } \\ & E A C H \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Poles | Diag. |  |
| 348994 | 1001 | SP'ST n.o. | 1 | .62 |
| 348995 | 1002 | SPST n.c. | 111 | . 62 |
| 34 - 996 | 1 (0)3 | SPDT |  |  |
| 34 B997 | 1004 | DHST 4.0. | IV | . 76 |
| 34 -999 | 1006 | DPDT | VII | . 91 |
| 34 B 969 | 1009 | 3PDT | XII | 1.23 |

## SWITCHCRAFT SCHEMATIC DIAGRAMS


"LEV-R" TYPE SWITCHES
Ultra-Compact
Lever Swltchos.
Lever Swlichos.
ing type or momen-
tary contact. spring
return type. Silver
contacts rated @ 3 amps, 120 V. AC, non-inductive load. Length. $317 / \mathrm{s}^{\prime \prime}$; width, $3 / 8$. 8 mo . means normally opey. 3-position switch. With locknut; require
LOCKING TYPE


SPRING.RETURN TYPE

| Stock No. | Mfr's Type | \$Action |  | $\begin{gathered} \mathrm{NE} \\ \text { EAC-1 } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Pole | Dlag |  |
| 348465 | 3001 | SI'ST, n.o. |  |  |
| 348466 | 3003 | SPDT | IV | . 4 |
| 34 B 467 | 3004 3006 | DPDT | v | 1.62 |
| 34 3488 | 3009 | 3PDT | $\times 11$ | 1 |
| 4 日 469 | - 3033 | SPDT ${ }^{\text {n.o. }}$ | 11 | 1.47 |
| 34 B 458 | * 3034 | DP ${ }^{2-C k t}$ | VIII | 1. |
| 348464 | +. 3035 | DP ${ }^{2}$-Ckt | V11 | - |
|  | +. 3036 | DP 2.Ckt | 1X |  |
| $4 \mathrm{B4} 40$ | , | DPDT, n , | X | 1. |

## "TINI-SWITCHES"

| Submindature, Non-Locking, Pushbutton Svitches. Red or black buttons. $1 /{ }^{*}$ " threaded bushing, "3 " lonk. Requires s/ic" beltind panel. For low-level currents only. |  |
| :---: | :---: |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

$$
\begin{aligned}
& \text { b.o. means normally ope } \\
& \text { normally closed. Wt., } 3 \text { oz. }
\end{aligned}
$$

| $\begin{aligned} & \text { Stock } \\ & \text { No } \end{aligned}$ | $\left\lvert\, \begin{aligned} & M 1 r^{\prime} s \\ & \text { Type } \end{aligned}\right.$ | Sulton | §Action |  | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Poles | Diag. |  |
| $\begin{aligned} & 34 \text { B } 831 \\ & 34 \text { B } 832 \\ & 34 \mathrm{~B} \end{aligned}$ | $\begin{aligned} & 951 \\ & 952 \\ & 953 \end{aligned}$ | $\begin{aligned} & \text { Red } \\ & \text { Red } \end{aligned}$ | $\begin{aligned} & \text { SPST n. } \\ & \text { SPDT } \end{aligned}$ | $\begin{aligned} & 11 \\ & 111 \end{aligned}$ | 59 |
| $\begin{aligned} & 348834 \\ & 34 \mathrm{~B} 835 \\ & 34 \mathrm{~B} 836 \end{aligned}$ | $\begin{aligned} & 962 \\ & 963 \end{aligned}$ | Black Black Black | $\begin{aligned} & \text { SPST } \\ & \text { SPDT } \end{aligned}$ | 111 |  |

"BUTTON" SWITCHES
Unusually Small, Mo: mentary-Contact Pushbutton Switches. replacement in eectrices. Enclosed in meta! pliances. Enclosed in inetal housing have black or red lastic button $1 / 2$ ypes lons; fit and 913 are $1 / 2$ fons; ht hind holei mount from be
 hind panel. 9 ypes fit $1 /=913 \quad 933$ 933 are $7 / 8$ frons; front of panel. All rated at 250 , a nou-inductive load. AC ( 30 watts max.). Wi., 2 oz.

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | $\left\|\begin{array}{c} \text { Mtr's } \\ \text { Type } \end{array}\right\|$ | Button Color | Action |  | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Poles | Diap. |  |
| 358414 | 903 | Red | SPDT | III | 88 |
| 35 B 418 | 913 | Black | SPDT | 111 | . 88 |
| 35 B416 | 923 | Red | SPOT | III | 1.03 |
| 35 B 420 | 933 | Black | SPOI | 111 | 1.03 |

## CORD-TYPE PUSHBUTTON SWITCH

Hand-held switch for use on control cords. Consists of a momentary-contart "butcon" switch (above) threaded into one end of a nickel-plated sleve, Alis, easis SPDT: Diakram for remote control of hy operate lighs counters, many other recorders. Wt. ${ }^{4}$ oz. Type E903 Red. NETI. 47 35 E 422. Typo E903 Black, NET 1.47

| "LITTEL" SWITCHES |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Miniature, Non-LockingPush= button Type Switches for lim. ted suce applicationa. Ont-piece |  |  |  |  |  |
| button and shaft. Red or black button. \$n.o. means normally open; m.c. theans norinally closed. |  |  |  |  |  |
| Nicket silver contacts; spring sections are ingulated. $3 / 3^{\prime \prime}$ threaded stem: $3 / 3$ " long. For $10 w^{-}$ level currents only. With mis. hdwe. Wt., 3 oz . |  |  |  |  |  |
| Slock No. | Mir's TyDe | Button Color | Actlon |  | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
|  |  |  | Poles | Dine. |  |
| 348944 | 101 | Rer | SPST n.o. | 1 |  |
| 348945 | 102 | Red | SPST n.c. | 11 |  |
| 348946 | 103 | Red | PDT | III |  |
| 34 B 947 | 201 | Black | SPST n.o. |  | 53 |
| 34 E 948 | 202 | Black | SPSI nc. |  | 53 59 |
| 34 B 049 | 203 | Black | SPD | 11 |  |

Miniature, Non-LockingPushbutton Type Switches for limsited space applications. Red or black button. \$n.o. means normally
Open; the. means norinally contacts; spring oections are insulated. $3 / 8^{\prime \prime}$ threaded stem; $3 / 3$ long. For $10 w$.

## TELECHRON CLOCK-TIMER



An excellent value in a famous-name combination electric clock and for control time swlich. Unit can be system. air conol an AC radio, h-maker. liot plate, etc. ditioner, coffee-maker. Aomateur station Plenty or uscs in the -"warms up" equipand laboratory pre-get time. The bultt-in SPent at any pre-set 15 amps at 125 $\underset{\text { volts } A \text { S. }}{ }$
One of the switch controls prermits selecting manual "on" and "off" operation, or automatic turning on of the romtroled alce at a preselected operation man also be period. Automatic operation can also be employed with a signal alarm sound other minutes after "on cycle beg:na. The other switch control permits sriectime hour duratimed on cycse of up tradio as a "sleeen tion-can be used with ${ }^{1 / 2}$ guare; $1^{11 / 6 "}$ switch Gold color, from 110.120 s.. 60 cyce AC. Shos. W2.. 2 lus. .) NET 5.98
78 B 43 . (fucludes F. E. T.)

TORK TIME SWITCHES—PROGRAM TIMER


- Plug-in Cord


8001

- Easy to Use


## MODEL 919T PORTABLE SWITCH

 Can be sel for on period from 20 min . to 23 hrs.. 15 min . daily to nearest "on-otf"' cycles. Use extra trippars $15 \mathrm{amps} 51 / 2 \times 41 / 4^{7}$. U.L. Approved. For $110-120$ v.. 60 cycle AC. Wi. 4 lbs. 9.72 Entra Trlppers. For above, Pair, 3 oz 78 8 309. NET PER PAIRMODEL BOOI PROGRAM TIMER Has 96 tabs, one for each 15 min . interval of the day, Any tab may be set to be either off $\begin{array}{ll}\text { or "on." Repeats every } \\ \text { rated (a } \\ 20 & 2 \mathrm{mps}, 81 / 2 \times 53 / 3 \times 41 / 9^{\prime \prime} \text {. } 1 . \mathrm{L} \text {. Ap- }\end{array}$ proved. For operation from $110-120$ v. 60 cycle AC. Wt.,
78 B 299 . List $\$ 27.95$. NET
18.17

## MODEL 6100 "TORKMASTER"

> once over a 24-hou period. Reprats every 24 hours. Minitauin set tins. 90 minutes. 24-hour dlal is calibrated in 15 -minute intervals. Sivitch is simple pute; contacts rated $40 \mathrm{ampss} .81 / 2 \times 53 / 841 / 20$. 60 cycle proved. For operation from
AC. Shpk. Wt.. 4 thbs.
54 B 464 . List. $\$ 11.95$. NET.......... 7.77
hen You Order From Allied


## MODEL 4100 "HOURMASTER"

Heavy-duly SPST titne switch. Any hour or sequence of hours may be set to include an dentical on cycle each hour you chow 2 to 5 o. 24. On cycle can be veried 24 hours Ratminutes. Sequence repeats every $841 / 2 \times 53 / 841 /{ }^{6}$. For $110-120$ v., 60 cycle AC. 4 ibs. 19.47 For B 295 List. $\$ 29.95$. NET.

## MODEL 7100

Not illustrated, SPST switch automatically turns electrical equipment or lights "of " and "on" once every 24 hours. Minitum sting is 20 minutes. May be easily set to skiperated 1 to 6 days per week automaticaly or operated ntanually without disturbing automatic ade tings. Up 106 additional trippers can be added for applications requiring several operationg ${ }^{2}$. d.L. Approved. For operation irom $110-120 \mathrm{w}$. 60 cycle AC, Shug. wi. 4168.
11.02 78 B 379 , 1.1st. \$16.95. NET
11.02 MODEL $7100-W$. As above. but may be set for longer or sliorter onerations for individual days. Ha4 7-day switch. Minlinum "on time. $21 / 2$ hrs. Shpg. Wt. 27.95 . NET
78 B 399 . List. $\$ 27$.
18.17


## MODEL A211-4 "TIME-ALL"

Time control switch for office, store or home. Excellent for contrilling ilights or ap-
pliances. etc. Has manual control with pliances. etc. Has manual control with automatic reset. Turns lights "on" and "off" at pre-set times-gives house a "lived in" look to discourage prowlers while owners are out or away on a vacation. To revert to control cycle, simply, release manual control from "permanent" position.
Min. "on" time, 15 min.; max., 23 hrs. 45 $\min _{\text {trolled. }} \mathrm{AC}$ outcet for equipment to be controlled. Switch contacts will handle 15 amps . 1875 -watt load. Complete with 6 -ft. cord, plug and instructlons. Desert Sand Plaskon case. $5 \times 4 \times 21 / 2^{\prime \prime}$. U.L. A pproved. For $110-120$ volts, 60 cycle AC. Shpg. wt., 2 lbs. 78 B 311 . List, \$11.95.

NET 7.97
Model A221.4. Same as above. but designed to handle 7 amps, 875 -watt load. Excellent for use in such light-duty applications as the automatic control of hi-fi music systems, home lights, etc. Dove Gray Plaskon case. Shpg. wt., 2 lbs .
7B B 397 . List. $\$ 10.95 \ldots \ldots$.......NET 7.29

## CLOCK TIMERS AND CONTROLS



A401-4


A501

## MODEL A401-4 "CLOCK-TIMER"

Combination clock and switch. For automatically turning appliances. "on" and "off" at preset times. Min. "on" time, $1 / 1$ hour; max., $51 / 2$ hours. SPST switch rated 15 amps, 1875 watts. AC receptacle for plugging in appliances. Desert Sand Plaskon case. 6 .ft. cord and plug. $41 / 2 \times 43 / 1 \times 21 / 4^{\circ}$ U.L. Approved. For operation from 110-120 78.60 cycle AC. Shpg. wt., 2 lbs.

78 B 343. (Includes F.E.T.)... NET 8.77

## MODEL A 501 "MUSIC-MINDER"

Com:nation electric clock and automatic time switch that turns "on" appliances witisin a 12 hour period. Alarm may be set to yo off 10 minutes later. 0.60 min . sleep switch lets you fall asleep to music. Handles 1875 watts. Desert Sand Plaskon case, 6 -ft. cord. $41 / 2 \times 13 / 4 \times 21 / 41$ U.L. A pproved $110-120$ ₹.. 10 cycle AC. 2 ibs.
78 B 267. (Includes F.E.T.)... NET 8.77

## MODEL A3OI-4 "TIME-MINDER"

Combination electric clock and signal timer. Times any pre-set interval from 1 min . to 1 hour. Pleasant-toned buzzer sounds at end of interval and continues untll manually shut off. No installation-just plug in. Desert Sand Plaskon case. U.L. Approved. 6 6ft. cord. $41 / 2 \times 43 / 4 \times 21 / 4^{\prime \prime}$. For $110-120$ v. 60 cycle AC. Shpg. wt., 2 lbs.
78 B 342. (Includes F.E.T.) ... NET 6.57


A301-4

## MODEL RC542I-4 CLOCK-TIMER

- All Controls Are Front-Mounted
- Very Attractively Styled

An unmounted combination electric clock and automatic time switch. Use it for controlling radios. TV sets. fans, air conditioners or any other appliance drawing up to 15 amps of current.
Will automatically turn "on" electrical appliances at any pre-set time within a 12 hour period; if desired, a pleasant sounding alarm may be set to go off 10 minutes later. A sleep-sivitch permits selecting a timed "on cycle" of up to 60 minutes in dura-tion-lets you fall asleep to radio music. Unit can be manually operated too.
All controls are located on the front panel. Highly attractiv has brass bezel, soft white and brown dial, tan knobs. Handles 1875 watts. 31, ² $^{\circ}$ square; $2^{\circ}$ deep. With crystal. Has four square; meg, holes on $313 / \mathrm{m}_{0}$ ctrs. For oneration from $110-120$ v., 60 cycle AC. Shps. wt., 1 lb .
78 B 499. (Includes F.E.T.)... NET 6.94

## MODEL RC5321-2 CLOCK-TIMER

Not illustrated. An unmounted unit, nearly identical to RC5421-4 above, but sleepswitch control and on-off-alarm knob are located on front panel, time and alarm-set shaft are at rear. Shpg. wt., $11 / 2 \mathrm{lbs}$. 78 B 498 . (Includes F.E.T.1... NET 6.43

## POPULAR TIME SWITCHES



T101


1185


## TYPE T185 TIME SWITCH

Provides up to 12 "on-off" cycles daily, with extra trippers below. Each cycle is Independently controlled and can vary from 5-60 nin. Minimuminterval between cycles. $13 / 4$ hrs. Can be used as SPST normally open: SPST normally closed; or SPDT. Perfect for applications requiring more than one on-oft cycle of the same or different duration in a 24 -hour period. Rated 40 amps ( 4375 watts, tungsten rated), 125 v ., AC. With 3 trippers ( 1 for cach "on-off" cycle). $73 / 4 \times 5 \times 3^{\circ}$. U.L. Approved. For $110-120$ volts. 60 cycle AC. Slipg. wt., 4 lbs. 78 B 313. List, \$17.95.

NET II. 67
Extra Trippers. For above. 4 oz.
78 B 336. NET EACH.

## TYPE T965 TIME SWITCH

Program timer for up to 96 operations in a 24 hour period. Minimum "on" or "off"
period is 15 min . Can be used for 24 hour period is 15 min . Can be used for 24 hour
control of heating, air conditioning, and incontrol of heating, air conditioning, and in-
dustrial music systems. SPDT switch; dustrial music $3 y$ stems. SPDT switch; rated
20 amps . $7 / 8 \times 5 \times 3^{\prime \prime}$. U.L. Approved. For $110-125$ v., 60 cycle AC. Wt. 4 ibs. 78 B 395. List, \$36.50.......NET 23.73

## UTC, Superior, Ohmite and Standard Transformers

## UTC TRANSFORMERS

ULTRA-COMPACT HIGH-FIDELITY AUDIOS High fidelity inpus, interstage, and output transformers. Input yyper identitied by maximum level In dbm. Multiple shied for very low hum pickup. Response: A-10, A-11, A-12, A-16, A-18, $\pm 2 \mathrm{db}, 20$ 20.000 c db, $40-20,000 \mathrm{cps;}$ A-20. $+2 \mathrm{db}, 10-50,000 \mathrm{cps} ; \mathrm{A}-21$ $\pm 2 \mathrm{db}, 30-30,00 \mathrm{cps} ; \mathrm{A}-24, \mathrm{~A} 20, \pm 2 \mathrm{cps} .2 \times 1 / 2 \times 11 / 2^{\prime \prime}$ case. Av. shpg. wt., $3 / 4$ libs.

| Stock No. | Mir's Type | Príl Imp.. | Sec. Imp.. Ohms | Max Level | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 626820 | A-10 | $\begin{aligned} & 50,125-150,200- \\ & 250,333,500-600 \end{aligned}$ |  | 15 dbm | 20 |
| 62 G 821 | A-11* | 50, 200. 500 | 50 K P.P. | 5 dbra | 12.00 |
| 62 <br> 62 <br> 62 <br> 6 | A-12 A-15 | Sampe as A-10 | 80 K 2 $500-2 \mathrm{Kcect}$ | $15 \text { dbm }$ | $\begin{array}{r}12.00 \\ 9.90 \\ \hline\end{array}$ |
| 62 G 864 |  |  |  | 30 mw | 0 |
| 62 G 824 |  | ${ }_{15 \mathrm{~K}}^{15}$ (Split) | $80 \mathrm{~K} \text { P.P. 2.3:1 }$ | 30 mw | 12.00 |
| 62 62 6 G 826 | $\begin{aligned} & \text { A-18 } \\ & \text { A-19 } \end{aligned}$ |  | 80K P.P. $2.3: 1$ | 30 nmw | 12.00 |
| 62 G 827 | A-20 | Same as A- | Same as Pri. | 15 dbm | 14.40 |
| 62 G 828 | A-21* | $50,2000-250,500$ | Same as Pri. | 15 dbm | 12.00 |
|  |  | 500 |  | 1 watt | 9.90 9.90 |
| 62 G 873 | A-23 | 500 | 4-16, split | 3 matt | 12.90 |
| 62 G 777 | A-24 | 15K | As A-10 pri. | 30 mv 30 mw | 12.00 |
| 62 G 778 62 G 779 | A-25 A-26 | $15 \mathrm{~K}-\mathbf{8} \mathrm{ma}$ 30 KP . to | $\begin{aligned} & \text { As A-10 pri. } \\ & \text { As A-10 pri. } \end{aligned}$ | 30 mw | 13.20 |
|  |  | 25,000-6250 | 500-125 split | vatt | 0.20 |
| 616795 | A-35 | 10,000-2500 split | 500-125 split | 1 watt |  |
| 61 G 797 | A-37 | 500-125 split | 50-12.5 split | 1 watt | 9.60 |
| 62 G 874 | A-33 | Murnetal shield; for | any of above | ....... | 2.70 |

## UTC OUNCER AUDIO UNITS

For compact applications. Response: $=1 \mathrm{db}, 30-20,000 \mathrm{cps}$; except 0-14, 15 , and unita carrying DC. average 150-4000 cps; +100-20,000 cps. Max. operating levels: 0-1, $2,3,12,14$, and 16
 Sealed in aluminum case. Dia. $7 / 3 \times 13 / 6^{\circ}$ except $\$ \mathrm{dla}$. $11 / 10 \times 11 / 2$


| Stock No. | Type | Primary Impedance\| | Sce. Imp. | CET |
| :---: | :---: | :---: | :---: | :---: |
| 62 G 780 | O-1 | 50, 200-250. 500-600 | 50.000 | 7.80 |
| 62 G 781 | 0-2 | 50, 200-250, 500-600 | 50.000 CT | 7.80 |
| 626782 | 0-3 | 7.550 15.000 | 50.000 60,000 | 7.50 6.60 |
| 62 G 783 | 0.4 | 15,000 |  |  |
| 626784 | 0-5 | 15.000 DC in Pri. | $60,000$ |  |
| 62 G 785 | 0-6 | 15.000 DCC in P | 95.0000 C | 7.50 |
| 62 G 786 62 G 787 | $0-7$ 0.8 | 15.000 DC in P <br> 15,000 | 150. | 7.80 |
| 62 G 788 | 0. | 15.000 DC | 200-250. | - |
| 626789 | 0-10 | 30,000) plate |  | 8.40 |
| 62 G 790 | 0-12 | 50, 200-250 | : 0000 ol | 6.30 |
|  | 0-13 | Reactor: 30 | , 6000 |  |
| 62 G 791 | $0-14$ | 200 | $5{ }^{5} \mathrm{meg}$ |  |
| 626794 | 0.164 | 250 CT 200 |  | 7.80 |
| 62 G 493 | 0-181 | $10.000 / 2500$ $10.000 / 2500$ | 20001/500 | 7.80 |
| 62 G 494 | 0-19t | 10,000/2500 | 4000/1000 | 7.80 |
| 62 G 495 | 0-20t | 1500 CT | 500/125 | 6.30 |
| 62 G 496 | 0-21 $\dagger$ | 2000 C T; 4000 CT | 8:16 | 5.40 |
| 61 G 762 | 0-23 | Reactor: 7 hys. at 3 m |  | 5.10 |
| 61 G 765 | 0.26 $\dagger$ | 10,600 CT | $10,000 \mathrm{CT}$ | 8.10 |
| 61 G 766 |  |  | 500/125 |  |
| 61 c 769 | $0.30 \dagger$ | 500/125 | 500/125 | 8.10 150 |
| 62 G 492 | 0-17 | Mumetal Shield; fits | ny Ouncer unit. | . 50 |

## UTC STANDARD PHOTOFLASH TRANSFORMERS

Can be used for either standard (Amglo type), or trigser (Sylvania type) multiple flash tubes.
Type PF-1 Powor Transformer. Primary $115 \%$., $50-60$ cycle AC. Secondary with $2 \lambda 2$ rectifier dement tape for $2 \times 2.21 / 2 \times 31 / 4 \times 2 \xi \xi^{2}$. Wt., $21 / 2 \mathrm{ibs}$
mer 62 G 230. NET EACH
8.40

Type PF-3 Trlgger Transformer. Not lilus. Use With PF-1 to trigker (sylvania type) fash tubes. 62 G 232 . NET EACH long. 6 oz.
6.00


PF.1, PF. 5

## UTC TRANSISTOR PHOTOFLASH TRANSFORMERS

Miniaturized light weight units for transistor-type photoflash supply. For 115 v . AC or portable, battery operation.
Type PF-5 Power Transformer. With two primary windings, one for 115 v ., 5060 cycle AC and the other for $41 / 2-v$. battery operating transistors switched by PF- 6 inverter transformer (below). Secondary output with voltage doubler: 400 v . DC. © 10 charge photoflash capacitor. Mount63 G 527. NETEACH
8.40

Type PF-6 Inverter Transformer. Transforms 41/2 V . DC from batwry, to AC (In conjunction with transistorized circuitry), to drive Pli-5 tery, io trandformer (above). $7 / \mathrm{x} \times 17 / e^{4}$. Same case" as "Ouncer" (above). Slipg. Wr., ${ }^{2}$ OZ.
63 GEACH 5.10

Type PF-7 Trigger Transformer. Not illus, Use with 1PF-S and PF-6 (above), to trigger flask tubrs. 25 mid capacitor dischar
winding provideg 6 KV pul
Use This Catalog as Your Guide to Everything in Electronics

## Stancor TV Transformers



## EXACT-REPLACEMENT TV HORIZONTAL OUTPUT TRANSFORMERS

A complete line of top-quality replacement flyback transformers for all standard television receivers. Every transcarmer fathatully duplicates all of the electrical and physiManufacturer's own specificatlons are used; performance is

## ADMIRAL

| tockNo. | Type | Orig. Mir'spart ${ }^{\text {a }}$ | NET |
| :---: | :---: | :---: | :---: |
| 64 G 210 | A-8128 | 79, $23.3 .79 \mathrm{C} 28-1$ | 6.88 |
| 64 64 64511 | ${ }_{\text {A-813 }}$ | ${ }^{79} \mathrm{C} 30-1 /-3$ | 9.89 |
|  |  | 79C38-1, 79 D38-1 | 8.96 |
| $64 \mathrm{G213}$ | A-8254 | 79C60-1 |  |
| 64.6214 | A-8255 | 79C60-2/-3 | 5.59 6.49 5.83 |
| $\begin{array}{r}63 \\ 64 \\ 64 \\ \hline\end{array}$ | ${ }_{\text {H-820. }}^{\text {H-8135 }}$ | 790.70-1 | 5.83 |
| 64 G 212. | A-8253 | 79048-1 |  |
| 63 G 459 | A-8292 | 79D65-1 | 7.35 |
| 61 G 204 | Ho-301 | $79 \mathrm{D} 55-2 /-$ $79077-2$ |  |
| 63 G 290 | HO-317 | $79 \mathrm{B77-6}$ |  |
|  |  | 79D77-6. 79E77-6 | 5.31 |
| 63 G291 |  | 98377.79D77-7/-2 |  |
| 63 G 292 | O-319 | 79E77 | 5.31 6.54 |
| CBS-COLUMBIA |  |  |  |
| 64.6331 | $\begin{array}{\|c} A-8230 \\ A-8201 \end{array}$ | 10104 07,08/10/35 |  |
| ${ }_{6} 64 \mathrm{G} 463$ | A-8283 |  |  |
| 63 G 464 A | ${ }_{\text {A-8284 }}$ | $12001051 / 91$ |  |
| CROSLEY |  |  |  |
| 64 G 2222 | A-8241 | 157820 | 6.36 |
|  |  | $3^{69 /-1,154990}$ |  |
| 64 G 208A | A- 8263 | 158481-1/-2/-5 | 9.37 |
| EMERSON |  |  |  |
| 64 G 221 A | A-8131 | $7^{738047 / 48}$ |  |
| 64 <br> 64 G <br> G <br> 1 | A-8138 | $738079 / 84$ $738067 / 68 / 60 / 73 /$ | 6.53 |
| 64 G 333 A |  | $\begin{aligned} & 73806 / 68 / 69 / 73 / \\ & 74 / 75 / 82 \end{aligned}$ | 7.35 |
| 61 G 206 | HO-294 | $7388103 / 109$ | 6.53 |
| 616208 | H0-296 | 738106/107/111/1929 |  |
|  |  |  | 7.50 |
| $\left.{ }_{6}\right)^{6} 248$ | H0-310 |  | 5.88 |
| 61 G 249 H | HO-311 | ${ }_{738155}$ | 5.15 |
| 61 G 50 H | 退 | 738100 | 4.93 |
| ${ }^{5} 1 \mathrm{G} 252{ }^{\text {a }}$ | HO-314 | 738162 |  |
| GENERAL ELECTRIC |  |  |  |
| 64 G 546 |  |  |  |
| 64 G 277 A | A-8262 | RTO-131/141/- |  |
| ${ }_{63} \mathrm{G} 4669$ A | $\begin{aligned} & A-8288 \\ & A-8289 \end{aligned}$ | RTO-149/1 <br> RTO-151/3 |  |
| 63.647 A | -8290 | RTO-166/5 |  |
| 63 G 468 H | 10-252 | RTO-165 | 6.05 6.47 |
| 63 G 469 H | - | RTO-175/87 | 6.47 |
| 1 G 209 H | O-298 | RTO-207 | 6.47 |
| G 2101 H | -299 | RTO-208 | 6.69 7.06 |
| HOFFMAN |  |  |  |

## HOFFMAN (Cont'd)

StockNo. Typo Orig. Mer'sPartNo NET 63 G $976 / \overline{\mathrm{HO}-287} 5144 / 45 / 46 / 48 / 49 / 55 / \frac{18}{7.18}$

## MAGNAVOX

| $63 G 472$ | 293 | $\left\|\begin{array}{c} 360593-2 \cdot 360552-1 / \\ -2 /-2 \mathrm{~A} . \end{array}\right\|$ |  |
| :---: | :---: | :---: | :---: |
| 63 G 473 |  | $360606 /-1$ |  |
| 636474 | A-8295 | 360614-1. 360623/ |  |
| C 253 | HO-331 | 320055-1/61-1/-3 |  |
| 61 c | HO-332 | 36058 |  |
| 61. | HO-333 | 30070 |  |
| 61 G 25 | 110-334 | 32081 1 -1 |  |
| G 25 | HO-3 | 360739-1/779-1 |  |

## MOTOROLA

| $\begin{aligned} & 64 \text { G } 325 \\ & 64 \text { G } 279 \end{aligned}$ | $\begin{aligned} & A-8224 \\ & A-8239 \end{aligned}$ | $\begin{aligned} & 24 \mathrm{C} 711265 / \mathrm{A} \\ & 24 \mathrm{C} 721290 \\ & 24 \mathrm{~K} 792753, \\ & 24 \mathrm{~K} 701009 \\ & \hline \end{aligned}$ | 9.11 6.98 |
| :---: | :---: | :---: | :---: |
| 646326 | $\overline{\text { A-8225 }}$ | $24{ }^{\text {k }} 712193$ | 9.11 |
| 64 G 327 | A-8226 |  |  |
| 63 G 971 | HO-280 | 24K739284 | 8.128 |
| 63 G 972 63 G 973 | H0-281 | 24K730902/03/04 | 8.82 |
| 63 G 973 | HO-282 | 24C736487 $24 \mathrm{~K} 738699$ |  |
| 61 G 213 | HO-293 | 24 C 736488 | 8.37 8.57 |
| 61 G 127 | HO-336 | 24C739283 |  |
| 61 G636 | HO-341 | Coil only |  |
| 61 G 637 |  | 24C740969/742676 | 2.59 6.94 |
| $61 G 638$ $61 G 639$ | $1 \mathrm{O}-343$ $\mathrm{HO}-344$ | 24 C 744042 , | 7.06 |
| 616639 | HO-344 | $\begin{array}{r} 24 k 748397 / \\ 754273-Z \\ \hline \end{array}$ |  |
|  |  | MUNTZ |  |


| 64 $G$ 281 $A-8129$ <br> 64 $G$ 55 $A-8132$ <br> 64 $G$ 283 $A-8240$ <br> 63 $G$ 436 $A-8291$ <br> 64 $G$ 278 $A-8261$ | $\mathrm{TO}-0024$ $\mathrm{TO}-0031$ $\mathrm{TO}-0036$ TO 0039 $\mathrm{C} 9.253 /-1 /-2 /-\mathrm{E}$ | $\begin{aligned} & 7.17 \\ & 8.82 \\ & 7.06 \\ & 7.06 \\ & 6.63 \end{aligned}$ |
| :---: | :---: | :---: |
|  | PHILCO |  |


\section*{| 63 G | 438 | $\mathrm{HO}-277$ | $32-8465-2,32-8509 /-2$ | 9.41 |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 64 | G | 323 | $\mathrm{~A}-8222$ | $32-8533 / 34$ | 7.42 |
| 64 | G | 321 | $\mathrm{~A}-8220$ | $32-8565$ | 8.22 |
| 63 | G | 437 | $\mathrm{HO}-276$ | $32-8624 /-1$ | 8.47 | <br> PHILHARMONIC}


| 64 G $573 / \mathrm{A}-8136 / 80-263 /-265 /-2$ | 17.47 |
| :--- | :--- | :--- |

RCA

identical in every respect. No alterations are rexuired in the existinged of high.riuality for installation. Carefully constructed of high-quality materials to assure exceptional dependability. *For 77JI except where 6CD6 horizontal output tube is used. Av. shpg. wt.. 1 Ib

## RCA (Cont'd)

StockNo. Type Orig. Mir'sPartNo. NET 63 G $442 \overline{10-272} 972914-1.103092 \quad 6.53$ 61 G 258 HO-320 10.389 (50-94292-1) 5.66 61 G 259 HO-321 104876 (972942-1)


$106533(973908-1) 7.18$

## SILVERTONE




## WESTINGHOUSE

 64 G 286 A-8238 $\left\lvert\, \begin{aligned} & \mathrm{V}-10214-1 . \\ & \mathrm{V}-10204-1 .\end{aligned}\right.$ 64 G 284 A-8236 V-11548-1/-2/-3/-4 $\begin{array}{llll}61 & \text { G } 269 & \mathrm{HO}-339 & 493 V 004 \mathrm{MO2} / 3 / 4 \\ 61 & \mathrm{G} 270 & \mathrm{HO}-340 & 493 \mathrm{~V} 003 \mathrm{Mo3}\end{array}$

## ZENITH

|  |  |  |  |
| :---: | :---: | :---: | :---: |
| 64 G 287 | A-8267 | $\begin{aligned} & \text { S-15911/12,16566 } \\ & S-17130 / 40,17233, \\ & S-17245 / 265 / 435 \\ & S-17646 / 767 / 811 \\ & S-17927,-20908 \\ & \hline \end{aligned}$ | 7.06 |
| $64 G 288$ 64 G 289 | A-8268 A-8269 | $\mathrm{S}-15015 / 202 / 709$ <br> S <br> S <br> $\mathrm{~S} 15110 /-16191 / 204$ <br> $\mathrm{~S}-17244 / 699 / \mathrm{X}$. <br> S <br> $\mathrm{S}-18866$ <br> S | 7.06 7.06 |
| 64 G 290 | A-8270 | S-18567/990. |  |
| 64 G 291 |  | $\begin{aligned} & \mathrm{S}-19728 \\ & \mathrm{~S}-19032 / 71 \end{aligned}$ | 6.53 6.53 |
| 63 G 444 | HO-267 | $\begin{aligned} & \mathrm{S}-19032 \\ & \mathbf{S}-20099 \\ & \hline \end{aligned}$ |  |
| 63 G 445 | HO-268 | S-23049 | 6.08 |
| 63 G 447 | 140-270 | S. 1812.5 | 5.88 |
| 63 $61 G 248$ | HO-271 A 8276 | $\underset{\mathrm{S}-22154}{\mathrm{~S}-22451}$ S-23438 | 6.53 |

## TELEVISION POWER TRANSFORMERS

Quality power transformers for replacement use in standard TV receivers. Designed to supply high volt-
age (plates), rectifier and filament windings are CT. Leads are stripped, tinned and color-coded to E.I.A. standards. "With conpuer short. ing band to reduce external magnetic field. For 117 v . 60 cycle AC, except Type P-5059, which has primary
designed for 117107 y operation Type P- 8355 and designed for $117 / 107$. operation. Types P-8335 and P-8356 are similar to Fig. A on following page.


## VERTICAL DEFLECTION OUTPUT TRANSFORMERS

 All are isolation transformer type except $t$ which is autoformer type and,f whichcan be used either way. "Copper shielding band around coil and core.

| Stoek No. | Mfr's Type | $\begin{aligned} & \text { Pri. } \\ & \text { Ohms } \end{aligned}$ | Sec. Ohms | Sixe | $\begin{aligned} & \text { Wt. } \\ & \text { Lus. } \end{aligned}$ | $\begin{gathered} \text { NET } \\ \text { EACH } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{lll}64 & \text { G } & 522 \\ 64 & \text { G } & \\ 6\end{array}$ | A-8112 | 1300 | 10 | $2 \times 3 \frac{1}{4} \times 1340$ | 1 | 2.94 |
| 64 <br> 64 | A-8113 | 700 | 12 | $2 \times 31 / 1 \times 1$ | 1 | 2.94 3.09 |
| 64 G 547 | A-8115 $\mathrm{A}-8123$ | 600 1200 | 11 | $31,5 \times 215 \times 2142^{\prime \prime}$ | $21 / 2$ | 5.24 |
| 64 G 554 | A-8140 | 1200 400 | 11.3 |  | 11/2 | 2.91 |
| 64 G 557 | A-8141t | 1650 | 4.5 |  |  | 4.17 |
| 61 G 289 | A. 8142 | 540 | 10.5 | $25 / 4 \times 3 \times 21 / 6^{\circ}$ | 11/2 | 4.17 |
| 61 G 290 | A-8145 | 540 | 14 | $25 / 9 \times 21 / 2 \times 21 / 4$ | $21 / 2$ | 5.17 4.20 |
| $\begin{array}{ll}61 & G 291 \\ 64 & G 473\end{array}$ | A-8146 | 375 | 10 | 2x31/4x17/8 | $11 / 2$ | 4.20 2.97 |
| $\frac{64 G 473}{63 G 977}$ | A-8148t | 375 | 6.5 | 2x15035\% | 11/2 | 3.37 |
| 63 G 977 61 G 292 | VO-103* | 530 | 5.5 | 2x11/3x31/4 | 11/2 | 4.11 |
| $61 G$ $61 G 292$ | VO.108 | 350 | 10.3 | $2 \times 2 \times 3140$ | 11/4 | 2.84 |
| 61 G 124 | VO-110 | 1150 | 12 | $2 \times 2 \times 31 / 9$ | $11 / 2$ | 5.41 |
| 61 G 125 | VO-11! | 1425 | 7.0 | 2×31/4 $2 \times 3{ }^{\circ}$ | $11 /$ | 2.82 |
| 61 G 294 | VO-112 | 1384 | 3.5 | 2x ${ }^{1 / 4 \times 21 / 9} \times 3$ | $11 / 4$ | 3.25 |
| 61 G 295 | Vo-113 | 1435 | 19.7 | $25 / 16 \times 2^{1 / 9} \times 1 \%$, | $11 / 4$ | 3.36 2.73 |
| 61 G 126 | VO-114 | 250 | 6 | $2 \times 15 / 8 \times 31 / 4^{\circ}$ | $1 / 4$ | 2.73 2.82 |

## VERTICAL BLOCKING OSCILLATOR TRANSFORMERS

Primary to secondary ratios permit operation in the majority of con-

| Stock No. | Type | Pri.: Sec. Ratio | Size | Lbs. | -NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 64 G 501 | A-8111 | 1:4.2 |  |  |  |
| 64 64 64 G 54 | A-8121 A-8122 | $1: 4.2$ | $13 / 4 \times 25 / 16 \times 1 / 2$ | //2 | 1.94 <br> 2.59 |
| 64 G 558 | A-8125 |  |  | 2 | 3.83 |
| 64 G 471 | A-8126* | 1:4.2 | $27 / 6 \times 11 / 4 \times 13 / 16^{\prime \prime}$ | 1/2 | 1.89 |
| 61 G 218 | VBO-201* | 1:3.33 | $13 / 4 \times$ | 2 | 1.94 |

## Stancor Transformers



POWER TRANSFORMERS

For 6.3 Volt Tubes．All transformers have center－tapped 6.3 volt wind－ ing except PS 8415 ，PS．8416，PC－8414．PC． 8418 ，DC－8419，PC－8420
PM 8419 ．PM 8420 and PA－ 8421 ．For $6 A \times 5,6 \times 4,6 \times 5$ and similar 6.3 filament rectifiers，and for selenium rectiet．A，are asure $B$ ，urcep
 windings are for 117 volt． 60 cycle AC

| Stock No． |  | Plate |  | $\begin{aligned} & 5 \mathrm{~V} \\ & \text { (m) } \\ & \hline \end{aligned}$ |  | Slze | Wt． Lbs． | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Type | VCT | Ma |  |  |  |  |  |
| G | PS－8415 | 125 | 15 |  | 6 A | 23 |  | 2.32 |
| G． 078 | PA－8421＊ | 125 | 50 |  | 2.0 A | 2 |  |  |
| 64 G 216 | P＇S－8416＊＊ | 250 | 25 |  | 1．0A |  |  |  |
| 64 G 077 | PC．8418＊ | 460 | 50 |  | 2．5A |  |  |  |
| 64 G 154 | 1＇M－8401 | 470 | 40 | 2A | 2．0A | 2 $1 / 1 \times 3 \times 2 \times$ |  |  |
| 64 G 176 | PC－8401 | 470 | 40 | 2A | 2.0 A | $314 \times 2$ 5 $\times 25$ | 24 | 2 |
| 64 G 170 | IM－8402 | 480 | 55 | 2 A | 2.04 | 2 |  |  |
| 64 G 177 | $1^{1} \mathrm{C}-8402$ | 480 | 55 | 2A | 2．0A |  |  | 5.41 |
| 64 G 175 | $1^{\prime}$ M－8419 ${ }^{\circ}$ | 480 | 70 70 |  | 3.0 A | 3310x296x ${ }^{\text {\％}}$ | $21 / 4$ | 5.41 |
| 64 G 215 |  |  |  |  |  | 31／6 $\times 27 \times 33 /{ }^{1 / 4}$ | 3162 | 6 |
| 4 G 167 | $\mathrm{PM}-8420^{*}$ | $520$ | 90 90 |  | 4.0 A 4.0 A | 3，452／2x31／8 | 3 | 6.29 |
| 64 G 168 | $\begin{aligned} & \text { PC-84 20* } \\ & \text { PM }-8403 \end{aligned}$ | 520 500 | 90 70 |  | 4．0A $2.5 A$ | 31／2x $\times 2$ | 3 | 6.23 |
| 64 G 171 | $\mathrm{P}^{\mathrm{P}} \mathrm{P}-8403$ | 500 500 | 70 | 2 A | 2．5A | 3314294034＂ | $31 /$ | 6.23 |
| 64 G 178 | PC－8403 PC -8404 | 500 520 | 70 90 | 2 A | 2.5 A 3.0 A | 36\％$\times 3 \times 348^{\circ}$ | 4 | 6.91 |
| 64 G 179 | $\frac{\mathrm{PC}-8404}{\text { PM } 8404}$ | 520 |  |  |  |  | 4 |  |
| 64 G 160 | PM－8404 ${ }^{\text {PM }}$－8405 | 520 540 | 120 | 2A | 3.0 A 3.5 A |  | 5 | 9.01 |
| G 183 | $\mathrm{l}^{2} \mathrm{C}-8405$ | 540 | 120 | 3 A | 3．5A | $4 \times 31 / x$ | 5 | 9.0 |
| 1 G 133 | $1^{1}-6.358{ }^{*}$ | 600 | 65 |  | 2.7 A |  |  |  |
| 61 G 237 | $1 \mathrm{PM}-8423$ | 6014 | 94 | 2 A | 3．5A | 3 | 3 | 7 |
| $64 \mathrm{G1} 55$ | ＇1 M－8407 | 650 | 55 | 2 A | 2．0A | 2 有 $\times 3 \times$ |  |  |
| 64 G 157 | 1．M－8406 | 650 | 40 | 2A | 2．0A | $24 \times 3 \times 2$ |  |  |
| 64 G 217 | PCa 8406 | 650 | 40 | 2 A | 2.04 | $625 \times 29 .$ | 3 |  |
| 64 G 184 | $12 \mathrm{CB}-8407$ | 650 | 55 <br> 70 | $2 \mathrm{2A}$ | 2.04 | $6 \times 25 \times 349^{\circ}$ | 3 | 7.35 |
| 64 G 164 | $1^{\prime}$ C－ 8408 | 680 | 70 | 2 A | 2．5A |  |  |  |
| 4 C 15 | M－8408 | 68 | 70 | 2A | 2．5A |  |  |  |
| 64 G 158 | $1 \cdot \mathrm{~N}-8409$ | 714 | 94 | 2 A | 3.0 |  | 415 | 7.76 |
| 64 G 185 | $1 \times 8480$ | 7 （k） | 90 | 2 A |  |  | 5 | 9.17 |
| 64 G 159 | $1 \times \mathrm{M}-8410$ | 720 | 120 | 3 A | $\begin{aligned} & 3.5 A \\ & 3.5 A \end{aligned}$ |  | 514 | 8.81 |
| 64 G 186 | $1^{3} \mathrm{C}-8410$ | 720 | 120 | 3A | 3．5A |  |  |  |
| 4 G 1 | ［＇M－8411 | 750 | 150 | 3 A | 4．5A | $31 / 6 \times 3$ |  |  |
| 64 G 187 | $1^{2} \mathrm{C}-8411$ | 750 | 150 | 3 3 | 4．5A |  | 814 |  |
| 64 G 161 | PM－8412 | 800 | 200 | 3 A | 5．0A | $3 \mathrm{~s} \times 436 \mathrm{x}$ | 8 |  |
| 64 G 163 | PC－8412 | 800 | 200 | 3. | 5．0A |  | 832 | 1.46 |
| 64 G 169 | $\mathrm{P}^{\text {C }}$－ 84148 | 120 | 200 | 3. | 3．0A | 41／4 | 832 |  |

（A）TYPE P－8195 TRANSISTOR INVERTER TRANSFORMER
G 182 For 280 v．DC © 150 ma fix＝d（ 117 v． 60 cycle AC），or mobile （ 12 v．DC）transistorized power supply．Schematic included．Also has


## DEFLECTION YOKES

For $70^{\circ}$ deffection picture tubess，except $\$$ for $50^{\circ}$ ：$\uparrow 90^{\circ}$ ．
$110^{\circ}$ ．All have ferrite cores and cosine－wound distributed windings for anti－astigmatic lecusing．Av．shpg．wt．， $11 / 3 \mathrm{lbs}$ ．

NET 13.50
 Stoc
64 G 538
64 G 5
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$\square$ 8.3 mh .13 .5 ohms 10.3 mh .14 .5 ohms $13.5 \mathrm{mh}, 175$ ohms $13.5 \mathrm{mh}, 17.5$ ohms
$30.0 \mathrm{mh}, 45$ ohms $20 \mathrm{mh}, 31 \mathrm{ohms}$ $30 \mathrm{mh}, 41$ ohms
12.5 mh .15 ohms $30 \mathrm{mhl}, 45$ olams
$25 \mathrm{mh}, 35$ ohms $25 \mathrm{mh}, 35$ ohms
$20 \mathrm{mh}, 25$ ohms
$14.5 \mathrm{mh}^{2} 10$ ohm $14.5 \mathrm{mh}, 10 \mathrm{ohm}$
20 mh .27 ohms
$24 \mathrm{mh}, 46 \mathrm{ohms}$ $\frac{17.5 \mathrm{mh}, 35.5 \mathrm{ohms}}{24 \mathrm{mh} .36 \text { olms }}$

|  |  |
| :---: | :---: |
| $50 \mathrm{mh}, 66 \mathrm{ohms}$ | 7.54 |
| $50 \mathrm{mh}, 66$ olims | 7．22 |
| $50 \mathrm{mh}, 52.50 \mathrm{mms}$ | 7.22 |
| $50 \mathrm{mh}, 53.5$ ohms | 8.40 |
| 3.5 mh .3 .5 ohms | 7.22 |
| $50 \mathrm{mh}, 50$ ohms | 8.89 |
| $50 \mathrm{mli}, 50$ ohms | 8.0 |
| 48 mm .52 hmms | 10.17 |
| $3.5 \mathrm{mh}, 3.5$ olims | 7.59 |
| $40 \mathrm{mih}, 50$ olyms | 7.88 |
| $44 \mathrm{mh}, 45$ ohms | 9.17 |
| 3.1 mh， 3.5 ohms | 7.44 |
| $45 \mathrm{mh}, 43$ ohms | 8.53 |
| 11 mh .11 ohms | 9 |
| 12.3 mh .13 .5 ohms | 10.24 |
| $3.2 \mathrm{mh}, 3.4$ ohms | 1 |
| $3.2 \mathrm{mh}, 3.4$ ohms | 7.01 |
| $3.2 \mathrm{mh}, 3.4$ ohms | 7.25 |
| $42 \mathrm{mh}, 42$ ohms | 8.65 |
| 42 mh .42 ohms | 8. |
| 43 mh .50 ohms | 6 |
| $47 \mathrm{mh}, 42$ ohms | 7.35 |
| $45 \mathrm{mh}, 45$ ohms | 6.89 |
| 40 mh .37 ohms | 9.08 |
| $45 \mathrm{mh}, 45$ ohms | 8.13 |
| $34.4 \mathrm{mh}, 34 \mathrm{ohms}$ | 8.78 |
| 40 mh .41 ohms | 7.9 |
| 40 mh .39 olims |  |
| $41 \mathrm{mli}, 54$ ohms | 8.64 |
| $34 \mathrm{mh}, 34$ ohms | 8.54 |
| $3.3 \mathrm{mh}, 3.0$ ohms | 11.04 |
| 34 mh． 34 ohms | 8.82 |
| $14.8 \mathrm{mh}, 13.80 \mathrm{~lm}$ | 12.97 |
| 41 mh .72 ohnis | 8.00 |
| $29 \mathrm{mh}, 60$ olsms | 6.76 |
| $38 \mathrm{mh}, 80$ ohms | 8.41 |
| $33 \mathrm{mh}, 83 \mathrm{ohms}$ | 9.29 |

All ratings are with maximum DC in winding．\＆Fig．G with leads．All C2691 have dual wirdirus；first rating series，second rating parallel．

| Stock No． | Type | Fit | Hys． | Ma． | Ohms | Size | Lbs． | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 64 C | C1001t | C | 10.5 | 110 | 225 | $2 \% / 4 \times 2 / 4^{4}$ | $2 \%$ | 3.52 |
| 64 G | C1002 | C | 15.0 | 75 | 400 | $21 / 4 \times 3$ 1／$\times 21 / 4$ | 11／2 | 2.82 |
| 64 G 05 | C1003 | c | 16.0 | 50 | 580 | 2x3kx $1 \%$ | 12 |  |
| 64 G 065 | C1080 | c | 3.5 | 50 | 200 | 1302\％x1\％\％ | 1／4 | 62 |
| 64 G 075 | C1279 | C | 8.5 | 50 | 400 | 14x2\％x1\％${ }^{\circ}$ | 8／4 | ． 62 |
| 64 G 067 | C1355 | E | 8.0 | 75 | 290 | $21 / 6 \times 2{ }^{5} / 4$ | 1 | 2.60 |
| 64 G 063 | C1410t | A | 4.0 | 175 | 100 | $33 / 16 \times 24 \times 2 / 8{ }^{\prime}$ | 21／2 |  |
| 64 G 466 | C1411t | A | 4.5 | 200 | 80 | 34．3x3\％＂ | 31\％ |  |
| 64 G 455 | C1412t | A | 4.0 | 250 | 60 | 3\％14343 | 41／2 | 6.82 |
| 64 G 068 | C1420 | A | 16.0 | 80 | 360 | $31 / 6 \times 2 \% \times 2 \%^{\circ}$ | 21／2 | 55 |
|  | Cl | A | 7.0 | 140 | 165 | $31 / 6 \times 2 \frac{1}{1 / 2} \times{ }^{\circ}$ | $21 / 2$ | 55 |
| $64 G 058$ | C1515 | C | 20.0 | 15 | 900 | 1\％142\％x11／ |  | 0 |
| 64 G 050 | C1706 | C | 4.5 | 50 | 300 | 1\％ $21 / 2$ n14／ | 1／8 | － |
| 64 G 051 | C1707 | C | 7.0 | 50 | 550 | $13 / 0 \times 2 / 4 \times 1 \%^{\prime}$ | 1／4 | 1．39 |
| 64 G 052 | C1708 | c | 13.0 | 65 | 500 | 2x3y／xl\％ |  | 2.35 |
| 64 G 053 | C1709 | C | 8.0 | 85 | 250 | 2x31／4 2 | $11 / 4$ |  |
| 64 G 054 | C1710 | c | 7.0 | 150 | 200 | $2 \% \times 4 \times 24^{\circ}$ | 21／4 |  |
| 64 G 069 | C1721＋ | F | 8.5 | 200 | 120 | 3／481／0x3 |  | 10.35 |
| 64G456 | C1722t | F | 8.0 | 300 | 80 | 4）4x3\％x3\％ | 12 | 0 |
| 64 G 059 | C2303＊ | c | 2.5 | 130 | 100 | 2x31／4x1\％ | 1 | 2.20 |
| 64 G 060 | C2304 | 5 | 2.3 | 150 | 60 | 2x31／ax14． |  |  |
| 646061 | C2305 | 0 | 5.0 | 100 | 300 | $2^{11 / 4623 / 4 \times 3 / 16^{\circ}}$ |  | 3.38 0.82 |
| 64 G 064 | C2308＋ | A | 8.0 | 300 | 80 | 41／64431／0 | 7\％ | 0.82 2.52 |
| 64 G 457 | C2309＊ | C | 3.0 | 150 | 90 |  |  | $\frac{2.79}{}$ |
| 64 G 505 | C2325 | C | 2.0 | 200 | 60 | $33 / 4 \times 21 / 4 \times 21 / 4$ |  |  |
| 64 G 520 | C2326 | C | 1.0 | 300 | 43 | 34． | 1／4 |  |
| 64 G 073 | C2327 | c | 1.5 | 200 | 85 | 14／22\％ $21 / 4 \%^{\circ}$ | 11／4 | 1.76 |
| 64 G 458 | C2328 | c | ． 8 | 375 | 25 | $21 / 4 \times 31 / 42^{\circ}$ | 11／2 | 3.53 3.46 |
| 64 G 459 | C2334 | C | 2.8 | 300 | 60 | $2 \%$ 退 $1 / 8 \times 4$ | 21／2 | ． 46 |
|  |  |  | 75 | 300 | 32 | 1／2x2\％xik\％ | $1 /$ |  |
| $61 G 244$ | C23448 | $c$ | 1.5 | 10 | 85 | $11 / 4 \times 21 / 0 \times 11^{\circ}$ | 1／8 | ． 10 |
| 61 G 245 | C2345 | c | 350 | 5 | 5600 | 2r31／82＊ | 11／2 | 3.01 1.69 |
| 61 G 246 | C23468 | $c$ | 35 | 15 | 1800 | $11 / 2 \times 24 \times 11^{*}$ | \％ | 1.69 |
|  | C26 | G | ． 035 | 2 A | ． 75 | $23 \times 23 / 2 \times 2 \%^{\circ}$ |  |  |
| $61 G 239$ | C2686： | G | ． 025 | 4 A | ． 425 | $3 \times 3 \% \times 2 \%^{\circ}$ 。 | ， | 5.93 7.80 |
| 61 G 240 | C2687＊ | G | ． 01 | 8 A | ． 15 | $31 / 43 \% \times 33 / 16$ | 2 | 8.89 |
| 61 G 241 | C2688： | G | ${ }_{0}^{01}$ | 12．5A | ． 11 |  |  | 13.10 |
| 616242 | C2689＊ | G | ． 005 | 22．5A | ． 03 |  |  |  |
|  | C2690 | J | 3－075 |  |  | $\begin{aligned} & 37 / 6 \times 2 \% \times 31 / 4 \\ & 316836 \times 3 \%^{\prime \prime} \end{aligned}$ |  | 70．86 |
| 616138 | C2691 | c | 08－． 02 | 2．5－5A | ${ }^{0.6 \cdot 0.15}$ | 31／8831／0 314. |  | 3.01 |
| $61 G 139$ | C 2704 | C | 10 | 125 200 | 250 150 | 21／834714\％ | $\begin{aligned} & 21 / 4 \\ & 39 / 6 \end{aligned}$ | 7.09 |
| $61 G 140$ | C2705 | A | 10.6 | 200 310 | 150 50 | $31 / 16 \times 2 \% \times 3 y^{\circ}$ | $3{ }^{16}$ | 5.94 |

## FIXED－IMPEDANCE OUTPUT TRANSFORMERS

Transformers for single－sinded or push－pull tube output stages matching to line or voice－coll．Center－tapped primaries are for punh－pull．Al transformers are Fig．C mounting type with the exception o

| Stock No． | Mfr＇s Type | Primary | Sec． | Watts | Mto. Cers. | $\left\lvert\, \begin{aligned} & \text { Wt. } \\ & \text { Lbs. } \end{aligned}\right.$ | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 646013 | A2312 | 14，006 CT | 4 | 10 |  | 1 | 2.75 2.50 |
| 64 G 245 | A2313 | 7.000 | 800／18／4 | 10 |  |  |  |
| 64 G 033 | A3304＊ | 7，10k CT | 500／15／8／4 | 25 | 2x11你 | 3 | 6.77 |
| 64 G 297 | A3311＊ | 10KCT | $500 / 15 / 8 / 4$ | 25 5 | $\frac{2}{2} /{ }^{\prime \prime} \times{ }^{\prime \prime}$ | 31／2 | 6.78 1.80 |
| 64 G 296 | A3327 | 25 K |  |  |  |  |  |
| 64 G 244 | A3328 | 4.000 | 3.5 | 3 3 |  | 16 | 1.34 1.34 |
| 64 G 246 | A3329 | 8.000 | 3.5 | 5 | 2\％ |  | 1.94 |
| 64 G 299 | A3330 | ${ }_{2}^{2 K}$ | 3.5 | 3 | $\left\lvert\, \begin{aligned} & 2^{\circ} \\ & 1 \end{aligned} 3 i^{\circ}\right.$ | 鲐 | 1.35 |
| 64 G 243 | A3332 <br> A 3337 | 2.000 5 K | 3.2 6.8 | 10 | $\begin{aligned} & 13 y^{\prime} \\ & 2 y^{\prime} \end{aligned}$ |  | 2.28 |
| 64 G 295 | A3337 | 5K | 6.8 |  |  |  |  |
| 64 G 020 | A3800＊ | 5，000 CT | $\begin{gathered} 500 / 250 / 15 \\ / 8 / 4 \end{gathered}$ | 30 | 24．182 | 4 | 6.73 |
| 64 G 021 | A3801＊ | $6,600 \mathrm{CT}$ | $500 / 250 / 15$ | 35 | 214x23／4 | 481 | 8.58 |
| 64 G 298 | A3831 | 10 KCT | 8／4／2 | 5 | $2 \%$ | 3 | 2.65 |
| 64 G015 | A3857 | 25 K CT | 8／1／2 | 5 |  | 1 | 2.35 <br> 1.45 <br> 1.45 |
| 64 G 001 | A3876 | 2，000 |  | 5 |  |  |  |
| 64 G 004 | A3877 | 5，000 | 4 |  | 2 ＂ | 14 | 1.45 1.49 |
| 64 G 006 | A3878 | 7.000 | 4 | 5 | $2^{2}{ }^{\prime \prime}$ | 2 | 1.45 |
| 64 G 010 | $\wedge 3879$ | 10.000 | $32 / 16 / 8$ | 744 | 31／00 | 13 | 3.49 |
| 64 G 138 | A8094 | ${ }^{4.000} 71.600$ | $32 / 16 / 8$ | 5 | $2=$ | 14 | 1.73 |

## AUDIO UNPUT TRANSFORMERS

For matching 7000 to 15,000 ohm impedance single plate to push－pull For matching 7000 to 15,000 oncept for matchims 7,000 to 20,000 ohm impedance single plate to single grid．Maximum primary DC， 10 ma． 111

| Stock No． | Type | Ratlo | Size | Wt．Lbs． | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | A－52－C | 1：2 | $13 / 8 \times 23 / 8 \times 13 / 8{ }^{2}$ | $3 / 4$ | 2.20 |
| 646090 | A53＊ | $1: 3$ | $13 \times 23 \times 11 / 2=$ | 4 | 1.98 |
| 64 G 081 | A－53－C | 1：3 | $13 / 8 \times 21 / 6 \times 11 / 8$ | $1 / 4$ | 2.35 |
| 64 G 082 | A．63－C | 1：3 | $15 / 6 \times 2 / 8 \times 11 /{ }^{\prime \prime}$ | 1／4 | 2.65 |
| 63 G 281 | A47791 | 1：10 | $13 / 0 \times 23 / 8 \times 11 / /^{\prime \prime}$ | 1 | 2．25 |
| 63 c 282 | A $4778{ }^{\text {t }}$ | l：20 | $23 / 6 \times 27 \times 1 / 4$ | 1 | 3.914 |
| 63 G 283 | A4780 | 1：20 | $2 \times 31 / 3 \times 1 / 4$ | 1 | 3.94 |

## Stancor Transformers





FILAMENT TRANSFORMERS
Single－secondary filantent transformers，All are center－tapped except Type PG469 and Type P8190．Type P8191 designed for filament isolation，
has 6.3 V ．primary and secondary．All ochers． 117 v 60 cycle．AC －Illustrated on preceding page．

| Stock No． | $\begin{aligned} & \text { Mir's } \\ & \text { Type } \end{aligned}$ | Flg． | Volts | Amps | Insul． | Mtg． Cers． | $\begin{aligned} & W_{t .,} \\ & \text { Lbs: } \end{aligned}$ | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 64 G 141 | P6133 |  | 2.5 | 5.0 | 7500 | $211 / 16^{\circ}$ |  |  |
| 64 G 301 | P3060 | E | 2.5 | 10.0 | 10 kV | $21 / 4 \times 17 / 8^{\circ \prime}$ | $21 / 2$ | $\begin{aligned} & 3.72 \\ & 6.59 \end{aligned}$ |
| 64 64 6 262 | P6467 | D | 5.0 | 3.0 | 2500 | $2^{1} 16$ | $11 / 2$ | 6.59 3.14 |
| $64 G 255$ $61 G 235$ | P3062 | $\underset{\mathrm{E}}{\mathrm{E}}$ | 5.5 | 6.0 | 2500 | $2 \times 2$ | $21 / 4$ | 5．04 |
| 61 G 234 | ${ }^{13} 6432$ | L | $\frac{5 C 1}{5 C T}$ | 15 | 2500 | 2×21／4＂ | 3 | 7.01 |
| 64 G 888 | ${ }^{1} 6492$ | A＊ | 5 ct | 21 | 2500 | 21／4 $\times 21 / 2$ | 43 | 8.16 |
| 61 G 134 | P6464 | A＊ | 6.3 CT | 16 | 2500 | $3 \times 23$ | $71 / 2$ | 0.72 |
| 64 G 887 | 1＇6465 | D | 6.3 | 10.6 | 1500 | $2 \times 21 / 4$ | $31 / 2$ | 6.80 |
| 64 G 308 | P61 34 | D | 6.3 | 1.2 | 3000 |  | 1／2 | 1.94 |
| $64 C 584$ | P8190 | D | 6.3 | 1.2 | 5000 | ${ }^{1} 1 / 18{ }^{\prime}$ | 1 | $\begin{aligned} & 2.06 \\ & 2.70 \end{aligned}$ |
| 64 C 585 | P8191 | D | 6.3 | 1.2 | 5000 | $2^{13} 116^{\circ}$ | 1 | 2.91 |
| 61 G 230 | P6428 | A＊ | 6.3 | 1.75 | 25 CO | $2 \times 1{ }^{15} 1{ }^{\prime}$ | 3 | 6.08 |
| 64 G 263 | P6466 | D | 6.3 | 3.0 | 2560 | $2^{\prime} 1 / 16{ }^{\prime}{ }^{\circ}$ | 11／2 | 3.32 |
| 61 G 232 | P6430 | $A^{*}$ | 6.3 CT | 3.0 | 2500 | $2 \times 113 / 16^{*}$ | 23／4 | 5.39 |
| 64 G 309 | P5014 | E | 6.3 | 3.0 | 2500 | $2 \times 13$ | ${ }^{2} 1$ | 5.39 4.58 |
| 61 G 231 | P6429 | A＊ | 6.3 | 3.5 | 2500 | 21／2x2，16＂ |  | 4.58 8.26 |
| 64 C 256 | P4019 | $\mathrm{A}^{*}$ | 6.3 | 4.0 | 2500 | $2 \times 11 \mathrm{Mc}{ }^{\circ}$ | 41／2 | 8.26 4.94 |
| $\begin{aligned} & 64 G 264 \\ & 64 G 312 \end{aligned}$ | P4089 | $\mathrm{A}^{\text {E }}$ | 6.3 | 6.0 | 2500 | $21 / 4 \times 2=$ | 31／2 | 6.49 |
| $\begin{array}{lll}64 \\ 61 & \text { G } 23\end{array}$ | P3064 | $\mathrm{E}^{\mathbf{E}}$ | 6.3 6.3 CT | 6.0 | 2500 | $2 \times 2=$ | $21 / 2$ | 5.31 |
| 64 G 313 | P6308 | F | 6.3 .3 | 6.0 10.0 | 2500 2500 | $21 / 2 \times 2316$ | $41 / 4$ | 8.17 |
| 64 G 265 | P6309 | F | 6.3 | 20.0 | 2500 | 21／423／60 | $31 / 3$ | 6.46 |
| 64 G 314 | P5015 | E | 7.5 | 20.0 4.0 | 2500 2500 |  | 63／4 | 10.01 |
| 64 G 257 | P5016 | E | 10.0 | 4.0 |  |  |  | 5.93 |
| 64 G 318 | P6139 | $F$ | 10.0 | 8.0 | 2500 | $21 / 9 \times 21 / 8{ }^{\circ}$ | $\begin{aligned} & 31 / 4 \\ & 5 \end{aligned}$ | 5.93 7.35 |
| 64 G 25 厚 | P4097 | $\mathrm{A}^{*}$ | 10.0 | 8.0 | 2500 | $21 / 3 \times 23 / 1{ }^{\prime \prime}$ | $51 / 4$ | 7.66 |
| 64 G 142 | P8 130 | D | 12.6 | 2.0 | 1500 | $213 / 6^{\circ}{ }^{\text {d }}$ | $11 / 2$ | 7.36 |
| 64 G 143 | P6469 | D | 25.2 | 1.0 | 1500 |  | $11 / 2$ | 3.36 3.20 |
| 61 G 200 | P6456 | D | 6.37 | 6.0 | 2000 | $31 / 8{ }^{\circ}$ |  | 3.74 |

## UNIVERSAL OUTPUT TRANSFORMERS

Replacement units for radlo and television and other audio applications． Multi－tapped windings match varlous types of output tub 2 and circuits Fig．$G$ sungle－ended and push－pull plates to voice coil or line．All are ohms；$\$ 500,333,200,125,50$ ohms．Wt．， $11 / 2 \mathrm{lbs}$ ．

| Stock No． | Mfr＇s Type | Primary | Wates | Slze | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $64 G 294$ | A3250 | $5 \mathrm{~K}: 10,20 \mathrm{KCT}$ | （15 ma） | 2x31／4x\％ | 4．11 |
| $64 G 005$ $64 G 026$ | A3822 | $7.10 \mathrm{~K}$ | （15 4 |  | 4.91 |
| $\begin{array}{ll} 64 & G \\ 64 & G 26 \\ 242 \end{array}$ | $\begin{array}{r} \text { A3823 } \\ \text { A3824 } \end{array}$ | 4－14 K CT | 8 | 1\％92\％${ }^{\circ} \times 14{ }^{\circ}$ | 3.30 |
| 64 G 002 | A3825 | 1．5－4．5 | 8 | $2 \times 31 / 2 \times 2$ | 3.23 |
| 64 G 028 | A3830＊ | 3－10K CT | 8 | $2 \times 31 / 4 \times 1$ | 2.58 |
| 64 G 293 | A3841＊ | $2.5,4,5.6 .7 \mathrm{~K}$ | 20 |  | 4.41 |
| 64 G 023 | A3849 | 1．5－10k ${ }^{\text {2．5．}}$ | 10 |  | 4.90 |
| 64 G 024 | A3850＊ | 1．5－10K 4 KT | 10 |  | 3.30 |
| 64 G 027 | A3852＊ | 4－14KCT | 8 |  | 3.25 |
| 64 G 025 | A 3856 | 4－14K | 18 |  | 3.99 |
| 64 G 029 | A3870 | 4－14K CT | 18 | ${ }^{18} \times 2{ }^{3} \times 12{ }^{\prime \prime}$ | 2.84 |
| 64 G 2921 | A3880 | $4-14 \mathrm{~K}$ | 18 |  |  |

## DRIVER TRANSFORMERS

Single plate（ 10,000 ohms primary impedance）to push－pull grids．For Use between first audio and push－pull output stage． $5 / 8 x^{3 / 8 \%}$ core except for A 4752 which has $1 / 4 \times 1 / 4$＂core．（Fig．D．）

| Steck No． | $\begin{aligned} & \text { Mris } \\ & \text { Type } \end{aligned}$ | $\begin{gathered} \text { Pri. } / 1 / 2 \text { Sec. } \\ \text { Ratlo } \end{gathered}$ | Max． Pri．DC． | Size | Wt． Lbs． | NET EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 64 G 076 | A． 4713 | $2: 1$ | 30 ma | 1／482\％ $211 / 6^{\circ}$ | 1 | 2.08 |
| 64 G 038 | A－4723 | $3: 1$ | 30 ma |  | 1 | 2.11 |
| 64 G 039 | A－4752 | 2／1．5／1：1 | 40 ma | $2 \times 31 / 4 \times 14^{\circ}$ | $11 / 2$ | 2.87 |

## SELENIUM RECTIFIER TRANSFORMERS

（E For low voltage，high current applications．Use with CT or bridge rectifier circuits．For 117 v．， $50-60$ cycle AC．With wiring chart．共 tapped）．§Type TA－14 has two wecondarites． 16 ohnns series． 4 ohms Similar to $D$ on Simiar to $D$ on preceding page，tils A on preceding page．＊Similar ceding page．Averape H $61 / 1 \mathrm{ss}$ ：TA－17


## INPUT TRANSFORMERS



OUTPUT TRANSFORMERS


## DRIVER TRANSFORMERS

| $\begin{array}{lll} \hline 63 & G & 956 \\ 63 & G & 957 \\ 63 & G & 958 \\ 63 & G & 964 \\ \hline \end{array}$ | TA－5 <br> TA． 6 <br> TA－7 <br> TA－13 | D | 1000 <br> 2000 <br> 100 <br> 200 CT | $\begin{aligned} & 200 \mathrm{CT} \\ & 200 \mathrm{CT} \\ & 100 \mathrm{CT} \\ & 400 \mathrm{CT} \end{aligned}$ | $\begin{array}{r} 10 \\ 5 \\ 100 \\ 10 \end{array}$ | .05 .05 .5 .6 | $\begin{aligned} & 3 / 1 \times 11 / 182^{\circ} \\ & 13 / 1 \times 2 \times 120^{\circ} \\ & 3 \times 211 / 10 \times 25 / 33^{\circ} \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 63 G 858 | TA－16 | D | 20 | 36 CT | 400 |  |  |  |
| 61 G 131 | TA 58 | D | 100 | 200 CT | 200 | 5 | 136x2 $16 \times 1 /{ }^{\prime}$ |  |
| 63 G 478 | TA． 59 | D | 500 CT | 200 CT |  | 5 | $11 / 6 \times 2 x] 4$ | 2．37 |
| 61 G 641 | TA－61 | Df\％ | 1：1 1 | o ea．Pri | 2 |  |  | 2．55 |

## MODULATION TRANSFORMER

63 G 659｜TA－17｜Att｜8CT $|7.5 K / 5 K| 120 \mid$ 35 $\left|31 / 1 \times 3 \times 21 / 2^{2} \quad\right| 6.36$

POWER TRANSFORMERS－117．V．AC PRIMARY

| Stock No． | Type | Fig． | iption | Siza | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 63 G966 | TP－1 | Alt | 2 Secs．each 13 or 18 v．AC |  |  |
| 61 G 642 | P－8196 | Aft | ma，DC．For bridge rects． <br> Sec： 80 VCT ； 1.2 A ．（2） $45 \mathrm{v}, \mathrm{DC}$ | $\begin{aligned} & 3 \times 3 \times 21 / 20 \\ & 31 / 2 \times 21 / 2 \times 31 / 2, \end{aligned}$ | $4.86$ |


| Stock No． | $\begin{aligned} & \text { Mr's } \\ & \text { Type } \end{aligned}$ | Range ol AC Volts | Max．OC Output Load |  | Size | $\begin{aligned} & \text { We. } \\ & \text { Lbs. } \end{aligned}$ | $\begin{aligned} & \text { NET } \\ & \text { EACH } \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Resistive | Capac itive |  |  |  |
| 64 G 372 | RT－201 | 11.71029 .11 .2 V ＠2．0A |  | 13．8v 9.0 Aa | 31／2x21／2 $\times 3 \%^{\prime \prime}$ | 21／2 | 97 |
| 64 G 373 | RT－202 | $\begin{aligned} & 12.0 \text { to } 29.8 \\ & 12.0 \text { to } 29.8 \end{aligned}$ |  | $\begin{aligned} & 30.0 \mathrm{~V} \text { @ } 1.25 \mathrm{~A} \\ & 14.7 \mathrm{~V} \text { @ } \\ & 13.0 \mathrm{H} \text { @ } 2.0 \mathrm{~A} \end{aligned}$ | ， | 4 | 6.75 |
| 64 G 374 | RT－204 |  |  | $14.5 v{ }^{2} 8.001$ | $4 \times 31 / \times 41 / 3^{\circ}$ | \％／4 | 8.73 |
| 64 G 375 | RT－205 |  |  |  | $41 / 2 \times 37 / 6 \times 51 /{ }^{4}$ | 9\％ | 11.87 |
| 646376 | RT－208 |  |  | 14．8v © 15.0 A | 4 | 121／2 |  |
| 64 GU 378 | RT－2012 |  |  |  | 51／2x $\times 3 / 3 \times 63 / 8$ | 21 | 22.05 |
| 61 G 135 | P8193 |  |  | 9.0 va （ 2.8 A | $31 / 4 \times 31 / 6 \times 34 / 4$ | 6 |  |
| 61 G 136 | P8194 |  |  | 17.0 V 16 4.0 A |  |  |  |
|  |  |  |  | 34.0 V <br> 38.0 V <br> 15 | 41／2x $31 / 2 \times$ | 10 | 14.35 |

# Stancor, Acrosound, Acme Transformers 



## STANCOR TRANSFORMERS

## LINE-TO-VOICE-COIL TRANSFORMERS

For matching speakers to lines. Type A3837 is autotransformer for matching paralle1 speakers to line. Transformers for constant voltage lises are $\$ 1$ to volt: ${ }^{*} 70.7$ volt; and $\$ 25$ volt. $\dagger$ Power taps in watts when connerted to appropriate line.

| Stock No. | $\begin{aligned} & \text { Mir's } \\ & \text { Type } \end{aligned}$ | Fir. | Primary Imp. | Secondary Imp. | Watts | $\begin{aligned} & \text { Mts. } \\ & \text { Ctrs. } \\ & \hline \end{aligned}$ | WI. Lbs. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 64 G087 | A3818 | A | 1500/1000/500 | 15/8/4 | 25 | 314. | 21/2 | 4.82 |
| 64 G 088 | A3837 | A | 500/1000 | . 06 to 8, 12 to 16 |  |  |  |  |
|  |  |  |  | $\begin{gathered} .18 \text { to } 24, .24 \text { to } 32 \\ .30 \text { to } 40, .36 \text { to } 48 \end{gathered}$ | 15 | 2\%' | 11/2 | 3.93 |
| 64 G 098 | A3883 | A | 500 | 15/8/6/4 | 25 | 2\% | $11 / 4$ | 3.38 |
| 64 G 085 | A7947 | B | $\begin{aligned} & 2000 / 1509 / \\ & 1000 / 500 \end{aligned}$ | 6-8/3.2 | 8 | 2\% ${ }^{\circ}$ | y/4 | 2.87 |
| 64 G 086 | A7949 | A | 2000/1500/ |  |  |  |  |  |
|  | A8080* | B | $1000 / 500$ $5 / 4 / 3 / 2 / 1 \dagger$ | ${ }_{\text {6-8/3.2 }}$ | 12 | $2^{21^{\circ}}$ | $1 \%$ | 3.37 |
| 61 G 297 |  | $A$ | 10/9/8/7/64 | $8 / 16$ | 10 | $2^{\circ}$ | $3 / 4$ | 3.10 |
| 61 G 298 | A6082* | A | $15 / 11 / 13 / 12 /$ | 8/16 | 15 | 2\%" | 11/4 | 9 |
| 61 G 643 | A8083* | ${ }_{H}^{H}$ | 2/1/.5 $\dagger$ |  | 2 |  |  | 2.45 2.45 |
| 61 G 644 | A8087 ${ }^{\text {a }}$ | B |  | 8 $4 / 8$ | 2 | $2^{\circ}$ | 1/2 | 2.45 2.64 |
| 6) G 201 | A8095 | B | $\begin{aligned} & 5 / 2.5 / 1.25 \\ & .62 / .319 \end{aligned}$ | 4/8 |  | 2 | \% |  |
| 61 G 202 | A8096 8 | A | 8/4/2/1/0.5 $\dagger$ | 4/8/16 | 8 | $2^{\circ}$ | 1/2 | 3.53 |
| 61 G 203 | A8097 ${ }^{\text {c }}$ | A | 168/4/2 | 4/8/16 | 16 | 213/6 ${ }^{6}$ | 11/2 | 4.23 |
|  |  |  | 1/2.5/ 51 | 4/8 | 2 | 13. |  | 2.45 |
| 646089 | A8101 | 8 | 500 | 3.2/6-8 | 5 | 2. | 4 | 1.73 |
| 64 C 091 | A8102. | A | $8 / 4 / 2 / 1 / .5 \dagger$ | 4/8/16 | 8 | $2^{\circ}$ | $1 /$ | 3.43 |
| 64 G 092 | ${ }^{\text {a }}$ (1003* | A | $\begin{aligned} & 16 / 8 \\ & 1 \% .5 \dagger \end{aligned}$ | 4/8/16 | 16 | 213/16 ${ }^{\circ}$ | 11/2 | 4.85 |
| 64 G 099 | A8104 | A | $3000 / 2000 /$ <br> 1500/1000/500 | 16/8/4 | 10 | 2\%" | 11/2 | 3.99 |
| 64 G 889 | A8105* | 8 | 5/2,5/1.25/ |  |  |  |  |  |
|  |  | A | $\begin{aligned} & 62 / 314 \\ & 84 / 2 / 14 \end{aligned}$ |  |  | ${ }^{2}$ | 1/2 | $\begin{aligned} & 2.78 \\ & 2.94 \end{aligned}$ |
| $\begin{aligned} & 64 \text { G890 } \\ & 64 \text { G } 891 \end{aligned}$ | $\begin{aligned} & \text { A8106! } \\ & \text { A8107 } \end{aligned}$ | ${ }_{\text {A }}^{\text {A }}$ | $16 / 8 / 4 / 2 / 1 t$ | $\begin{aligned} & 4 / 8 / 16 \\ & 4 / 8 / 16 \end{aligned}$ | 16 | $213 / 66^{\circ}$ | 11/4 | 4.64 |
|  | A8109: | H | 2/1/.5 $\dagger$ | $4 / 8$ | , | 11/8 | $1 / 4$ | 2.45 |

## HIGH-FIDELITY OUTPUT TRANSFORMERS



Foreq. response of 20-20.000) cycles $\pm 1$ db at rated watts. Max. power



| No. | Type | ( $P$-P) | imp. | Per Half | Watt | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 64 G 563 | A-8053 | 5000 | 8, 16 | 150 ma | 5 | 13.36 |
| 64 G 570 | A. 8056 | 6610 | 8. 16 | 125 ma | 25 25 | 13.36 13.36 16.27 |
| 4 G 564 | 1-8054. | 9000 | 8, 16 | 100 ma 100 ma | 25 | 13.36 16.27 |
| 4 G 574 | A-8072* | 7600 2000 | 4, 8, 16.32 | 140 ma | 15 | 7.98 |

## ISOLATION TRANSFORMERS

Ideal for lsolating transformerless (AC-DC type) radios and TV sets from AC power line. FPrimary is tapped for 105 , 115 and 125 volts; 115 -volt secondary with standard outlet. fias 15 -volt primary and tapped secondary with 3 standard outlets fed to core. $\$ 115$-volt primary and built-in electrostatic shield grounded to core, fins-volt primary
ils-volt mecondary; standard outlet. All have line cord and plug.

| Stock No. | Type | Watts | Sire | Fig. | Lbs. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 64 G 449 | P-64108 | 50 |  | C | 4 | 7.77 |
| $64{ }^{6} 443$ | P-6160* | 100 | $43 \times 4 \times 319^{\prime \prime}$. | C | 7 | 14.19 |
| 64 G 475 | P-63715 | 175 |  | $\stackrel{\text { c }}{\text { c }}$ | 17 | 23.05 |
| 64 G 444 | P-6415t | 350 500 |  | C | 28 | 42.27 |

## AIR CONDITIONER AUTOTRANSFORMERS

Type PSU-2000. Designed for use with home air conditlonerg having $1 / 2$ to 1 hg , motors. ( $1 / 2$ to 1 ton units). Converts 208 -volt unit to 230 voit line. Converting a 230 -volt unit to side the outlet box. Supplied with line cord, standars 250 volt polarized plug, and re-
ceptatle. Rated at 2.3 KVA . Size, $31 / 2 \times 61 / 2 \times$ $31 / 4^{\prime \prime}$ Shpt. WL. 9 lbs
$63^{\text {G }} 967$. NET EACH.


Type PSU-3000. Simllar to PSU-2000, but dewigned for larser air conditioners. Supplies enough power to drive a 102 -hp. Thotor of the type used in 1 to 2 ton conditioners, Converts 208 -vo
230 -volt unit to $208.4 \times 6 \times 41 / 2$. Shps. wt., 10 lbs.
19.68

230-volt unit to 208. $4 \times 6 \times 4$
63 G 96 . NETEACH


Type A-4744 is almilar to Fik. H mounting sype but with side shells Types A-8u90 and A-8091 are similar to Fig. H but with solder lug secondary connections. Type A-3833 is Fik. H type. Type A-4749 is 1ik. J.
Type A-3817 modulation and output transformer is designed especially type A-3817 modianion equipment. 3 watts, $\$ 8$ watts. $\$ 5$ watts. Type $\mathrm{A}=3833$ is for microphone input or plate to grid. Av. shps. ws.. I lb.

| Stock No. | Mir's | Application | Imp., Ohms |  | Slye, HWD | NET EA. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Pri. | Sec. |  |  |
| 61 G 236 | A. 3817 | Transcelver | 5006 | 6750.4 | $4 / 6 \times 23 / 811 /{ }^{\circ}$ | 2.94 |
| 64 G 030 | A-4744. | V C. to gricl |  | ${ }_{3}^{25 \mathrm{~K}}$-6.8 |  | 1.98 |
| 64 G 489 64 | A-8090* | Line to V.C. | + $\begin{array}{r}\text { 45-50 } \\ 45-50\end{array}$ | 3-4,6-8 | $15 \times 2 \% \times 14$ | 2.06 |
| $64{ }^{64} \mathrm{G} 031$ | A-3833 | Transceiver | 200 \& 5 K | 60 K | $10 \times 2$ \% 110 | 2.81 |
| 64 G 148 | A-4749 | Tisle. Pateh | 10K | 500 |  | 4.75 |

## CONTROL TRANSFORMERS

Fig. A. except Fig. G. 2-section secondary for series or parallel operation. For 115 or 230 v . $50-60$ cycle AC.

| Stock No. | $\begin{aligned} & \text { Mrr's } \\ & \text { Type } \end{aligned}$ | Secondary |  | Site | Mig. <br> Ctis. | Wt. Lbs. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Paratel | Series |  |  |  |  |
|  |  |  | 12V@IA | ( $3 \times$ |  |  | 7 |
| G 277 | P6376 | 6V(0)A | 12v(a2A | $34 / 831 / 1{ }^{21 / 9}$. | 2 | $11 / 2$ | 1 |
| 3 G 278 | P6377 | 12V@:A | 24 V (c2a | 31/ $331812 \%^{\circ}$ |  | 1/8 |  |
| G 279 | P6378* | 12V@A | 24V(a.4A | 3\%1012\%x ${ }^{3}$ | $21 / 4$ 3 1 | \% |  |
| 63 G 280 | P6379* | 12V@r6A | 24 V | 4\%23处3 | 31 |  | 13.06 |

## POLY-PEDAN EE MODULATION TRANSFORMERS

F Match Class "B" moilulators to Class "C load impertancre in AmaF teur and commercial transmitters. Multi-tapped primary and secondary windings match load impedances from 2000 to 20,000 ohms.

| Stock No. | Mrr's | Max. DC Output Load |  | Watts | Size | Wt., Lbs. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Primary | Secondary |  |  |  |  |
| 64 G 478 64 G 488 | $\begin{aligned} & \text { A-3893 } \\ & \text { A-3894 } \end{aligned}$ | $\begin{aligned} & 180 \mathrm{ras} . \\ & 225 \mathrm{mia} . \end{aligned}$ | $\begin{aligned} & 180 \mathrm{ma} . \\ & 225 \mathrm{ma} . \end{aligned}$ | $125$ | $4 \% \times 4 \times 4 \%$ | $\begin{aligned} & 7 \\ & 10 \end{aligned}$ | $\begin{aligned} & 12.9 \\ & 16.2 \\ & \hline \end{aligned}$ |

## TUBE EHECKER TRANSFORMER

(B) Typo P-1834-3. Muhiple-secondary transformer. Pri.: $125 / 115 / 105$
 Size, $23 / 3 \times 4 \times 21 / 2^{2}$. Slapg. wt., $21 / 2 \mathrm{lbs}$.
9.92

## MICROPHONE TRANSFORMERS

Type A4350 is for microphone-to-line or lime-to-line. Others for microphone, pickup or line-to-grid. A4350 and A4352 are Fig. G. A4705 is FigD. and A4351 is Fis. D, on pase 357. *Center-tapped. tSame as drimary impedance.

| Stock No. | Type | Primary Ohms | Sec. Ohms | Mis. Cirs. | Lbs. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 64 G 094 | A4350 | 500*/3:3/200*/125/50 | $\dagger$ | 213/6 |  | 4.24 |
| 64 G 097 | A4351 | 500*/333/200*/125/50 | 89.000 | 21/x $\times 16^{\prime}$ | 11/2 | 4.54 |
| $\begin{array}{llll}64 & \text { G } \\ 64 & 093\end{array}$ | A4352 | 500*/33 / $2000 / 125 / 50$ | 89,000 80,000 |  | /2 | 4.70 2.91 |

## ACME VARIABLE VOLTAGE ADJUSTERS

 $41 / 4 \times 4 \times 5^{\circ}$. Sherg ivt., 9 lbs.
$62 G 514$. NET..........
II. 55

Type T10306. 150 -watt constant-duty variable transformer. Adjusted by rotary tap switel. Tised as step-up or step-down transformer to correct
eisher low or hlyls voltage line condition. Calieither low or higls voltage line condition. Calimary tapped for $65,75.90$, 100 , 115 , 130 and
volts at $50-60$ cycles. Non-aging, silicon steel laminations and impregnated coily for low core loss $8-f \mathrm{ft}$. cord with pluk,




[^21]
# Knight Transformers and Chokes 



## FILAMENT TRANSFORMERS

Primaries, 117 y. $50-60$ cycle AC. All ce
tap on primary. $\$ \mathrm{H}$ as electrostatic shield.

| Stock No. | Fig. | V | Amps. | Insuli | Size | We., Lbs. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| G $\mathrm{C}_{4} 478$ | $\stackrel{F}{F}$ | 2.5 | 5.0 | 5000 | $23 / 4 \times 31 / 0 \times 21 / 0^{\prime \prime}$ | $13 / 4$ |  |
| G 474 | H | 2.5 | 10.0 | 2500 | $31.6 \times 25 / 0 \times 21 / 16^{\prime \prime}$ |  |  |
| 61 G 475 62 G 028 | A | 5.0 5.0 | 3.0 6.0 | 2500 2500 | $2 \times 31 / 4 \times$ | 1 | 2.52 |
| 61 G 416 | A | 6.3 | 0.6 | 1500 |  |  |  |
| 2 G 030 | A | 6.3 | 1.0 | 1500 |  |  |  |
| 1 G 419 | A | 6.3 | 1.2 | 3000 | $158 \times 213 \times 11 / 8^{\circ}$ | 1 | 1.51 |
| 1 G 031 | ${ }_{\text {A }}$ | +8.3 | 3.0 | 2500 | $2 \times 31 / 4 \times 21 / 4$ |  | 2.46 |
| 616417 | H D | +80.3 | 4.0 6.0 | 2500 2500 | $33 / 6 \times 25$ $3 \mathrm{~K} 21 / 2 \times$ |  | 4.11 |
| 61 G 418 | D | * 6.3 | 10.0 | 2500 | $31 / 3 \times 2136 \times 27{ }^{\circ}$ |  |  |
| G 420 | A | 12.6 | 2.0 | 1500 | $2 \times 31 / 4 \times 2$ | 11/2 | 2.49 |
| G 421 | A | +25.2 | 1.0 | 1500 | $2 \times 31 / 4 \times 2$ |  |  |
| 61 G 476 | A | 26.5 | 0.6 | 3000 | $2 \times 31 / 4 \times 2=$ | $11 / 2$ | 2.2 |

## UNIVERSAL OUTPUT TRANSFORMERS

B. Match single or push-pull (ubes to speaker voice coll on secondary | Stock Primary | Watta Mtg. Wi., NETT |
| :--- | :--- | :--- | :--- |



## FIXED-IMPEDANCE OUTPUT TRANSFORMERS

For a wide varicty of audio applications. All have center-tapped primary


Eariable 1801 ation Transformer. Rated 150 watts, 115 v . output 2 G 080. NET.
61 G 490. As above. Rated ion watts, 115 v. output; 105 I 13 .II $50-60$ cps input. Mtg. ctrs., $3 \times 29 / 6^{\circ}$. $71 / 2$ lbs. NET. ................. 111.85 MINIATURE INTERCOM AND TRANSCEIVER TRANSFORMERS
A) grid. Thime to $\sqrt{C}$. 61 G 493 is Fig. B. Av. flapgercom input, VC to

| Stock No. | Impedance, Ohms |  | Audio Watts | Mtg. Cers. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Primary | Secondary |  |  |  |
| $\begin{array}{l\|l} 6 & G \end{array} 4_{1}^{\prime}$ | $\begin{aligned} & 200 / 5000 \\ & 44 \\ & 45 / 50 \end{aligned}$ | $\begin{aligned} & 60,000 \\ & 25.000 \end{aligned}$ | 5 |  | $\begin{aligned} & 2.08 \\ & 1.65 \end{aligned}$ |



## POWER TRANSFORMERS

A complete selection of highly cfficient power supply transformers recommended for radio set replacement use, home hobbyists, ctc. Fully shielded; heavy-duty $5^{\text {" }}$ hexible coded leads. All plate wimdings centertapped, except half-wave type; for $6 \mathrm{AN} 5,6 \mathrm{~N} 4,6 \mathrm{~N} 5$ and similar 6.3 v has $2-6.3 \mathrm{v}$. Windings not CT. $110-120$ volt, $50-60$ vycle wrimgexept

| Stock No. |  | Plate |  | $\begin{aligned} & 5 \mathrm{~V} \\ & \text { at } \end{aligned}$ | 6.3 V at | Meg. Cers. | Wt., Lbs. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fig. | VCT | Ma. |  |  |  |  |  |
| 61 G 410 | F | +125 | 15 |  | 10.6 A | $2^{\prime \prime}$ | 1/4 |  |
| 61 G 411 | A | 125 | 50 |  | -2A | 31/8" | $11 / 2$ | $2.72$ |
| 626008 | F | 250 | 25 |  | +1A | 23/8 | $1^{1 / 2}$ | $\begin{aligned} & 2.78 \\ & 2.05 \end{aligned}$ |
| 61 G 461 | H | 460 | 50 |  | +2.5A | $2 \times 11 / 4$ | $23 / 4$ | $\begin{aligned} & 2.05 \\ & 3.87 \end{aligned}$ |
| 62 G 034 | G | 480 | 40 | 2A | $+_{2 A}$ | $21 / 2 \times 2^{\prime \prime}$ | $\begin{aligned} & 23 / 4 \\ & 21 / 4 \end{aligned}$ | $\begin{aligned} & 3.87 \\ & 4.00 \end{aligned}$ |
| $\begin{array}{llll}61 & G \\ 61 & \text { G } & 462\end{array}$ | $\xrightarrow{H}$ | 480 | 40 | 2 A | 2A | $2 \times 111 / 6$ | 23/4 | 4.00 |
| $\begin{array}{lll}61 & \text { G } 462 \\ 61 & \text { G } 463\end{array}$ | H | 480 | 55 | 2A | 2A | 2×13/4" | 3 | 4.50 |
| 61 G 464 | ${ }_{\mathrm{H}}^{\mathrm{H}}$ | 480 | 70 |  | $\dagger 3 \mathrm{~A}$ | 2×17/ | 3 | 4.48 |
| 61 G 465 | ${ }_{\mathrm{H}}^{\mathrm{H}}$ | 500 <br> 520 | 70 | 2 A | 2.5A | 2×21/8 | $31 / 2$ | 5.20 |
| 61 C 444 | G |  | O |  | 14 A | 21/4x $21 / 16^{\circ}$ | $31 / 4$ | 5.26 |
| 61 C 412 | H | 520 | 90 | 2A | 3 A | $2116 \times 21 /$ | 4 | 5.10 |
| 61 G 466 | H | 540 | 120 | 2 A | 3 A | $21 / 421 / 4$ | 4 | 5.10 |
| 61 G 467 | $G$ | 550 | 50 | 3A | 3.5 A | $21 / 2 \times 21 / 4=$ | 5 | 7.35 |
| 61 G 468 | G | 600 | 70 | 2 A | $2.5 A$ | $21 / 2 \times 2^{\prime \prime}$ | 31 | 5.85 |
| 616469 | G | 600 | 120 |  | 3 A | 21/2 | $33 / 4$ | 32 |
| 626041 | G | 650 | 40 | A | 5A | $31 / 8 \times 21 / 2^{\prime \prime}$ | 6 | 7.90 |
| 61 G 413 | H | 650 | 40 | $2 \mathrm{2A}$ | 2 A | $21 / 2 \times 2$ | $21 / 2$ | 4.16 |
| 616470 | H | 650 | 55 | 2 A | 2 A | 2x111/16 | $21 / 2$ | 4.16 |
| 62 G 042 | G | 650 | 70 | 3 A | 2. ${ }^{\text {3. }}$ A | $\begin{aligned} & 2 \times 21 / 9^{\prime \prime} \\ & 21 / 2 \times 2^{\prime \prime} \end{aligned}$ | $31 / 2$ | 4.96 |
| 61 G 428 | H | 650 | 70 | 3 A | 3.5A |  |  |  |
| 61 C 471 | G | 650 | 150 | 3A | SA | $31 / 8 \times 21 / 2^{\prime \prime}$ | $71 / 2$ | $\begin{aligned} & 4.34 \\ & 7.80 \end{aligned}$ |
| 61 G 472 | H | 680 | 70 | 2 A | 2.5A | $21 / 4 \times 2 \%$. | $4^{1 / 2}$ | 5.98 |
| 62 61 61 6 | G | 700 | 90 | 3 A | 3.5A | $2^{1} 1 / 16 \times 2{ }^{\prime \prime}{ }^{\prime \prime}$ | $41 / 2$ | 5.75 |
| 61 C 429 | H | 700 | 90 | 3A | 3.5A | $21 / 4 \times 23 / 8$ | 41/4 | 5.75 |
| $\begin{array}{lll}62 & \text { G } & 044 \\ 61 & G & 430\end{array}$ | G | 700 | 120 | 3A | 4.7 A | $31 / 8 \times 21 / 2^{\prime \prime}$. | 53/4 | 6.76 |
| 61 G 430 62045 | ${ }^{\text {H }}$ | 700 | 120 | 3 A | 4.7A | $21 / 2 \times 211 / 1{ }^{\prime \prime}$ | $53 / 4$ | 6.75 |
| 61 61 61 6 |  | 750 | 150 | 3A | 51 | $31 / 10 \times 21 /{ }^{2}$ | 61/2 | 8.72 |
| 62 G 033 | G | 750 800 | 150 | 3 A | 5A | $21 / 2 \times 3.16^{\prime \prime}$ | $61 / 2$ | 8.72 |
| 61 G 414 | H | 800 |  | 3 A | 5 | $31 / 4 \times 3^{\circ}$ | 8 | 9.06 |
| 61 G 473 | H | 1200 | 200 | 3A | SA | 3x2 |  | 9.06 |

STANDARD OUTPUT TRANSFORMERS
A For coupling plate of output tube to the speaker volce coil. Designed hms end A amplis. Secondary $\mathrm{mp} ., 3.2$ ohms, except 3.5 t ohms, and $: 6-8$ ohms. $84.5 \%$ primary tap. *WFig. F.'Shps. wt., $3 / 41 \mathrm{~b}$.

| Stock No. | Primary |  | Audio Wates | $\text { H, Wize } \text {. }$ | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 mp . | $\mathrm{Ma}$ |  |  |  |
| 61 G 401 | 2000 | 50 | 3 | $11 / 4 \times 21 / 8 \times 114^{\circ}$ |  |
| 62 61 G 065 | ¢ $\mathbf{2 0 0 0}$ | 50 | 5 | $13 \times 23 \times 1 \%$ | 1.00 |
| 6.6445 | §*2000 | 60 | 5 | $13 / 6 \times 23 / 8 \times 112^{\prime}$ | 1.48 |
| 62 G 063 | +2500 | 60 50 | 5 | $1^{3 / 6 \times 23} 8 \times 1 \%$ " | 1.70 |
| 61 G 400 | +4000 | 10 | 3 | 11/6x21/8×13: |  |
| 62 G 064 | 5000 |  |  |  | - |
| 61 G 403 | +5000 | 40 | $\begin{aligned} & 3 \\ & 5 \end{aligned}$ | $11 / 4 \times 29 / 1813 / 8$ | 1.07 |
| 61 G 446 | ** $\$ 5000$ | 40 | 10 |  |  |
| 61 G 447 | \$7000 | 30 | 10 | $23 / 8 \times 27 / 0 \times 17 / 8$ | +.89 |
| 62 G 093 | 8000 | 20 | 5 | $11 / 8 \times 2{ }^{1 / 8 \times 11,}$ | 1.25 |
| 61 G 448 | \$10,000 | 30 |  |  | 1.00 |
| 616449 | 125.000 | 5 | 5 | $13 / 6 \times 23 / 8 \times 13 / 9^{\prime \prime}$ | 1.20 |

## AUDIO TRANSFORMERS

A Primary ma., 10 maximum. Single plate to PP grid excent, *single A plate to single grid. tsingle or PP plate to PP grids. Size, $1 / 2^{2} \times 1 / 2^{0}$.
Shpg. wt., $1 / 2 \mathrm{Ib}$.

| Stock No. | Impedance, Ohms |  | $\begin{aligned} & \text { Turns } \\ & \text { Ratio } \end{aligned}$ | Size | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pri. | Sec. |  |  |  |
| $\begin{aligned} & 62 G 062 \\ & 61 \text { G } 415 \end{aligned}$ | $\begin{aligned} & * 7000 \\ & 7000-15 \mathrm{~K} \end{aligned}$ | 20.000 | 1:3 | $13 / 8 \times 23 /$ |  |
| $\begin{array}{ll}61 \\ 61 & G 15 \\ 6\end{array}$ | $\begin{aligned} & 7000-15 K \\ & 10,000 \end{aligned}$ |  |  | 11/5 $\times 23 / 6 \times 13 /{ }^{\circ}$ | 1.74 |
| $61 G 459$ | $10.000$ |  | $\begin{aligned} & 1: 2 \\ & 1: 3 \end{aligned}$ | $\frac{11 / 8 x}{} 2 \times 31 / 4 \times 1{ }^{\text {a }} 112^{\prime \prime}$ | 1.74 2.64 |
| 61 G 460 | $+10.000 \mathrm{CT}$ | 90,000 CT | 1:3 | 15/8x27/4x11/2" | 2.64 2.18 |

HIGH-FIDELITY PUSH-PULL OUTPUT TRANSFORMERS
For use in high-fidelity audio amplifiers. All have screen taps on primary winding for ultra-linear type operation and have a frequency response flat from is to 35,000 cps, except which do not have acreen taps and ohm secondaries. $\dagger$ Maximum DC in to 20,00 cps. All have 4, 8 and 16 ohm secondaries. †Maximum DC in each half of primary

| Stock No. | Flg. | Watts | $\begin{aligned} & P-P \\ & \text { imp. } \end{aligned}$ | $\dagger \mathrm{Ma}$ | Size | Wt.. Lbs. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 62 G 082 | J | 12 | 8000 | 60 |  |  | 7.90 |
| 62 G 018 | $J$ | * 18 | 8000 | 65 | $31 / 4 \times 3 \times 31 / 4=$ | $31 / 2$ | 7.90 8.50 |
| 62 G 083 | $k$ | 24 | 6600 | 75 | $41 / 4 \times 35 / 8 \times 41 / 2=$ | $6$ |  |
| 62 G019 | K | 30 | 6600 | 100 | 41/4×35/8. $\times 41 / 2=$ | 7 7 |  |
| 62 G 024 | H | 12 | 8000 | 60 |  |  |  |
| 62 G 058 | A | - 18 | 8000 | 60 | $\begin{aligned} & 31 / 8 \times 23 / 8 \times 2 \\ & 25 / 6 \times 4 \times 21 / 2 \end{aligned}$ | 2 $1 / 1 / 4$ | 6.76 5.35 |
| 62 G 054 | H | 24 | 6600 | 75 | $37 / 1031 / 4 \times 37 / 8$. | $6^{1 / 4}$ | 1.35 |
| 62 G 059 | H | 30 | 6600 | 100 | $31 / 8 \times 31 / 4 \times 4{ }^{-8}$ | 6 | 11.85 |

## 

KNIGHT TRANSFORMERS
Skillfully constructed Ifne－matching，step－down and isolation transform－ ers：made to rigid specifications and low in cost．

70．7－VOLT LINE－TO－VOICE－COIL TRANSFORMERS
Secondaries：4，8， 16 ohms，except＊3．2－4，6－8，中High－fidelity type

| Slock No． | Fir． | Taps | Mar． Watls | Size | $\begin{aligned} & \text { Wt. } \\ & \text { Lbs. } \end{aligned}$ | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 61 G 440 \\ & 62 G 081 \\ & 61 G 422 \\ & 62 G 077 \end{aligned}$ | $\frac{i}{p}$ | $\begin{aligned} & 2,1,5,5,52, .31 \\ & 5,2.5,1,25,62, .31 \\ & 8.4,2,1,0.5 \\ & 10,5,2.5,1.25, .62 \end{aligned}$ | $\begin{array}{r} 2 \\ * 5 \\ 8 \\ 8 \\ 10 \end{array}$ |  | $1 / 4$ $1 / 4$ $3 / 4$ | $\begin{aligned} & 1.93 \\ & 1.92 \\ & 2.54 \\ & 2.41 \end{aligned}$ |
| 62 G 078 <br> $61 G 450$ <br> $62 G 079$ <br> 61 G 441 | $\begin{aligned} & p \\ & p \\ & \mathbf{p} \\ & \mathbf{q} \end{aligned}$ | 18，9．4．5，2．25 1．12． 56 <br> 16，8，4，2． 1.0 .5 <br> $24,12,6,3,1.5 .75$ <br> 5，2．5，1．25，．625，．31 | $\begin{aligned} & 18 \\ & 16 \\ & 24 \\ & \uparrow 5 \end{aligned}$ |  | $11 / 4$ $21 / 4$ $1 / 4$ | $\begin{aligned} & 2.95 \\ & 3.89 \\ & 3.54 \\ & 2.53 \end{aligned}$ |

## 25－VOLT LINE－TO－VOICE－COIL TRANSFORMERS



## STANDARD LINE－TO－VOICE－COIL TRANSFORMERS

500－ohm primary except $2000 / 1500 / 1000 / 500$ and $\$ 30(10 / 2000$ ， L $1500 / 1000 / 500$ ohmis．tFig．

| Stock No． | Sce．Imp．， Ohms | Audlo <br> Watts | Size | Wt． Lbs． | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{l\|l} 61 G 442 \\ 6 & G 423 \\ 61 & G 425 \end{array}$ | $\begin{aligned} & 4.8 \\ & 6.8 / 3.2 \\ & 6.8 / 3.2 \end{aligned}$ | $\begin{array}{r} 4 \\ .5 \\ .8 \end{array}$ | $\begin{aligned} & 13 / \times 21 / 2 \times 13 / 8 \\ & 13 / 8 \times 23 / 11 / 2 \times 1 / 2 \\ & 15 / 8 \times 213 / 16 \times 13 / 8 \end{aligned}$ | $\begin{aligned} & 11 / 2 \\ & 1 / 2 \\ & 3 / 2 \end{aligned}$ | $\begin{aligned} & 1.70 \\ & .729 \\ & 2.10 \\ & \hline \end{aligned}$ |
| $\begin{array}{l\|l} 6: G 43 \\ 6: & 6 \\ 451 \\ 6: & 642 \end{array}$ | $\begin{aligned} & 4.8 \\ & 4 / 8 / 16 \\ & 15 / 8 / 6 / 4 \end{aligned}$ | $\begin{array}{r} 12 \\ +810 \\ +25 \end{array}$ | $\begin{aligned} & 2 \times 31 / 2 \times 17 \times 1 \\ & 21 / 1 / 21 / 8 \times 1 / 8 \\ & 23 \times 27 / 8 \times 17 / \end{aligned}$ | $\begin{aligned} & 13 / 4 \\ & 11 / 4 \\ & 13 / 4 \end{aligned}$ | $\begin{aligned} & 2.30 \\ & 2.77 \\ & 2.49 \\ & \hline \end{aligned}$ |

## 230－TO－115 VOLT AUTOTRANSFORMERS

M Well－built step－down transformers for reducing 220－250 volts， $50-60$ lifiers， plifiers，household appliances，etc．Shielded

| Srock No． | Wates | Size | We．，Lbs． | NET EACH |
| :---: | :---: | :---: | :---: | :---: |
| 61 G 494 <br> 62 G 510 <br> 62 G 511 <br> 62 G 512 <br> 62 G 513 | $* 8$ 80 150 250 500 |  | $\begin{gathered} 1 \\ 31 / 4 \\ 43 / 4 \\ 13 \end{gathered}$ | $\begin{array}{r} 3.00 \\ 5.70 \\ 7.20 \\ 9.45 \\ 13.00 \\ \hline \end{array}$ |
| GIG 434 <br> $61 G 432$ <br> 61 <br> $G 435$ <br> 61 | $\begin{array}{r} 750 \\ 1000 \\ 1500 \\ 2000 \end{array}$ | $\begin{aligned} & 51 / 3 \times 43 / 8 \times 55^{\prime \prime} \\ & 51 / 3 \times 45 / 8 \times 51 / 4 \\ & 6 \times 1 / 2 \times 53 / 4^{\prime \prime} \\ & 6 \times 41 / 2 \times 65 / 8^{\circ} \end{aligned}$ | $\begin{aligned} & 133 / 4 \\ & 141 / 4 \\ & 20 \\ & 25 \\ & \hline \end{aligned}$ | $\begin{aligned} & 16.33 \\ & 20.33 \\ & 24.00 \\ & 27.20 \\ & \hline \end{aligned}$ |

ISOLATION TRANSFORMERS
（M）Isolation Transformers．Reduce shock hazard by isolating test AC．With o－ft．cord，plug and output receptacle

| Stock No． | Wates | Size H．W．D． | Wt．，Lbs． | NET EACH |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 61 \text { G } 426 \\ & 62 \text { G } 086 \end{aligned}$ $62 G 087$ | $\begin{array}{r} 50 \\ 100 \\ 250 \end{array}$ |  | $\begin{array}{r} 31 / 2 \\ 7121 / 5 \end{array}$ | $\begin{array}{r} 5.67 \\ 10.00 \\ 17.50 \end{array}$ |

## DYNACO SUPER－FIDELITY TRANSFORMERS

Outstanding line of hi－fi output transformers for
the most discriminatins hii－f buiker．Feature spe－ cially desisned．para－coupled windimes wizlel pro－ vide ars accurately lalanced coil with tiglit coupling bet ween sections．The low distortion resulting from this design provides greater definition of audio de－ tail and contributes to he response of any amplifier In which this unit is used．Desigred for substantial reserve of power handling caparity to permit full， frequencies as sell as in the middie of the audio frectrum Para－coupled arrangement reduces mid－ spectrum．Para－coupled arrangement reduces mid－ core of thin－gauge \＆rain－oriented stcel provides dis－
tortionless transmlstion of hiph level fow frequency signal components Critical balancing of the output tubes is vircually eliminated．Windings are sealed in steel cans with hish temperature potting compound Type A． 440 has tertiary winding with taps for connection in either screen or cathode circtits；all ot hers have sereen taps on primary． 8 and 16 ohm secondaries except＊4，8， 16 ohnss；$\uparrow 4,8,16$ ohms and 70.7 volt，

| $\begin{aligned} & \text { Stack } \\ & \text { No. } \end{aligned}$ | $\begin{gathered} \text { Mrr's } \\ \text { Type } \end{gathered}$ | $\begin{aligned} & \text { Prl. } \\ & \text { Ohms } \end{aligned}$ | Output Watts at： |  | $\begin{gathered} \text { Slze } \\ \text { HWD } \end{gathered}$ | wt..LDs. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & 30 \text { to } \\ & 15.000 \mathrm{cps} \end{aligned}$ | $\begin{gathered} 20 \mathrm{to} \\ 20.000 \mathrm{cps} \end{gathered}$ |  |  |  |
| 61 G 98 | A． 410 | 8000 | 30 | 15 | 31／2332\％${ }^{\circ}$ | 5 | 14.95 |
| 61 G 982 | A．420 | 6600 4300 | 60 | 60 | 41／231／2n ${ }^{\text {a }}$ | 14 | 19.95 |
| $61 G 983$ 616984 | A－431． | 4300 4300 | 120 | $\begin{aligned} & 60 \\ & 60 \end{aligned}$ |  | 14 | 29.95 34.95 |
| 61 G 985 | A．431－70 $\dagger$ | 4300 |  |  | 574\％194 |  | 39.95 |
| 61 GU 986 | A－440 | 4300 | 240 | 120 | 6x $11 / 4 \times 5 \%^{\circ}$ | 24 | 39.95 |
| 61 GU 987 | A－450 | 2200 | 246 | 120 | 6x4\％1／25\％ | 23 | 39.95 |



TRIAD TRANSFORMERS
Quality transformers widely used in military and commercial appllea－ tions．Excellent for use in audio circuits．Allied slocks the complete fine of Triad transformers－write for information on any not showen here．

## PJWER TRANSFORMERS

Last letter in Type indicates fig．above．＂CT．For 115 v．， 60 eycle AC

| Stock No． | $\begin{array}{\|l\|} \text { Mrr's } \\ \text { Type } \end{array}$ | Piste |  | Filaments |  |  |  | MIR． Ctrs． | $\left\lvert\, \begin{aligned} & \mathrm{wt} \\ & \mathrm{Lbs} \end{aligned}\right.$ | $\begin{aligned} & \text { NET } \\ & \text { EACH } \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | volts | Ma | Volts | Amps | Voits | Amps |  |  |  |
| 616901 | R－2C | 135 | 15 |  |  | 6.3 | ． 9 | 11／4 |  | 4.05 |
| 64 G 936 | R．3A | $500 *$ | 20 |  |  | 6．3＊＊ |  | 11／8130 | 11／2 | 6.00 |
| 64 G 976 | R－4A | $500^{*}$ | 4D |  |  | 6．3＊ | 2 | $113 / 86^{1 / 7}$ | 11／ | 6.15 |
| 646977 | R－5A | $600^{*}$ 480 | 旨 |  |  | 6．3＊＊ | 2.7 | 2x1\％${ }^{2} \times 14{ }^{\circ}$ | 2\％ 24 | 6.90 7.32 |
| 61 G 900 | R－6A | $480^{*}$ | 5 | 5 | 2 | 6．3＊ | 2 | 2x1\％ | $2{ }^{2} / 0$ | 7.32 |
| 64 G 978 | R．7A | $600 *$ | 50 | 5 | ？ | 6．3＊＊ | 5 | 2x1\％． | $2{ }^{2 / 4}$ | 7.38 |
| 616902 | R－8A | $500 *$ | 7.1 | 5 | ？ | 6．3＊ | 2.5 |  |  | 7.68 |
| 64 G 979 | F－9A | $600 *$ | 7 | 5 | 2 | 6．3＊ | 3 | 21／221／20 | 31／2 | 8.49 |
| 61 G903 | R－10A | 525＊ | 9＊ | 5 | 2 | 6．3＊ |  | 21／421／2． | 41／3 | 8.91 |
| 646986 | R－11A | 700＊ | 90 | 5 | 2 | 6．3＊ | 3.5 | 21／42\％${ }^{\circ}$ | 4／1／4 | 9.27 |
| 616904 | $\overline{\mathrm{R}-12 \mathrm{~A}}$ | $550^{\circ}$ | 110 | 5 | ？ | $6.3 *$ | 5 | 21／2x $2^{1 / 6^{\circ}}$ | 41／2 | 9.33 |
| 64 G 987 | R－14A | 700＊ | 125 | 5 | 3 | 6．3＊ | 4.5 | 21／2x $\times 2 \times$ |  | 10.41 |
| 616905 | R－16A | 700＊ | 160 | 5 | 3 | 6.3 ＊ | 5 | 21／23314． |  | 11.67 |
| 616906 | R－18A | $750 *$ | 175 | 5 |  | 6．3＊ | 8 | 2\％$\times 314 \%$ 。 | $81 / 2$ | 12.66 |
| 616907 | R－20A | 700＊ | 200 | 5 | 3 | 6.3 ＊ | 8 | 2\％／631／4． | 91／ | 13.80 |
| 61 G 908 | R－21A | $80{ }^{\text {8 }}$ | 200 | 5 | 3 | $6.3 *$ |  | 21／63 $31 /{ }^{\circ}$ | 91／4 | 14.31 |
| 616909 | R－29A | 230＊ | 40 |  |  | $6.3{ }^{*}$ | 1.5 | 1\％x11／${ }^{\text {c }}$ | 11／1 | 5.85 |
| 61 G 910 | R－30X | 135 | 50 |  |  | 6.3 | 1.5 |  | $11 / 2$ |  |
| 61 G 911 | R－54X | 115 900. | 15 250 |  |  | 6．30／6．3 | $2 / 4$ | ${ }^{2 \%} \times{ }^{\circ}$ |  |  |
| 616912 | R－71A | 900＊ | 250 | 5 | 4 | 6．30／6．3 | $2 / 4$ | 3x3\％ |  | 17.01 |
| 616914 | R－738 | 135 | 200 |  |  | $6.3{ }^{*}$ |  | 213／6x21／6 | ${ }^{21 / 4}$ | 8.67 |
| 61 G 915 | R．56A | 130 | 20 | $0 / 15$ | 6／．6 | 22．5／30 | $6 / 6$ | $13 \times 12^{\circ}$ |  | 6.90 |
| 61 G 916 | R－68A | $800^{*}$ | 10 |  | 2 | ［6．3／6．3 | 1．2／1．2 | 2x21\％ |  | 10.32 |
| 616917 | R－41C | ${ }^{880}{ }^{\text {¢ }}$ | 125 |  |  |  |  | 37／6x ${ }^{\text {\％}}$＂ | 71／2 | 16.86 |
| 61 G 918 |  | 1250 | 3 |  |  | 6．3／6．3 | 1／3 | $2 \frac{1}{2} \times 2^{\prime \prime}$ | 3／2 |  |
| 616918 | Ramb | 000 |  | 5. | $1 / 3$ |  |  |  |  | 10.32 |

FILAMENT TRANSFORMERS
For operation from $115 \mathrm{v} ., 60$ cycle $A C$ ．

| Slock No | $\begin{aligned} & \text { Mr's } \\ & \text { Type } \end{aligned}$ | Sec． Volts | $\begin{aligned} & \text { Sec. } \\ & \text { Amps } \end{aligned}$ | Insul． Volts | $\begin{aligned} & \text { Slze } \\ & \text { (HWD) } \end{aligned}$ | Wt． Lbs | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 61G931 | F－1X | 2.5 CJ | 3 | 1500 | 196213／6x196 | 1／8 | 2.61 |
| $61 G 932$ | $F-3 x$ | 2.5 CT | 10 | 3000 | 21／$\times 31 / 4 \times 21 / 0^{\circ}$ | 1\％ | 4.02 |
| 61 G 933 | F－5U | 2.5 CJ | 10 | 7500 | $3 \times 21 / 2 \times 21 /{ }^{\text {c }}$ | 2 | 5.67 |
| 61 G 934 | F－6X | 2.5 CT | 6 | 2500 | 115／16x31／4 $\times 1 \frac{13}{4}$ | ， | 3.42 |
| $61 G 935$ | F－7X | SCT | 3 | 1500 | $115 / 8 \times 371 \times{ }^{\prime}$ | 11／4 | 3.57 |
| $61 G 936$ | $F \cdot 8 X$ | 5 CT | 6 | 1500 | 214 $\times 3^{11} 1 / 6 \times 21 / 4^{\prime \prime}$ | 1\％／4 | 4.17 |
| 64 G 953 | F－13x | 6.3 | ． 6 | 1500 | 1\％x21／4．1\％＂ | $1 / 2$ | 2.10 |
| 64 G 954 | F．14X | 6．3CT | 1.2 | 2500 |  | 1／6 | 2.22 |
| 64 G 955 | F－16X | 6.3 CT | 3 | 2500 | 1＇5／6431／4x $2^{\circ}$ | 11／4 | 3.33 |
| 64 G 956 | F－18A | 63 CT | 6 | 1500 | 31／182\％$\times 2 \%$＂ | 21／2 | 6.15 |
| 64 G 957 | F．21A | 6.3 CJ | 10 | 1500 | $31 / 203 \times 3 \%^{\circ}$ | 31／0 | 7.38 |
| 64 G 958 | F－22a | 6.3 CT | 20 | 2000 | 31／4 1 3 $1 / 4 \times 31 /{ }^{*}$ | 7. | 10.56 |
| 64 G 959 | F．25x | 12.6 CJ | 1.5 | 1500 | 15／6x31／4x2 | 11／4 | 3.57 |
| 61 G 937 | F－26x | 12.6 CT | 2.5 | 1500 | $2^{\prime} / 8^{1311 / 1682^{\prime \prime}}$ | 11／2 | 4.17 |
| 64 G 974 | F－40X | 26．8CT | 1 | 1500 | $15 / 16 \times 3 / 4 \times 2^{\circ}$ | 14／4 | 3.39 |
| 61 G 938 | F－41X | 25.2 Cl | 2.0 | 1500 | $21 / 184 \times 21 / 4{ }^{\circ}$ | 21／6 | 5.16 |
| 64 G 935 | F－23U | 10CT | 7 | 1500 | 31／232\％／215／6＂ | 4 | 7.17 |

DRIVER，INTERSTAGE，AND INPUT TRANSFORMERS
$300-3000 \mathrm{cps}$ except $30-15.000 ; 1707000 ; \$ 50-10.000$ ．Espade－lug mig．

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { Mris } \\ & \text { Type } \end{aligned}$ | Application | tPimary | $\begin{aligned} & \text { Turns } \\ & \text { Ratio } \end{aligned}$ | $\begin{aligned} & \mathrm{Mtg} \\ & \text { Cirs. } \end{aligned}$ | $\begin{aligned} & \text { Wt. } \\ & \text { Lbs } \end{aligned}$ | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 64 G 989 | A． $1 \times$ | line／SB mike to Eld |  | 31.41 | 11／． | 1 | 04 |
| 61 G 925 |  | line／DE mithe to grid |  | 22：1： |  | $1 / 4$ | 2.22 |
| 61 G 926 | A－4X | line to grid | $\begin{array}{r} 500 \not 200 / \\ 67.5 \mathrm{CT} \end{array}$ | 12：1 | 11／40 | 4 | 2.67 |
| 61 G 927 | 5 x | SB mike．p．D．srids | 100 | 84：1 | 2\％${ }^{\text {\％}}$ | 炎 | 2.97 |
| 61 G 92 | A． 6 X | speaker v．c．to gris | $8 / 3.2$ | 79：1 | 11／${ }^{\prime}$ |  | 2.25 |
| 61 G 92 | A． 71 | speaker ve．to gric | 13.2 | 124：1 | $6^{\circ}$ | $1 / 4$ |  |
| 61 G 93 |  | line／mike to grid | 600／250／50 | $12: 1$ |  |  | 0.05 |
| $\begin{aligned} & 64 \text { G } 934 \\ & 64 \text { G } 991 \end{aligned}$ | $\begin{aligned} & \text { A. } 21 x \end{aligned}$ | Sbmike／plate to g －$/ \mathrm{d}$ plate to s ／o．p． grid | $\begin{aligned} & 100 \text { \& } 10,000 \\ & 10,000 \end{aligned}$ | $\begin{aligned} & 31.5: \\ & 1: 3 \end{aligned}$ | $\begin{aligned} & 11 / 6 \\ & 2^{2} \end{aligned}$ | n | 2.37 |
|  | A． $33 \times 1$ | plate lo s／p．p．gr | 10，000 | $1: 3$ |  |  | 3.30 |
| 64 G 993 | 81X | driver（30，144） | 15 ma ．in Pri | 2．66：1． $1 / 2 \mathrm{sec}$ ． |  |  | 2. |
| 61 G 921 | A－83x ${ }^{\text {d }}$ | do iver（ 66 f 6.42 .45 ） | 40 ma in Pri． | 1．33：1． $1 / 2 \mathrm{sec}$ |  | \％ | 2.58 |
| 61 G 922 | A． $85 \times 3$ | driver（6F6，42，45） | 40 ma ．in Prif． | $2.6601 .1 / 2 \mathrm{sec}$ |  |  | 3.06 |
| 61 G 923 | A－89A8 | p．p．plates to grids | $100 \text { ma. each }$ | 3．1／1．8：1．1／2sc． | 2x13 |  | 7.0 |

# Lamps—General Electric and Chicago Miniature 



## ABBREVIATIONS USED TO DESCRIBE BASE AND BULB STYLE

S. C., F.-single contact, flanged base
S. C., Bay,-single contact, bayonet base
D. C., Boy-double contact. bayonet base

Cand.-Candelabra type base; G-globe bulb
T-tubular bulb style; B-lemon shape bulb
TL-lens end, tubular (pre-focus type) bulb

FE-flat end bulb; RP-reflector, pear shape S-as in Fig. F; Types 1847 and 1891 are for use in Ford and Chevrolet automobiles

GENERAL-PURPOSE MINIATURE LAMPS
A wide selection of top-quality, precision-manufactured lamps commonly Gashlight and pilot lamps. Many are exact-duplicate lamps for replace-

## GENER AL-PURPOSE MINIATURE LAMPS (Conl'd)

ment use. All are miniature lamps, except: "midget fanged type; tpreocused candelabra. Those indicated 5 have switchboard slide-type base Av. shpg. wt.. I lamp, 2 oz, box of $10,4 \mathrm{oz}$.

## NEON GLOW LAMPS

For $105-600$ v. except $\$ 210-600$ v. $\$ \mathrm{DC}$ only. Sk. under Base means skirted. Serew types have series resistor in base-for $105-125 \mathrm{v}$. ; otherg
require external resistor. AC starting voltage. DC starting $\mathrm{v} .40 \%$ higher. †High brightness. Av. shpg. Wi., 1 lamp. 3 oz .; box of $10,5 \mathrm{oz}$.

| Stock No. | Mir's Type | Fig. | Watts | *AC volts | $\begin{aligned} & \text { Bulb } \\ & \text { Style } \end{aligned}$ | Basa | NET | $\frac{\mathrm{ACH}}{50-\mathrm{UD}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 54.017 | A1B | B8 | 1/17 | 65 | T-2 | Wire Term. | 14 | I |
| 54 E 018 | PAIC | BB | 1/17 | 95 | T-2 | Wire Term. | . 14 | . 1 |
| 52 E 370 | NE-2 | M | 1/17 | 65 | T-2 | Wire Term. | . 10 | . 08 |
| 52 E 926 | NE-20 | L | 1/15 | 65 | T-2 | S.C. Mid. Flanse | . 82 | . 66 |
| 54 O 019 | NE-2E | M | 1/10 | 65 | T-2 | Whre Term. | .10 | . 08 |
| 2 E 396 | TNE-2H | M | 1/5 |  | T-2 | Wire Term. | .12 | 10 |
| 52 E 929 | [ NE-2] | \% | 1/5 | 105 | T-2 | S.C. Mid. Flange | . 82 | . 66 |
| 52 E 374 | NE-7 | R | $1 / 4$ | 55 | 7.41/6 | wire Term. | .73 | . 58 |
| 52 E 826 | NE-16 | T | 1/4 | 867 | 7.41/2 | D.C. Bay. Cand. | . 63 | 5 |
| 52 E 827 | NE-17 | 1 | \% | 55 | T-4\% | D.C. Bay. Cand. | . 90 | 72 |
| 52 E 822 | NE-21 | W | 1/4 | 55 | T.71/2 | S.C. Bay. Cand. | . 95 | 76 |
| 52 E 81 | NE-30 | $x$ | 1 | 60 | G. 10 | Edison | 1.20 | . 96 |
| 52 E814 | NE-32 | Y | ! | 60 | G. 10 | D.C. Bay. Cand. | 1.20 | . 96 |
| 52 E 803 | NE-34 | 2 | 2 | 60 | S.14 | Edison | 1.85 | 1.48 |
| 52 E 806 | NE-40 | 2 | 3 | 60 | S. 14 | Edison | 2.70 | 2.16 |
| 52 E 16 | NE-42 | AA | 3 | 60 | S-14 | Sh.D.C.Bay.Cand. | 2.65 | 2.12 |
| 52 E 807 | NE. 45 | S | 1/8 | 65 | T-41/2 | Cand. Screw | . 85 | . 68 |
| 52 E 812 | NE.48 | $T$ | 1/4 | 65 | T.41/2 | D.C. Bay. Cand. | .70 | 56 |
| 52 E 373 | NE-51 | N | 1/25 | 65 | T-31/4 | S.C. Bay. Min. | .21 | 17 |
| 52E 395 | 4NE.51H | N | $1 / 7$ | .... | T-31/ | S.C. Bay. Min. | . 23 | 16 |
| 52 E 30 | TNE-56 | X | 1 | 60 | S-11 | Edison | 1.25 | 1.00 |
| 52 E 361 | NE.57 | S | $3 / 4$ | 55 | T-41/2 | Cand. Screw | . 99 | . 79 |
| 52 E 362 | \$ NE-58 | S | 1/2 | 65 | T.41/8 | Cand. Screw | . 95 | . 76 |
| 52 E 397 | NE-71 | 14 | 1/4 | 140 | T-2 | 3-wire Term. | . 55 | . 44 |
| 52 E060 | NE.96 | 1 | 1/4 | 140 | T-2 | 2 -Wire Form. | .10 | 16 |

## ARGON GLOW LAMPS

Pale blue-violet light-near-ultraviolet radiation. Clear glass. *Av. life.

 | $52 E 811$ | AR-3 | S | $1 / 4$ | 80 | T.41/2 | Cand. ScIew | .85 | .68 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $52 E 810$ | HAR-1 | 2 | 2 | 65 | S.14 | Edison | 1.90 | 1.52 |

## AC-DC LAMPS

| StockNo. | Type | Flg. | Wates | Base | 11-49, EA. | 50-Up, EA. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 52 E 349 | 6S6 | CC | 6 | Cand. Screw | 22 | . 18 |
| 52 E 352 | $6 \mathrm{S6DC}$ | CC | 6 | D.C. Bay. Cand. | 33 | 26 |
| 52 E 54 | 3S6/5 | CC | 3 | Cand. Screw | . 39 | .31 |
| 52 E 353 | -1056/10 | C | 10 | Cand. Screw | . 52 | 42 |
| 52 E 355 | 7 C 7 | DD | 7 | Cand. Screw | 22 | 18 |
| 52 E 356 | 5 7 7 7 W | D) | 7 | Cand. Screw | . 22 | .18 |
| 52 E 351 | 10C7DC | D1) | 10 | D.C. Bay, Cand. | . 29 | . 23 |
| S2 E 350 | 1 |  | 4 | Cand. Screw | 54 | 49 |



## HALF INCH ASSEMBLIES

A Series 81410 X Enclosed. Rugged, aviaA. tion-type socket shell with smooth jeivel in $1 / 2^{\prime \prime}$ holder. Takes T- $31 / 4$ miniature bayonet lamp. Size, $21 / /^{\prime \prime}$ long; requires $11 / 5^{\circ}$ mounting hole. Fits panels up to $3 / 1$ thick. Black nlekel finish. U.L. Approved. Less T-31/4 minlature lamp; see bulb listings. Av, shpg. we., 3 oz .

| Stock No. | $\begin{aligned} & \text { Mif's } \\ & \text { Type } \end{aligned}$ | Cap Color | $\left\|E^{1-9}{ }^{\prime}{ }^{\prime} H\right\|$ |  |
| :---: | :---: | :---: | :---: | :---: |
| 52 E 530 <br> 52 E3  <br> $S 2$ E 53 <br> 52 E 533 | $\begin{aligned} & 111 \\ & 112 \\ & 135 \\ & 113 \end{aligned}$ | Red Green Whiter Amber | 1.19 | 1.07 |

Replacement Jowel Caps for Above. Wt. 2 oz.

| Stdck No. | $\begin{aligned} & \text { Mifr's } \\ & \text { Type } \end{aligned}$ | Jewel Color | $\left\lvert\, \begin{array}{cc} 1.9 \\ E A C H \end{array}\right.$ | $\begin{aligned} & 10-U \mathrm{O} \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{lll} \hline 52 & E & 535 \\ 5 & E & 536 \\ 5 & E & 537 \\ 52 & E & 538 \end{array}$ | $\begin{aligned} & 81-111 \\ & 81-112 \\ & 81-135 \\ & 81.113 \end{aligned}$ | Red Green White Ambe | . 16 | 14 |

(B) Series 857 B, Open. Requires an $1 / 4{ }^{\circ} \mathrm{mtg}$ hinale. For lens, $2^{\prime \prime}$ long. Tinned solder ter minals. For panels up to $/ 6$ thick. With mounting washer. Less lamp. Uses Type 44, 47

| Stock No. | $\begin{aligned} & \text { Mir's } \\ & \text { Typo } \end{aligned}$ | $\begin{aligned} & \text { Cap } \\ & \text { Color } \end{aligned}$ | EAC'H |  |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 52 E 545 \\ & 52 E 546 \\ & 52 E 547 \\ & 52 E 548 \\ & \hline \end{aligned}$ | $\begin{aligned} & 431 \\ & 432 \\ & 433 \\ & 434 \end{aligned}$ | Red Green Amber <br> Blue | . 44 | 0 |

NEON LIGHTS AND ASSEMBLIES


C Series $95408 \times$ and Series $95408 \times \mathrm{H}$, InCeries 95408 X hits. Enclosed indicator lights. watt resistor for NE-5! neon 50,000 -ohm, $1 / 125$ v. AC-IDC circuits. Series 95408 . H (*) have built-in resistor of 18.000 ohms for use with $21 / 6^{\circ}$ long. $11 / 16^{\circ}$ howe. Meet M11 ${ }^{110-125}$ V. AC. U.L. reguirements. Less lamp. With mounting nut. Av. shpg. wt.. 3 oz.

| Stock No. | $\begin{aligned} & \text { Mpr's } \\ & \text { Type } \end{aligned}$ | Stock No. | $\begin{aligned} & \text { Mre's } \\ & \text { Type } \end{aligned}$ | $\underset{\mathrm{Cal}}{\mathrm{Ca}}$ |
| :---: | :---: | :---: | :---: | :---: |
| 52 E 504 | 931 | 53 E 142 | 931 H* | Red |
| 52 E 505 | 933 935 | $53 \mathrm{E}: 43$ | 933H* | Ambe |
| 52 E 506 | 935 | 53 E 144 | 935 ${ }^{\text {a }}$ * | White |
| 52 E 507 | 937 | 53 E 145 | 937H* | Clear |

(D) Serles 952208 Panel Assemblles. En-built-in 56.000 ohm resistor for $\mathrm{NE}-51$ in 105 125 v . AC-DC circuits; except $\#$ with 18,000 ohm reaistor for NE-5111 "high-brightness* lamp for use with $105-125 \mathrm{v}$. AC. $2 \mathrm{y} / \mathrm{s}^{*}$ " lons.
 With mounting nut. Av. shpg, wt., 3 oz .


## PILOT BULB REMOVER



# Lamp Sockets，Bulbs，Buss Fuses and Accessories 

## LAMP SOCKETS，REDUCERS TUNGAR AND NEON BULBS <br> SOCKETS／REDUCERS FOR NEON，ARGON，PILOT LAMPS <br>  <br>  <br>  <br> （A） <br> B

Reducer fits into socket to convert to most oommonly used types of bulb bases．＂Socket with hard rubber insert in metal shell．Av．shpg． Wt．for sockets． 3 oz．Av．shpg．nt．of reducers． 2 oz

| StockNo． | Fig． | Description | 1－49，EA． | 50－Up，EA |
| :---: | :---: | :---: | :---: | :---: |
| 52 E 850 | A | Edison socket |  |  |
| 52 E 5258 52 | ${ }_{\text {A }}$ | Miniature screv socket Candelabra serew sock | ．15 | $12$ |
| 52 E 855 | A | Candelabra screw socket | ． 145 | ． .13 |
| 52 E 853 | C＊ | D．C．bay，candelabra sorket |  |  |
| 52 E 856 52 E 52 | D | D．C．bay candelabra socket | ． 87 |  |
| 52 E606 |  | Edisonto Cand reducer | ． 81 | ． 72 |
| 52 E 63 | F | Canulelabra－to－Min．reducer |  |  |
| 52 E 634 | F |  | 9 |  |
| 52 E638 | G | Edison－to－Inter．reducer |  |  |

## G．E．TUNGAR BULBS



Argon and argon－murrcury filled tungar bulhs for use in the rectification of current fromect 10 DC Used in battery chargers，oc power projectors：also for opera－ tion of magnetic chucks，motors，etc．＂Indicates type of tungar bulb used in motion picture projectors，Av，shpg，wt．， $11 / 4 \mathrm{lbs}$ ．
Stock No．Type Fig．AmpsNETSrockNo．Typo Flg Amps NET


DRAKE NEON INDICATING LIGHTS


Type 110 ＂Flushlite＂．Neon indicating liyht．en－ closed in translucent plastle base．For $110-125$ volts．

 Type 105 ＂Post－lite＂．Panel light for $65-130 \mathrm{~V}$ ： AC，or $90-130 \mathrm{~V}$ ．，DC．Length． $21 / 4^{\prime \prime}$ ．Requires $1 / 2^{2}$ 78 E O62．10－UP．EACH ． 59 1－9．EACH 62

## BUSS HOUSEHOLD PLUG FUSES



All are 125 v ．max．Type T dual－element fuses are protected against＂blowing＂during motor starting．Shpy，wt．per ply．． 5 oz． 4 fuses per okg．Type W are Edinon bask house fuses． Type．Wt．per pkx．．．oz． 5 rusce por pkg． with higher values withour chansing adapter Shpg．Wh．per pkg． 2 oz． 4 fuses per pkg．

## FUSETRON TYPE T DUAL－ELEMENT FUSES

| Amps | $\begin{aligned} & \text { Seock } \\ & \text { No. } \end{aligned}$ | PER PKG．OF 4 |  | Ampe | Stock No． | PER PKG．OFA |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1－19 | 20．Up |  |  | 1.19 | 20．Up |
| 15 | $\begin{array}{llll}53 & 8 & 521 \\ 53 & 8 & 522\end{array}$ | ． 3 | ． 28 | $\begin{aligned} & 25 \\ & 30 \end{aligned}$ | $\begin{array}{lll}53 & 8 & 523 \\ 53 & 8 & 524\end{array}$ | 30 | 28 |

## TYPE W PLUG FUSES

| Amps | $\begin{gathered} \text { Stock } \\ \text { No. } \end{gathered}$ | PEA PKG．OF 6 |  | Amps | Stock No． | PERPKG．OFE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1－19 | 20－U． |  |  | 1－19 | 20－Up |
| $\begin{array}{r} 3 \\ 8 \\ 10 \\ \hline \end{array}$ | 53 B 560 <br> 53 8  <br> 53 B 564 | .32 | ． 29 | $\begin{aligned} & 15 \\ & 20 \\ & 30 \end{aligned}$ | 53 B 565  <br> 53 日 566  <br> 53 B 568 | ． 29 | .26 |

TYPE S FUSTAT FUSES

| Amps | Stock No． | Body Color | Amps | Stock No． | Body Color |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 15 | 42 B 900 | Blue | 25 | 42 B 902 | Green |
| 20 | 42 B 901 | Orange | 30 | 42 － 903 | Gre |

## MINI－BREAKER＂ <br> IRCUIT MINDERS

Precision circuit protectors that provide circult breaker action； open overloaded circults；reset with pushbutton．Fit Edison base sockets．U．L．Approved．For 120 ．AC．Shpg．we．， 3 oz ．

| Stock | No． | Amperes | EACH |
| :---: | :---: | :---: | :---: |
| 2 B | 176 | 15 | 8 |
| 52 | B | 77 | 20 |
| 52 | 8 | 78 | 30 |

## BUSS FUSES AND ACCESSORIES

## TYPE MDL FUSETRON FUSES

Long time－lag prevents needless blows from start－ ing currents or surges．Operates instantly on high overloads or shorts．Thermal cutout operates slowly on low overloads．Size， $11 / 4 \times 1 / 4$ U．L．Anproved MDX Shpg．we．，ber pkg．， 2 oz． 5 fuscs per package．

| Amps | Max． Volts | Stoek No． | $\left\lvert\, \begin{array}{\|l\|} \hline \text { PKG. OF } \\ \hline 1-19 \\ \hline \end{array}\right.$ | Amps | Max． Voles | Stock No． | $\frac{P K G}{1.19}$ | $20-U p$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1／100 | 250 | 538441 | 1.131 .00 | 4／10 | 250 | 538453 |  |  |
| 1／32 | 250 | 53 E 442 | 1.131 .00 | $1 / 2$ | 250 | 53 B454 |  |  |
| 1／16 | 250 | 53 5 B 443 | ．82 ．70 | 6／10 | 250 | 53 日 455 | 82 | 0 |
| 1／10 | 250 | 53 B 444 | 82.70 | 8／10 | 250 | 53 B 456 |  |  |
| 15／100 | 250 | 53 B 450 |  |  | 250 | 53 B 41 | 82 | 0 |
| $2 / 10$ | 250 | 53 B 451 |  | 2－8／10 | 125 | 53 日 466 | 62 | 55 |
| $1 / 4$ | 250 | 53 E 407 | .82 .70 | 4 | 32 | 53 － 468 | 62 | 55 |
| 3／10 | 250 | 53 日 452 |  | 5 | 32 | 53 日 469 | ． 62 | 55 |

## TYPE MDX $125-V O L T$ FUSETRON FUSES

Have same thermal delay action as Type MDL above，but open in approximately half the time $1 / 2$ second． $11 / 4 \times 1 / 4^{\prime \prime}$ ．U．L．Approved． Shpg．We．per pkg．， 2 oz ．；per 100 ， 15 oz． 5 fuses por package．
Amp：Stock PERPKG．OF 5 SAmps Stock PERPKG．OF 5 3－2／10 53 1－19 20－U口 3－2／1053 8408 $\begin{array}{lll}53 \\ 53 & \text { B } & 50 \\ 5\end{array}$
.62 ． 55 $\begin{array}{llll}61 / 4 & 53 & 8 & 505 \\ 7 & 83 & 806\end{array}$ 1－19 20－Up 69 .60

## 32－VOLT FUSES

For circuits operating at 32 volts or less． $11 / 4 \times 1 / 4$ ．U．L．Approved． Shpg．wh．， 1 oz．per phg． 5 fuses per package



SP－1 STAK－PAK FUSE ASSORTMENTS
－Neat，Convenient Way to Carry Fuses
－Compact Design；Sturdy Motal Construction
An assortment of 50 fuses in a compact．unbreakable metal case．Ideal for the serviceman＇s tool box－no more loose fuses scattered about．Consists of rack and Includes box bach：AGC $1 / 2$ amp；AGC 1 －amp；AGC 3 －amp；AGC $1 / 0$－amp；AGC 1／amp；AGCL－amp；AGC 3－amp；AGX M－amp；MDL $33 / 8 \times 13 / \mathrm{s} \times 1 \mathrm{~s} / \mathrm{B}^{\circ}$ Shpg．wt．， $1 \mathrm{lb} . \quad 4.83$
$53 \mathrm{~B} / \mathrm{N}^{2}$ NET．

FUSETRON TYPE FNM LONG TIME LAG FUSES


Dual－element type．Fuse link operates only on high overloads or short－circuits；thermal eut－ out on low overloads．Thermal cutout cannot operate quickly on any load－provides long


| Amps | Stock No． | PERPKG．OF 10 |  | Amps | $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | PERPKG．OF 10 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1.9 | 10．Up |  |  | 8－9 | 10－U0 |
|  | 53 B 485 <br> 5   <br> 5 B 489 <br> 53 8 1 <br> 53 B 492 | 2.44 | 2.07 | $61 / 4$ 88 10 15 | $\begin{array}{lll} 3 & 8 & 493 \\ 3 & 8 & 494 \\ 3 & 8 & 495 \\ 3 & 8 & 496 \end{array}$ | 2.44 | 2.07 |

TYPE HKL AND HKR INDICATOR FUSEHOLDERS


## BUSS AND G－C FUSE MOUNTINGS



For radio．TV，autos，etc．All are Buss，except＊G－C．Fuse projecis be yond holder；always easy to reniove．tScrew terminals．Av．，wt．． 1 oz Stoek No．TypelFor Fuses NETIStock No．Typel For Fuses，NET



## G－C＂SPEEDEX＂FUSE PULLERS



# Littelfuse Fuses and Mountings 



TYPE 3AG STANDARD FUSES
A Series 312000．Dependable，quick－acting fuscs for short time－lag A．uses．High operatimg temperatures do not affect fuse characteristics． Size： $11 / 4^{\circ}$ long $x 1 / 4^{6}$ dia．Pkg．wt．， 2 oz． 5 fuses per package

| Amps | Max． Volts | Stock No． | $\begin{aligned} & \text { Per } \\ & \text { Pkg. } \end{aligned}$ | 20 Phgs． of more． Per Phr． | Amps | Max． <br> Volts | $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { Per } \\ & \text { Pkg. } \end{aligned}$ | $\begin{aligned} & 20 \text { Pkgs } \\ & \text { or more, } \\ & \text { Per Pkg. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1／16 | 250 | 52 B 242 |  |  | 3／4 | 250 | 52 B 233 | 1 | ． 35 |
| 1／8 | 250 | 52 E 230 |  |  | 1 | 250 | 52 B 234 | ． 25 | .21 |
| 15／100 | 250 | 52 B |  |  | 11／2 | 250 | 52 B 235 | ． 25 | ． 21 |
| ． 175 | 250 | 52 B 672 |  |  | 2 | 250 | 52 B 236 |  | ． 2 |
| $3 / 16$ | 250 | 52 B161 |  |  | 3 | 250 | 52 日 237 | ． 22 |  |
| 1／4 | 250 | 52 E 231 |  |  | 4 | 250 | 52 B 238 | ． 31 | ． 26 |
| $3 / 10$ | 250 |  |  |  |  | 250 | 528239 | ． 31 | ． 26 |
| 3／8 | 250 | 52 B 243 | ． 41 | .35 | 6 8 | 250 | 52 B 240 52 B 248 | ． 31 | ． 26 |

## TYPE 3AG SLO－BLO FUSES



Series 313000．Sio－Blo fuses with hish time－lag to stand heavy B）surges．Designed for clrcuits laving high inductive or capacitive unges．Also for circuits having heavy starting currents，such as motor and $1 / 4$ diameter．Slipg．wt．per pkg． 2 oz． 5 fuses per package．

| 1／1001 | 125 | 52 日 185 | 1.15 | ． 98 |  | 125 | 52 B 220 | 82 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1／32 | 125 | 52 B 186 | 1.15 | ． 98 | 11／4 | 125 | 52 B 253 | ． 76 | 5 |
| $1 / 16$ | 125 | 52 В187 | ． 82 | ． 70 | 11／2 | 125 | 52 B 198 | ． 76 | 5 |
| $1 / 10$ | 125 | 52 B 252 | ． 82 | ． 70 | 1.6 | 125 | 52日 254 | ． 76 | 5 |
| 1／8 | 125 | 52 В188 | ． 82 | ． 70 | 2 | 125 | 52 B 179 | ． 76 | 5 |
| 15／100 | 125 | 52B189 |  |  | $21 / 2$ | 125 | 52 B 257 |  |  |
| ． 175 | 125 | 52B675 |  |  |  | 125 | 52 B 181 |  |  |
| $3 / 16$ | 125 | 52 B 190 | 82 | 70 | 3.2 | 125 | $52 \mathrm{B182}$ | 62 | 53 |
| 2／10 | 125 | 52 B 191 |  | ． | 4 | 125 | 52 B 227 | ． 62 | 5 |
| $1 / 4$ | 125 | 52 B 921 |  |  | 5 | 125 | 52 日 223 |  |  |
| $3 / 10$ | 125 | $52 \mathrm{B192}$ |  |  | ${ }_{8}^{61 / 4}$ | 33 |  |  |  |
| $3 / 8$ $1 / 2$ | $\begin{aligned} & 125 \\ & 125 \end{aligned}$ | $\begin{aligned} & 52 B 193 \\ & 52 \mathrm{~B} 923 \end{aligned}$ | ． 82 | ． 70 | $\begin{array}{r} 8 \\ 10 \end{array}$ | $\begin{aligned} & 32 \\ & 32 \end{aligned}$ | $\begin{aligned} & 52 \mathrm{~B} 184 \\ & 52 \mathrm{~B} 226 \end{aligned}$ | ． 62 | 53 |
| 6／10 | 125 | 52 B 195 |  |  | 15 | 32 | $52 \mathrm{B224}$ |  |  |
| 3／4 | 125 | $52 \mathrm{B196}$ |  | 7 | 20 | 32 | 52 S 225 | 2 | 53 |
| $8 / 10$ | 125 | 52 B197 |  | ． 7 | 30 | 32 | 52 B 677 | ． 62 | ， |

## TYPE 3 AB FUSES

Series 314000．Steatite powder－filled．for high－current une．Medium time lag． $11 / 2 \times 1 / /^{\circ}$ ．Types thru 15 amps．U．L．Appv＇d． 2 oz .6 per pkg．

| 1 | 25 | 2 6678 | ． 53 | ． 45 | 10 | 250 | S2B244 | 50 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | 250 | 52 B 679 | ． 53 | ． 45 | 12 | 250 | 52 B 245 | 3 | ． 45 |
| 3 | 250 | 52B680 | ． 53 | ． 4 | 15 | 250 |  |  |  |
| 5 | 250 | 52B681 | ． 50 | ． 43 | 20 | 250 | 52 B 247 | 53 | ． 45 |
|  | 250 | 52B241 | ． 50 | .43 | 30 | 125 | 52 B 682 | 62 | ． 53 |

## TYPE $4 A G$ SLO－BLO FUSES

B Serics 413000 ．Mect aircraft requirements．Open in 1 hr ．on $135 \%$ $9 / 2 \mathrm{z}, 2$ oz． 5 per okg．

| $\begin{aligned} & 2 / 10 \\ & 1 / 4 \\ & 3 / 10 \\ & 1 / 2 \end{aligned}$ | $\begin{aligned} & 250 \\ & 250 \\ & 250 \\ & 250 \end{aligned}$ | $\begin{aligned} & 52 \mathrm{~B} 994 \\ & 52 \mathrm{~B} 985 \\ & 52 \mathrm{~B} 995 \\ & 52 \mathrm{~B} 986 \\ & \hline \end{aligned}$ | 1.09 | ． 93 | $\begin{aligned} & 3 \\ & 3^{\frac{2}{2} / 19} \\ & 51 / 4 \\ & \hline \end{aligned}$ | $\begin{array}{r} 250 \\ 250 \\ 32 \\ 32 \\ \hline \end{array}$ | $52 B 989$ 528947 528990 528949 | 82 | ． 70 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 6 / 10 \\ & 3 / 4 \\ & 11 / 4 \\ & 1 \end{aligned}$ | $\begin{aligned} & \hline 250 \\ & 250 \\ & 250 \\ & 250 \end{aligned}$ | 52 B 997 <br> 52 B 683 <br> 52 B 987 <br> 52 B 999 | 1.09 | .93 | $\begin{array}{\|r} 8 \\ 10 \\ 15 \\ 20 \\ \hline \end{array}$ | $\begin{aligned} & 32 \\ & 32 \\ & 32 \\ & 32 \end{aligned}$ | $\begin{array}{r} 528960 \\ 528991 \\ 528961 \\ 528962 \\ \hline \end{array}$ | ． 82 | 0 |
| $1.6 / 10$ | 250 | $\begin{aligned} & 528945 \\ & 52 \mathrm{~B} 988 \end{aligned}$ | 1.09 | ． 93 | $\begin{aligned} & 25 \\ & 30 \\ & \hline \end{aligned}$ | $\begin{aligned} & 32 \\ & 32 \\ & \hline \end{aligned}$ | $\begin{aligned} & 528963 \\ & 528964 \end{aligned}$ | 82 | 70 |

## TYPE 8AG FUSES

A Series 361000 Fast Action Instrument Fuse．All rated 250 max

| $1 / 500$ | 3 | 52 B 199 | 4.09 | 3.48 | 1／2 | 520 | 52 B 208 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1／200 | 8 | 52 B 200 | 1.71 | 1.45 | 3／4 | 800 | 52 B 209 | ． 38 | $\cdot$ |
| 1／100 | 16 | 52 B 201 | 1.53 | 1.30 | 11／2 | 1300 1950 |  |  | －25 |
| 1／32 | 40 | 52 B 202 | 1.32 | 1.13 | $11 / 2$ | 1950 | 52 B 212 |  | ． 25 |
| 1／16 | 85 | 52 B 203 | ． 82 | ． 70 | 2 | 2600 | 52 B 211 |  |  |
| 1／8 | 155 | 52 B 205 |  |  | ${ }^{3}$ | 3600 |  |  |  |
| 1／4 | ${ }_{3}^{270}$ | 52 B 206 | ． 38 | ． 33 | 5＊ | 6000 | 52 B 214 | 9 | 5 |

\footnotetext{

## LIMITED－CURRENT BAYONET FUSES

E TV fuses for 346000 series bayonet－lock fuse holders only．Seric 33000 are Slo－Blo： 332100 are rezular．Wi．， 2 oz． 5 fuses per pkg 333000 Series（Sio－B10 N Type） 332000 Series（Regular C Tyoe）

| $\begin{aligned} & .25 \\ & .3 \\ & .4 \\ & .5 \end{aligned}$ | $\begin{aligned} & 125 \\ & 125 \\ & 125 \\ & 125 \end{aligned}$ |  | ． 87 | ． 74 | $\begin{aligned} & 25 \\ & .3 \\ & .375 \end{aligned}$ | $\begin{aligned} & 250 \\ & 250 \\ & 250 \\ & 250 \end{aligned}$ | 52 B 732 52 B 68 52 B 733 52 B 050 | 50 | ． 43 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} .6 \\ .7 \\ .75 \\ 1.0 \end{gathered}$ | $\begin{aligned} & 125 \\ & 125 \\ & 125 \\ & 125 \end{aligned}$ |  | ． 87 | ． 74 | $\begin{aligned} & 75 \\ & 11.0 \\ & 1.5 \\ & 2.6 \end{aligned}$ | 250 <br> 250 <br> 250 <br> 250 <br> 250 | $\begin{aligned} & 52 \mathrm{~B} 169 \\ & 52 \mathrm{~B} 734 \\ & 52 \mathrm{~B} 736 \\ & 52 \mathrm{~B} 051 \end{aligned}$ | .50 <br> .28 <br> .28 <br> .28 | .43 .24 .24 .24 |
| $\begin{aligned} & 1.25 \\ & 1.6 \\ & 2.0 \end{aligned}$ | $\begin{aligned} & 125 \\ & 125 \\ & 125 \end{aligned}$ | 52 8 166 <br> 52 8 056 <br> 52 B 057 | ． 79 | ． 6 | 2.5 | 250 125 | 52 B 163 52 B 052 | ． 28 | ．24 |



FUSE MOUNTINGS，RETAINERS，POSTS
Fuse holders for every application．＊With fuse．Av．shpe．wt．， 3 oz ．

| Slock No． | $\begin{aligned} & \text { Mir's } \\ & \text { Type } \\ & \hline \end{aligned}$ | Fis． | For Fuses | Descriplion | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 418720 | 341001 | F | 3AG，3AB | Screw slot | ． 41 |
| 418721 | 371001 | F | 8AG | Screw slot | ． 41 |
| 418729 | 442001 | G | 4AG | Thumb knot | ． 82 |
| 418727 | 342001 | G | 3AG，3AB | Thumb knob | ． 41 |
| 418728 | 372001 | 6 | 8AG | Thunib knod | ．41 |
| $52 \mathrm{B292}$ | 357001 | 1 | 3AG，3AB | Lug term． | .13 |
| 52 B 285 | 387001 | H | 8AG | Lug term． | .13 |
| 52 B 294 | 356001 | H | $3 \wedge \mathrm{G}, 3 \mathrm{AB}$ | Screw term． | .27 |
| 408450 | 350218 | J | 3AG，3AB | Single fuse mounting | .17 |
| 52 日 296 | 387002 | K | 2．8AG | Double fuse mounting | ． 25 |
| $\begin{aligned} & 528297 \\ & 52 \mathrm{~B} 295 \\ & 52 \mathrm{~B} 291 \end{aligned}$ | $\begin{aligned} & 357002 \\ & 383002 \\ & 353001 \end{aligned}$ | $\begin{aligned} & K \\ & L \\ & M \end{aligned}$ | $\begin{aligned} & 2-3 A G \text { or } 3 A B \\ & 8 A G \\ & 3 A G, 3 A B \end{aligned}$ | Double fuse mounting ＂Meter－back＂mounting Panel type mounting | $\begin{aligned} & .25 \\ & .21 \\ & .35 \end{aligned}$ |
| 416788 | 155009 | N | －SEE，（9 a．） | Inline fuse relainer |  |
| 418798 | 155014 | N | －SFE，（14 a．） | Inline fuse retainer |  |
| 418789 | 155020 | N | －SFE，（20 a．） | Inline fuse retainer | 3 |
| 41 B 795 | 342012 | P | 3AG | Extractor bost |  |
| 528262 | 342014 | R | 3AG | Minialure fuse dost | 30 |
| 528263 | 342004 | S | 3AG | Minialure fuse post | 35 |
| 52 日 264 | 1342022 | T | 3 AG | Minialure fuse post | 35 | 52 B 685．Fig．W．Type 101001 Fuse Clips．Fit SFE．3AG，8AG and

 4I B 733 ．Fig．X．Type 350130 Fuse Holders．Fit 3AG fuses．Shpg．
wt．， 2 oz．NET EACH．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．

## FUSEMASTER RACK ASSORTMENT

－Includer 20 Boxes－ 100 Mast Popular Fuses
Type 094047． 100 assorted fuses in a clear plastic rack．Ideal for service shopsi invebtory control
 glance．Includes 3 AG types $5-5$ amp， 10 － $1 / 4-\mathrm{amp}$ SB，5－1／2－amp SB，5－1－amp SB．S－2－amp SB， 5 3－amp SB， $10-5-\mathrm{amp} \mathbf{S B}$ ialso $\mathrm{N}^{\text {2 }}$ types： 5 － $3 / 10$－amp．5－4／10－amp．5， $1 / 2-\mathrm{amp}$ ；and type： $10-3 / 10-\mathrm{amp}, 11 \times 73 / 6 \times 2^{*} \cdot 2 \mathrm{lbs}$.
52 B 943 ．NET．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 93

## SERVICEMEN＇S FUSE CADDIES

Type 094041．Designed to fit in tube caddy．Contains is boxes（ 5 fuses per box）of Types $\mathbf{C}$ and N limited－current fuses marked by＊in table be－ per boxted 250 v．，except 7 amp ． 125 v ．Clear plastic case has 3 spare compartments．Size， $17 / 2 \times 3 \times 41 / 4$ ．Shpg．wt．， 2 ！bs． net 10.58 52 B 283.

of fuses（eypes
Type 094037 ．Fuse caddy as above but contains 14 boxes of fuses（types inses in popular values．Shpg．wt．， 2 lbs． 52 B 272

| Type | Amps | Typo | Amps | Type | Amps |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\bar{C}$（Regular） | 3＊ | N （Slo－Blo） | 6＊ | 3AG | 2.04 |
| C（Regular） | 5＊ | N（Slo－Blo） | 7＊ | 3AG | 3.04 |
| C（Regular） | 75＊ | N（Slo－810） | 1＊ | 3AG | $5.0 \uparrow$ |
| C（Regular） | $2 *$ | N（Slo－B10） | 1．25＊$\dagger$ | 3 3G（S10－B10） | ． 25 |
| C（Regular） | 2．5＊+ | N（Slo－Blo） | 1．6＊ | 3AG（Slo－Blo） | ． 5 ¢ |
| C（Regutar） |  | $N$（Slo－Blo） |  |  |  |
| N（Slo－Blo） | ．25＊$\uparrow$ | 3AG | ． 25 t | 8AG-U.L. | ． 5 ¢ |
| $N$（Slo－B10） | 3＊ | 3AG | ．${ }^{\text {t }}$ |  |  |
| N（Slo－Blo） | 5＊ | 3AG | 1t |  |  |

## TYPE 3AG PIGTAIL FUSES

D Serics 318000．Fast－acting type．All have 11／2 tinned copper leads （1）Size． $11 / 4 \times 1 / 4^{\circ}$ ．Shpg．wt．per plig．， 2 oz． 5 fuses per package．

| Stock No． | Amps | Volt | $\begin{aligned} & \text { Por } \\ & \text { Pkg. } \end{aligned}$ | 20 Pkgs． or more， Per Pkg． |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 52 \mathrm{~B} 215 \\ & 52 \mathrm{~B} 279 \\ & 52 \mathrm{~B} \\ & \hline \end{aligned}$ | $1 / 2$ | $\begin{aligned} & 250 \\ & 250 \\ & 250 \\ & \hline \end{aligned}$ | $\begin{aligned} & .62 \\ & .62 \\ & .47 \end{aligned}$ | $\begin{array}{r} .53 \\ .53 \\ .40 \end{array}$ |

TYPE SFE 32－VOLT AUTO FUSES
A Serles 307000．Medium－acting fuses，Sizes spectified by S．A．E． A Specially grooved element strengthens fuses against vibrations U．L．Approved．Max，volts，32． $1 / \mathbf{s}^{* d i a}$ ． 2 oz．per plg． 5 fuses per pkg．

| Amps | Stock No． | Length | Per Pkg． | 20 Phgs． or more． Per Pkg． | Amps | Stock No． | Length | Per Phg | 20 Pkgs． or more． Per Phe． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 4 \\ & 6 \\ & 71 / 2 \\ & 9 \\ & \hline \end{aligned}$ | $\begin{array}{lll} 5 & 2 & 8 \\ 5 & 250 \\ 5 & B & 255 \\ 5 & \text { B } & 274 \\ 52 & \text { B } & 260 \end{array}$ | $\begin{aligned} & 3 / 6^{\prime} \\ & 16^{\prime} \\ & 3^{\prime \prime} \\ & 3{ }^{\prime} \end{aligned}$ | $\begin{aligned} & .17 \\ & .17 \\ & .17 \\ & .16 \end{aligned}$ | $\begin{array}{r} .14 \\ .14 \\ .14 \\ .13 \end{array}$ | $\begin{aligned} & 14 \\ & 20 \\ & 30 \end{aligned}$ | 52 B <br> 5265 <br> 52 <br> 52 <br> 52 | $\begin{aligned} & \hline 11 / 8^{\circ} \\ & 11 / 0^{\circ} \\ & 11 / 66^{\circ} \end{aligned}$ | $\begin{aligned} & .14 \\ & .14 \\ & .18 \end{aligned}$ |  |



## STANDARD CHASSIS BASES

Have one-piece construction; corners are reinforced and spot-welded. The four sides are folded at the bottom for additional strength. Aluminum types are spot-welded Steel chassis gauges: *No. 22; $\dagger$ No. 20; $\$ \mathrm{No}$. 18. Aluminum chassis gauges (aluminum gauge): $\ddagger$ No. 18 ; **No. 16: $\dagger$ No. 14. Less bottom plates. AC-403: $2 \times 91 / 2 \times 5^{\circ}$.

Allied stocks the complete Bud line of metal goods. Even if the Bud equipment you require is not listed. Allied can fill your order quickly.


## BOTTOM PLATES FOR CHASSIS BASES

Bottom plates to fit the chassis bases listed above. Ideal for shielding. In inc-plated or black ripple heavy-gauge steel plate and aluminum. Four

| Slze | Lbs. | Black Wrinklo |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Stock No. | Type No. | NET |
| $5 \times 7{ }^{\circ}$ | 1/2 | 80 P 386 | BiP-70s | . 56 |
| $5 \times 93{ }^{\circ}$ | 1 | 80 P 387 | B1>-680 | .61 |
| ${ }^{5 \times 10^{\circ}} 7 \times{ }^{\circ}$ | ${ }^{3}$ | 80 <br> 80 <br> 80 | BP. 536 | 66 |
| $7 \times 9$ | 1 | 80 80 80 P 390 | B1'-681 | 90 |
| $7 \times 11$ - | 1 | 80 P 391 | BP-683 |  |
| $7 \times 12^{\circ}$ | 148 | 80 P 392 | BP-537 | . 97 |
| $7 \times 13^{\circ}$ | 11/4 | 80 P 393 | BP-684 | 1.00 |
| $5 \times 1314{ }^{\circ}$ |  | 80 P 394 | BP-685 | . 82 |
| $4 \times 17^{\circ}$ | 112/2 | 80 P 395 | BP-1069 | 82 |
| $7 \times 17^{\circ}$ | 113 | 80 P 396 | BP-686 | . 88 |
| $8 \times 10^{\circ}$ | 114 | 80 P 400 | BP-707 | . 90 |
| $8 \times 12^{\prime}$ | 15 | 80 P 397 | BP-709 | 1.04 |
| $8 \times 17^{\circ}$ | 13 | 80 P 398 |  | . 93 |
| 10x12* | $13 / 2$ | 80 P 399 | BP-688 | . 93 |
| $10 \times 1{ }^{48}$ | 11/9 | 80 P 401 | BP-517 |  |
| $10 \times 17^{\circ}$ | $11 /$ | 80 P 402 | BP'-689 | 1.18 |
| $11 \times 178$ | $11 / 2$ | 80 P 403 | BP-690 | 1.18 |
| $12 \times 17^{\circ}$ | 2 | 80 P 404 | BP-691 | 1.24 |
| $13 \times 17^{\circ}$ | 24 | 80 P 405 | BP-692 | 1.44 |



## HEAVY-DUTY CHASSIS BASES



Rugred chassis bases. Formed of one-picce heavy Kolded steel. Corners spot welded and sides With bottor at bottom. Electro-zinc plated. With bottom plates and screws.

| St | No. |  | D. | 5. | N |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 86 PX | 240 | CB-1 | $3 \times 17 \times 8$ | 7Y |  |
| 86 PX | 42 | CB 1767 | 3×17×11* |  |  |
| PX | 243 | CH-1768 | 2×178130 | 9 |  |
| 86 Px | 244 | CB-1764 | 3x17*13* | 10 |  |
| 86 PX | 946 | CH-1770 | $4 \times 17 \times 13^{\circ}$ | 11 |  |

raised bosses in corners to prevent marring and scratching of table-top or shelves. Drilled for use with No. 6 self-tapping ecrews

## ALUMINUM MINIBOXES

Two-plece aluminum boxes with gray hammertotr oo natural aluminum finish. Particused for anmplitiers, couvertets. TVI filters. teat ulsits, cte. Two-piece censtruction permits easy access to circuitry. Flanges assure pose suap locks permit quicl assembly and disassembly; also permit use with self-tapping screws (supplied)


| $\begin{aligned} & \text { Sire } \\ & A x C x B \end{aligned}$ | $\begin{aligned} & \text { Slipg. } \\ & \text { Wt., } \\ & \text { Lbs. } \end{aligned}$ | Gray Hammer. tone | PAIr's Type | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ | Nafural Aluminum | Mr's <br> Type | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21/9x | 1/4 | 8 | cu-21 | 7 |  | CU-3000A |  |
| 31421/1 | $1 /$ | 80 P 359 | CU-2117A | . 76 | 80 P 377 | CU-3017A |  |
| $31 / 4 \times 21 / 3 \times 1$ | 1/8 | 80 P 343 | CU-2101A | . 74 | 80 P 361 | CU-3001A | 60 |
| 4×2x21/4* | 1/4 | 80 P 357 | CU-21154 | . 90 | 80 P 375 | CU-3015A | 3 |
| 4x21/0x1\%" | $1 / 4$ | 80 P 344 | CU-2102A | . 78 | 80 P 362 | CU.3002A | 63 |
| $4 \times 21 / 2{ }^{21 / 2}$ | 1/4 | 80 P 345 | CU-2103 | 88 | 80 P 363 | CU- | , |
| 4 $1 / 1 \times 21 / 4 x 1 / 80$ | 1/4 | 80 P 358 | CU-2116A | . 90 | 80 P 376 | CU.3016A | 73 |
| $5 \times 21 / 4 \times 21 /{ }^{\prime \prime}$ | 1/4 | 80 P 346 | CU-2104A | . 93 | 80 P 364 | CU.3004A | 74 |
| $5 \times 4 \times 3$ " | 1/2 | 80 P 347 | CU-2105A | 1.18 | 80 P 365 | CU-3005A | 94 |
| 51/483×21/8" | 1/8 | 80 P 348 | CU-2106A | 1.00 | 80 P 366 | \|CU-3005A | 80 |
| $6 \times$ |  | 80 P 349 | CU-2107 |  | 80 P 367 | CU-3007A | 8 |
| $7 \times 5 \times 3{ }^{\circ}$ | 1/4 | 80 P 350 | CU-2108A | 1.62 | 80 P 368 | CU.3008A | 1.29 |
| $8 \times 6 \times 31 / 4$ | 1 | 80 P 351 | CU. 2109 A | 2.06 | 80 P 369 | CU. 3009 A | 1.65 |
| 10x2x1\% | 1/2 | 80 P 355 | CU | 1.18 | 80 P 373 | 013A | 4 |
| 10x6831/20 | 13/4 | 80 P 352 | CU-2110A | 2.30 | 80 P 370 | CU-3010A | 1.84 |
| 12x21/2 $\times 21 /$ | 2/4 | 80 P 356 | CU-2114A | 1.52 | 80 P 374 | CU.3014A | 1.22 |
| 12x7x ${ }^{\text {a }}$ | 11/4 | 80 P 353 | CU-2111A | 3.14 | 80 P 371 | CU-3011A | 2.51 |
| 1785* ${ }^{\circ}$ | , | 80 P 354 | CU.2112A | 3.14 | 80 P 372 | CU-3012A | 2.51 |

## METAL UTILITY CABINETS

Metal utility cabluets for all types of electronic equipment. Excellent for housing receivers, monitors. VFO's, test equipment, frequency meters. ramsmitters, etc. Well adapted for shiclding of circuitn. Two renovable patiels attach to flanges with self-tapping screws. *Aluminum.


## UNIVERSAL SLOPING-PANEL CABINETS

Versatile streamlined sloping-penel cabinets available in steel or aluminum. Offer enough space to house a two or three moniature tube amplifier or kadget. Sides and one-piece detachable back fasten to the bods with selftapplng screws for easy service and replacement of components. Fully enclosed to exclude dust and moisture. Easily accommodate most smal chassis. All units are $4^{*}$ high, $41 / 4^{*}$ doep. Finished in attractive, gray hammertone finish

| Width | Steel Stock No. | Mrr"s <br> Type | Shps. Wt. Lbs. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ | Aluminum Stock No. | MIr's Type | Shpg. Wt., Lbs. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $4{ }^{4}$ | 88 P 642 | C-1606 | \% | 1.42 | 88 P 646 88 P 647 | AC-1610 AC-1611 | \% | 1.65 |
| 5 | 88 88 8 | C-1607 | 11/8 | 1.52 | 88 P 647 88 P 648 | AC-1612 | 1/ | 1.86 |
| 7 | 88 P 645 | C-1609 | 11/8 | 1.86 | 88 P 649 | AC-1613 | 4 | 2.06 |

## SHIELDED-SURFACE RACK PANELS

1/8" thick, nat urally bright aluminum alloy relay
rack panels in blemish-free mill finish. Covered on rack panels in blemish-free mill finish. Covered on bather to protect against damage. paper is excellent paper to protect akainst damage. Paper is excelient drilling. $19^{*}$ wide; standard notching.

| Helghe | Shpg. Wt., Libs. | $\begin{aligned} & \text { Mir's } \\ & \text { Type } \end{aligned}$ | Stock No. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 1314^{\circ \prime} \\ & 31 /{ }^{\prime \prime} \\ & 51 / 4 \\ & 70^{\circ} \end{aligned}$ | $\begin{aligned} & 1 / 4 \\ & 1^{1 / 4} \\ & 13 / 4 \end{aligned}$ | $\begin{aligned} & \text { SFA-1831 } \\ & \text { SFA-1832 } \\ & \text { SFA-18.33 } \\ & \text { SFA-1834 } \end{aligned}$ | $\begin{aligned} & 88 p \times 662 \\ & 88 p \times 663 \\ & 88 p \times 664 \\ & 88 p \times 665 \end{aligned}$ | $\begin{aligned} & .95 \\ & 1.31 \\ & 1.76 \\ & 2.17 \end{aligned}$ |
|  | $\begin{aligned} & 2 \\ & 21 / 2 \\ & 23 / 4 \\ & 3 \end{aligned}$ | $\begin{aligned} & \text { SFA-1835 } \\ & \text { SFA } 1836 \\ & \text { SFA-1837 } \\ & \text { SFA-1838 } \end{aligned}$ | $88 p \times 666$ $88 p \times 667$ $88 p \times 668$ $88 P \times 669$ | $\begin{aligned} & 2.61 \\ & 3.27 \\ & 3.77 \\ & 4.36 \end{aligned}$ |
| $\begin{aligned} & 153 \% \\ & 17 \% \\ & 191 \% \\ & 21^{\circ} \end{aligned}$ | $\begin{aligned} & 31 / 2 \\ & 4 \\ & 41 / 4 \\ & 5 \end{aligned}$ | $\begin{aligned} & \mathrm{SFA}-1839 \\ & \mathrm{SFA}-1840 \\ & \text { SFA-184, } \\ & \text { SFA-1842 } \end{aligned}$ | 88 PX 670 88 PX 671 88 P 672 88 PX 673 | $\begin{aligned} & 4.87 \\ & 5.36 \\ & 5.87 \\ & 6.37 \end{aligned}$ |

## STREAMLINED CABINETS

Steel cahinets for electrical or electronic devices not requiring excessive depth Feature recessed hinged cover with con venient finger lift: panels fit flush with embossen. rounted corner fronts. All acce sible. Have $31 / 2^{-2}$-high opening across the lach for cables or pear controls. Louvered sides provide ample ventila tion All are $8^{*}$ high and $8 K^{\circ}$ dieep except vertical chrome strip fastened to cormers. Bud open-end chassis are recommended for use in these cabinets. Choice of gray hammertone or black wrinkle finish.

| Size |  | Mfr's Type | Gray Hammertone | Black Wrinhle | WT, Lbs. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Width | Panel |  |  |  |  |  |
| 101/2' | $8 \times 8{ }^{\circ}$ | CD-1480 | 88 PX 650 | 88 PX 65 | 5\%/4 |  |
| 12\% ${ }^{\circ}$ | $8 \times 10^{\prime \prime}$ | CD-1481 | 88 PX 652 | 88 PX 653 | 6 | 5.89 |
| 141/2* | $8812 *$ | CD- 1482 | 88 PX 654 | 88 PX 655 | 61/2 | 6.18 |
| 161/2* | $8 \times 11^{\circ}$ | CD. 1483 | 89 PX 656 | 88 PX 657 | 7 | 6.63 |
| 18\%* | $8 \times 16^{*}$ | CD. 1484 | 88 PX 658 | 88 PX 659 | 73/4 | 7.21 |
| 20\% | $12 \times 18^{*}$ | CD-1485* | 88 PX 660 | 88 PX 661 | 15 | 14.65 |

## COWL-TYPE MINIBOXES

Bud's cowl-type miniboxes. Attractively styled easily drilled or punched. Have projecting cover which reduces glare on the panel from overhead lighting. Also provide protection for fnobs. switches, and meter faces. Nay be used for housing receivers. transmitters. test equipment, etc. Cover is attached with 16 sheet metal screws nrovided. This construction results in a sturdy, rigid housink. All are made of long-lasting. 18 -gause alumiltum. Choice of handsome, gray hammestone finish or natural aluminum finish.

| $\begin{gathered} \text { Size } \\ \text { H.W.D. } \end{gathered}$ | Shpg. <br> Wi. <br> Lbs. | $\begin{gathered} \text { Gray } \\ \text { Haminertone } \end{gathered}$ | $\begin{gathered} \text { Mr's } \\ \text { Type } \end{gathered}$ | $\begin{gathered} \text { NET } \\ \text { EACH } \end{gathered}$ | Natural Aluminum | $\begin{aligned} & \text { Mifr's } \\ & \text { Typo } \end{aligned}$ | $\begin{aligned} & \mathrm{NET} \\ & \mathrm{EACH} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 6 \times 1020^{\circ} \\ & 7 \times 12 \times 8^{\circ} \\ & 3 \times 8 \times 6^{\circ} \\ & 5 \times 55^{\circ} \\ & \hline \end{aligned}$ | $\begin{aligned} & 1 / 1 / \\ & 1 / 1 / 2 \end{aligned}$ | $88 P \times 684$ 88 PX 685 88 P686 88 P 687 | $\begin{aligned} & \hline \mathrm{SC} \cdot 2130 \\ & \mathrm{SC}-2131 \\ & \mathrm{SC}-2132 \\ & \mathrm{SC}-2133 \end{aligned}$ | $\begin{aligned} & 5.83 \\ & 6.37 \\ & 3.38 \\ & 3.53 \end{aligned}$ | 88 PX 688 98 PX 689 88 P690 88 P 691 | $\begin{aligned} & \hline S C-3030 \\ & S C-303! \\ & S C-3032 \\ & S C-3033 \end{aligned}$ | $\begin{aligned} & 4.21 \\ & 4.61 \\ & 2.40 \\ & 2.55 \end{aligned}$ |

## SLOPING.PANEL CABINETS

Sloping-panel ateel cabineta with lainged top for easy access to tubes and top-of-chassis
components. Removable front panel permits components. Removable front panel permits chassis: Type C-1584, $7 \times 6 \times 2^{\prime \prime}$ : Type C-1585.

 1894. $7 \times 13 \times 2^{6} ;$ Type $\mathrm{C}-1896,7 \times 17 \times 3^{3}$. In black wrinkle or light-gray hammertone finiah.


| $\begin{aligned} & \text { Size } \\ & \text { H.W.D. } \end{aligned}$ | Wt. Ltos. | $\begin{aligned} & \text { Mrr's } \\ & \text { Type } \end{aligned}$ | Stock Mo. Black | Mrr's Type | Stock No. Gray | $\begin{gathered} \text { NET } \\ \text { EACH } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $61 / 2 \times 7 / 16 \times 75 / 10^{\circ}$ | $21 / 2$ | C-1584 | 86 PX 900 | C. 1584HG | $88 \mathrm{P} \times 576$ | 3.23 |
| 61/89917675/16. |  |  | $86 \mathrm{P} \times 901$ | C-1585HG | $88 \mathrm{P} \times 577$ | 3.67 |
| 6\%/21111687 ${ }^{3} / 16^{\circ}$ | 31/2 | C-1586 | 86 PX 902 | C-1586HG | $88 \mathrm{P} \times 578$ | 4.25 |
| $8 \times 131 / 16 \times 81 /{ }^{\circ}$ | 51/4 | C-1892 | 86 PX 903 | C-1892HG | 88 PX 581 | 5.83 |
| 10. $181 / 80 \times 101 / 2^{\circ}$ | 81/2 | C-1893 | 86 PX 904 | C-1893HG | 88 PX 582 | 7.69 |
| $8 \times 81 / 16 \times 8^{\circ}$ | 2/4 | C-1587 | 86 PX 968 | C-1587HG | $88 \mathrm{P} \times 579$ | 4.42 |
| $8 \times 101 / 16 \times 8{ }^{\circ}$ | 31/4 | C-1588 | 86 PX 969 | C-1588HG | 88 PX 580 | 4.91 |
| $8 \times 141 / 6 \times 8{ }^{\circ}$ | 4 | C-1894 | 86 PX 970 | C-1894HG | 88 PX 583 | 5.23 |
| 9x181/16881/60 | 7 | C-1896 | 86 PX 971 | C-1896HG | 88 PX 584 | 7.53 |

## ALUMINUM AND STEEL CARRYING CASES

Ideal housings for portable transceivers, test instru ments, power supplies, radlo-control units, field strengti meters, phono oscillators, etc. Ruggedly constructed to whatand hard usage, fromt and back panels mount with self-tapping screws. Panels are easily removable to comide access to interior; call be used for mounting cemponents such as meters, relays. transformers, power mum s, etc. Available in either welded steel for max mits in black wrinkle or gray hammertone finish; aluminum units in natural, or gray hammertone finish


PORTABLE STEEL CASES

| $\begin{aligned} & \text { Size } \\ & \text { H.W.D. } \end{aligned}$ | $\begin{aligned} & \text { Mrr's } \\ & \text { Type } \end{aligned}$ | $\begin{aligned} & \text { We., } \\ & \text { Lbs. } \end{aligned}$ | Stock No. Black | Stock No. Gray | $\begin{gathered} \text { NET } \\ \text { EACH } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $9 \times 6 \times 5^{\circ}$ $6 \times 9 \times 5^{\circ}$ <br> $12 \times 7 \times 6^{\circ}$ | $\begin{aligned} & C C-1095 \\ & C C-1091 \\ & C C \end{aligned}$ $\text { CC. } 1096$ | $\begin{aligned} & 31 / 8 \\ & 31 / 4 \\ & 4 \end{aligned}$ | $\begin{aligned} & 80 \text { P } 798 \\ & 80 \text { p } 799 \\ & 80 \text { P } 808 \end{aligned}$ | $\begin{aligned} & 80 P 813 \\ & 80 p 814 \\ & 80 p X 816 \end{aligned}$ | $\begin{aligned} & 2.95 \\ & 2.95 \\ & 4.10 \end{aligned}$ |
| $7 \times 12 \times 6^{\circ}$ $15 \times 1 / 4 \times 7^{\circ}$ $10 \times 10 \times 8^{\circ}$ $9 \times 15 \mathrm{x} 7$ | $\begin{aligned} & C C-1092 \\ & C C-1097 \\ & C C-1100 \\ & C C-1093 \end{aligned}$ | $\begin{array}{r} 4 \\ 5 \\ 5 \\ 5 \end{array}$ | 80 Px 809 80 Px 810 80 Px 811 80 PX 812 | 80 PX 817 80 PX 818 80 PX 819 80 PX 848 | 4.10 4.59 4.73 |

PORTABLE AIUMINUM CASES

| $\begin{gathered} \text { Slie } \\ \text { H.W.D. } \end{gathered}$ | $\begin{aligned} & \text { Mfr's } \\ & \text { Type } \end{aligned}$ | WL, LDs. | Nat urai | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ | Stock No. Gray | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $9 \times 6 \times 5^{\circ}$ | ACC-2095 | 11/6 | 88 |  |  | 3.44 |
| $6 \times 9 \times 5{ }^{\circ}$ | ACC-2091 | $11 / 8$ | 88 P 565 | 3.03 | 88 P 569 | 3. |
| 12×7x6 | ACC-2096 | 1 | $88 \mathrm{P} \times 568$ | 4.41 | 88 PX 572 | 4.9 |
| 7×12x6 | ACC-2092 | 11/3 | $88 \mathrm{P} \times 566$ | 4.41 | 88 PX 570 | 4.9 |

## Bud Metal Products

## MINIA TURE UTILITY CABINETS

 WITH ATTACHED CHASSIS

Sturdily-marie, unusually compact steel utility cabinets with a buile-in chas: sis attached to the front parel. Especially surable es. frequency meters, small transistorized recivers, coole practice osellators, decade boxes, ther types of small, welf-contained units. Re movable front and rear pancls fastened with poinents and provide maximum layout flexibility. Black-wrinkle enamel finish.

| Stack 10. | Type | Cabinet H.W.D. | 1.W.I |  | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| P32 | C | $4 \times 8$ | $1 x^{3}$ | \% |  |
|  |  | 815 | 1x41/22\% |  |  |
| P P328 | C-179 | $5 \times 4 \times 3^{\circ}$ | $11 / x x^{31 / 62} 2{ }^{\circ}$ |  |  |
| 80 P 329 |  | $6 \times 5 \times 4{ }^{\circ}$ | 13/2441/233\% | 11/4 |  |
|  | C-1797 | $5 \times 6 \times 4{ }^{\circ}$ | 1/2x | 11/4 |  |
|  | C-1 | $6 \times 6$ |  |  |  |

PANEL-MOUNTING CHASSIS


Ideal for vertical chassis installation where space in depth is limited or frontserv-Open-side chassis for standard
mounting. $062^{*}$ aluminum with reinforced corners. 1" flange on ends, with 4 elongaterl holes for mounting to any rack with stc. panel notching. All otber excluding flange. and $5 \% 2^{\circ}$ deep.

| ck No. | Typo | Helght | Lbs. | NET |
| :---: | :---: | :---: | :---: | :---: |
| $\times 185$ | CB-1370 |  |  |  |
| Px 186 | Ca-1371 |  | 11 |  |
| 6 Px 18 | CB-1372 |  | 13/2 |  |
| 6 Px 188 | CB-1373 |  |  | 3.1 |
| 6 P× 189 | CB-137 |  |  |  |
| 6 Px 190 |  |  |  |  |
| 6 P× 191 | CB-1376 |  |  |  |
| 6 P× 192 | CE-137 |  |  |  |

STANDARD AMPLIFIER FOUNDATIONS


Ideal for mose amplifiet requirements. Foundations consist of regular chassis with ringed met. al covers. Solld pieces are usech cover for bracing and a snuk fit to chassis. Heavygauge metal screening assures propet protecfandles provide portability. Typers CA. 699 CA=1125, and CA- 1126 have $21 / 2$ high chassis: Type CA-1128 has $3^{*}$ High chassig. All units have a black wrinkle finish.

| ock No. | Type | II.W.D. | Lbs. | NET |
| :---: | :---: | :---: | :---: | :---: |
| 80 P× 697 | CA-699 | $85 / 6 \times 99 \times 59.9$ |  |  |
| 698 | CA-1125 | $85 \% 6 \times 134 \times 5 \%^{\circ}$ | 4/4 |  |
| PX 699 | CA-1126 |  |  |  |
|  |  |  |  |  |

## SHADOW CABINETS



Versalile housligg for amplifiers. test equip-
mient, etc. Both ment.etc. Both
front panels as front panels as
well as the botwell as the botmoved for installation and servicing purcontrols, meters panel is recessed $1^{\circ}$ to protect controls, meters, otc. Recessed panel and bevelled front edges Body constructed of 18 -gauge steel, panels of 16-gauge steel'. Rubber feet attached to bottom of cabinet prevent marring of the surface on
which it may be placed. Finished in attractive. light gray Haminertone.

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { Mr's's } \\ & \text { Type } \end{aligned}$ | Size H.W.D. | $\begin{aligned} & e \text { Bud } \\ & \text { lassis } \end{aligned}$ | Lbs. | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 82 Px 746 | SE-21 | $8 \times 141 / 2$ | AC-429 | 111/2 | 6.3 |
| 7 | \$8-2141 | $71 / 8131 / 89^{\circ}$ | AC-407 |  |  |
| - 748 | SB-2142 | 91/817x11- | CB-665 | 15\% |  |
| $\times 7$ | SB. 2143 | 6,151/90\% | AC |  |  |

## UTILITY CABINETS

Ateractive housing with rounded corners. All conarruct Frol of 20 gatuge steel. panels removeable; panels remel louvered rear panellouvered rubber feet. Body rubber feet. Body fray enamel. panels in

| Stock No. | $\begin{aligned} & \text { Mrr's } \\ & \text { Type } \end{aligned}$ | $\begin{aligned} & \text { Size } \\ & \text { H.W D. } \end{aligned}$ | Wt., | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 88 P692 88 P 693 88 P 694 88 PX 695 88P 696 88 PK 697 | $\begin{aligned} & C U-453 \\ & C U .465 \\ & C U .555 \\ & C U .587 \\ & C U-7125 \\ & C U-7127 \end{aligned}$ | $47 / 3 \times 66^{7 / 2} \times 33^{6}$ 47/3x67/3x5\% <br> 57 x87/ax5y <br> $5 \operatorname{lin}_{2 \times 8} 1 / 2374$ <br> 77/2 $12127 / 3 \times 5{ }^{\circ}$ <br> 71/32 $\times 127 / 3 \times 74^{\prime}$ | $\begin{aligned} & 11 / 2 \\ & 21 / \\ & 3 \\ & 31 / 6 \\ & 5 \end{aligned}$ | 5.39 6.22 8.18 8.82 9.51 0.14 |

UNIVERSAL METER CASES


For use with $2^{\circ}$ or $3^{\circ}$ meters. With front Panel for $2^{\prime \prime}$ meter. Knockout ring enlarges hole for a 3 "meter. Have one-piece banck and side attached whth screws. Top has two $1 /{ }^{\circ}$ knockouts for terminal posts or feed-throughs. Steel or aluminumigray
Hammertone $41 / 2 \times 4 \times 4$

## StockNo. Type Material Lbs. NET

 INSTRUMENT AND RECEIVER CABINETS


Ruggediy constructed steel
cabinets. Have recessed hinged cover for easy ac-
cess. Front panel is held securely in place with selftapping screws.
Panel extends full width of cab-inet-providea
maximum space for controls. Louvers on each side assure ample ventilation. Black wrinkle enamel finish. Stock No. Type H.W.D. Lbs. NET




MINIATURE AMPLIFIER FOUNDATION
 Type CA.1754. Meets the requirements of miniaturized compomints Chassis is only $2^{-}$bigh, $7^{*}$ wide, and $2^{\circ}$ bigh, $7^{\circ}$ wide, and fastened in place, en${ }^{\circ}$ tire unit stands only struction. Removable cover includes a carcover includes a car-
rying handle. Cover is heavily perforated: fastened to charais sides
screws. Black wrinicle finish. Iy I bs. 3.92

## STANDARO RACK PANELS



Heavy-duty rack panel
constructed of aluconstructed of $1 / 1 /$ aluwinum. All are 19 in edses to fit mounaling screw spacing of all standarn telephone type relay racks. Light gray Hammertone finish.


NEW PORTACAB CABINETS


One Plece Aluminum Construction

Flexible Re. cessed Han dles for Stocking

Well-
Lauvered for Adequale Ventilotion

Recommended as housings for instrumentation requiring highly stylized appearance. The body on on-piece $.050^{\circ}$ aluminum with contoured corners. Panel is $.062^{\circ}$ aluminum. Flexible recessed handle permits easy portability as well as vertical stacking. Louvers point inward perspace. Welded back has openiny. Four detachable rubber feet are provided. Available in grny hammertore finish only

| Stoch No. | $\begin{aligned} & \text { Mr's. } \\ & \text { Typ. } \end{aligned}$ | $\begin{aligned} & \text { Size } \\ & \text { H.W.D. } \end{aligned}$ | UseBnol WI. Chassis 16: | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| $88 \mathrm{P} \times 227$ | WA. 1540 |  | AC-402 | 9.20 |
|  | WA-1541 | 9x84612" | AC. 4073 | 12.00 |
| PX22 | WA-1542 | $8 \times 101 / 6 \times 8^{7}$ | AC-406 31/ | 10.65 |
| P×229 | WA-1543 | $11 \times 1116 \times 18$ | AC.416 6/ |  |
| P× 23 | WA-15 | $12 \times 14 \%$ z18 ${ }^{\circ}$ | AC-420 7\% |  |



## DESK-TYPERACKS

A strong chassis ideally suited for mounting heavy components. Perfect for table mounting of low and medium power and other electronle equipment. Designed for use with standard $10^{\circ}$ panels. No exposed edges. With hardware. Gray hammertone finish


## CHASSIS MOUNTING BRACKETS



An excellent accessory for adapting racks and cabinets to specific needs. A rugxed, top-quallity bracket formed of heavy sause steel. Cut away at the bottonn to provide clearamce for a chassis $3^{\prime \prime}$ high, Finisherd in high-grade
black enamel. For use with ${ }^{4}$ charsis. Av. wi.. 3 libs


## UTILITY HANOLES



Strong handles wlth comfortable grip. Ideal for mounting on cabinets to afford portabil-

ity. Made of tubular afuminum with etcherl StookNo. Type Lgin. Mtg. Cer. NET | 86 P 849 |
| :--- |
| 86 UH-70A |
| $1 \%$ | 86 P 899 UH-71A 35

PLASTIC CASES AND PANELS


Molded black plastic cases and panels designed for test instrument mountins. Sturdily constructed to protect meter and components. Cases have recessed corner bosses for flush mounting of panels. Pre-drilled for "ho self-
tapoing screws. Case walls and tapping screws. Case
panels are $\hbar^{\circ}$ thich

CASES

| Siock No. | $\begin{aligned} & \text { Size } \\ & \text { H.W. } \end{aligned}$ | Wi., Lbs. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| $\begin{array}{lll} \hline 86 \text { P } 286 \\ 86 P 287 \end{array}$ |  | $\frac{1}{2}^{1 / 1 / 2}$ | $\begin{aligned} & 66 \\ & .84 \end{aligned}$ |


| Stock No. | $\begin{aligned} & \text { Size } \\ & \text { H.W. } \end{aligned}$ | We. Lbs. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 86 P 288 86 P 289 |  |  | 48 60 |

Allied Stacks the Complete Line of Bud Relay Racks and Accessories

# Amphenol Connectors 



MICROPHONE CONNECTORS

Most microphones listed in this catalog are supslied less connector Choose from this complete selection of Amphenol connectors-you'l Gnd one to meet any application. Precision
SERIES 75 SINGIE BUTTON CONTACT TYPES
Standard connectors $3 / \mathbf{R}^{*} .27$ threads; *1/ mountins holes. tindicates miniature connectors that are approximately half the size and weight of standard counternarts with same specilications. Av, shpg. we.. 3 oz. StoekNo. Type |Fig. Description

| Stoek No. | Type | Fig. | Description | N |
| :---: | :---: | :---: | :---: | :---: |
| 41 H958 | 75-MCIF | A | Combination cable plug R jack |  |
| 41 H955 | 75-MCiM | B | Cable plug |  |
| 41 H965 | *5-PCIM | C | Chassls receptacle, non-shorting |  |
| 41 H962 | 75-MC1P | 1 | Whone plug adapter |  |
| 41 H959 | 75-MCIFA | E | $90^{\circ}$ ansle cable jack |  |
| 41 H 967 | *75-CL.PC1M | F | Chassis receptacle, closed circuit |  |
| 42 H658 | +75-1 | A | Straight plug |  |
| 42 H 659 | +75-2 | $\stackrel{8}{\mathrm{~F}}$ | Cable jack |  |

## SERIES 80 SINGLE \& DOUBLE PIN CONTACT TYPES

For shielded cablea, single and two conductor coaxial rables, etc. Center contacts are pin and onket type. "Single-contact type. fPolarized double-contact type. Av. shipg wt., 3 oz

| Stook No. | Type | Fla. | Description | NE |
| :---: | :---: | :---: | :---: | :---: |
| 42 HO 4 | +80-C | N | Female chassis rereptarle | . 60 |
| 42 H661 | *80.C1 | N | Male chassis receptacle | . 60 |
| 42 H 080 | *80-F | G | Female cable jack: | 56 |
| 42 H662 | -80-F1 | H | Female cable plus | 6 |
| $42 \mathrm{HO81}$ | * 80-M | H | Male cable plug |  |
| $42 H 663$ 42 $H$ | *80-M1 $+80-\mathrm{MC} 2 \mathrm{~F}$ | G | Male cable jack Fenale cable jack | . 52 |
| 42 H 482 | $80-\mathrm{MC}^{2 F}$ | ${ }^{\text {H }}$ | Female cable plus | . 70 |
| 42 H 083 | 40-MC2M | H | Male cable plus | . 68 |
| 42 H665 | +80-MC.2M1 | G | Male cable jack | . 52 |
| 42 H 085 | +80-PC2F | N | Female chassis receptacle | . 60 |
| 42 H666 | +80-PC2M | N | Male chassis receptacle | . 60 | S dirt and dust. Chain has eye for securing to panel. Userl with both



## SERIES 91 MINIATURE CABLE CONNECTORS

Compact connectors for shieided or unshlelded cables. Polarized contacts prevent incorrect insertion. For cables up to $1 / 4^{\circ}$ dia. Last letter In Type No. indicates: L, long ( $13 \mathrm{~B}^{\circ}$ ); S. short ( ${ }^{3} / \mathrm{He}^{*}$ ). Last fis in Type No denotes contacts. PCG-chassis type. Figs. T and X are female types; Fig. W, male types. Av are femate 2 oz.


SERIES 143 PRINTED CIRCUIT CONNECTORS
Precision connectors for printed circuit networks. Printed circult board acts as maie part of connector. Molded of diallyl phthalate di : electric; has gold plated constact. Accept.061 to .071" printen circult boards. Polarizing Dimirromilio tey. Av.

| Stock No. | Type | Contacts | NET | Stock No. | Type | Contacts | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $41 \mathrm{H090}$ | 143-006-01 | 6 | 1.53 | 40 H 501 | 143-018-01 | 18 | 1.63 |
| 40H 503 | 143-010-01 | 10 | 1.05 | 40 H 502 | 143-022-01 | 22 | 1.83 |
| 42 H 675 40 H | $143-012-01$ $143-015-01$ | 12 | .88 | 42 H 676 | 143-953 |  | . 02 |

SERIES 133 PRINTED CIRCUIT PLUGS
Matching pluss for standard 143 series printed circuit connectors above. Have molded diallyl phthalate dielectric body, cadmium-plated brass guide pins, and cadmum-plated end caps
 ing. Rusged contacts are not subject to damaze

Eurnollahlant by mating or unmating at an angle. Average voltage rating, 2300 volts rms at sea level; current rating meets or suipasses any printed circuit board requirement. Av. shps. wt., 2 oz.

nections free from noise. leaks or shorta. Note: Type 75-MC1F (Fig. A) fits all Knight PA Amplifiers. When splicing 2 cords, use one 75-MCLE and one $75-\mathrm{MC} \mathrm{C} M$ connector for a st rong. reliable joint.

## SERIES 91-3 AND 4-CONTACT TYPES

Microphone connectors for portable equipment. Polarized to prevent incorrect insertion. Clamps eliminate stress on soldered connections. *3-contact type. +4-contact type. Shps. wt., 3 oz.

| Stock No. | Type | Fig. | Description | NET |
| :---: | :---: | :---: | :---: | :---: |
| 41 H 970 | *91-MC3F | - | Female cable jack | . 84 |
| 42 H 667 | *91-MC3F1 | k | Female cable plug | . 92 |
| 41 H 971 | *91-MC3M | K | Mate cable plus | .888 |
| 42 H668 | *91-MC3MI | J | Male cable jack |  |
| 41 H 972 | F | N | Female chansin receptacle | 2 |
| 42 H669 | *91-PC3M | N | Male chassis receptacie | . 82 |
| 41 H 977 | $\pm 91-\mathrm{MC} 4 \mathrm{~F}$ | $k$ | Fermale cable jack |  |
| 42 H 670 | 191-MC4F1 | K | Female cable plug | . 98 |
| 41 H 976 | +91-MC4M | K | Maie cable plus |  |
| 42 H 672 | 91-MC4M1 |  | Male cable jack |  |
| 41 H 978 | 91-PC4F | N | Female chassis receptacle | 74 |
| 42 H673 | +91-PC4M | N | Male chasals receptacle | 2 |

Type 91-CCC3 Cap and Chain. Protects chassis jacks from dust. 42 H 674. NET

## SERIES 91 "QUIK" 3 AND 4-CONTACT TYPES

Push tokether; released by slight pressure on lock button. Gold-plated Push tokether, released silver) bronze contacts. Incorrect insertlons are impossible because connectors tact type. $\dagger 4$-contact type. Av. shpg. wt., 3 oz

| Stock No. | Typo | Flg. | Description | NET |
| :---: | :---: | :---: | :---: | :---: |
| 42 H 065 | *91-853 | L | Male cable plus | 1.34 |
| 42 H 066 | -91-854 | M | Female cable plug | 1.54 |
| 42 H 067 | *91.855 | R | Male chassis recentacle | 1.00 |
| 42 H 068 | *91-856 | p | Female chassis receptacle | 2.23 |
| 42 H069 | +91-8.57 | L | Male cable ulug | 1.42 |
| 42 H 070 | +91-858 | M | Fernale cable plug | 1.96 |
| 42 H 071 | $+91-859$ $+91-860$ | R | Male chassis receptacie Female chinsis receptacle | 1.04 2.29 |



Sories 318 NC Coaxial Connectors. Small weatherproof connector with bayonet coupling. Low-voltage, single contact. For 50 -ohm $R G-$ $55 / \mathrm{U}$ and RG-58/U cables, tFor $70-0 h m \mathrm{RG}-59 / \mathrm{U}, \mathrm{FG}-62 / \mathrm{U}$ and RG. 71 /U. Plugs mate with $31-003$ or jacks. Av. wt.. 3 oz .

| Stock No. |  | $\begin{aligned} & \text { Mri's } \\ & \text { Tyoo } \end{aligned}$ | Fig. | Description | NETEACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Military |  |  |  | 1.9 | 10-49 |
| 40 H 391 | UG-88/U | 31-002* | Y | Plus | 1.11 |  |
| 40 H 393 | UG-89/U | 31-005* |  | Jack | 1.20 | 0 |
| 40 H 396 | UG-260/U | $\begin{aligned} & 31 \cdot 012+ \\ & 31-015 t \end{aligned}$ | Y | Plug | 1.18 |  |
| 40 H 397 | UG-261/U | $\frac{31-015 t}{2}$ |  | Jack | 1.24 | 1.0 |
| 40 H 395 | UG-262 U | 31-0119 |  | Panel Jack |  |  |
| $\begin{array}{r}40 H 392 \\ 40 \\ \hline\end{array}$ | UG-290/U UG $291 / \mathrm{U}$ | 31-003* |  | Receptacle Panel Jach | $\begin{aligned} & 1.02 \\ & 1.27 \end{aligned}$ | .85 1.05 |
| Series 82 N Coaxial Connectors. Low-voltage. 50 ohms; 70 ohms. Av. shpg, wt., 3 oz. |  |  |  |  |  |  |
| 40 H 313 | UG-21B/U | [82-6] |  | Plur for RG/U 8, 9, 10 | 1.91 | 1.5 |
| 40 H 520 | UG-27A/U | 88.64 |  | Right-Angle Adapter | 3.46 | 2.8 |
| 40 H 312 | UG-58/U | $82.23^{*}$ | 2 | Receptacle | 1.22 | 1.0 |
| 40 H 519 | UG 107a/u | 182 -36 |  | T Adapter | 5.55 | 4.6 |

Series 83 UHF Coaxlal Connectors. Small single contact. Widely used for RF applications. All exposed metal silver plated. Wt., 3 oz .

| 40 H 357 | $\begin{aligned} & \text { UG-106/U, } \\ & M-360,49193 \end{aligned}$ | 83-1H | AA | $\begin{aligned} & \text { For RG/U8,9, } 10, \\ & 11,12,13,63,65 \end{aligned}$ | . 27 | 22 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 40 H 356 | UG-363/U. PL-274 | 83-1F |  | Feed-Through Connector | 1.98 | 1.65 |
| 40 H 354 | M-358, 49199 | 83.11 |  | "T"Adapter | 2.64 | 2.20 |
| 40 H 355 | PL-258. 49191 | 83-11 | 8B | Straight Adapler | 1.15 | .96 |
| 40 H 350 | PL-259, 49190 | 83-1SP | CC | $\begin{gathered} \text { For } \mathrm{RG} / \mathrm{U}, 9,9,10,11 \text {. } \\ 12,13,63,65 \end{gathered}$ | . 73 | . 61 |
| 40H 352 | S0-239, 49194 | 83-1R | DD | Receptacle Chassis Type | . 75 | . 63 |

Soldepless Type UHF Plug Connectors.
40 H 509
40 H 510

| $83-850$ | EE | Plug for RG/U 11 | 1.38 |
| :--- | :--- | :--- | :--- |
| 83.851 | 1.15 |  |  |


| $83-851$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 83 | EE | $\begin{array}{c}\text { Plug for RG/U 8, } \\ \text { Plug } 12,12,13,63,65 \\ 11,12,13,63,65\end{array}$ | 1.20 | 1.00 |

Allied stocks the complete line of Amphenal connectors; many ore not listed in this cotalog. Write, wire, or phone us for information.'

## Cannon, Switchcraft, and Lab-Tronics Connectors

CANNON PLUGS AND RECEPTACLES


## TYPE XLR CONNECTORS

Audio connectors with clamp and resilient socket insulator. Minimize mechanical interference and reduce noise. Feature satín-nickel finish, integral cable clamp. neoprene cable relief and push-action latchlock. First number in type column indicates number of contacts. - 2 G in Type No. indicates 2 gang. Available with three 15 -ampere contacts, or four 10-ampere contacts. Wall-type receptacles; tpanel-type receptacles. IIndicates steel shell, others are die-cast zinc. Av. shpg. wt., 4 oz .

STRAIGHT CORD PLUGS

| Stock No | Mir's Type | Fig. | Description | NET |
| :---: | :---: | :---: | :---: | :---: |
| 40 H 790 | XLR-3-11C | A | Female (socket insert) | 1.29 |
| 41 H 212 |  | A | Female (socket insert) | 1.64 |
| 40 <br> 40 <br> 40 | XLR-3-11SC | A | Female (socket insert) | 3.49 |
| 40 H 791 | XLR-3-12C | B | Male (pin insert) |  |
| 41 H 213 | XLR-4-12C | B | Male (pin insert) | 1.20 |
| 40 H 985 | XLR-3-12SC | B | Male (pin insert) | 2.68 |
| 40 H 986 | XLR-4-12SC | B | Male (pin insert) | 2.87 |

## WALL AND PANEL RECEPTACLES

| $\begin{aligned} & 4! \\ & 4! \\ & 4! \\ & 4! \end{aligned}$ | $\begin{array}{llll} \hline H & 2 & 4 \\ H & 2 & 15 \\ H & 2 & 6 \\ H & 2 & 17 \\ \hline \end{array}$ | $\begin{aligned} & \text { XLR-3-13t } \\ & \text { XLR } L \text {-13 } \\ & \text { XLR } R-13 N \\ & \times L R-4-13 N \end{aligned}$ | C C D D | Female (socket insert) Female (socket insert) Female (socket Insert) Female (socket insert) | $\begin{array}{r} 1.85 \\ 1.93 \\ 2.14 \\ 2.20 \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 41 41 41 4 | $\begin{array}{lll} \mathbf{H} & 218 \\ \mathbf{H} & 21 \\ H & 19 \\ \mathbf{H} & 223 \end{array}$ |  | $\begin{aligned} & \mathbf{E} \\ & \text { E } \\ & \text { F } \\ & \mathbf{F} \\ & \hline \end{aligned}$ | Male (pin insert) <br> Male (pln insert) <br> Male (pin insert) <br> Male (pin insert) | .83 1.87 1.87 1.87 |
| 40 41 41 41 | $\begin{aligned} & \hline \mathbf{H} 792 \\ & \mathbf{H} 225 \\ & \mathbf{H} 793 \\ & \mathbf{H} 226 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { XLR-3.31 } \\ & \text { XLR-431 } \\ & \text { XLR-32 } \\ & \text { XIR-4-32 } \\ & \hline \end{aligned}$ | G $\mathbf{G}$ $\mathbf{H}$ $\mathbf{H}$ | Female (socket insert) Female (socket insert) <br> Male (pin insert) <br> Male (pin insert) | 1.93 1.99 1.10 1.22 |
| $\begin{aligned} & 40 \\ & 40 \\ & \hline \end{aligned}$ | $\begin{array}{ll} \text { H } 987 \\ H & 988 \end{array}$ | $\begin{aligned} & \text { XLR-3-35** } \\ & \text { XLR-3.35-2G* } \end{aligned}$ | k | Female (socket insert) Female (socket insert) | $\begin{array}{r} 4.03 \\ 7.42 \\ \hline \end{array}$ |


| 40 | H 948 | XLR-3-15 |  |
| :--- | :--- | :--- | :--- |
| 40 | H 949 | XLR | $4-15$ | $90^{\circ}$ plugs

L Female (socket insert)

## IYPE P CONNECTORS

3-contact receptacles and cable connectors for audio circuits. For any size wires up to No. 10.30 amp capacity per contact. Black phenolic insulation. *inc with satin-chrome finish. tSteel shells and zinc cable clamp. \{P3-13 with satin-chrome brass plate.



| 40 | H 701 | P3-CG |
| :--- | :--- | :--- | :--- |
| 40 | H 709 | P3. 358 |

M Panel mount, female (socket)
N Cable mount, male (pin)
R Cable plug. female (socket)
R Cable plug, male (pin)
P
3.68
2.19
4.16

## SWITCHCRAFT MINIATURE MIKE CONNECTORS

"Mini-Con" connectors for use with singleconductor cable up to $3 / 10^{\circ}$ in diameter (singleconductor and a shicid). Ideal for lapel microphones. musical instruments. etc.lialf the size of standard mike connectors.
Body and ring are nickel-plated brass. $5501 \%$ Body and ring are nickel-plated brass. 55011 can be soldered to spring; the spring is then clamped into borly by hollow point set screw. Panel receptacle 5501 MP mounts in $3 / 4{ }^{4}$ dia.
hole; for insulated mounting. use Insulating washers and $1 / 4^{2}$ dia. mounting hole, Av. shpg. wt., 2 oz .
T Type $5501 F$. Straight connector with single contact, female type 41 H 947 ....ng. Bright nickel-plated brass.
W Type 5601 M . Straight connector, single contact, male type W) 41 H 948 .
. Straight connector, single contact, male ty pe.
[X Type 6501 MP . Panel connector with male type single contact.


## SWITCHCRAFT ADAPTER-CONNECTORS



For quick and easy adapta. tion of jack and connectors of one type to fit other type
of connections on recorders of connections on recorders, amplifiers, tuners, multiplex units, etc. All have low-capacity effect to ininimize
loss of high frequencies in ass of high frequencies in audio applications. Av.
shpg. wh.. 6 oz .

| tock No. | Type | Fig. | Descripelon | NET |
| :---: | :---: | :---: | :---: | :---: |
| 41 H 460 | 343 | Y | Phono jack input: phone plug output. Bulltin limiting resistor for cord. | 5 |
| 40 H 382 | 3452 | $Z$ | Phone plug out; pliono jack in. | .73 |
| 41 H 768 | 332A | AA | 2 -cond. phone jack input to female or male mike output; main body $1 / 2^{\prime \prime}$. | 1.03 |
| $41 H 769$ $41 H 657$ | 334 A 44 | BB | Phono jack Input to lemale microplione connector ourput. <br> Adapts Amphenol Type 75 -MClF or | .73 |
| 41 H657 | 44 | CC | Adapts Amphenol Type 75-MClF or 75-MC1F-A connectors for use with standard $1 / 4$ " phone jacks. | . 29 |
| $41 H 773$ | 338 A | DD | Phono plug to male mike connector. | . 58 |
| 40 H 940 | 364 | EE | 2-cond. "tini-jack" Input; standard phone plug out. | . 85 |
| 4) H 774 | 349A | FF | Phono plug coupler mates with phono plug at each end; gray plastic. | 58 |
| 41 H779 | 369 | GG | Sid. 2 -cond. phone plug to 2 -cond short extension lack (used on late models Revere and Wollensak recorders). | 1.18 |
| 40 H 938 | 361 | HH | 2-cond, phone jack coupler mates with phone plug at each end. | 1.32 |
| $41 H 772$ $41 H 649$ | 336 A 346 | JJ KK | 2-conductor phone jack input to phono plug output; main body $1 / 2^{*}$ | 85 26 |
| $\begin{aligned} & 41 \text { H } 649 \\ & 40 \text { H } 939 \end{aligned}$ | $\begin{aligned} & 346 \\ & 340 \end{aligned}$ | KK LL | Tip jack imput to phome plug output. 2 standard phone jack inputs connected in parallel to 2 -cond. phone plug output. | 1.26 2.20 |
| 41 H983 | 330 | M M | Flexible Y-connector; 2 phono jacks to std. phono plug. Shielded. $4^{*}$. | 8 |
| 41 H984 | 330 F 2 |  | Same as above, but phono plug and |  |
| 41 H 9 | 330 F |  | phono jack to phono plug. | 1.18 |
| 41 H | 330 F |  | Same as above two types. but 1 phono plug to two phono plugs. | 1.18 |
| 41 H 764 | 330 F | NN | 2 phono jacks connected in parallel to |  |
| 41 H 994 |  |  | - | 1.03 |
|  |  |  | standard 2 -cond. phone plug. |  |
| 41 H 229 | 330 PJ | RR | $Y$-adapter; standard phone plug to 2 phono jacks. |  |

## NEW SWITCHCR AFT HANDY ADAPTER KIT

Type 331 A . Save time, eliminate poor connections and soldering jobs. Kit conaudio adapters and one interconnecting cable, in a handy compartmented plastic box. Includes one each of Types 25 AF 25 . $25 \mathrm{Y} .330 \mathrm{FI}, 332 \mathrm{~A} .334 \mathrm{~A}$. 336A, 336B. 345 A , and two each of 44 and 349 A . Slupg. wt.. 1 lb.
58 H 808.

NET 8.82


## LAB-TRONICS JACK ADAPTERS, CONNECTORS



Type C 400 allows rapid connection of two lines with pin plug ends. P55A allows connection of standard pin plug to phone jack. MP is pin plug with mike connector. Av. shpg. wt., 4 oz .

| Stack No. | Type | Fig. | Description | NET |
| :---: | :---: | :---: | :---: | :---: |
| 91 H 582 | A754 | SS | 2 Phono Pin Jacks; Phono Pin Plug | 1.18 |
| 94 H 458 | C400 | TT | Double-ended Phono Pin Jack | . 59 |
| 71 H 289 | P55A | WWV | Phono Pin Jack; Phone Plug | . 73 |
| 89 H 991 | A750 | XX | Phone Jack; Phono Pin Plug | 1.03 |
| 89 H 992 | A 75.3 | YY | Plono Jack; Phono Pin Jack | 1.03 |

## Connector Cables, Connectors, Plugs



# Switchcraft, G-C Plugs and Jacks 



## "LITTEL-PLUG" PHONE PLUGS

Small-size phone plugs; fit standard $1 / 4^{*}$ phone Jacks. except *Types S250 and S280, 206" sleeve for S-11 "Littel Jax" and for Bell and Howell epuipment; tType R280 which has short sleeve for Revere recorders. Pluss with solder terminals feature bullt-in cable clamp; others do not Handles are clamp. Metal (shielded) handles are nickel-plated brass. Handles are $11 / 1 s^{\prime \prime}$ long; $1 / 2^{"}$ dia. Av. shpg. wt.. 4 oz .


## STANDARD PHONE PLUGS

Standard-size $1 / 4 " .2$-and 3 -conductor type phone plugs to fit all standard acks. Metal (shielded), red or black molded bakelte handes; $2 \mathrm{yb}^{\circ}$ long. " diameter, except " 1 " long. Type 170 is similar to 70 , but has 2 -plece handle with cable clamp for $1 / 4^{\prime \prime}$ cable. No. 190 A is simitar to 90 , but has same handle as 170 . Av. shpg. we.. 5 oz .

| stock No. | $\begin{aligned} & \text { Myr's } \\ & \text { Typo } \end{aligned}$ | Fig. | Cond. | Hande Color | Terminals | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 $H$ 557 <br> 4 $H$ 447 <br> 41 $H$ 58 <br> 41 $H$ 559 | $\begin{aligned} & 40 \\ & 45 \\ & 60 \\ & 70 \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathbf{A} \\ & \mathbf{A} \\ & \mathbf{A} \\ & \mathbf{B} \end{aligned}$ | $\begin{array}{r} 2 \\ 2 \\ 3 \\ 2 \\ \hline \end{array}$ | $\begin{aligned} & \text { Black } \\ & \text { Red } \\ & \text { Black } \\ & \text { Meta } \end{aligned}$ | Screw Screw Solder Screw | .44 .44 .72 .71 |
| 41 $H$ 560 <br> 41 $H$ 561 <br> 41 $H$ 52 <br> 41 $H$ 563 | $90^{*}$ $160^{*}$ 170 190 A | $\begin{aligned} & \mathrm{E} \\ & \mathbf{E} \\ & \mathbf{C} \\ & \mathbf{C} \end{aligned}$ | $\begin{aligned} & 3 \\ & 2 \\ & 2 \\ & 3 \end{aligned}$ | Metal <br> Metal <br> Metal <br> Metal | Solder <br> Screw <br> Screw Solder | $\begin{array}{r} .76 \\ .93 \\ .97 \\ \hline \end{array}$ |

"LUG-PLUG" PHONE PLUGS
Low-cost, two-conductor. phone pluks. All fit $1 /$ he $^{*}$ Jacks except. *fits S-11 Littel-Jax. Have solder terminals. Exterior parts brisht nickel plated. Red or black handles are $15 / /^{\circ}$ long, $1 / 2^{\prime \prime}$ diameter. Types 380 and 385


| Stock No. | Mfr's Type | Figure | Color | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 4 $H$ 564 <br> 41 $H$ 565 <br> 4 $H$ 566 <br> 4 $H$ 448 | $\begin{aligned} & 350 \\ & 355 \\ & 380 \\ & \mathbf{3 8 5} \end{aligned}$ | $\begin{aligned} & \mathbf{A} \\ & \mathbf{A} \\ & \mathbf{D} \\ & \mathbf{D} \end{aligned}$ | $\begin{aligned} & \text { Black } \\ & \text { Red } \\ & \text { Metal } \\ & \text { Metal } \end{aligned}$ | $\begin{aligned} & .32 \\ & .32 \\ & .41 \\ & .59 \end{aligned}$ |

## FLAT PHONE PLUGS

$1 / 4^{*}$ phone plugs featuring flat. space-saving handles. Ideal for applications where conventional plugs would protrude too far and Interfere Fivith operation of equipment. prevent installation in tight quarters. etc. shielded steel handle. bright nickel plated. All have screw terminals. shielded Types 228 and 238 which have solder jug terminals. Types 220 and -225 wisl accept standard phone tips. Type $\$ 230$ is commercial version of SMilitary Type $P \int-068$ (Switcheraft No. 480 ) plus; has $206^{*}$ diameter sleeve and tip. Terminals and body are mechanically interiocked. Av.
shpg. wt. 4 oz .

| $\begin{gathered} \text { Stock } \\ \text { No. } \end{gathered}$ | $\begin{aligned} & \text { Mir's } \\ & \text { Type } \end{aligned}$ | Fig. | Conductors | Handle Color | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 41 H 621 \\ & 41 H \text { H } 57 \\ & 42 H 968 \end{aligned}$ | $\begin{aligned} & 220 \\ & 225 \\ & 228 \end{aligned}$ | $\begin{aligned} & \mathbf{G} \\ & \mathbf{G} \\ & \mathbf{F} \end{aligned}$ | $\begin{aligned} & 2 \\ & 2 \\ & 2 \end{aligned}$ | Black Red Metal | $\begin{aligned} & .53 \\ & .53 \\ & .56 \end{aligned}$ |
| $41 H 568$ $41 H 569$ $42 H 969$ $42 H 970$ | $\begin{array}{r} 230 \\ 235 \\ 238 \\ \mathbf{S} 230 \end{array}$ |  | $\begin{aligned} & 3 \\ & 3 \\ & 3 \end{aligned}$ | Black <br> Red <br> Metal <br> Black | .76 .76 .82 1.03 |

## G-C ELECTROCRAFT PLUGS AND JACK




> "LITTEL-JAX" PHONE JACKS

K Take standard $x^{*}$ photie plugs, except "S-11, which takes S250. K S280 and 385 plugs, and ${ }^{\circ} \mathrm{C}-12 \mathrm{~B}$ which takes 480 Military-type "Littel-Plug" $1 /{ }^{\circ}$ " dia., 11 " overall, with a 3 " dla. threaded shank. long. L-11 and L-12A have bushing $3 / 0^{\circ}$ long. SCC indicates single elosed circuit: OC indicates open circuit. Av. shpg. wt., 3 oz.

| Sto | ck | NO. | Type | Diag. | Cond. | Circuit | JANType | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 41 | H | 622 | 11 | 1 | 2 | OC |  | . 24 |
| 41 | H | 623 | C-11 | ! | 2 | OC | JJ-034 | . 35 |
| 41 | H | 479 | C-11. | I | 2 | $\mathrm{OC}^{\mathrm{O}}$ |  | . 29 |
| $\begin{aligned} & 4 i \\ & 41 \end{aligned}$ | H H | 607 | $\mathrm{S}-11$ | $\begin{aligned} & 1 \\ & 11 \end{aligned}$ | $\frac{2}{2}$ | $\stackrel{O C}{\mathrm{SCC}}$ |  | .26 .26 |
| 41 | H | 631 | C-12A | 11 | 2 | SCC | JJ-089 |  |
| 41 | H | 469 | L-12 | II | 2 | SCC | JJ089 | . 32 |
| 41 | H | 632 |  | [11 | 3 | OC |  | . 32 |
| 41 | H H | 633 634 | C-12B** | IV | 3 | $\stackrel{\mathrm{OC}}{\mathrm{SC}}$ | JJ-033 | .41 |

## "TINI-JAX" SUB-MINIATURE PHONE JACKS

[] Extra-small 2 -conductor jacks for "Tini-Plugs". "M Iong; fit $1 /$ " $^{\text {" }}$ $L$ hole. OC, open circuit; CC, closed circuit. Av. shopg. wt.. 2 oz . | 41 | $H$ | 516 | 41 | 1 | 2 | OC | $\ldots \ldots$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 41 | $H$ | 517 | $42 A$ | 11 | 2 | CC | $\ldots$ |

(M) Type 125 "Tini-Extension Jax." Two-conductor; solder lug terminals. Mates with "Tinl-Plugs." below. Wit.. 2 oz .
41 H 472 . NET
"TINI-PLUGS" SUB-MINIATURE PHONE PLUGS

| Stack No. | Type | Fig. | Ter. | Handle | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{llll} 41 & H & 518 \\ 41 & H & 519 \\ 41 & H & 520 \\ \hline \end{array}$ | $\begin{array}{r} 740 \\ 745 \\ 750 \end{array}$ | $\begin{aligned} & \mathbf{N} \\ & \mathbf{N} \\ & \mathbf{N} \\ & \hline \end{aligned}$ | Screw Screw Solde | $\begin{aligned} & \text { Black } \\ & \text { Red } \\ & \text { Black } \end{aligned}$ | .44 <br> .44 |
| $\begin{array}{ll} 41 & H \\ 421 \\ 41 & 522 \\ 41 & 523 \\ \hline \end{array}$ | $\begin{aligned} & 755 \\ & 770 \\ & 780 \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathbf{N} \\ & \mathbf{p} \\ & \mathbf{p} \end{aligned}$ | Solder Screw Solder | Red Shielded Shielded | .41 .62 .59 |

## "EXTENSION JAX" CABLE EXTENSION JACKS



| Stoek No. | Type | Fio. | Cond. | Ter. | Handio | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 41 $H$ 571 <br> 41 $H 18$  <br> 41 $H$ 572 | $\begin{array}{r} 80 \\ 88 \\ 120 \end{array}$ | $\begin{aligned} & \mathbf{S} \\ & \mathbf{S} \end{aligned}$ | $\begin{aligned} & 2 \\ & \frac{2}{2} \\ & 2 \end{aligned}$ | Screw Solder Screw | Black <br> Black <br> Shielded | .68 .59 .91 |
| 41 H 473 <br> 41 H 474 <br> 42 H 971 <br> 41 H 717 | $\begin{array}{r} 121 \\ 131 \\ 830 \\ 1230 \end{array}$ | $\begin{aligned} & \mathrm{R} \\ & \mathrm{R} \\ & \mathrm{~S} \end{aligned}$ | $2$ | Solder <br> Solder <br> Screw | $\begin{aligned} & \text { Shlelded } \\ & \text { Slielded } \\ & \text { Black } \\ & \text { Shielded } \end{aligned}$ | $\begin{aligned} & .94 \\ & 1.18 \\ & .91 \\ & 1.15 \end{aligned}$ |

## ULTRA-MINIATURIZED PLUGS AND JACK


W. TR Sertes "Micro-Plugs." Handy. wame uniformity, dependability featuring ity coniformity. dependability and qualand construction as famous "Littel-Pluys" and "Tini-Pluge." Microscopic size, only ard plugs it Have nylon insulation between tip and sleeve circults; sleeve terminal is tinned brass. Tip and sleeve are nickel plated machined brass. All have sleeve circuit cable clamp; accoinmodate cables to handle. Shps, wt., 2 oz . 42 H 554. Type 850. Black Handle. NET 42 H 555. Type 855. Red Handle. NET 42 H 556. Type 880. Natural Handle. NET X TR-2A "Micro-Jax." For "Micro-Plugs." 2 cond. sgl. closed circuit


## THICK-PANEL PHONE JACKS



Have extra long bushings for use in panels up to $11 / a^{"}$ thick. Ideal for wall paneling, hi-fi in-
stallations. etc. Shielded for microphone use. Require $1 / 2$ mounting hole. Wt., 2 oz.
42 H 558. Type 151, 2 Conductor. NET
42 H 559. Type 152B. 3 Canductor. NET
JACK SCHEMATIC DIAGRAMS


# Plugs, Jacks, Test Prods, Binding Posts 

## G-C ELECTROCRAFT TEST PRODS, CONNECTORS AND BINDING POSTS



## TEST PRODS AND CONNECTORS

E Type 33-404 Soldorless Test Prod. Threaded prod with 5 long E plastic handle, $3 / 8^{\circ}$ outer diameter. Nickel-plated phone tip. Wire fits through handie and body of plug. wraps around screw portion-secured by knurled collar. Shpg. wt., 402 .
42 H 110 . Red. 42 Hill. Black. NETEACH .29
B Extremely small "Midget" and "Infant" type jacks for limitedB) space applications. All take thone plugs. Midget type jacks require only $1^{\prime \prime}$ " mounting space behind panel; "Infant" type requires only $7 / \mathrm{m}^{\circ}$ behind panel. Cadmium-plated steel frames with nickel-plated brass shank. springs. and mountlng hardware. \% threaded shank for mounting in panels up to $1 /{ }^{\prime \prime}$ thick. Folumn headed "Cond. indicates Aumber of conductorg in mating plug. All are "Midget" type
Infant" type jack. ( $\dagger$ Not illustrated). Av. shpg. wt., 2 oz.

| Stock No. | $\begin{aligned} & \text { Mir's } \\ & \text { Typo } \end{aligned}$ | * Cond. | Clircuit | Dlagram | $\begin{gathered} \text { NET } \\ E A C H \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $41 \mathrm{HO50}$ | +A.1 | 2 | Open | I | 39 |
| $41 \mathrm{HO51}$ | A-2 | 2 | Shorting | VII | 48 |
| 41 H 053 | A-2A | 2 | C. Closed | 111 | . 57 |
| 41 H 056 | A-3A | 2 | Chosed-Transfer 1 | V111 | . 66 |

lONG-FRAME STANDARD PHONE JACKS


Industrial-type, long-frame jacks offering a varicty of switch combinations. All take standard, 4 phone plugs. Tybes Nos. 1, $2,2 \mathrm{~A}$. and 5 (Ftg. C) are 3 hil $4 x^{\circ}$ wide. Mount in pancls up to thich by means of $3 / 0^{\prime \prime}$ diameter threaded shank, XP typeg (Fig. D) are $31 / 2 x^{5 / 32}$ screw and nut *olumn headed "Cond. "indlcates number of conductors screw and nut. Commn heardicates switching arranvement (shown in in mating plug. TDiagram inelicates

| Stock No. | $\begin{aligned} & \text { Mir's } \\ & \text { Type } \end{aligned}$ | * Cond. | Cireult | + Diagram | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 34 H 440 | 1 | 2 | Open | I | . 45 |
| 34 H 441 | 2 | 2 | Shorting | VII | . 57 |
| 34 H 442 | ${ }_{5}^{2} \mathrm{~A}$ | $\frac{2}{2}$ | Clomed <br> Closed \& Transfer | $11$ | $\begin{aligned} & .57 \\ & .90 \end{aligned}$ |
| 41 H 055 |  |  | Open |  |  |
| $34 H 445$ $41 H 644$ | $\begin{aligned} & X P_{1}^{1} \\ & X P_{2} \end{aligned}$ | 2 | Open | 11 | . 63 |
| 34 H 446 | $\times \mathrm{X} 3 \mathrm{~B}$ | 2 | Transter | VIII | . 90 |

JACK SCHEMATIC DIAGRAMS


## SUPERIOR BINDING POSTS

Five-way binding post offers complete insulation. Current capacity. 30 amperes; working voltage. 1000 volts. Take spade lugs, banana plugs (have jack in top). clip leads, and up to No. 12 wire. All current-carrying inetal parts are gold-plated for long Ite, resistance to corrosion. stable electrical contact and faster soldering. Insulated with nylon plastic; metal components are recessed. Mount in $1 / 2^{*}$ holes in panels ho to $1 / s^{*}$ thick. With hexagonal thumb nut. Shps. wt., 4 oz .

| Stock No. | Typo | Color | $\left\lvert\, \begin{gathered} \text { NET } \\ \text { EACH } \end{gathered}\right.$ | Stock No. | Typo | or | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \hline 4 \mid H: 72 \\ & 41 H \\ & 4 \end{aligned}$ | $\begin{aligned} & \text { DF } 30 \text { YC } \\ & \text { DF } 30 \mathrm{GNC} \\ & \text { DF } 30 \mathrm{WTC} \end{aligned}$ | Yellow Green White | 4 | $\begin{array}{\|l\|l\|l\|l\|} \hline 4 & 1 & H & 77 \\ 4 & 1 & H & 7 \\ 4 & 1 & H & 9 \\ \hline \end{array}$ | DF30BC DF30RC DF30BLC | $\begin{aligned} & \hline \text { Black } \\ & \text { Red } \\ & \text { Blue } \end{aligned}$ | 40 |

## GENERAL RADIO dOUbLE PLUG

Type 274-MB. Dual plug for standard banana jacks. On $1 / 4$ " centers. Also accepts phone tips or wire to No. 12. Jacks in top permit use of units in tandein. 15 ampere rating. Body
41 Hize


## G-C ELECTROCRAFT DUAL BANANA PLUG

 Has polarity indlcated on top and side for teasy identilicaion. Can be stacked for multiple connectlons. Body size, $11 / 5 \times 1 / 2$. Shpg. wt.. 3 oz.

E Type 33-376 Solderless Fiber Test Prod. Has $4^{\prime \prime}$ bone fiber Body ls nickel-plated braws wire fits through handle and body of wire. Body ls nickel-plated brass. Wire fits through handle and body of plug, wraps around screw portion. Secured by knurled collar. Wit., 4 oz. 29
F Type 33-384 Phono Needle Test Prod. Brass, nickel-plated body F with steel, nickel-plated phono-type needle. Has removable chuck for replacing broken needies. Needle plerces plating or corrosion to insure positive readings. Molded plastic handle, overali length $6^{\circ}$ long, $3 / 3^{\circ}$ outer diameter. Sipg. Wh.. 3 oz.
42 H 373. Red. 42 H 374. Type 33-386. Hlack. EACH
G Type 33-378 Heavy-Duty Test Prod. Threaded type with extraG nturdy brass. nickel-plated tip. Molded plastic handle, overall length 63 " long. $1 / 6$ outer dia. Fits standard phone tip jacks. 3 oz
42 H 375 . Red 42 H 376 Black. NETEACH

H Type 33-138 Self-Gripplng Tips. Clip to any terminal, lug, etc. H Needle points for piercing insulation. Solderless connection inside 42 H 27 I. 33-138. Red. 42 H 272. 33-140. Black. NET EACH.... 37 (H) Type 33-160 Mini-Prod Adapter Tips. Fit over standard test H) points or phono needle types. Convert to self-gripping types with insert supplied. Shpg. wt. 2 oz .
$50 \mathrm{H} 159.33-160$. Red. 50 H
J) Connectors. Molded-plastic angle phonc tips for test leads. Solder 50 H 725 , $33-132$. Red. 50 H $736.33-134$. Hlack. NET EACH.... 41


K Type 33-276. Dual binding post assembly with metal heads. Accepts K single or dual banana plugs. wire and phone tips either forward or sideways. Mounts in two holes on inounting centers in panels from $1 /$ up to $1 / 4$ thick. Body: brass, nickel-plated, Head: Captive type, around solder studs. Has $3 / 6 \times 11 / 8$ rounded black base. Includes 4 hex nuts. 2 flat washers. Shpg. wt., 4 oz . 59 41 H 326 . NET59

Type 33-286. Five-way metal binding post. Accepte banana plugg L phone tip, spade lug, alligator clip or wire strand. Mounts in 171 hole in panels from $1 / 6$ "to $1 /{ }^{*}$ thick. Body: brass. nickel-plated. Head: captive, hex brasa nickel-plated. Has wrap-around solder stud With 2 mounting nuts. Shpy, wt., 3 oz .
(M Type 33-288. Dual 5-way binding post assembly with black. insulatM ed fluted heads. Accepts single or dual banana plugs. Mounts in two $3 / 3^{*}$ holes on $1 / 4$ mounting centers in panels up to $/ 4$ thick. Has solder stud. 41 H 328 . NET $1 / \mathrm{base}$. Hody: brass, nickel-plated. With 4 meg.nuts. 4 oz. 53
(M) Type 33-290. Similar to Type 33-288. above, but has black hex-grip Insulated heads. Shps. wi. 4 oz .
41 H 324. Type 33-292. As above, with 1-black. 1-red head. NET. 65 Mulil-Purpose Posts. Rated $2000 v .030 \mathrm{amps}$. Captive heads. Length shown is total closed. For panels $1 / 16=1 / 4$ "thick. "Locking edge. ABananaolug jack in head; also accepts phone tip. lug. etc. FGrounding types. $\frac{1}{8}$ Take solder connection to stud. Av. shpg. wt. 2 oz.

| Stock No. | Type | Fig. | Mounting | Length | Color | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 41 H 368 | 33-272* ${ }^{\text {\% }}$ | N | $1 /{ }^{*}$ | 115/ | Red | 35 |
| 41 H 367 | 33-274* ${ }^{\text {¢ }}$ | N | $1 / 2$ | 1156 | Black | . 35 |
| 41 H 330 | 33-256tt | P | 1164 | 11 | Red | . 18 |
| 41 H335 | 33-2584 | P | 11/4" | 11\%. | Black | . 18 |
| 41 H388 | 33-264* | R | 196. | $13 / 8{ }^{1 /}$ | Red | . 26 |
| 41 H389 | 33-266* $\dagger$ | R | 56" | 13160 | Black | 26 |
| 41 H 394 | 33-294R ${ }^{\text {3 }}$ | S | 11/4* | $1 \%$ \% | Red | 25 |
| $41 H 395$ | 33-294B \% $^{\text {3 }}$ | S | 16 | $1{ }^{16}$ | Black | 25 |
| 41 H 397 | 33-296§ | S | 236 | $1 \%$ \% | Red | 25 |
| $41 H 398$ | 3,3-2968 | S | $21 /$ | 1\% | Black | . 25 |

Type 33-284, Brasm, for leavy-duty ume. $21 / 30$ long. His" mountimg hole. Shps. wt 2 oz.
H 37 1. 1-9, NET EACH

# G-C Electrocraft Plugs and Jacks 

# didnutbd blifiv- <br>  <br> insulated tip plugs <br>  

## A

 Type 33-110 Heavy Duty Phone Tip Plug. Molded plated brass construction. $21 / \mathrm{B}^{\circ}$ long Shpas. We.. 3 oz.41 H 536. Aed $\begin{aligned} & \text { Black } \\ & 41 \\ & 4 \\ & \text { HET EACH }\end{aligned}$ H 538 . Yellow

NET EACH
I5c
41 H $540^{\circ}$ Bluo
.... 138
10.49. EACH

134
$i d e r-$
(B) Type 33-106"senior"Solder-

B Iesp Phone Tio Plug. Knurled nut tightens against wire making soldering unnecessary. Plug is nickel-nlated brass; ha
bakelite. $2 \times \pi{ }^{2 / n}$ long. Wt., 3 oz .

H1 H 255. Black NETEACH
 15c 10-49, EACH. 15c.13c G Type33-144" Junior"SolderC less Phone Tip Plug. Has same tizhtening assembly as Type
$33-106$ above. Plastic handle; nlekel-plated brass. $1 \%$ long. 3 oz . 41 H 542 . Red
41 H 543. Black 4 I-9. ${ }^{1}$ 41 H 545. Green 41 H 546 . Blue
10.49, EACH 15c
Dubminiature phone Tlp. (0) $1 / /^{\prime \prime} \mathrm{O} . \mathrm{D}$. bone fiber handle. Nickel-plated brass body. 147/4 overall length. 2 oz

|  | No. | Type | Color |
| :---: | :---: | :---: | :---: |
| 41 | H 547 | 33-112 | Red |
| 41 | H 548 | 33-114 | Black |

## 1-9, NET EACH <br> 10-49, EACH

Type 33-116. For standard tip jacks. $11 /$ long 3 oz
 10-49, EACH

Short Phone Tip Plug. rion to insulated handle. Nickel-plated brass body. $11 / 2$ long. Shpg. wt. 3 oz .

| No. |  | Type | Color |
| :--- | :--- | :--- | :--- |
| 4 | H 575 | $33-118$ | Red |
| 4 | H 576 | $33-120$ | Black |
| 4 | H 577 | $33-118$ | Yellow |
| 4 | $H$ | 578 | $33-118$ |
| 4 | $H$ | G79 | $33-118$ |

1.9 , NET EACH
10.49 , EACH

12 c

## NON-INSULATED TIP PLUGS <br> Type33-146"Seniop"'Solder. less Phone Tlp Plug. Has knurled tut for fastening wire. 41 H 240 . 1-9, NETEACH.IOC <br> Type33-142" Junior"Solder less Phone Tip PIUg. less Phone Tip PIug. As above, but $13 / 16$ Jong. 2 oz. 230.1 . 1 , NET EACH. 0-49. EACH <br> Type $33-158$ Heavy-Duty Cord Tip. Fits standard phone tip jacks, 1 long 2 az. 3C 10.49, EACH. Type 33-166 Siandard Cord K Tip. For test panels, head- 

## MOLDED METER PLUGS

(S)
S) Four-leafed phosphor bronze spring i nickel-plated. Tip is 15 , long. Shpg. wt.. 2 oz .

| No. |  | Type | Color |
| :--- | :--- | :--- | :--- |
| 41 | H 467 | $33-046$ |  |
| 41 | H 468 | $33-048$ | Red <br> Black |

1-9, NET EACH $\qquad$ 35 c
(1) Meter Tip Piug. Molded in $\square$ two halves for easy assembly with screw and nut. Nickel-plated
tip is $1 / 2$ long. Shpg. wt. 2 oz tip is $1 / 2$ long. Shpg. wt.. 2 oz .

| No. | Type | Color |
| :--- | :--- | :--- |
| 41 H 203 | $33-128$ <br> $33-130$ | Red |
| 41 Black |  |  |

1-9. NET EACH
$26 c$
10-49, EACH
$.24 e$

## BANANA PLUGS

(L) Insulated, Spring Tip. 4 Molded Bakelite handle. Wire can be soldered to brass stud which is supplied, or directly into


| No. |  | Typo | Color |
| :--- | :--- | :--- | :--- |
| 41 | H 593 | $33-000$ | Red |
| 41 | H 594 | $33-002$ | Black |
| 41 | H 595 | $33-000$ | Yellow |
| 41 | H 596 | $33-000$ | Green |
| 41 | H 597 | $33-000$ | Blue |

## $1-9$, NET EACH 10.49 , EACH <br> 10.49, EACH

$21 c$
195
(M) Insulated, Split Tip. Nickelcan be soldered ofted tip. Wire which is supplied. $11 / 0^{\circ} 20 \mathrm{~s}$ stud

| No. |  |  |  |
| :---: | :--- | :--- | :--- |
| 4 | Type | Color |  |
| 4 | H 428 | $33-012$ | Red |
| 4 | H 067 | $33-014$ | Black |
| 4 | H 068 | $33-012$ | Yellow |
| 4 | H 069 | $33-012$ | Green |

1-9, NET EACH
18 c
N Type 33-028 Insulated,
Nickel-plate Tip. Plastic handle Nickel-plated tip. Fits all standard banana jacks. Four leafed spring provides lasting contact. Lensth,
$2_{4 i}{ }^{\circ} \mathrm{Hhg} 407$. Red ${ }^{2}$ oz.

10-49, EACH.
Insulated, Spring Tip. Solderless; has set screw in plasLic handle. Nickel-plated tip. $\frac{\text { Leneth. } 111 / \mathrm{K}^{\prime} \text {. Shpe. wit., } 2 \text { oz. }}{\text { No. }}$

| No. |  | Type | Color |
| :--- | :--- | :--- | :--- |
| 41 | H | 405 | $33-006$ |
| 4 | Red |  |  |
| 41 | H | 410 | $33-008$ |
| $4 i$ | H | Black |  |
| 41 | 302 | $33-006$ | Yellow |
| 41 | H 403 | $33-006$ | Green |
| 41 | H 404 | $33-006$ | Blue |

## 1-9. NET EACH

R Insulated, Split Tip. SolderR1/ss ${ }^{2}$. Shasg. wet screw in handle. 2 oz .

| No. |  | Type | Color |
| :--- | :--- | :--- | :--- |
| 41 | H 425 | $33-018$ | Red |
| 4 | H 430 | $33-020$ | Black |
| 4 | H 412 | $33-018$ | Yellow |
| 4 | H 413 | $33-018$ | Green |
| 4 | H 414 | $33-018$ | Blue |

1-9, NET EACH
10-49, EACH.... $\qquad$ 18 c

## BANANA PLUGS

W Type 33-032 Insulated brasping Tip. Nickel-plated brass tip. Wire can be soldered to bl ${ }^{4}$ stud supplied. $111 / 6^{\circ}$. 2 oz 41 H 462 . Red
41 H 464. Yellow NET EACH 41 H 465. Green NET EAC
$18 c$ 10-49, EACH.....
$\qquad$
X Type 33-034 All-Meral, Spring Tip. Has solder lug Four-leafed apring. Nickel-plated 411 H $400.1=9$, NETEACH.ISC 10.49, EACH

Y Type 33-062 All-Metal, internal threads permit use on al
 10-49, EACH
(2) Type 33-064 All-Metal.
2) Spring Tip. Nlckel-plated. one-plece construction. $6-32 \times 3 / 8$ 41 H $489.1-9$, NETEACH.15C 10-49, EACH

## TIP JACKS

AA Mintature Nylon Tip Jacks. copper contact. Fits in beryllium mounts in panels up io $1 / 4$ hoie mounts in panels up to $1 / 4$ thick.

|  | No. | Type | Color |
| :---: | :---: | :---: | :---: |
| 41 | H 495 | 33-242 | Red |
| 41 | H496 | 33-240 | Blac |
|  | H 497 | 33-240 | Yellow |
|  | H 498 | 33-240 | Green |
| 41 | H 499 | 33-240 | Blu |
| 1-9, NET EACH ...........26C 10.49, EACH |  |  |  |

BB Nylon Tip Jack. Completely Bronze contact. $11 / 16 \times 1 / 2$. 2 oz.
or

|  | No. | Type | Color |
| :---: | :---: | :---: | :---: |
| 41 | HOI2 | 33-216 | Red |
| 4 | $\mathrm{H} O 13$ $\mathrm{H} O 14$ | 33-218 | Black |
| 4 | H O O 14 | 33-216 | Yellow |
|  | HOIS $\mathrm{H} O 16$ | $33-216$ <br> $33-216$ |  |

1-9, NET EACH
$18 c$
CC Insulated TIp Jack. Body
CC is nickel-plated brass. Jack mounts in "/6" hole in panels up to

|  | No. | Type | Color |
| :---: | :---: | :---: | :---: |
| 41 | H 110 | 33-210 | Red |
|  | H 115 | 33-212 | Blac |
|  | H 432 | 33-210 | Yellow |
| 41 | H 433 | 33-210 | Green |
| 41 | H 434 | 33-210 | Blue |

1-9, NET EACH.
$13 c$


## TIP JACK

EE Type 33-226 Non-Insu. lated Tip Jack. $1 /{ }^{*} \mathrm{mtg}$ hole; $3 / 0$ max. panel thickness. 41 H 1000.19 , NETEACH. IOc 10-49, EACH

## BANANA JACKS

FF With solder Banana Jack. FF With solder lug and removable insulated top. Requires \$16" hole for Panels up to $1 / \mathbf{y}^{\prime \prime}$ thick
$21 / \mathrm{y}^{2}$ long. Shig. wt. 2 oz .

|  | No. | Type | Color |
| :---: | :---: | :---: | :---: |
| 41 | H 475 | 33- | Red |
| 41 | H 480 | 33-182 | Black |
| 41 | H 422 | 33-180 | el |
| 41 | H 423 | 33-180 |  |
| 41 | H 424 | 33-180 |  |

## 1-9, NET EACH

13c GG Insulated Banana Jack. GG Has molded plastic head; Fits $5 / 6^{\circ}$ mounting hole; for $3 /{ }^{\circ}$ max. panel thickness. 2 oz.

|  | No. | Type | ol |
| :---: | :---: | :---: | :---: |
| 41 | H033 | 33-186 | Red |
| 41 | H034 | 33-186 | Blac |
| 41 | H 035 | 33-186 | Yello |
| 41 | H 036 | 33-186 | Green |
| 41 | H 037 | 33-186 | Blue |

1-9, NET EACH
10-49, EACH
15 c
HH Type 33-220 Insulated Bahead and insulating washer. Sut mtg, hole; $11 /{ }^{\prime \prime}$ max. 2 oz 41 H 042 . Red

$4)^{4}$ H 043 . Black Ye ${ }^{1-9}$ Ellow NET | 4 |  |
| :--- | :--- |
| 4 |  |
| 4 | H O45. Green |
| 46 . Blue |  | 10.49, EACH

JJ Tape 33-184 Non-Insuinned lug. $1 / 4^{*} \mathrm{mtg}$. hole; $\$^{\prime \prime}$ max H 047 . $1-9$, NET EACH.IOC 10.49, EAC' KK Type 33-192 Non-Insu: 41 H 470 . $1-9$, NET EACH.ICIC 10-49, EACH

## COMBINATION JACK

\section*{LL Insulated Combination} standard phone tio or banana plugs. Nickel-plated brass boly Mouss. Nickel-plated brass body; hick. Length. 11 k ; panels to 1 | No. Typo | Color |
| :---: | :---: | :---: |


|  | No. | туре | Color |
| :---: | :---: | :---: | :---: |
| 41 | H 130 | 33-194 | Red |
| 41 | H 135 | 33-196 | Black |
| 41 | H 137 | 33-194 | Yellow |
| 41 | H138 | 33-194 | Green |
| 41 | H 143 | 33-194 | Blue |

1-9. NET EACH 16 c 10.49, EACH

## INSULATED SPADE LUG

MM Banana Plug To Spade allows insertion of banana plug. $145^{\circ}$ long. $3 / 8^{\circ}$ O.D. 2 oz .

| No. | Type | Celar |
| :---: | :---: | :---: |
| 4  <br> 4 H 048 | $33-300$ |  |

1-9, NET EACM
1-9; NET EAC
$10-49$, EACH.
${ }_{10} \mathrm{ll}$

# Cinch-Jones Strips, Terminals, Plugs, Sockets 



SERIES 170 TERMINAL STRIPS
Have extra-heavy double-notched solder terminals. Ideal for industrlal users. labs, etc. Molder bakelite $3 / 3^{\circ}$ centers. $3160^{*}$ wide, $1 / 4^{\circ}$ thick. Terminals are mounted on $1 /{ }^{3}$ cerminals. Terminals are $.032^{\circ}$ brass, tin plated. Av. shpg. we.. 5 oz .

Stock No. Type Torm. NET Stock No. Type Torm. NET | Stock No. |
| :--- |
| 40 H 990 |
| 40 M 91 |

40 H 991
40 H 992
40 H 993


## SERIES 2000 TERMINAL STRIPS

Terminals are made of $.019^{*}$ brass, tin-plated. and spaced on 1 centers. Molded bakelite insulation. Mounting brackets are made of cadmium-plated steel. Mounting holes at eac end of bracket. Av. ahpge. Wt., 2 oz.
Stock $\mid$ Mir's Teook Mr's Torm Meg. NET


## CABLE CLAMPS

Cable clamps for fanning strips above. Made of nickel-plated brass. with $6-32$ round head screws. Serve as strain relief and anchor cable securely. Sizes shown are I.D. Shps. Wt.. 2 oz.


## SERIES 101 PLUG AND SOCKET

 cond. Cadmilum-plated brass: prong, con-

tacts, silver-plated. Slipg. wt., 4 oz .
Stock No. |Type| Description NET Stack No. Type Description NET


SERIES 202 PLUGS AND SOCKETS
Cadmium-plated brass plugs and sockets. Type P-202-CCT is polarized. K nurled nut. Tyme S-202-B

 thread. TYPe PR hase rable clamp


FANNING STRIPS
For neat. dependable terminal wiring. Insure nositive connectons. simplify assembly and disassembly. Last letter in lype indicates risht or left mounting hole prass. Av, shps. wit., 3 oz .


Serles 160. Fit Series 140 barrier terminals below. Terminals are mount. ed on $312^{\circ}$ bakelite. $15_{2}^{\circ}$ wide and on $\mathrm{K}^{\circ}$ centers.

| Stock No. | Type | Term. | NET | Stook No. 1 | Type | Term. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 41 H 808 | 2-160L | 2 | . 10 | 40 H 956 | 2-160R | 2 | . 10 |
| 41 H 809 | 3-160L | 3 | . 16 | 40 H 957 | 3-160R |  | 6 |
| 41 H812 | 4-160L | 4 | . 21 | 40 H 958 | 4-160R | 4 |  |
| 41 H813 | 5-160L | 5 | . 26 | 40 H 959 | 5-160R | 5 |  |
| 41 H814 | 6-160L | 8 | . 32 | 40 H 960 | 6-160R | 8 | . 32 |
| 41 H817 | 8-160L | 0 | . 42 | 40 H 961 | (8-160R | 8 | . 52 |
| 41 H 818 | 10-160L | 10 | . 52 | 40 H 962 40 | 12-160R | 12 | . 63 |

Series 161. Fit Series 141 barrier terminals below. Terminals aremount-

Sorles 162. Fit Series 142 barrier terminals below. Terminals are mounted on $33^{\circ}$ bakelite. $\%$ " wide and on "你 centers.


## BARRIER TERMINAL STRIPS

Barriers between each terminal provide increased insulation. Excellent for industrial and experimental applications. Barriers follow edke of strips and terminate at base. Make a long leakage path and prevent direct shorts caused by frayed wires at the terminals. Base is molded bakelite, with mounting holes at ends. Eyelets and binder screws of nickel-plated brass; terminals of hot tin-finish brass. Barrier-type terminals and fanning strips. when used together. insure positive contact and , binder firm connections. No. 140 terminal strips have $5-40 x^{2} /$ in $^{-1}$ binder head screws. $1 / 4$ metai-to-metal spacing. No. 141 types have $6-32 \pi 1 / 8$ bindef head screws. $1^{\circ}$ metal-to-metal spacins. No. 142 types have $8-32 x$ binder head screws. $\% 8^{\circ}$ metal-to-metal spacing. Av. shps. We., $3 / 2^{\circ}$ wide Series 140. Metal-to-metal spacing over bakenning strips
$x 3 / 2=$ high. $1 / s^{\prime \prime}$ centers. Use with Series 160 fanning

| Stook No. | $\begin{aligned} & \text { Mrr's } \\ & \text { Type } \end{aligned}$ | Torm. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ | Stook No. | $\begin{aligned} & \text { Mrr's } \\ & \text { Typc } \end{aligned}$ | Term. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 41 H 580 | 1-140 | 1 | . 11 | 41 H806 | 12-140 | 12 | 4 |
| 41 H 800 | 2-140 | 2 | . 18 | 41 H 584 | 13-140 | 13 |  |
| 41 H801 | 3-140 | 3 | . 24 | 41 H 485 | $14-140$ $15-140$ | 15 | $\begin{array}{r}.98 \\ \hline 1.05\end{array}$ |
| 41 H 803 | 4.140 <br> $5-140$ | 4 | .31 |  | 15-140 | 16 | 1.11 |
| 4) $41 \begin{aligned} & \text { 4 } 802\end{aligned}$ |  |  | . 44 | 41 H588 | 17-140 | 17 | 1.17 |
| $4{ }^{4} \mathbf{4} \mathrm{H} 581$ | 7-140 |  | . 51 | 41 H589 | 18-140 | 18 | 1.24 |
| $4{ }^{4} 1 \mathrm{H} 804$ | $8-140$ | 8 | . 57 | 41 H 590 | 19-140 | 19 | 1.31 |
| 41 H 582 | 9-140 |  | .64 | 41 41 41 $H$ | $20-140$ $21-140$ | 21 | 1.38 |
|  | $10-140$ $11-140$ | 11 |  |  | 21.140 |  |  |

Serlos 141. Metal-tometal spacing over bakelite 3 " Base $14 \mathbf{H}^{\prime \prime}$ wide $x$ Serlos high. $1 /$ /" centers. Use with Series 161 fanning strips.


Serlos 142. Metal-tometal spacing over bakelite "/n". Base 1 "/4" wide $x$ K" hikh. "/fo centers. Use with Series 162 fanning strips.


## ADAPTER SOLDER TERMINALS

Adapt barrier strips (listed above) to permit top-side or underside solder connections. Type 4 W permits top-side soldering to barrier terminals; ype is for underside older connections. Made of brass, hot-tin uniser binder positive solder connections. $\mathbf{3} \mathbf{~ o z t e n}$. setarely wader binder

| TYPE $3 / 4 \mathrm{~W}$ |  |  |  | TVPE Y |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Stock No. | $\begin{aligned} & \text { Mrr's } \\ & \text { Tyop } \end{aligned}$ | $\begin{aligned} & \text { For } \\ & \text { Serles } \end{aligned}$ | $\left\|\begin{array}{c\|c\|} \text { NET } \end{array}\right\|$ | Stock No. | $\begin{aligned} & \text { Mif's } \\ & \text { Typo } \end{aligned}$ | For Serlos | NET |
| 22 H 640 | $3 / 6 W-140$ | 140 | . 03 | 22 H 269 | Y-140 | 140 | . 02 |
| 22 H641 | W/W-141 | 141 | . 04 | 22 22 22 H 270 | Y-141 | 141 | . 03 |

## Vaco, Thomas and Betts, A-MP Solderless Terminals-Tools



## VACO SOLDERLESS TERMINALS

Terminals form a perfect electrical connection. Of copper alloy for maximum conductivity and minimum voltage drop. *Included in 2195 kit. below. $\dagger 1 / 4^{\prime \prime}$ male tab. FFemale tab socket. $\ddagger 1 / 4^{\prime \prime}$ angle male tab. \& Angle female tab socket. **1/4 male tab
on one end; takes Fig. C $5 / 12^{\prime \prime}$ snap terminal on other end. It Female tab socket on one end; takes Fig. C $5 / 3 z^{\prime \prime}$ snap terminal on other. Av. shpg. wt., 8 oz. per package. Pocked 100 terminals to a package. Smaller lots listed at bottom of extreme right-hand column.


## VACO service kit

MODEt 2195. Handy kit contains $\$ 5.00$ worth of solderless terminals in assorted sizes, in addition to Type 1900 crimpercutter tool described at right. Wide selection lets you make almost any type of lug connection used in radio or TV work. Terminals with * in listing above, are included in kit. Clear plastic case. $8 \frac{3}{4} \times 6 \times 13 / 4$ ". Shpg. wt.. 2 lbs. 44 H 427.

## NET 8.77

## A-MP crimping tools and solderless terminals


$\underset{\mathrm{Kit}}{\text { Terminal }}$ Kit

TERMINAL KIT. Contains assortment of most popular types of solderless terminals for general wiring applications plus, the heavyduty "Super Champ" crimping and wiring tool described below. Terminals and tool come in one handy, compact. transparent plastic case with compartments. Ideal for radio-TV and electrical servicemen, etc. Eliminates soldering-saves time and labor. For all wire sizes from 10 to 22 , and mostoften used stud sizes. Dimension of case $91 / 2 \times 61 / 2 \times 2^{\prime \prime}$. Shpg. wt., 2 lbs.
45 H 322.
NET 19.95
"SUPER CHAMP" CRIMPING TOOL TYPE 47100.1. Crimps insulated solderless terminals; shears machine screvs. measures stud sizes, cuts and strips wire. Of tool steel; has insulated plastic handles. Wt.. 1 lb . 45 H 321 .

NET 4.95
TYPE 49835.1. Same as above, but for crimping non-insulated terminals. 44 H 453 .

GENERAL WIRING TERMINAIS. *Insulated terminals-plastic outer sleeves. Wire size, 14 to 16. except $\dagger 16$ to 22. U.L. Approved. Shpg. wt., 8 oz . per pkg. 100 per pockoge.

| Stock No. | FIg. | Mfr's <br> No. | pe | $\begin{aligned} & \text { Stud } \\ & \text { Size } \end{aligned}$ | $\begin{aligned} & \text { PEA } \\ & \text { PKG. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 45 H 301 | R | 34149* | Ring | 8-10 | 6.25 |
| 45 H 302 | R | 34142* ${ }^{\text {3 }}$ + | Ring | 4-6 | 6.25 |
| 45 H 304 | R | 34158** | Butt |  | 7.50 6.25 |
| 45 H 305 | R | 34161* | Ring | 10 | 6.25 |
| 45 H 306 | S | 34165** | Spade | 4-6 | 6.25 |
| 45 H 307 | S | $34167 *$ | Spade | $8-10$ | 6.25 |
| 45 H 308 |  | $34071 *$ | Butt |  | 7.50 |
| 45 H 310 | A | 34154** | Spade |  | 6.25 |
| 45 H 311 | A | $34194 \dagger$ | Ring | $4-6$ | 3.91 |
| 45 H 312 | T | $31818 \dagger$ | Butt |  | 4.66 |
| 45 H 313 | A | 34197 | Ring | 4-6 | 4.46 |
| 45 H 314 | A | 33217 | Ring | $8-10$ | 3.91 |
| 45 H 315 | - | 33477 | Spade | 4-6 | 4.99 |
| 45 H 316 | 8 | 33219 | Spade | 8-10 | 4.99 |
| 45 H 317 | W | ${ }^{317624}$ | Knife |  | 10.11 |
| 45 H 318 | W | 31763 | Knife |  | 10.1 |
| 45 H 319 | C | 34846 | Plug |  | 2.25 |
| 45 H 320 |  | 36840* | Recep |  | 6.96 |

## THOMAS AND BETTS TERMINALS

Barrel for staking conductor has ring or spade tongue. Allied can supply any of these terminals (including types not listed below) in 5000 lots. Write for prices. Insulation grip. $\dagger$ Self-insulated, with insulation grip. Insulated connectors. $\ddagger$ Disconnects. Av. wt., 7 oz, per pkg. Packed 100 to o package.

| Stock No. | Fig | Mifris No. | $\begin{aligned} & \text { Wira } \\ & \text { Slze } \end{aligned}$ | Stud 51ze |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 43 H 756 \\ & 43 H H 757 \\ & 43 H 758 \end{aligned}$ | $\begin{aligned} & \mathbf{A} \\ & \mathbf{A} \end{aligned}$ | A18-6 <br> A18-10 <br> B14-6 | $\begin{aligned} & 22-18 \\ & 22-18 \\ & 20-14 \end{aligned}$ | $\begin{array}{r} 6 \\ 10 \\ 6 \end{array}$ | 3.75 |
| $\begin{aligned} & 43 H 759 \\ & 43 H 760 \\ & 43 H 761 \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathbf{A} \\ & \mathbf{A} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { B14-8 } \\ & \text { B14-10 } \\ & \text { B14-14 } \end{aligned}$ | $\begin{aligned} & 20-14 \\ & 20-14 \\ & 20-14 \end{aligned}$ | $\begin{array}{r} 8 \\ 10 \\ 114 \end{array}$ | . 75 |
| $\begin{aligned} & 43 H 762 \\ & 43 H 763 \\ & 43 H 764 \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \\ & \mathbf{A} \\ & \hline \end{aligned}$ | $\begin{aligned} & C 10-6 \\ & C 10-10 \\ & \text { C } 10-14 \end{aligned}$ | $\begin{aligned} & 16.10 \\ & 16-10 \\ & 16-10 \end{aligned}$ | $\begin{array}{r} 6 \\ 10 \\ 1 / 4 \\ \hline \end{array}$ | 20 |
| $43 H 765$ $43 H 766$ 43 H 767 | $\begin{aligned} & \mathbf{N} \\ & \mathbf{B} \end{aligned}$ | $\begin{aligned} & \mathrm{B14-6G} \\ & \text { B14-10G } \\ & \text { A18-6F } \\ & \hline \end{aligned}$ | $\begin{aligned} & 16-14 \\ & 16-14 \\ & 22-18 \end{aligned}$ | $\begin{array}{r} 6 \\ 10 \\ \hline \end{array}$ |  |
| 43 H 768 <br> 43 H 769 <br> 43 <br> 43 | $\begin{aligned} & \hline \mathbf{B} \\ & \mathbf{P} \\ & \mathbf{P} \end{aligned}$ | $\begin{aligned} & \hline \text { B14-10F } \\ & \text { B14-6FG* } \\ & \text { B14-10FG } \\ & \hline \end{aligned}$ | $\begin{aligned} & 20-14 \\ & 16-14 \\ & 16-14 \end{aligned}$ | $\begin{aligned} & 10 \\ & 6 \\ & 10 \end{aligned}$ |  |
| $\begin{aligned} & 43 \mathrm{H} 771 \\ & 43 \mathrm{H} 772 \\ & 43 \mathrm{H} 773 \\ & 43 \mathrm{H} 774 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{R} \\ & \mathbf{R} \\ & \mathbf{R} \\ & \mathbf{R} \end{aligned}$ | RA18-6† RA18-10† RB14-6才 RB14-10 | $\begin{aligned} & 22-18 \\ & 22-18 \\ & 16-14 \\ & 16-14 \end{aligned}$ | $\begin{array}{r} 6 \\ 10 \\ 6 \\ 10 \end{array}$ | 7.20 |
| $43 H 775$ $43 H 776$ $43 H 777$ $43 H 778$ $43 H 779$ | $\begin{aligned} & \mathbf{S} \\ & \mathbf{S} \\ & \mathbf{S} \\ & \mathbf{S} \\ & \mathbf{S} \end{aligned}$ | $\begin{aligned} & \text { RA18-6Ft } \\ & \text { RA18-10Ft } \\ & \text { RB14-6F } \\ & \text { RB14-8F } \\ & \text { RB14-10Ft } \end{aligned}$ | $\begin{aligned} & 22-18 \\ & 22-18 \\ & 16-14 \\ & 16-14 \\ & 16-14 \end{aligned}$ | $\begin{array}{r} 6 \\ 10 \\ 6 \\ 8 \\ 10 \end{array}$ | 7.20 |
| $\begin{aligned} & 43 H 780 \\ & 43 H 781 \\ & 43 H 782 \\ & 43 H 783 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathbf{E} \\ & \mathbf{E} \\ & \mathbf{H} \\ & \mathbf{G} \end{aligned}$ | 2RA188 2RB14 B14-250F B14-250T | $\begin{aligned} & 22-18 \\ & 16-14 \\ & 20-14 \\ & 20-14 \end{aligned}$ |  | $\begin{aligned} & 6.88 \\ & 6.88 \\ & 4.80 \\ & 4.80 \end{aligned}$ |

## VACO crimping tools



MODEL 1906. Designed for insulated solderless terminals. Strips insulation from $\psi 22$ to $\$ 10$ AWG wire. Has 2 dies, steel jaws. With red plastic handles. Wt., 1 lb . 47 H 059.

NET 4.16
MODEL 1900. As above, except for non-insulated solderless terminals. With 3 crimping dies. Shpg. wt., 1 lb .
47 H 058.
NET 3.87

## VACO SOLDERLESS TERMINALS



ECONOMY PACK. Selection of popular types and sizes of Vaco terminals in quantities of less than 100. For general-purpose use, appliance repair. radio and TV servicing, repairing automotive electrical systems, etc. Provide reliable connections without soldering. Av. shpg. wt., per pkg., 3 oz.


# Alligator Clips, Terminal Strips, Lugs 



MESH TEETH TEST CLIPSFor general purpose use. ©Solid Copper A) Solid bronze. \&Cadmium-plated steel. inn-sulation-piercing needle. Av. shpg. we., ${ }^{\text {Soz }}$
Stock No.
45 H OOO
45 H005
45 H 010
45 H 078

## LEAD-PLATED BATTERY CLIPS

For moderately heavy current work inA cluding battery charging, electroplating. and light welding. Av. shpg. wt., 4 oz.

| Stock No. | Type | Amos | Descriotion | Size | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $45 \mathrm{HO21}$ | 24 A | 25 | Positive | 21. | . 23 |
| 45 HO 22 | 24 A | 25 | Plain | ${ }^{2} \%^{\circ}$ | . 23 |
| 45 HO 03 | 214 | 50 | Positive | $4^{\circ}$ | . 40 |
| $45 \mathrm{HO24}$ | $21 A$ | 50 | Plain | $4^{\circ}$ | . 40 |
| 45 H026 | 11 A | 100 | Positive | $6^{*}$ | 1.06 |
| 45 H 027 | 11a | 100 | Plain | $6^{\circ}$ | 1.06 |

## SOLID COPPER CLIPS

(A) Heavy-duty, hixh-conductivity, solld cop$11 \mathrm{C} .7 \mathrm{oz} . ; 33 \mathrm{C} .13 \mathrm{oz}$

| Stock No. | Type | Ambs | Descriotion | Size | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $45 \mathrm{H028}$ | 24 C | 50 | Positive | . | 38 |
| 45 H | 24 C | 50 | Prain | 2\%* | 8 |
| $45 \mathrm{HO31}$ | 21 C | 100 | Positive | 412. | .97 |
| 45 HO 32 | 21 C | 100 | Plain | ${ }^{4} 8^{\circ}$ | . 97 |
| 5 HO 03 | 11 C | 200 | Positiv | $6^{6}$ | 1.81 |
| 5 HO 04. | 11 C | 200 | Plain |  |  |
| $5 \mathrm{H050}$ | 33 C | 300 | Plain | 71/4 | 3.35 |

## NON.FERROUS RF TEST CLIP

B. Type 88. Phosphor bronze clip. brass screw. Ideal for colls. $111 / 6^{\prime \prime}$. Shpg. wt., per

## 3-SIDED MESH TEETH CLIPS

C Cadmium-plated steel; *solid copper. Jaws C. open $5 / 6^{\circ}$. Shpg. wt., per $100,31 / 4 \mathrm{lbs}$

Stock No. $|$| Typo | Amps |
| :---: | :---: |
| Size | NET |
| 27 |  |
| 10 |  |



## "MINI-GATOR" CLIPS


0 tip. ${ }^{\text {Cadmium-plated steel: *solid copper. }}$


## 70 SERIES ALIIGATOR CLIPS

(Eadmium-plated steel; *olid copper: fsolder connection; Iscrew connected. Wt.. per $100,1 \mathrm{lb}$.

| Stock No. | Type | Amps | Slue | NET |
| :---: | :---: | :---: | :---: | :---: |
| 45 H 170 | 705 | 5 | 111/0 | . 07 |
| 45 H 171 45 H 172 | 70 CS | 10 | 1110, | . 08 |

INSULATED BARREL ALLIGATOR CLIPS F Made of cadmium-plated steel. except "solF id copper. Jaws open S/6". Wt., per 100 , $11 / 2168$.


\section*{CROCODILE CLIPS} (G) Solld copper: §cadmium-plated stecl; copper: §cadmium-plated steel; 45 H $06013855^{21}{ }^{\circ}$ Screw Connection | $45 \mathrm{H} 062 * 85 \mathrm{C}$ | $2 \%$ | Screw Connection |
| :--- | :--- | :--- |
| 45 H 098 | .85 T | $2 \%$ |

## ALLIGATOR CLIPS

H Steel, except *Solid copper; $\dagger$ Solder type; H -screw type. Slim jaws for close work. aws open $5 / 6^{\circ}$, Wt., per 100.1 lb .


## INSULATED ALLIGATOR CLIPS

J Cadmium-plated steel; *solid copper type vailable in either red or black. Size, 21/3. Shag. wt., 3 oz.

| No | Type | Amps | Des |  |
| :---: | :---: | :---: | :---: | :---: |
| 45 | \$63 | 5 | R |  |
| 46 | 83 |  |  |  |
|  | 3 | 10 | Red |  |
|  | *33C | 10 | Black insulator |  |

## SLIP-ON INSULATORS FOR CLIPS

K
Tough, flexible vinyl plestic. High dielectric $K$ strength; resistant to oils and grease. Covers entire clip except or end of nose. Av. shps. red one black.

| Stock No. | Mfr's Typo | For Use With | NET PER PKG.OF 2 |
| :---: | :---: | :---: | :---: |
| 45 H 167 | 13 | Series 11 | 1.60 |
| 45 H 164 | 23 | Series 21 | . 80 |
| 45 H 163 | 26 | Series 24 | . 42 |
| 45 H 166 | 29 | Series 27 | . 26 |
| 45 H 144 | 32 | Series 30 | . 10 |
| 45 H 162 | 35 | Series 33 | 5.86 |
| 45 H 160 | 47 | Series 45 | . 12 |
| 45 H 161 | 49 | Series 48,50 | . 18 |
| 45 H 165 | 62 | Series 60 | .10 |
| 45 H 168 | 87 | Serics 85 | .12 |
| 45 H 169 | 93 | Series 88 | 24 |

## G-C ELECTROCRAFT ALLIGATOR CLIPS

Have plastic insulated handles. Types 33-33-332 are Fig. L; orhers are Fig. M. Clips are steel cad mium-plated. Springs maintain firm grip. Types 33-328 and 33326 are all-insulated to prevent shock or srounding. All accept sta. phone tip or banana plug except Type 33-326. banana plug Type 33-328 tipplug. Av. wt., 2 oz


CINCH-JONES TERMINAL STRIPS

| Stoek No. | Type | Terminals | NET |
| :---: | :---: | :---: | :---: |
| 22H644 | 51 |  | . 02 |
| 22 H645 | 52 |  |  |
| 22 H646 | 53 E | 3 | . 03 |
| 22H647 | 54 | 5 |  |
| 22H648 | 546 568 | 6 |  |
| X Scrow Typo. Solder coated mig. holes. $1 / 60^{*}$ thick. Av. wt.. 2 oz. |  |  |  |
| 22H649 | 17.2 | ${ }^{2}$ | . 06 |
| 22H650 | 17.3 | 3 | 9 |
| 51 | 17.4 |  |  |
| 52 | 17.5 |  |  |
| 22 H653 | 17.6 | 6 | . 18 |


[

## TERMINAL LUGS AND PIN PLUGS

Wt.. per pkg., 4 oz. 10 per pkg. Slock No. Fig. Description PER PKG $\overline{41 H 767} \overline{\text { CC }}$ Terminal lugs. .53 41 H77700 Black insulated pin-plug.

| 8. | .54 |
| :--- | :--- |

## MINIATURE TIE-POINTS

EE Bakelite strips handy for supEE porting parts in circuit wiring Tinned terminals on $1 / 16$ phenolic With ground lug. Ar'. shp


## HEAVY-DUTY STRIPS

FF Designed for heavy-duty use ff the terminal strips are constructed of $3 / 3^{\prime \prime}$ thick. black bakelite. Have cadmum plated screw forminals and tinned lugs. Idea for antenna-ground connection on receivers; speaker connections on recelvers; power supply re Bakalis, and similar applications. Bakelite base inting. Av shop $40 z$

| Stock No. | Terminals | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: |
|  1 <br> 4 $H 875$ <br> 4 $H$ <br> 4 $H 80$ <br> 4 $H 885$ <br> 4 $H 890$ | $\begin{aligned} & 2 \\ & \frac{3}{3} \\ & 4 \\ & 5 \end{aligned}$ | $\begin{aligned} & .20 \\ & .27 \\ & .33 \\ & .40 \end{aligned}$ |
| $\begin{aligned} & 41 \\ & 4 \\ & 4 \end{aligned} \mathrm{H} 89501 \mathrm{H} 8970$ | 6 7 8 | .45 .51 .58 |

# Amphenol Sockets and Shields 

POPULAR STANDARD SOCKETS


Type MIP. Bakelite body with molded-in A steel plate. *Require its hole; mounting centers, + Requires others have Mica-filed bakelite. Av. shpg. wt., 4 oz .

| Stock No. | Type | Prongs | NET |
| :---: | :---: | :---: | :---: |
| 40 H 024 | $77 \mathrm{M1P4}$ | 4 | . 14 |
| 40 HO 25 | $77 \mathrm{MIP5}$ | 5 | . 15 |
| 40 H 026 | $77 \mathrm{M1P6}$ | 6 | .18 |
| 40 H 027 | $77 \mathrm{M1P7S}$ | 7 Small | .19 |
| 40 H 029 | 77M1P7L $\dagger$ | 7 Large | . 19 |
| 40 H 028 | $77 \mathrm{M1P8}$ | Octal | . 16 |
| 40 H 126 | 88-8* | Octal | .17 |
| 40 H 030 | 88-8X* | Loctal | .22 |
| 40 H 034 | $77 \mathrm{MIP8T}$ | Octal | .19 |
| 40 H 032 | $77 \mathrm{M1P9}$ | 9 | . 18 |
| 40 H 033 | $77 \mathrm{MIP11}$ | 11 | .21 |
| 40 H 069 | $77 \mathrm{MLP12}$ | 12 | .21 |
| 40 H 070 | 77 MIP 20 | 20 | . 54 |

B
Type RS. Molded bakelite body with resize thable mounting plate. For mounting in centers from $11 / 2$ to 17 mounting holes to fit

| Stoek No. | Type | Prongs | NET |
| :---: | :---: | :---: | :---: |
| 40 H 004 | 78RS4 | 4 | . 18 |
| 40 H 005 | 78RS5 | 5 | .20 |
| 40 H 006 | $78 \mathrm{RS6}$ | 6 | .21 |
| 40 H 007 | 78RS7S | 7 Small | . 22 |
| 40 H 008 | $78 \mathrm{RS8}$ |  | . 20 |
| 40 H01O | $78 \mathrm{KS8L}$ | Loctal | . 27 |
| 40 HOL 2 | 7812S9 | 9 | .23 |
| 40 H 071 | 78RS11 | 11 | . 25 |

## MIP SOCKET KIT

Typo 77-3K. For makitig any Type MiP grommets. 2 mig. screws, nuts, washers. 1 oz socket (above) into floating socket. Includes: 4


O

C. Type RSS. Ultra-low-loss steatle replace C. ment sockets. Ruggedly constructed. Adapt able to a wide variety of uses. Excellent for use in high-frequency transmitting equipment. mounting plate with al ypei have removable Mounting hole $1 \mathrm{~K}{ }^{\circ}$ sotted holes ${ }^{2}{ }^{\circ}$ w requires $1^{11}{ }^{\prime \prime}$ Av ghog we 503 | requires ${ }^{1 \prime \prime} /^{4 \prime}$. Av. shpg. wt., 5 oz . |
| :--- |
| Stock No. Type | 40 H 074 40 H 075 40 H 076 40 H 077

40 H 079 49RS
49RS
$49 R S$
$49 R S$
$49 R S$
 40 H 078 49RSS7
75
7 Sma
7 Larg 7 Larg
Octal $\qquad$
(D) Typo S. High-dielectric molded bakelite (D) body. Units are the same as Type RS, but without mounting plate. Mount quickly and easily without screws or rivets on panel or chassis up to $.050^{\circ}$ thick with retainer ring supplied. Ruggedly built for trouble-free service. Socket may be positioned to line up contacts for convenlent wiring. Sockets in table below all require $11 / \mathrm{m}^{\prime \prime}$ mounting hole. Av slipg. Wh., 4 oz.

| Stock No. | Type | Prongs | NET |
| :---: | :---: | :---: | :---: |
| $40 \mathrm{HOS4}$ | 7854 | 4 | 3 |
| 40 H055 | 7855 | 5 | . 14 |
| 40 H 056 <br> 40 H 057 | $\begin{aligned} & 78 \mathrm{S6} \\ & 78 \mathrm{~S} 7 \mathrm{~S} \end{aligned}$ | 7 Small | +16 |
| 40 H 058 | 7858 | Octal |  |
| 40 H 062 | 7859 |  | . 18 |
| 40 H 060 | 7858 L | Loctal | . 22 |
| 40 H 072 | $78 \mathrm{S11}$ | 11 | . 20 |



ACS SOCKET SHELI
Type 23-15. Lightwelght aluminum shell for Type RSS. RS and S sockets at left (except Type 49RSS 7 L ). Permits extension of sockets ${ }^{13 / 18}$ " above or be. low chassis surface. Body dia., $11 / 16^{\circ} ; 23 / 6^{"}$ base Requires 13/6 mounting hole. Socket not aup plied. Shpg. Wt. 5 oz. .14

## HIGH-VOLTAGE OCTAL SOCKET



Type 146-101. Designed for maximum performance unde extremely high voltage condi resisting Molded of durable arc dates octal Mamine. Accommo to a diameter of $13 / \pi$ Finy size up to a diameter of $13 /{ }^{\prime \prime}$. For such etc. Requires $\mathbf{1 2 1 / 2 "}^{2 \prime}$ dia. hole with two "6" mtg holes on $21 / 3 z^{\prime \prime}$ centers. 4 oz . 80 H 088 NET.

HIGH-VOLTAGE 4-CONTACT SOCKET


Type146-812. Fourcontact, above chassis mounting plate type socket for high voltage applications. Quick heat dissipation is aided by Stee cadmitun plated mtg. plate ctrs. Requires $1^{11}$ 解 dia. mitg, hole $40 \mathrm{H} 089 . \mathrm{NET}$
2.27

## HIGH-VOLTA GE 4-CONTACT SAFETY SOCKET



Type 77A-4T. For 4-pin hi-voltage rectifiers and other types with base dia, hole on $17 /{ }^{\circ}$ centers. Socket is recessed in shell. 5 oz .
40 H 147. NET
.60

## TV TUBE SOCKET



Type 59-402. Standard duodecal socket for cathoderay tubes with 12 pins on ite cap to eliminate shock hazard. Wt. 5 oz . 86

BARRIER-TYPE OCTAL KELAY SOCKETS

Maximum ElA working voltage, 2000 DC. Bronze cloverleat removable contacts rated 8 ampy each. Inerelectrodecapacitance. 2.6 mmf . Includes 4 threaded aserts for use as tie points. Size: $63 / 6 \times 1^{15} / 16 x$ $25 / \%^{\circ}$. Mtg. centers, $111 / 6^{\circ}$. Shpg. wt. 8 oz .

| No. | Typo | Mount | NET |
| :---: | :---: | :---: | :---: |
| 40 H 180 | 146-103 | Top | 1.44 |
| 40 H 181 | 146-104** | Top | 1.76 |
| 40 H 080 | 146-203 | Bottom | 1.44 |
| 40 H 087 | 146-204* | Bottom | 1.76 |

## NEW II-CONTACT RELAY SOCKET <br>  <br> Type 146-817. For current relay requitements of 600 VRMS (ब) 10 antps. Suckettype replaceable contacts on,$\frac{1 / 4}{}$ circle. on $37 /{ }^{\circ}$ centers; 4 tie $\begin{array}{llll}\text { pts. } & 1 & \text { lb. } \\ 42 & \text { H } & 593 \ldots & 3.64\end{array}$

NEW 14-CONTACT RELAY SOCKET


Type 59-106. For standard 14 -contact relays and Amphenol hermetically sealed headers. Requires $3 / 4$ " hole with $1 / 4 \% \mathrm{mtg}$. holes on $11 /{ }^{\prime \prime}$ centers. Wt.. 402 40 H OOO. NET .37

NEW 20-CONTACT RELAY SOCKET
Tyfe 69-470. Relay socket with 20 heattreated beryllium
copper contacts and curret terminals. Recures 1 hole and on $1.400^{\circ}$ centers.
Shpg. wt.
40 HOOI. NET
K Type 168-015 Saddle Octal. Designed for K) below-chassis mounting. Sturdy steel plate is moided directly into bakelite boily-cannot cunte loose or vibrate. For ${ }^{1 "}$ bole; " /n $^{2}$ mounting hoies on 18 . NETEACH

## All-Purpose Sockets

## ELCO TRANSISTOR AND TUBE SOCKETS

## TRANSISTOR SOCKETS

Sub-miniature mica sockets eliminate loss and damage from direct soldering of transistor pins. For 3 -pin transistors with in-
line plas or 3 and 4 pin tranators with pins on $.200^{\circ}$ diam. circle of any configuration. $3073313+\mathrm{PC}$ mounting for only for 3304 3307. 3313 . 1 PC, mounting for printed circuits MR, mounting ring. Av, wt., 2 oz

| Stock No. | $\begin{aligned} & \text { Mris's } \\ & \text { Type } \end{aligned}$ | FIg. | †Mtg. | EACT |
| :---: | :---: | :---: | :---: | :---: |
| 41 H092 | 3301 | A | Saddle |  |
| 41 H 238 | 3303 3305 | A |  | . 27 |
| $41 H 094$ <br> 41 | 3305 <br> 3308 | A | $\begin{aligned} & \mathrm{PC} \\ & \mathrm{PC} \end{aligned}$ | . 30 |
| 41 H093 | 3304 | A | MR | 26 |
| 21 H 243 | 3307 | B | M R | . 26 |
| 41 H 249 | 3313 | C | M R | . 29 |
| 41 H 095 | 757 | * | MR | 03 |

## PRINTED CIRCUIT SOCKETS

Excellent selection of sub-minia cure, mica filled phenolic sockets or use on printed circuit boards or transistors and sub-miniature type tubes. All contacts gold flash ed. Av. shps. wt.. 2 oz.

 Stock No. | 4 | H 062 | 786 BC |
| :--- | :--- | :--- |
| 4 | H 063 | 805 BC |

$|$| Prongs |  |
| :---: | :---: |
| 3 | EACH |
| 4 | $: \frac{8}{8}$ |

## RETAINER MOUNT SOCKETS

n-line sockets of mica flled phe nolic. For transistors and subminiture tubes. Contacts are goid lashed. Rerguire retainers listed $A v$. shpg. ws 30


| Stock No. | Type | Prongs | EACH |
| :---: | :---: | :---: | :---: |
| $4!H 074$ | $799 B C$ | 3 | .16 |
| $4: H 080$ | $803 B C$ | 4 | .17 |

Retalner Ring For Above Sockets. Desikned or Elico Type 799 BC and 803 BC iransistor and miniature tube sock

NEW POMONA TEST SOCKET

## TUBE ADAPTERS

For measuring voltage. resistance, audio and circuits from bottom of chassis TVS-7. TVS-8. Thassis. feature extend ed teat tabs; low-loss mica-filled molded phenolic construction per MIL-M-14. Voltake breakdown elementsex-
 DC. Types 1447, 1449 respectively) are for use with tuners having captive or telescoping tube shields-shields or covers do not have to be removed. DC. Av. sh pg. wt., 5 oz.

| Stook No. | Type | Pln: | Description | CH |
| :---: | :---: | :---: | :---: | :---: |
| 40 HO 035 | TVS-7 | 7 | Miniature |  |
| 40 H | TVS-8 | 8 | Octal | 1 |
| 40 H 037 | TVS-9 | 9 | Miniature |  |
| 40 H 038 | 1447 | 7 | Miniature |  |
| 40 H039 | 1449 |  | Miniatur |  |

## JAMES MILLEN TUBE SOCKETS

| Recommended for UHF use. Higher steatite body gives longer leakage path between contacts. Mounting centers. $18 / 4$. Slipg. wt.. 4 oz. |  |  |  |
| :---: | :---: | :---: | :---: |
| Stock No. | Type | Prongs | EAC |
| 72 H 060 72 72 72061 72 | 33004 33005 33006 33008 | 4 5 8 8 | 60 |

## VECTOR TUBE ADAPTER TEST KIT

Type T-789. For making voltage. resistance and wave form measurements from tube side of 9 chases. Contalns $1-7$-pin. adapter-fit into tube shield bases. $1 / z^{\prime \prime}$ diam. holes for test 40 H 210 . NET.
5.78


## E. F. JOHNSON TUBE SOCKETS



(D) TypeType 122-105-100. 7-pin VHF steatite Dit lated aluminum shell. Shpg. wt.. 10 oz. 1.60
73 H 996 . NET......................
(E Type 122-244-1, 4-pin steatite for "super SC Umbo tubes. Takes 8008, BR6. SO2 RHSO7.SR50. SR53. SK60. FG105. Wt., $1 / 2$ (b) 73 H 997 . NET
E Type 122-276-1. Steatite socket for giants E pin base tubes. Takes 4125 A , $4-250 \mathrm{~A}$ RK28, RK48, $125 \mathrm{M}, 803$. Slipg. wt., 10 oz. 73 H 998. NET
2.30

F Type 122-101-100. 7-pin steatite with base F shield and retainer springs. For use with 4-65A, 826. 829. 832, etc. Shpg. wt.. $1 / 2$ 1b. 2.70 (G) Type 124-113-1. Capacitor-Mount. 1450 DC mmid mica screen by-pass. Tested 1000 V DC. For ${ }^{124-109}$ and $124-114$ sockets. 602
73 H 999 NET. (H) Type 124-114-1. Socket for 4X150A H 4 4pe $250 \mathrm{~B}, 7034,7035$, etc. Shpg, wt.. $1 / 2 \mathrm{lb}$
73 H 995 . NET................... 5.65

## VECTOR SOCKETS

## PLUG-IN UNITS

Consist of standard tube socket. tubular terminal post. octal plug and whield can. Can sizes: B10M and CiOM and CiON, $2,21 /$ square, $^{21 / 2}$ C10M and Cion, 2 squ.
Stock No. Type Description NET EA.
40 H 237 B10M 7 -pin Miniature $40 \mathrm{H} 238 \mathrm{B10N}$ 9-pin Noval
0 H 241 C10M 7 -pin Miniatu
SOCKET-TURRETS
Terminal structures for use in single or multi-stage sub-assemblies. Components mount on phenolic form. Turrets are $1 / 2^{2}$. diam. Octal units mount in 1 , hole; miniatures, $5 / 3^{\circ}$ hole. Av hpg. Wit., 3 oz

\%" Turret. Has 9 terminals in two ring spaced $13 \xi^{\circ}$ apart

| Stock No. |  |
| :--- | :--- |
| 40 H 211 | $\frac{\text { Type }}{10-0-9 \mathrm{~T}}\left\|\frac{\text { Socket }}{\text { Octal }}\right\| \frac{\text { NET }}{.63}$ | $2^{*}$ Turpets. 9 terminals in two rings. $1^{\prime \prime}$ apart | 40 | H | 212 | $8-0-9 \mathrm{~T}$ | Octal |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 40 | H | 17 | $8-\mathrm{M}-9 \mathrm{~T}$ | $7-\mathrm{Pin}$ |

 | 40 H 217 | 8-M-9T | 7-Pin Min. | .69 |
| :--- | :--- | :--- | :--- |
| 40 H 233 | $8-\mathrm{N}-9 \mathrm{~T}$ | 9-Pin Noval | .69 |

$11 /{ }^{\circ}$ " Turrets. Have 6 terminals in one ring. | 40 H 213 | $6-\mathrm{O}-6 \mathrm{~T}$ | Octal | .54 |
| :--- | :--- | :--- | :--- | :--- |
| 40 H 218 | $6-\mathrm{M}-6 \mathrm{~T}$ | 7 7- P in Min. | .60 | | 40 H 218 | $6-\mathrm{M}-6 \mathrm{~T}$ | 7-Pin Min. | .60 |
| :--- | :--- | :--- | :--- | :--- |
| 40 H 234 | $6-\mathrm{N}-6 \mathrm{~T}$ | 9-Pin Noval | .63 |

Shleld Bases. For miniature sockets above. Fasten above chassis on socket mig. centers. Stock No. Type Description NET


## RAY-PAR ANTI-CORONA SOCKET

 Octal socket for t B3 high- $:-$ voltage rectifiet tube Corona $\quad$ Hong ming Laminated bakelite. Mounts on insulator or high-voltage on fita with screv type ter minal Slipg wi, 3 oz. 40 H446 NET
## NEW EBY NUVISTOR ADAPTER

Type 9320. This adapter permita testing of the new 7 pin auvistor tubes using existing test equipment. Simply plug adapter into standard octal socket. Includes Slipg. wt.. 8 oz . 41 H 359. NET
2.06

(1) Type 123-209-1. For tubes with 4 prong J "UX" base; 852 . 860, 866 tubes, etc. 4

(J Type 123-211-1. Porcelain base socket for 211.872 tubes etc. Mounting centers are spaced $21316^{\circ}$. Shpg. wt. 1 lb .


## STANDARD WAFERS

Steatite wafer sockets designed to meet general renulrements of receiving, low-power transmitting tubes. All types have cadmium-plated con
tacts. Bases are glazed steatite.
Size. $25 / 6^{\circ} \times 114 / 6^{\circ}$. Sockets have $13 / 4^{\circ}$ mounting centers. Shpg. wi., 4 oz .

| Stock No. | Mir's Type | Prongs | NET |
| :---: | :---: | :---: | :---: |
| 73 H 238 | 122-224-1 |  |  |
| 73 H 239 | 122-225-1 | $\begin{aligned} & 5 \\ & 7 \end{aligned}$ | .83 1.00 |
| 73 <br> 73 <br> 73 | 122-227-1 |  | 1.05 |

## EBY SOCKETS



Above-Chassis Type. One-piece molded bake Ilte construction, for top-of-chassls or panel mounting. Contact designations molded in base. Mounting centers. $111^{\circ}$. Shpg. wi.. 2 oz

| Srock No. | Type | Prongs | EACH |
| :---: | :---: | :---: | :---: |
| 40 H 254 | 12-4 | 4 | . 38 |
| 40 H 255 | 12.5 | 5 | .43 |
| 40 H 256 | 12.6 | $1{ }^{6}$ | . 44 |
| 40 H 261 | 12-7-N-O | 7L \& 7S | . 46 |
| 40 H 258 | 12-8 | Octal | .51 |

TV Tube Socket Type 49-13 D D. All-molded bakelite, duo-decal TV tube socket for magnetic or electrostatic focusing tubes. Complete with 18 leads. Shpg. wt. 4 oz 40 H 291 . NET

## EBY BLACK-AND.WHITE CRT TEST SOCKET ADAPTER

Type 1000. TV picture tube socket adapter. easy to install or remove. External lugs permit hecking all CRT pin voltages while set is in operation. No wirnk or soldering required 40 H 273. NET
.94

## NEW EBY COLOR CRT

 TEST SOCKET ADAPTERTypeCA-1. Test point adapt er for all color cathode ray ror all color cathode ra tubes. The CA- 1 allows any serviceman to test color pic ture tubes without removing the picture tube or chassis
 rom the cabinet. Easlly plugs der actual operating conditions. We. 8 oz. 5.88

## NEW EBY NOVAR ADAPTER

Type 9330. Keep your servicing equipment up-to-date by addine this new adapter. Permits testing of new 9 -pin Novar tubes on existing test equipment. Each adapt er supplied with complete instruc-
tions showing use with existing tions showing use with existing test equipment. Shpg.
41 H 399 . NET.....

# Tube Sockets, Plugs, Shields, Caps and Hold-Downs 

## CINCH-JONES PLUGS AND SOCKETS


(A) Octal Sockots With 15/6" Mounting A Centers. Molded from high dielectric black bakelite. Brass contacts and steel pressed-on saddle with 4 ground lugs. Mount in $1^{\prime \prime}$ chassis hole. 8 AB is general-purjose type; 8 AM is for VHF applications. 2 oz .

| Stock No | Type | Description | NE |
| :---: | :---: | :---: | :---: |
| 22 H 579 22 H 580 | $\begin{aligned} & 8 \wedge B \\ & 8 A M \end{aligned}$ | Black Bakelite Mica-filled | $9$ |

B Octal Sockets Wlth $11 / 2$ Mountling
Centers. Similar to above, have clinch-on

Miniature Sockete-Bottom Mounting. cadmium plated steel saddle. 7 EB contacts; cadmium plated steel saddle. 7 EB and 7 EM 9 EM mount in $\% / \mathrm{K}^{\mathrm{t}}$ hole; $11 / \mathrm{m}^{2}$ centers. 2 oz . | Stock No. | Type |  |  |
| :--- | :--- | :--- | :--- |
| 22 H 567 | $\frac{\text { Fig }}{\text { 7EB }}$ | $\frac{\text { Descripelion }}{\text { C }}$ | $\frac{\text { NET }}{7-\text { pin, bakelite }}$ |
| .09 |  |  |  |




Miniature Sockets-Top Mounting. Molded bakelite. Brass contacts. 7AB1 and 7AM1 mount in $5 \%^{\circ}$, hole; $7 \%^{\circ}$ centers. 9 AB and 9 AM mount in $3 / 4$ " hole; $11 /{ }^{\text {" centers. }} 2$ oz.
Stock No. Type Fig. Description NET



E Ring-Mounting Octal Sockets. Molded E sockets with solder-coated brass contacts. Mount in $111 / 4{ }^{*}$ keyed hole. Retainer ring supplied. *Chassis thickness. Av. shpg. wt., 2 oz. Stock No, Type Size* Descrlption NET

 rings for above sockets. We., 1 oz NET. Extra 22 H 591. Type 8AP Adapter Plate. For use with ring sockets when gerew or rivet mounting is reguired. Slotted $11 / 2^{\circ}$ to $1^{1 / / 0^{\circ}}$ mounting cen-


## SUB-MINIATURE TUBE AND TRANSISTOR SOCKETS

 Sub-Minlature Types. For hearing aids, miniature radios, etc Mica-filled bakelite with silver-plated contacts. 4 -prong miniature tubes and G.E. G11 and G11A transistors fit 2 H 5 . "Mounting ring for Type 8 SM . Av. shpg. wt., 2 oz .Stock No. Type Pins[Fig. NET Stock No. Type PinsiFig. NET

$\qquad$
Transistor Types. 5 -contact sockets; Type 5 PC (FIg. K) for printed circuits; SWC (Fig. L) for wired circuits. 2 oz
Stock No. Type Sixe NET|Seock No. Typē Slixe NET


WAFER-TYPE TUBE SOCKETS
Laminated-bakelite tube sockets widely used in radio, TV, mobile units. etc. Solder-coated brass contacts. With center

| Stock No | Type | Centers | Pins | NET |
| :---: | :---: | :---: | :---: | :---: |
| 22 H622 | 7W2A ${ }^{\text {7 }}$ | \%" | 7 (min.) | .07 |
| 22 H623 | 7WL2* | 1 | 7 (min.) | .07 |
| 22 H624 | 7WLA* | 15/16" | 7 (min.) | .08 |
| 22 H625 | 8W1 | 136* | (8) | .08 |
|  | $8{ }^{8} 2$ | $11 / 2$ | 8 | .08 |
| 22 H627 | 9W1* | 1\%" | 9 (min.) | .08 |
| 22 H628 | 9W2* | 1516* | 9 (min.) | .09 |

## TYPE BPB 8-CONTACT PLUG

For making up to 8 connections between chassis. Molded black bake16 F shield, (below). Wt., 2 oz . 40 H 846 . NET

19
Typo 11P8 11 -Contact Plug. Same as above, but with 11 contacts. Molded black bakelite construction. Fits 11 -contact socket. Type RB listed below. Use with Type 16 shap-on hield, below. Shpg. wt., 2 oz
.25

## TYPE 16 STEEL SNAP-ON SHIELD

Cadmium-plated, durable steel shield. Snaps on 8PB and 11 PB sockets, above. Rubber grom40 H 848 . NET............................ 27

## TYPE IIRB 11-CONTACT SOCKET



Use with 11 PB 11 -contact plug (above). Precision molded from high-dielertric, black bakette. Mount on Kín thick chassis using
retaining rink. Use with 16 F snapon shield (atove) on extension cables. Shipg. WL.. 2 oz.
40 H 849 . NET.

## CHASSIS AC SOCKET



Type 2 R2. Molded, black bakelite. Rated: 15 amp . at $110 \mathrm{v} . ; 10$ amp at 250 v . Solder-lug terminals. Mounts in $3 / 0 x^{3} / 4^{\circ}$ hole. Has ters. Size, $11 / 2 \times 1 / 2^{\circ} .2 \mathrm{oz}$.

## POMONA SOCKET SAVERS

Rigid-mounting socket savers of durable phe nolic materials with long life metal contacts. Protect your pube lester sorkets from wear of prated tube insertions. Plugs into orisinal socket, 3 oz .

| StockNo. | Type | Descrlption | NET |
| :--- | :--- | :--- | :--- |
| 40 H 668 | SS-7 | For \%-pin miniature | I. |
| 40 H 669 | SS-8 | For 8-pln octal |  |
| 40 H 678 | SS-9 | For 9 -pin miniature |  |

## POMONA $110^{\circ}$ CONVERSION

## ADAPTERS

Model 110-S. Sylvanla Type. For duodecal test equipment. No rewir ing- Dlug in for $110^{\circ}$ socket. Has dia. Wt. 4 oz 40 H 683 . NET Model 110-R. RCA Type. As above. but $6^{\circ}$ pin circle dia. 8 pins, $04^{*}$ dia. Wt.. 5 oz. 1.52
40 H 684 , NET.................... 1.
"MINI-SPRING" TUBE HOLD-DOWNS


Hold tubes securely in place. Prevent breakage and assure greater stability. Valuable where tubes are mounted upside down or in a horizontal position; also excellent for equipment subject 9 vin miniature shock, For 7 or with nut and bole or mav be installed with rivet. Averaye be in we. 3 oz .3 per package oz. 3 per package.

StockNo. Helght For Tubes |Per Pkg.
 41 H 122 17/8" 1 R5, $61 \mathrm{G} 5,61$ T6.
41 H 123 11/2" 6AJ5.6AK5.6AL.5
.26
$41 \mathrm{H} 1241 \%{ }^{\circ}{ }^{\circ} 12 \mathrm{AT} 712 \mathrm{AUF}$ etc

# Connectors, Plugs and Sockets 



Type 7428 male cap and Type 7427 female connector are of durable brown bakelite with metal cable clamps for $3 / 16$ to $1 / 3^{\prime \prime}$ O.D. cords. Type 7466 male base and Type 7468 female base are of bakelite 11 i
housings. Rater 10 amps at 250 volts, or 15 amps at 125 volts. housings. Ratedl 10 amps at 250 volts, or 15 amps at 125 volt.

| Stock No. | $\begin{aligned} & \text { Myr's } \\ & \text { Type } \end{aligned}$ | Flg. | Description | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{lll} \hline 41 & H 282 \\ 4 & H 283 \\ 4 & H & 284 \\ 4 & H & 287 \end{array}$ | $\begin{aligned} & 7428 \\ & 7427 \\ & 7466 \\ & 7468 \end{aligned}$ | $\begin{aligned} & \hline \mathbf{A} \\ & \mathbf{B} \\ & \mathbf{C} \\ & \mathbf{D} \end{aligned}$ | Male Cap Female Connector Male Base Female Base | $\begin{array}{r} .44 \\ .80 \\ .94 \\ \hline 1.14 \end{array}$ |

3-WIRE POLARIZED TYPES
As above but for 3-conductor cables Insulation is black bakelite. Clamps accept cords from 281 to $.421^{\circ}$ O.D. Polarization prevents Clamps accept cords from wrong connection. Rated 10 amps at 250 v ., or is amps at 115

| A | Male Cap | 1.03 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 41 | $\mathbf{H}$ | 288 | 7485 | A | Male |
| 4 | $H$ | 289 | 7484 | B | Female Connector |
| 4 | $H$ | 1.49 |  |  |  |
| 41 | $\mathbf{H} 290$ | 7486 | C | Male Base | 1.32 |

## STANDARD SIZE CONNECTORS <br> 3-WIRE POLARIZED TYPES

Type 7572 male cap. Type 7556 male base and Type 7557 female base heve rust-resistant metal housings. Type 7555 female connector is bakelite. Clamps take cords fromn 296 to $.562^{\prime \prime}$ O.D. Allare rated 10 amps at 250 volts, or 15 amps at 125 volts

| Stock No. | $\begin{aligned} & \text { Mir's } \\ & \text { Type } \end{aligned}$ | Fig. | Description | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 41 $H 292$ <br> 4 $H 293$ <br> 4 $H 294$ <br> 4 $H 295$ | $\begin{aligned} & 7572 \\ & 7555 \\ & 7556 \\ & 7557 \end{aligned}$ |  | Male Cap Female Connector Male Base Female Base | $\begin{aligned} & 1.32 \\ & 1.94 \\ & 1.61 \\ & 1.78 \\ & \hline \end{aligned}$ |

## HEAVY-DUTY 3-WIRE POLARIZED TYPES

Type 7311 cap. Type 7327 male base and Type 7328 female base have meral housings. Type 7313 connector is bakelte. Clamps take. 437 to
750 O O.D cords. Rated 20 amps at $250 \mathrm{v} ., 10 \mathrm{amps}$ at 600 v . ${ }^{*}$ Armored.

| $\begin{aligned} & 41 H 296 \\ & 41 H 297 \\ & 41 H 298 \end{aligned}$ $41 H 299$ | $\begin{aligned} & 7311 \\ & 7313 \\ & 7327 \\ & 7328 \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathbf{E} \\ & \mathbf{H} \\ & \mathbf{G} \\ & \mathbf{K} \end{aligned}$ | - Male Cap Female Connector Male Base Female Base | $\begin{aligned} & 1.76 \\ & 2.71 \\ & 2.09 \\ & 3.21 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |

## AH\&H MIDGET CONNECTORS



Midget 2-prong cord connectors and receptacles. Especially suited for applications where space is at a premium. Types thustrated in Figures $L$ and $\$$ have housings of durable molded bakelie. resistant metal housings and insulation of bak elece. Al for all receptacles. 10 amperes at 250 volts. Receptacle terminals are exposed, All units liave Contact spacing is $13 / x^{\prime \prime}$. Receptacle terminals are exposed, Avith plate for threaded covers. Types 80327 and 80329 are furnished with plate and lock ring. screwn. Typee 80327
Av. shpg, wt., 3 oz .

| Stock No. | Mfr's Type | Fig. |
| :---: | :---: | :---: |
| 52 H 721 | 80324 80325 |  |
| $52 H 722$ $52 H 725$ | $\begin{aligned} & 80325 \\ & 80326 \end{aligned}$ | $\stackrel{M}{\mathrm{~N}}$ |
| 52 H726 | 80328 | P |
| 52 M 727 | 80327 | R |
| 52 H 728 | 80329 | S |

> Description Male cable connector Female cable connector Female flush receptacle Mate flush receptacle Female fush receptacle Male flush receptacle

## AMPHENOL PLUGS AND SOCKETS




2


STANDARD AND GROUNDING-TYPE AC PLUGS AND SOCKETS
61 Series is 2 -pole; 160 Series is 2 -pole with grounding lug, recommended where grounding is required. Black phenolic. Rated 15 amps at 120 V Where $\mathrm{C}_{;} 10 \mathrm{amps}$ at 220 v . All are U.L. Approved except Types 160-10 and $160-11$, which must be grounded after mounting. Av, shpg. wt.. 3 oz . T) Retainer Ring Mounting Types. For mounting in $111 / 16^{*}$ keyed 1 hole in chassis up to $1 / 0^{\circ}$ thick. $61-\mathrm{M}$ is standard type; $61-\mathrm{F}$ is universal ty
StockNo. Type Descrip. EACH StochNo. Typo Descrlp. EACH

Y Mounting Plate Types, All require 1\%/3" mtg. holes and have $\$_{3 z^{\prime \prime}}$ slotted holes on $11 / 2^{\circ}$ to $11 / /^{\prime \prime}$ centers except Type $61-\mathrm{M} \mid \mathrm{P}-61 \mathrm{~F}$ which equires $13 / 46^{\prime \prime} \mathrm{mtg}$. hole and has $3 / 2^{2}$ holes on $11 / 2^{\prime \prime}$ centers. Types $61-\mathrm{M} 1$ and $61-\mathrm{F} 1$ have removable mtg. plates. *With terminal for ground wire. All 2-pole.


Type 61-61 Recessed Sholl. Shell for converting Type 61,86 and 160

40 H 086. NET
(W) Recessed Mounting Types. Consist of Types 61 and 160 plugs and StockNo. Type Descrlp. [EACHIStockNo. Type Descrlp. EACH

Cable Mounting Type. Shielded. Steel-shelled. grounding-type plugs and sockets for use with AC cords. Types $160-6$ and $160-\frac{1}{\text { have cable }}$ clamp (Fig. Z) for up to $3 / 4$ cable, Types $160-8$ and $160-9$ have rubber grommets (similar to Fig. X) for up to $3 / 6^{\circ}$ cable. All are 2 -pole. 3 oz .
 Steet Caps. For use with above plugs, sockets and connectors. Types $3-13$ Steet Caps. For use with above pluks, sockets and connectors. Types 3.85 (Fig. X). have grommet for un to $7 / 6^{\circ \prime}$ cable. Types $3-24$ and $3-856$ (Fin. AA). have adiustable clamps for cables up to $3 / /^{\prime}$ diameter. Stock No. Type Fig. Use with Plugs and Sockets Types EACH
 $42 H 538$
$42 H 546$

## AMPHENOL TYPE CP PLUGS

Standard bakelite plugs ideal for use as chassis connectors with plug-in units. "CP" plugs quickly and easily installed without screws or rivets by means of retainer rings. Use adapter plate below for replacement mounting, RMS voltage ratings: 86 .CP4, 2000 v.; CP-11 and CP-12, 500 v.; all others, 1250 v . With mounting ring for $1 / 16$ hies excep *124, keyed hole. tHave yuide post and aligning key. StockNo. Mfr'sType|Pins EACH StockNo. Mfr'sType Plns EACH
 Type 12-001-03 Adapter Plate. Nickel-plated ateel. For ure with all CP plugg above except $86-$ CP7L. $11 / 2^{\circ}$ to $17 /^{\prime \prime} \mathrm{mtg}$. centers. 2 oz . .05 40 H 023 NET


## AMPHENOL MULTIWIRE CONNECTORS

Matching male and female connectors, Take cabies
yp to $7 / 6^{6}$ " "F": in type number, female; "M", male
$78-\mathrm{PF} 8$ is standard octal. Av. shps. wt., 3 oz .

| Stock No. | $\begin{aligned} & \text { Mfr's } \\ & \text { Type } \end{aligned}$ | $\left\lvert\, \begin{aligned} & \text { Con } \\ & \text { tacts } \end{aligned}\right.$ | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ | Stock No. | $\begin{aligned} & \text { Mir's } \\ & \text { Typp } \end{aligned}$ | Con- | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $40 \mathrm{MS24}$ | 78-PF4 | 4 | . 32 | 404505 | 86-PM5 | 5 | 7 |
| 40 H525 | 78-PF5 | 5 | . 33 | 40 H 506 | ${ }_{86-P M 6}^{86 . P 4}$ | ${ }_{7} 7$ | . 38 |
| 40 H 526 | 78-PF6 | ${ }_{7}{ }^{5}$ | . 35 | 40 H 507 40 H 508 | 86-PM17S | 8 | . 39 |
| 40 H 527 | 78-PF7S |  |  |  |  |  |  |
| 40 H 528 | 78-PF8 <br> 78-PF9 | $\begin{aligned} & 8 \\ & 9 \end{aligned}$ | $.34$ | $\begin{array}{llll} 40 & H & 5 & 2 \\ 40 & H & 5 & 3 \end{array}$ | 86-PM9 <br> 86-PM11 | 11 | . 40 |
| 40 H 516 40 H 517 | 78-PF9 <br> 78.PF 11 | $\begin{array}{r} 9 \\ 11 \end{array}$ | . 37 | 40 H655 | 86-PM12 | 12 | . 44 |
| 40 H 517 40 H 504 | 86-PM4 | 14 | .36 | 42 H656 | 86 PM 20 | 20 | . 62 |

Amphenol Cable Clamp. Type 79-CC4. For use with above connec-
Amp. Relieves straln on soldered connections. Shapg. wt., 5 oz .
40 H 670 . NET
Depend on Allied for Everything in High-Quality Plugs and Sockets

## Knobs and Dials

HARRY DAVIES MOLDED KNOBS

friction fit for flat wire shafts; all others
equipped with setscrews to permit use with equipped with setscrews to permit use with either round or thatted $1 / 4^{2}$ shafts. \& Indicates
types not manufactured by Harry Davles. Wifior dual concentric shafes. Av. shps. wi 3 . For

| Stock No. | Fig. | Size | Color | $\begin{aligned} & 1.9 \\ & \text { EA. } \end{aligned}$ | $10-49$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 54H980 | K | $11 /$ | \% Walnut | . 15 |  |
| 54H981 | $K$ | 1\%" | glvory | . 15 | .14 |
| 55 H 067 | 1 | 11/1e* | § Blach | . 35 | . 315 |
| 55 H 083 55 H 084 | M | 1/4 | Black | . 10 | . 090 |
| $\frac{55 H 084}{554072}$ | N | $13116^{\circ}$ | Black | . 10 | . 090 |
| $55 H 072$ 55 H 073 | P | 11/4* | Black | . 09 | . 081 |
| 55 H 078 | $p$ | 11190 | Red | . 10 | . 09 |
| 55 H 074 | R | 11/4. | Black | .14 | . 126 |
| 55 H 070 | S | 200 | Black | .11 | . 099 |
| 55 H 071 | S | 2 |  | . 17 | . 153 |
| 55 H 079 | S | 2 | Red | . 18 | . 162 |
| 55 H006 | 1 | 1\%* | Black | . 22 | . 198 |
| 55 H 089 | \% | 2\% | Black | -18 | . 162 |
| 55 H 056 | 2 | 21/4. | Black | . 19 | . 171 |
| 55 H 057 |  | $11^{\prime}$ |  |  | - 1 |
| 55 H 058 | $Z$ | $11 / 2$ | Black | .16 | .144 |
| 55 H 059 | *+ $28 Y$ | 1/4. ${ }^{\circ} 11 / 4^{\circ}$ | Black Black | . 16 | .144 |
| 55 H 980 | 1W | $31 / 4{ }^{\circ}-1 / 2^{\circ}$ | Black | . 29 | . 261 |
| 55 H 981 | W | $31 / 84.12$ | Red <br> Black | . 06 | . 054 |
| 55 H 983 | \$ X | 31/60 $0^{2}$ /20 |  |  | 045 |
| 55 H 982 | : $\times$ | $31 / 60^{\circ}-1 / 2^{\circ}$ | Black Red | $.06$ | $\begin{aligned} & .054 \\ & .072 \end{aligned}$ |

HARRY DAVIES FLUTED KNOB

[AA]


B8

(C)

An excellent selection of high-quality fluter knobs. Functlonally deaigned-add custom ap pearance to amateur, experimental, and tes metal inserts with setscrew to fit flatied o Stock No. Fig. Shps. wt. 4 oz.

| Stock No. | Fig. | Dia. | 1-9, EA. | 10-49, EA |
| :---: | :---: | :---: | :---: | :---: |
| 55 H 085 | A. | 11/3 | . 36 | . 324 |
| 55 H088 | AA | 13\% | . 37 | .333 |
| 55 H 086 | A. | 15* | . 39 | .351 |
| 55 H087 | AA | 23/8* | . 52 | . 468 |
| 55 H095 | CC | 110 | .23 | . 207 |
| 55 H094 | CC | 13\% | . 24 | 216 |
| 55 H096 | CC | $1 \%$ | .27 | . 243 |
| 55 H 097 | CC | 21\%: | .40 | . 36 |
| 55 H 092 | BB | 11/2* | . 44 | .396 |
| 55 H 090 | BB | 2116* | . 54 | . 486 |

## MILLEN MINIATURE KNOBS



Black plastic knobs with brass inserts for $1 / \mathbf{s}^{*}$ diameter shafta. Developed primarlly for use in miniaturized equipment. In certaln devices where complete miniaturization is not para mount, a combination of standard and minia ture knols may possibly be used to advantagt slot A018. A007 and A019 have, screwdriver slot in top. Overall height: A006. $1 / 2^{\prime \prime} ; A 00{ }^{2}$.
 $\begin{array}{lll}72 & \mathrm{H} \\ 72 & \mathrm{H} \\ 72 & \mathrm{H}\end{array}$


## NATIONAL VERNIER DIALS



ACN


ICN


MCN

Blank dials with $5: 1$ drive. Hairline pointers: pinholes for calibration. Type ACN Ther size vernier dial formous original of this type with smart styling. Largebrisht chrome insert. $5^{\circ}$ high. $74^{\circ}$ wide. Shog. wt. 1 iscales. Knob has 71 H090. NET.
7.80

Type SCN. Vernier dial same as above but intermediate in size. $4^{1}$. ${ }^{*}$ 71 H 088 . NET.............................................................. 80
Type 1 CN Has large, easy-to-read, evenly illuminatedvernier dial. $51 / 3$ 71 mounting screws. Less lamps. Shpg. wt., 1 giandard bayonet sockets Typ Mcn 11.80
Type MCN. Small size vernier dial. Similar to above but not illumi3 blank scales. Mechanism extends $1 / 4$. below frame 10 or small units. 71 H 089. NET............................................

## NATIONAL CALIBRATED KNOBS



For any equipment. Types R, HRS. 3. and HRS- 5 are numbered 0 - 10 over ascs shown in scale column of table below. fir $1 / 4$ has single etched center line. Ali fit $1 / 4{ }^{*}$ shafts. HRS types of molded MM of molded bakelite. flat aluminum dial.

| Stock No. | Type No. | Fig. | Color | Scale | Dla. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 71 H 958 | HRS-3 | LL | Black | 0-10; $300^{\circ}$ | 176\% |  |
| 71 H218 | HRS-4 | LLL | Gray | 0-10; 300 ${ }^{\circ}$ |  | 6 |
| 71 H219 | HRS-4 | LL | Gray | 1-line |  | 68 |
| 72 H691 | HRS-5 | LL | Black |  |  |  |
| 72 H692 | HRS-5 | LL | Gray | 0-10;180 ${ }^{\circ}$ |  |  |
| 71 H 070 |  | M M | Black | 0-10; $180^{\circ}$ |  | . 85 |

## MILLEN MULTI-SCALE DIALS



NN Type 10035 Multi N.N Scale Dlal. A deluxe Illuminated slide-rule dial Two built-in pilot light: provide even illumina with 4 blank to 12 drivo with 4 blank scales for calibration and one 0-100 logging scale. Cardboard scale supplied can be used tic dial window. A mple panel space for 2 small controls. $81 / 2^{2} \times 61 / 2^{\circ}$. Black finish. Shpg. wt.. $21 / 2 \mathrm{lbs}$.
72 HI

PP Type 10039 Midget Panel Dlal. Economy model. Excellent far Patio small transmitters, receivers and measurement equipment. Drive interference. Totally self-contained mechanism eliminates back-of-panel cale. Blace; has blank scales for calibration and one 0-100 loxgieg 72 H 050. NET. Size, $4 \times 31 / 4^{\circ}$. Shpg. wt.. 13 oz
3.24

## MILLEN INSTRUMENT KNOB



Type 10007. Handsome bar knob with 0-10 elockwise scale spread over $180^{\circ}$ for easy direct calibration. Lends frofesuseful for engineers. Amateurs, experimenters. etc. Hiably etched numerals; black plastle knob. Fits $1 / 4^{*}$ shaft. Dia..

# TV Knobs, Dial Plates and Dial Accessories 

## G-C EXACT REPLACEMENT TV KNOBS



|  | G.E. KNOBS |  |  | Av. shpg. wt., 3 oz . |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stock No. | Fig. | Drig. Mr's ${ }^{\text {No. }}$ | Use | Color | NET |
|  | AA | G1001 | Channel Selector | Black 8 Goid | 90 |
| 55 H 418 | AA | G100? | Channel Selector | Black \& Silver | . 90 |
| 55 H 419 | B8 | G1003 | Fine Tuning | Stren \& Gold | 1.23 |
| 55 H 420 | ${ }_{\text {c }}$ | GWT43x246 GWr43x269 | Channel Selector Channel Selector | Clear \& Gold | 2.06 |
| 55 H 421 | OD | GWr43 269 |  |  |  |
|  | EE | WT43X40(RDK222) WT43X41(RDK223) | Fine Tuning OH-On Volume | Fawn | 3 |
|  | FF | $\begin{aligned} & \text { WT43X41(RDK223) } \\ & \mathbf{W T 4 3 X 4 2 ( R D K 2 2 4 )} \end{aligned}$ | OH1-On Volume Channel Selector | Fawn | 85 |
| 5S H424 | $\begin{aligned} & \text { GG } \\ & \text { HH } \end{aligned}$ | WT43X42(RDK224) WT43X53(RDK263) | Channel Selector OH-On Volume | Brown \& Fawn | 8 |
| $5 S$ 4 <br> 5 426 <br> 55 $H$ | $\begin{aligned} & \mathrm{HH} \\ & \mathrm{JJ} \end{aligned}$ | $\begin{aligned} & \text { Wr43x53(RDK263) } \\ & \text { WT43XS4(RDK264) } \end{aligned}$ | Channel Selector | Brown \& Fawn | 1.47 |
| H 428 | KK | WT43X76(RDK331) | Channel Selector | Brown \& Gold |  |
| 55 H 430 | MM | WT43×139 (RDK434) | Channel Seleclor | Brown \& Gold | 2.06 |
| 55 H 431 | MM | WT43X141 (RDK438) | Channel Selector | Fswn \& Gold | 2.23 |
| 55 H 429 | LL | WT43X152 (RDK455) | Channal Selector |  |  |
| 55 H 432 | NN | WT43X159(RDK469) | Channet Selector | Brown | 1.73 |



| Slock No. | Fig. | Orig. Mir's No. |
| :---: | :---: | :---: |
| $55 \mathrm{H433}$ | PP | 36 C 700886 |
| 55 H 438 | RR | $36 \times 700887$ |
| 55 H 435 | SS | 36 C 700888 |
| 55 H 436 | TT | 36 C 700889 |
| 55 H 437 | ww | $36 \mathrm{K700890}$ |

$\left|\begin{array}{l}\text { Use } \\ \text { Channel Selector } \\ \text { Contrast } \\ \text { Fine Tuning, Vol. } \\ \text { Channel Selector } \\ \text { Contrast }\end{array}\right|-$

| Colof |  |
| :---: | :---: |
| Mahegany \& Gold |  |
| Mahogany \& Gold |  |
| Mahorany \& Gold |  |
| Mahogany \& Gold |  |
| Mahogany \& Gold | 1.73 |


| CRONAME OIAL PLATES |  |  |  |
| :---: | :---: | :---: | :---: |
| Easy-to-read etched aluminum scale with black background. |  |  |  |
| 11/4" diameter. Type |  |  |  |
| clockwise arrow labeled mount- |  |  |  |
|  |  |  |  |
| ing, idears, plonographs trans- |  |  |  |
|  |  |  |  |
| mitters, etc. Use with $11 / 4^{\circ}$ bar knobs. $1 / 33^{\circ}$ center-hole. Shpg, wt., 2 oz . |  |  |  |
| Stock No. | Type | Descriptlon | NET |
| 55 H 1415555 | 25 | Voll |  |
|  | 569 | $0.100 .180^{\circ}$ |  |
| 55 H 108 | 905 | 0-100, $270^{\circ}$ |  |

## E. F. JOHNSON fLEXIBLE SHAFTS

Non-rusting phosphorbronze flexible shaf ts
 connecting out-ofline shafs tokether. Habs accessory for Annateurs. experimenters. etc. Permit up to 90 degrees angur 57 Shpg. wt.. 2 oz.
73 H
$790.115-253$. Length, $3^{\circ}$. NET.... 57 73 H 291. 115-254. Length, $6^{\circ}$. NET.... . 83

CRONAME "OFF-ON" SWITCH PLATE Economy-priced "Off On switch plates black background. Has polished aluminum letters and border. Size. 60 H 338 . NETEACH.
 ........ 17

## WALSCO

DIAL CORD SPOOLS
Cords with nylon sleeves over fiberglas or linen cores. Prestretched to prevent stretchproper tension. Av. wt., 4 oz


Stock Type Dia. Strgth. Lgth. EACH 60 H 490652 -Med $040^{\circ} 35 \mathrm{lbs}$. 60 H 492654 -Std. $032^{\circ} 20 \mathrm{lbs}$ $\qquad$ $\frac{60 \mathrm{H} ~}{43 \mathrm{H} 97} \overline{652-\mathrm{Med}} .040^{\circ} .35 \mathrm{lbs} .100 \mathrm{ft}$ $43 \mathrm{H} \mid 95656$-Thin $022^{*}$
$43 \mathrm{H} \mid 96.654$-Std. $\mathbf{~ l b s . ~} 100 \mathrm{ft}$
4
2.32

## 0 (

SHAFT
FITTINGS


Coupling Couplings for extending shafts of volume controis, stitches, cap whafts are not of the tingle uits, same diameter. Extenders for decreasing or black phenolicf diameter and for extending Whaft lengt 60 H 366 has $30^{\circ}$ opening, shaft length. 60 H on all extenders, $\%^{\prime \prime}$ : overall length, $15^{*}$. Ay. shps. wt.. 4 oz.

| Brass | Insulated | Type | S120 |
| :---: | :---: | :---: | :---: |
| 60 H360 | 60 H 350 | Coupling |  |
| 60 60 60 H 362 | 60 H 352 | Coupling | 14 |
| $6 \mathrm{6OH365}$ | 60 H 355 | Extender Extender | \% to |

## Insulators, Coil Forms, Polystyrene Sheets and Rods


Stand-Off Insulators. Hisl-glaze porcelain, except steatite. Nickel have trass hardware, 135-65, 135-65-2. 135-68, are handrawn bases. TBanana jack and solder lok as 10.18. . 740 jack is Pig. C. but square base and 4 mig . holes. Av. $277^{\circ}$ banana jack. ${ }^{*}$ Like

| stock No. | $\begin{aligned} & \text { Mifr's } \\ & \text { Type } \end{aligned}$ | Fig. | Body He, | Min. Dla. | $\begin{aligned} & \text { Max } \\ & \text { Ola. } \end{aligned}$ | Mtg. Cers. | Hardware | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 73 H 12 O | 135.203 | A | 1\%/6" |  | $13 / 4{ }^{\circ}$ | ctr. |  |  |
| 73 <br> 73 <br> 73 | $135-20-2$ $135-228$ | B |  |  | 13/4. | 15/16\% | $\begin{aligned} & 10-32 \\ & 740 \dagger \end{aligned}$ | .32 |
| H ${ }^{\text {H }}$ | 135-22-2 | ${ }_{\text {A }}^{\text {A }}$ |  |  | $130^{\circ}$ |  | 8-32 | . 20 |
| 73 H139 | 135-241 | ${ }_{\text {B }}$ | 5/9. | $3 / 8{ }^{38}$ | ${ }_{1}^{13 / 38}$ |  | $740 \dagger$ |  |
| 3 H 125 | 13 | * |  | 1368 |  |  |  |  |
| 73 H 126 | 135-62 |  | 2 |  |  | 13 |  | 1.20 |
| 73 H 127 | 135-65 | C |  | \% | 17/8* | $11 /{ }^{\prime \prime}$ | 10.32 |  |
| 73 H 128 | 135-65-2 | C | $13{ }^{\prime \prime}$ | $3 / 8$ | 17/8* | $1 \%$ " | $740 \dagger$ | . 39 |
| 73 H | 135-66 | D | $21 / 4{ }^{\circ}$ | $1516{ }^{1 /}$ | $11 / 4{ }^{\prime \prime}$ | 1/8* | 1/4-20 | . 87 |
| 73 H 130 73 H 131 | $\begin{aligned} & 135-66-2 \\ & 135-67 \end{aligned}$ |  |  |  |  |  | 7601 | 9 |
| 73 73 | $\begin{array}{r} 135-67 \\ 135-68 \end{array}$ | ${ }_{*}^{D}$ |  | $1116$ |  |  | 1/4-20 | 1.25 |
| 73 H 137 | 135-68-2 | * | 2 |  |  |  | 10.32 | . 54 |

Leadin Bushings. Ideal high-voltage terminals. $135-50,135-51,135-52$. porcelain, less hardware. Av. shpg. wh., 8 oz and nuts; 135-53. 135-54 are

| Stock No. | $\begin{aligned} & \text { Myr's } \\ & \text { Type } \end{aligned}$ | Fig. | Body Ht. | $\begin{aligned} & \text { Min. } \\ & \text { Dla. } \end{aligned}$ | Max. Dia. | $\begin{aligned} & \text { Panel } \\ & \text { Hole } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 73 H 160 | 135-50 | 11 |  | $3 / 5^{\circ}$ | 1/4" |  |  |
| 73 H 161 <br> 73 H 162 <br> 73 | $135-51$ $135-52$ | ${ }_{\text {H }}$ | $\frac{15}{21 / 4}$ | \% | 1\%* | 2738 | $\begin{array}{r}.40 \\ .57 \\ \hline 89\end{array}$ |
| 73 H 163 | 135-53 | F |  |  |  | 1732 | . 89 |
| 73 <br> 73 <br> 73 | 135-54 | E |  | ${ }_{1}^{11 / 16^{\circ}}$ | $\frac{21 / 2}{}{ }^{1 / 2}$ | $2^{2127 / 3 x^{\prime \prime}}$ | $.35$ |
| 73 H 165 | 135-55 | G | $1 / 2^{\prime \prime}$ | $1 / 2{ }^{\prime \prime}$ | , | $2150$ | $\begin{array}{r} 1.10 \\ .31 \end{array}$ |

E. F. JOHNSON INSUL ATORS

## Shpg. wh., 5 oz .

| Stock No. | Type | Body Ht. | MIn. Dla. | Max. Dla. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 73 H <br> 73 <br> 3 H | $135-500$ $135-501$ 1 | \%" | 7/6" | $5 / 8$ | . 23 |
| 73 H152 | 1.35-501 |  | 1/2\% | 3/4* | . 31 |
| $73 \mathrm{HIS3}$ | $135-503$ |  |  |  | . 51 |
| 73 H 154 | 135-504 | 3 | $3 / 4{ }^{\text {n }}$ | $11 /{ }^{\circ}$ | 1.34 |


| Stock No. | $\begin{aligned} & \text { Mifr's } \\ & \text { Type } \end{aligned}$ | Fig. | $\begin{aligned} & \text { Body } \\ & \text { Ht. } \end{aligned}$ | $\begin{aligned} & \text { Min. } \\ & \text { DIa. } \end{aligned}$ | $\begin{aligned} & \text { Max. } \\ & \text { Dia. } \end{aligned}$ | Panel Hole | Hard ware | $\mathrm{EACT}_{\mathrm{EACH}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 73 H 225 | $135-40 \uparrow$ | K | $13 / 90$ | 19.10 | 15.96 | $7 / 16^{\circ}$ | 10-32 | 42 |
| 73 H 226 | 135-40-2 | $\frac{L}{k}$ | $11 /{ }^{\circ}$ | ${ }^{19 \%}$ | 15/80 ${ }^{\circ}$ | 716" |  | . 53 |
| 73 H 228 | 135-42-2 | $L$ | 11/4* | 1/2. | $3 / 4$. | $\begin{aligned} & 13 / 2 y^{\prime \prime} \\ & 13 / 3 \end{aligned}$ | ${ }^{10-32}$ | . 42 |
| 73 H 229 | 135-44t | K | $17^{1516}$ | $3 / 8{ }^{3}$ | 5/8. |  |  |  |
| 73 H230 | 135-45 | M | $21 /{ }^{\circ}{ }^{\circ}$ | 3\%" | 11/8 | $1 / 2$ | 10-32 | . 59 |
| 73 <br> 73 <br> 7 | 135-45-2 | N | $2160^{\circ}$ |  | 110" |  |  | . 59 |
|  | 135-47 |  |  | 716 | 18/8* | 1/16" | 1/4-20 | 1.50 |
| 73 H223 | $135-47$ <br> $135-48$ | K |  | $11 / 6^{\circ}$ | $21 /{ }^{\circ}$ | 3120" | 1/4-20 | 2.75 |
| 73 H 224 | 135-48-2 | N | $2 \% /{ }^{\prime \prime}$ | 3/80 | $15 / 8$. | 10 | ${ }^{10-32}$ |  |

## FEEDER SPREADERS

Feeder spreaders for constructing ling etficiency, open-wire antenn feeders and transmiagion lines. Silicone impreynated, moisture-proo portelain. $3 / 8 \times 1 / 2$. Av.shpg. wt., $30 z$.

| Stock No. | Type | Length | NET EACH |
| :---: | :---: | :---: | :---: |
| $73 \mathrm{H} \mid 11$ | $136-122$ | $2^{\circ}$ | 0 |
| $73 H$ | 172 |  |  |
| $73 H$ | 136 | 124 | $4^{\circ}$ |

## JOHNSON ANTENNA INSULATORS



High-quality, strain-type nsulators for use int an-
c'ana construction. chacenstruction
nces resist moisture abGlazed porcelain sorption and prevert RF feakage. Types 136 glazed porcelain strencth Type ios have 800 libs. breakitg lain, $5 /=$ square , 04 dry-process glazed porceTypes $107,112,800 \mathrm{lbs}$. breaking strength.

| No. | Mir's | Slie | g. |  |
| :---: | :---: | :---: | :---: | :---: |
| 3 H 215 | $130-104$ | $4^{\prime \prime} x^{5 / 8} 8 \mathrm{sq}$ |  |  |
| 73 H216 | 136-107 | $7 \times 1$ dia. | 10 oz . | 1.30 |
| 73 H 217 | 136-112 | $12^{\prime \prime} \times 1^{\prime \prime}$ dia. | $11 / 9 \mathrm{lb}$ | . 85 |

## NATIONAL STANDOFF

## INSULATORS



Steatite insulators for RF cir cuits, Cap and bame are nickel plated brass. Glazed to prevent and terminal assembly are remove able torm ansembly are remov. cept 6-32 machine screws. Shpg. wt., 3 oz .

| Stock No. | $\begin{aligned} & \text { Mfr's } \\ & \text { Type } \end{aligned}$ | Ht. | Dla. | $\begin{aligned} & \mathrm{NET} \\ & \mathrm{EACH} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 71 H 125 | GS-1 | 17/16" | $1 / 2$ |  |
| 71 H 126 | GS-2 | 21516 | $1 / 2$ | 1.02 |
| 71 H 127 | GS-3 | $21316{ }^{\circ}$ | 10 | 1.26 |
| 71 H224 | GS-4 | 41 解 | $3 / 4$ * | 1.74 |

## POLYSTYRENE SHEETS, RODS AND TUBING



Ancxcellent selection of high-grade polystyrene sheets. rods and tubing. Ideal for $A C D C$ and RF applications including VHF. UHF, and SHF. Rods and tubing are excellent material for making insulators or coil forms. Sheets may be used for shielding or dlal and gauge glass. All have extremety low-loss factor at ultra-high requencies. Have high dielectric strength, exNo mone are resistance and insulating properties. varying climatic conditiongly stable under original dimensions-will not stretch or ward. Easy to cut any size conditions. Always relain tapped. Sheets are transparent. All tubing has satin finish except clear; be sawed. drodled or except $\dagger$ clear.

| $\begin{gathered} \text { Stock } \\ \text { No. } \\ 71 H 865 \end{gathered}$ | Slze | Thickness | Shpg. Ws. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |  | Stock No. | Size | Thlckness |  | pg. vit. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $71 H 865$ 71 | ${ }^{12 \times 12 \prime}$ | 1/16" | $8 \mathrm{8oz}$. | 4.07 | 71 | HX 870 | 12x24* |  |  |  |  |
| 71 H867 | ${ }_{12 \times 12}$ | \% | 10 oz | 4.70 | 71 | HX871 | $12 \times 24^{*}$ | Y/4' |  |  | 7.64 8.97 |
| 71 H 868 | $12 \times 12^{\prime \prime}$ | 3/80" | 12 oz 1 |  |  |  | $12 \times 24^{\prime \prime}$ | $1 / 8$ |  |  |  |
| 71 H 869 | $12 \times 12^{\prime \prime}$ | $1 / 4{ }^{6}$ | ${ }_{1}^{1 / 2} 1 \mathrm{lbs}$ | 7.01 | 71 | $H \times 873$ $H X 874$ | $12 \times 24^{\prime \prime}$ | , | $2^{1 / 2}$ |  | 10.39 |


(P) 5 Glazed porce. lain insulator
Has ribbed con ras ribbed con
struction struction to pro-
vide long leakage vide long leakage
path. $21 / 2^{2}$ long. path. $21 / 2^{\circ}$ long.
Shpg. we., 2 oz ${ }^{4}$ PERPR PKg. 21
(R) 51 itor, $13 / 4 x^{7 / 3}$, White porcelain strain insula-non-resontint $13 / x^{\prime \prime}$ dia. Breaks up guy lines into PER PKG............................ 29
(S) 51 ts 225 . Standard nall knob for single WE'R PK, 4 per pkg.

## POLYSTYRENE COIL FORMS



A wide selection of coil forms for winding RF coils of all types. Feature low loss. hish dielecuric polystyrene tional stability. Excellent for plug-it tonal stability. Excellent for plug-it Coils; plate. grid or tanks coils in rid-dip meter coils. VHF 4.5 , mind meter coils, HF equipinent. etc. Th: tib se and 6 prong standard forms fil standard forms fit Amphenol 6 prong miniature coil thiniarure sockets (listed Sockets" sorkets (isted under "Retainer Rin (og). Av. shpg. At. 2 oz. pages of this cata
lom. Av. Mis. Wh. 2 ozk

|  | $\begin{aligned} & \text { Mfris } \\ & \text { fypo } \end{aligned}$ | Description | ize |  |
| :---: | :---: | :---: | :---: | :---: |
| 72 | 24-5H |  |  |  |
| 7 | $24-6$ | 6-Prong |  |  |
|  | $2{ }^{24.4 P}$ | 4-Prong |  |  |
| H 724 |  | 5-Prong |  |  |

12" POLYSTYRENE ROOS


12" POLYSTYRENE TUBING

| Stock No. | O.D. | I. D. | Shpg. Wt. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ | $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | O. D. | I. D. | Shpg. Wt | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $71 H 885$ <br> $71 H 886$ <br> 71 <br> 71 <br> 7 | $\begin{aligned} & 1 / 4^{\circ *} \\ & 10^{\circ} \\ & 1 / 0^{\circ} \\ & 1 / 2^{\circ} \end{aligned}$ | $\begin{aligned} & 1 / 0^{\prime \prime} \\ & 346 \\ & 1 / 0^{\prime \prime} \\ & 1 / 8{ }^{2} \end{aligned}$ | $\begin{aligned} & 2 \mathrm{oz} \\ & 3 \mathrm{oz} \\ & 3 \mathrm{oz} . \\ & 3 \mathrm{oz} . \end{aligned}$ | 10 .14 .18 .25 | $\left\lvert\, \begin{array}{lll} 71 & 11889 \\ 71 & H 890 \\ 71 & 1 & 891 \end{array}\right.$ | $1^{\frac{3}{3} / 4^{*}}$ | 1/2", | $\begin{aligned} & \text { Wt } \\ & 40 z \\ & 40 z \\ & 6 \mathrm{oz} . \end{aligned}$ | $\begin{array}{r} .3! \\ .39 \\ .55 \\ \hline \end{array}$ |

## MILLEN MOLDED COIL FORMS



Type 45005. Same as 45004, but has 5 prongs. 72 H 125

NET 51

Typ, 45000. Sane as Tybe 45005 above, but Whithout jrongs. Designed for screw mounting. | Shpg. we |
| :---: |
| 72 H |
| 12 oz |

NET .39

# J. W. Miller, National, Hammarlund and Millen Components 



## FERRITE ROD ANTENNA

Type 705A. For universal replacement use. A Uses highly efficient design; improves re-adjust-simply slide coil along ferrite rod to peak antenna. Non-directional. Replaces any oop antenna. $31 / 4 \times 91 / 2^{2}$. Shps. wt., 5 oz . 60 H 893NET 1.94

## TRANSISTOR LOOP ANTENNA

B Type 2000. Has fixed inductance loop: B picks up adequate signal to the first atage Inductor is tapped to match the 600 onm input impedance of the transistor. Frequency range is 540 -105le capactor. $11 / 4 \times 91 / 2^{\#}$. Shpg. wt., 3 oz . 19 60 H 894

TRANSISTOR ANTENNA RODS
C. Type 2001. Matches 600 ohm input imped $[$ ance. Inductance. $240 \mu \mathrm{~h}$. Tunes with 36 Ont. $\times 31 / 4^{*}$. Shps. wt. 402

STRIP TRANSISTOR ANTENNA RODS (D) Type 2c04. Matches 600 ohin input impedt-
 H 978 netl. 76 Type 2005. As above, but 700 microhenries. Use with 125 mmf capacitor
60 H 979
NET 1.76

## SUB-MINIATURE ANTENNA ROD

E Type 2002. Adjustable from $35-300 \mu \mathrm{~h}$. M1E $Q$ coil tunes with 500 minf. Mounts 14 ofm hole, or bracleet supplied. Matches 3 Oz 1009 60 H 980

## NATIONAL FRONT-PANEL RISHT-ANGLE DRIVE

 freedom in parts layout. May be diminum hsed to irive two
housing and sears. $21 / 2 \pi 1 / 4$ mhaft. 6 oz. 4.31 $71 \mathrm{HO14}$
Type P-RAD. As above, but delnxe precision model whth brass gears, stainless steel shafts and buahings, bronze bearings and a die-cast zinc hou ing. Gearsare protected 3 removabe cover. Backlash less than $11 / 2 \%$. 3 NE .17 .25

## HAMMARLUND COUPLINGS

Type FC-465. Sturdy slipproof insulated coupling, Excellent for providing hexiole higned grine Maximum torque is lins. ited only by holding power of the 4 set screws ( 2 on each side).
 fer set screws (2 oncard $1 / 4$ "dlameter shaits For use on ail standard clearance, Fisa, Flash voltage, 5000 Size, $11 / 4 x^{13} 6^{\prime \prime}$. Shpg. wt., 3 oz . 72 H 496

NET 1.10
Typo FNC-46S. As above, but non-insulated ype. Gurable, heavy.duty construction. Nam tains firm, shor shaft misalignnment. Nich chel $1 / 4{ }^{\circ}$ dlameter $x^{2} 1 / 2$ Shpg. wt.. 3 oz .
Shpg wt:.
72 H 497 NET. 93

## INSULATED COUPLING

For coupling drive shafts to capacitors. sans switches. consrots and other componencs. bakelit fusmation. Hubs drilled to fit $1 / 1$ shafts; set-screws hold rigid
17 . Shpe. wt., 2 oz. 17 Shpg.
60 H 395.
 NET .53

## MILLEN PRECISION COMPONENTS

#  

A selection of most widely used Millen "Designed for Application" componentsfamous for their outstanding quality among industrial. Amateur, and experimental industrial. Amateur, Excellent for original-equipment applications, as well as for replacement purposes in existing units. All are made to exacting specifications to provide maximum dependability. Included in this listing are Series 69000 slug-tuned ceramic coil forms

-copper slug reduces inductance when it moves into coil; iron slug increases inductance. Form dimensions indicate diameters and winding lengths. Serles 80000 cathoderay bezels have satin-black finish, neoprene ushions (except 80072, felt cushion), and reen lucite filters. Refer to Manutacturers ndex for page numbers of RF chokes and many other Millen products in this Catalog. *ltems not illustrated.

|  |  |  |  |  | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stock | Mfr's | Flg. | Description | O8. | EACA |
| No. | Type | N | Richt Angle Driv | $\begin{aligned} & 5 \\ & 4 \end{aligned}$ | 5.00 .54 |
| 72 H 085 | 10050 | R | Dial Lock. | 4 | . 45 |
| 72 H 099 | 10061 | L | Shaft Lock. for 30" Bushing; 活" | 4 | . 39 |
| 72 H668 | A061 | L |  | 4 | . 54 |
| 72 H 08 B | 10062 | M | Slaatt Lock with Knurled Nut................. | 3 | . 45 |
| $72 \mathrm{HO}{ }^{\text {7 }}$ | 37001 | p | figh Voltage Terminal and Thru-Bushing, Black Hin Vige Trminal and Thrushing. Red | 3 | . 48 |
| 72 H 037 | 37001 40305 | P |  | 3 3 3 | . 69 |
| 72 H260 | 40305 41305 | * | 5-Prong Steatite Jack Bar for above. | 3 <br> 2 | 36 |
| 72 72 72 | $\begin{array}{r} 41305 \\ 37202 \end{array}$ | , | Bakelite Plates (2) for 37222 below. Black | 2 | . 3 |
| 72 H059 | 37222 |  | Binding Post ....ed Coil Form, is/28 $\% / 3$, Copper |  |  |
| 72 H 130 | 69041 | 1 | Ceramic Slug-tuned Coil Form, Slug | 3 | .96 .84 |
| 72 <br> 72 <br> 72 | $\begin{aligned} & 69043 \\ & 69045 \end{aligned}$ | $\begin{aligned} & \mathbf{F} \\ & \mathbf{G} \end{aligned}$ | Ceramic Sluy-tuned Coll Form. $1 / x$. Iron Slus Ceramic Slug-tuned Coll Form. 1/2x 1/is. Copper | 3 | 1.05 |
|  |  |  | Slug. Slug-tuned Coil Form. $1 / 4 \times 1 \mathrm{his}$. Iron |  |  |
| 72 H 132 | 69046 | G | Ceramic Slug-tuned Conl Po... | 3 | 1.05 |
|  | 69048 |  | Ceramic Slug-tuned Coil Form, $1 / \times \times 2$, Iron Slug | 3 3 |  |
| $72 H 672$ $72 H 673$ | 69056 69057 | K | Ceramic Stug-tuned Coll Form, 1, x 1,3 Ceramic Slus-tuned Coil Form. $1 / 4 \% \%^{\circ}$. Copper |  |  |
| 72 H 673 |  |  |  | 3 | . 87 |
|  | 69058 |  | Ceramic Slug-tuned Coll Form, $1 / 4 \times 4{ }^{\circ}$. Iron Slug | 3 | 87 |
| 72 H 675 | 69061 | K | Ceramic Slug-tuned Coil Form. Vix | 3 | 0 |
|  |  | K | Ceramic slug-t uned Coil Form, ${ }^{\text {a }} \times 3 \times 1{ }^{3}$. Iron Slus | ${ }^{3}$ | . 90 |
| 72 H 168 | 74400 |  | Octal Base and Shield, 1 with either 2AP1 or 2 BP1 |  |  |
| 72 H 150 | 80042 | 5 | Nicoloi Shield for use with $2^{\prime \prime}$ CR Tubes. | 10 | 6.90 |
| 72 H 151 | 80043 | S | Nicoloi Shield for use with either 3AP1. 3BPI |  | 9.70 |
|  |  |  | Ocloi shield tor 5CM | 12 | 18.90 |
| 72 H 177 | 80055 |  | Nicoloi Shield Berct. Cushton and Fitter for | 4 | 1.80 4.35 |
| 72 <br> 72 <br> 72 | 80073 | * | Bezel, Cushion and Filter for ${ }^{\prime \prime}$ | 7 | 4.35 8.40 |
| 72 H <br> 72 H | 80075 | * | Bexel, Cushion and Filter for $5^{\prime \prime}$ CR Iu |  |  |

## MINIATURIZED COUPLINGS

For himited space use. Type M003 nickel-plated is brass. Mype Mo06 (Illustrated) Is tuiversal joint style made of nickel-plated brass with steatite ceramnic insulation steatite copring fingers. Type
 M008 is a plastic insulated coupling with nickel-plated brass inserts. Type 39003 is solid brass for $1 / \mathbf{s}^{\prime \prime}$ shafts; all others are for $1 / s^{*}$ shafts. Av. shpg wt.. 2 oz.

| Stock No. | Mfr's Type | escription |  |
| :---: | :---: | :---: | :---: |
|  | M003 | So | . 33 |
| H 170 | M006 | Univ. joint coupling | . 75 |
| 72 H 171 | M 0008 | Insulated coupling |  |
| 72 HO | 39003 | Solid brass couplin | . 24 |

## 33087 TUBE BASE CLAMPS

Sturdily made, polished spring steel tube base clamps. Hold tubes in sockets and protect against damage from sud-

dellent for use in mobile equipinent and for reducing vibration of oscillator tubes in test equipment, etc. Av. shigg. wt.. 2 oz .

| Stock No. | $\begin{aligned} & \text { Mfr's } \\ & \text { Yype } \end{aligned}$ | Dismeter | NEY |
| :---: | :---: | :---: | :---: |
| 72 H 178 | 33087A | $1.125^{\circ}$ |  |
| 72 H 179 | 3.3087 B | $1.165^{\circ}$ | 36 |
| 72 H180 | 33087 C | $1.255^{\circ}$ |  |
| $72 H 181$ <br> 72 | 330875 | $1.375^{\circ}$ |  |

## FLEXIBLE COUPLINGS

Popular 39000 series flexible couplings. Designed o provide higher flexiblits, no backlash, hign breakdown voltages, small dianeter and accurate alignmem. In adduentional types versions of conventional design. units include original design, Type 3901 with insuated 30006 slide-action coupling type 39005 (high or eccentric shait motion- but not insulated. Type 39016 (illus.) molded as single unit for ype resistance to mechanical shock; has solid insulating barrier diaphragm. All are for $1 / 4$ insulating barrier $3 / 6^{\prime \prime}$ ghaft. Av. shpg. wt.. 2 oz shafts except NET

| Stock | Mfr's | ription | $\begin{aligned} & N E \\ & E A C \end{aligned}$ |
| :---: | :---: | :---: | :---: | 72 H034 39001 Universal joint 2 H 17639002 Fixed joint 72 H 05439005 Sniversal 72 H 094390016 Barier


| 72 H 175 |
| :--- |
| 72 |

.48
.63

## DRIVE MECHANISM

Type 10000 Worm Drive. A rugsedly constructed drive mechanism otiering a $16-t 0=1$. num frame drilled for secure mountiag on panel or chassis base Spring-loaded split gears base. Spring-loaded spilit gears for smooth oueracion and mind Size, $3 \times 2 \times 25^{\circ}$ Shipg. 46.6 oz.
72 H 173.


## variable liapacitors and Accessories

## TRIMMERS AND PADDERS



Mica trimmer and badder capacitors. Treated for
resistance to resistance to humidity and permanence of capacity settinRs. Low-loss ceramic base. Clear India mica. Rikid plates perlugs without affecting mit bending soldering dicated in tables below, arefrom 3 turns opea to tight setting. Av. shpg. wt., 2 oz .

STANDARD SIZE, $3 / 4^{\prime \prime} \times 5 / 8^{\prime \prime}$

| Stock No. | MIn. Mmif | Max. <br> Mmi | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 601347 | 1.5 | 15 |  |
| 60 L | 2.7 | 30 | .13 |
| 60 L 342 | 9.0 | 80 180 | -13 |
| 601343 | 25. | 180 | . 15 |
| $60 L 344$ | 50 |  |  |
| $60 \sim 345$ | 80 | 380 480 |  |
| $60 L 346$ | 110 | 580 | . 25 |
| 601348 | 140 | 680 |  |
| 601349 | . 170 | 780 | 30 |


| $\begin{gathered} \text { Stock } \\ \text { No. } \end{gathered}$ | MIn. Mmi | Max; Mmi | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| $17 L 077$ <br> 1760988 <br> 174099 <br> 174080 <br> 771081 | $\begin{array}{r}1 \\ 2 \\ 4 \\ 7 \\ 16 \\ \hline\end{array}$ | $\begin{array}{r} 12 \\ 25 \\ 40 \\ 100 \\ 150 \\ \hline \end{array}$ | $\begin{aligned} & 13 \\ & 13 \\ & 13 \\ & 115 \\ & : 17 \end{aligned}$ |
| 171082 176083 176084 1741085 17086 | 24 <br> 37 <br> 55 <br> 70 <br> 90 | $\begin{aligned} & 200 \\ & 250 \\ & 300 \\ & 350 \\ & 400 \end{aligned}$ | $\begin{aligned} & .11 \\ & .20 \\ & .22 \\ & .25 \\ & .30 \end{aligned}$ |

MINIATURE SIZE, $3 / s^{\prime \prime} \times 1 / 18 "$

| Stock No. | Min. <br> M mi | Max. <br> Mmp | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 17 L 087 | 0.9 |  |  |
| 17 L 088 | 1.5 | 20 | :14 |
| 17 L 090 | 7 | 40 60 | 16 .19 |

## MILLEN CAPACITORS

Serles 20000 Uitra-Midgete. Top-quality, steatite-insulated variables. For use in appications requiring miniaturized components. All are sincle. (rated 600 volts peak) air except * double-bearing type with $045^{\prime \prime}$ air gap ( 1400 volts peak). $1 / 4^{\text {" }}$ shafis. $1^{*}$


## NEW MINIATURE 2-GANG VARIABLE CAPACITOR



Ideal variable tuning capacitor for miniature circuitry and use as exact-duplicate replacement in current transist or receivers.
Rotates through a full $180^{\circ}-$ maximum capacity: antenna section, 148.1 mmf ; osciltator section, 65.2 mmf . Trimmer capacity: variable to over 6 mm . case. Completely enclosed in clear molyethylene plastic case to protect plates. Sizc only $7 / 16 \times 3 / 4$ 17
net 1.59

## NEW VARIABLE TUNING CAPACITOR WITH DIAL

Miniature single-gang TRF broadcase use in and experimental band ceivers-ideal for transistor circuits. Capacity variable from 10 co 365
mmf . Has $14{ }^{*}$ dity mmf . Has $1 \mathrm{~A}^{\prime \prime}$ diameter. clear plastic tuning dial brations in silver numierals, read from 530 Cali1600 KC . Rotates through $180^{\circ}$. Size, only 530 mquare, and $1 / 2^{\prime \prime}$ deep; shaft size, $1 / 4^{\text {min }}$. Shpy. 17 L 091.

NET. 69
B

## RECEIVER-TYPE CAPACITORS

MIDGET SUPERHET AND TRF TYPES Midget Superhet. Mlniature size without sacrifice of per formance makes these 2 -gang variables perfect for portable and midget sets. Capacity 27 plates; osc. section, 11.6 to 136.308 mmf plates. Capacity increases witht counter-ciockwise rotation. For use with 455 kc If With
 shaft extends 1 beyond franie. Ball-bearing mounted shaft. Shpg. wt., 6 oz 61 L 008.
to 232.4 re Superhet. RF section is 10.8 mmf 0232.4 mm . Osclilator section is 8.5 mmf to

 F. Compact, 33-plate from 15 to 409 capacitor. Variable creases clockwlse. Size: 1s $^{1}$ ity in 14" wide, 1 " $\mathrm{in}^{\circ}$ high. $1 / 4^{\circ}$ diameter shaft extends $\$$ beyond capacitor frame. Shpg. wt., 5 oz .
61 L 009 .
.NET. 76

## TRANSISTOR CAPACITORS



Mldget Superhet. Compact. variable, two-section capacitor designed for use with ceivers. Ideal fransistor remodels and portables. Count-er-clockwise rotation for caincludes a trimner for precise adjustment Oscillator section designed for $455-\mathrm{kc} 1 \mathrm{~F}$. section capacity: $75: 7.2$ to 66 mmf. Antenna $1 / 4^{\circ}$. Size: $12 / 8 \times 1$; 7.5 to 81 mmf . Shaft diameter 61 Lo12............................. NET 1.00


Minlature Superhet. Two sec tion. Variable capacitor designed particularly for the special needs of miniature transistor receivers. Although amall in size, accuracy and precision are not sacrificed Complete with trimmers. $1 /{ }^{*}$ shaft ranges: Oscillator section. 7.0 to 123.1 mection, 6.1 to 73.4 mmf ; RF
 $61 \mathrm{LOIS}{ }^{2} \mathrm{oz}$
net 1.04
CARDWELL CAPACITORS


## VHF BUTTERFLY CAPACITORS

(A) $90^{\circ}$ capacitors with butterfly rotor plates. moving contacts. Isolantite low inductance; no moving contacts. 1solantite insulation. Remov-
able plates. Air gap. $030^{\circ}$. Shpg. wt. 10 oz .

| Stock No. | $\begin{aligned} & \text { Mr } r^{\prime \prime} z \\ & \text { Typo } \end{aligned}$ | Max. Mmi | Min. Mmf | NET |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 75 \mathrm{~L} 001 \\ & 75 \mathrm{~L} \end{aligned}$ | PL-6076 | 5 | 5 | 2.07 |
| 75 L 003 | PL-6078 | 13 | 2.0 3.0 | 2.49 |

## "TRIM-AIR" MIDGETS

Universal mounting. Isolantite insulation. cept*. $\dagger$ Air gap rear extension for ganging; ex$\frac{\text { cept *. } \uparrow \text { Air gap, } .02^{\prime \prime} \text {; others. } 03^{*} \text {. Shps. wt.. } 7 \text { oz } .}{\text { Stock }}$

| Stock No. | Type | Max. Mmi | Min Mmi | NET |
| :---: | :---: | :---: | :---: | :---: |
| 75 L 010 | PL-6000 | 10 |  | $\frac{1.57}{}$ |
| 75 L 011 | PL-6001 | 15 | 1.5 | 1.65 |
| 75 L 013 | PL-6002 | 25 | 2.0 | 1.85 |
| 75 L 014 | PL-6004 |  |  | 2.03 |
| 75 L 015 | PL-6016 | S0 |  | 2.18 |
| 75 L 016 | PL-6017 | 100 | 2.7 | 2.14 |
| 75 L 017 | [1]-6018t* | 140 | 3.0 | 2.48 <br> 3.45 |

## BUD MIDGET TRIMMERS

Type MT-833. For antenna coupling, interstage coupling and receiver tracking applica-
tions. Has screw adjustment lions. Has screw adjustment.
3 mm cap. 36 mmf min. cap., 3 mmf . Shpg. wt., 4 oz. NET . 15

## SUPERHET CAPACITOR AND MATCHING COILS



Two-Section Superhet Varlable. 19-plate oscilator section with 172.6 max. $\mathbf{- 1 0 . 6} \mathrm{min}$ mmf; has one $2-17 \mathrm{mmf}$ trimmer. 27 -plate RF section with 434 max. -14.5 min . mmf ; has one $2-17 \mathrm{mmf}$ trimmer. Provides 455 kc loop antemna, below. Capacity coil and counterclockwise 15 apacity increases diameter $3 / 4$ " 6 i L $065 . . . . . .$.

 | Loop Antenna for Above. Shpg wt.. 8 oz |
| :--- |
| Si $040 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~$ |

## TRF CAPACITORS



2-Gang. For use in superhets Without RF stage or in 2 -stage has 29 receivers. Each section to 4678 plates. Range of 15.5 Counter-clockwis section. increases capacity. With rition ection Fid pata. With trimeasy tracking ad justments. Spring slotted for Require series padder for uscillator wese wifera. shalt. Ose extender 60 H 360 (liuted onda. 383). to convert to $1 / 6^{*}$ shaft. See coil on page ransormer section for coils. Size: $15 / 0 \times 11 / 5$. 61 Li Shpg. wt., 10 oz .


2- and 3-Gang Capacible Compact RRF varia mers on siders. Have trimrotor plates are slotited for tracking adjust ment tad for holes in frame provid secure mounting provide to 367 mmf . Shaft Range: 12 3. Size of 2-gang: 2"
 60 L 725 . 2-gang. shpg wt., 6 oz . of 3 -gang 60 L 726. 3-gang.

| NET | 1.08 |
| :---: | :---: |
| NET | 1.66 |

## BUD CAPACITORS


"MC" MIDGETS Sturdy, highly efficient midget variables. Single and double-bearing typere double. Flt $30^{* 2}$ dia mounting hole. Cad-mium-plated brass rotor and stator plates. Steagap. Shpation. $024^{\circ}$ airgap. Shpg. wt., 7 o

| $\begin{aligned} & \text { Stock } \\ & \frac{\text { No. }}{} \end{aligned}$ | $\begin{aligned} & \text { Myr's } \\ & \text { Type } \\ & \hline \end{aligned}$ | Max. Mmi | Min. Mmf | No. of Plates | $\begin{aligned} & \text { NET } \\ & E A C H \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 61 L 143 | 1850* | 15 33 |  | 3 | 1.78 |
| 61 L 144 | 1853* | 50 | 5 | 5 | 1.84 |
| 61 L 145 | 1855* | 100 | 5 7 | 7 | 2.43 |
| 61 L 146 | 1856* |  |  |  | 2.65 |
| $61 L 147$ | 1858* | 190 | 7 | 19 | 2.72 |
| 61 L 148 | 1859* | 235 | 10 | 37 | 2.94 |
| 61 L 149 | 1860* | 300 | 12 | 33 <br> 43 | 3.38 3.67 |
| 612150 | 1870 | 15 |  |  |  |
| 615151 | 1872 | 33 | 4 |  | 1.76 |
| 612152 | 1873 | 50 |  | 7 | 1.84 |
| 615154 | 1875 | 100 | 7 | 14 |  |
| 61 L 155 | 1876 | 140 | 8 | 19 | 2.06 |

TINY MITE 2 \& 3-GANG CAPACITORS


Compact. 3-gang capacitors designed for Ideal frequency use.
fonverters. preselectors and receivers covering Amabands. Soldered brass plates TV and FM brackets $41 / 4^{*}$ long. Rotor shafts extend $1 / 4^{*}$ at miun plat 1600 is 2-gang. Metal parts cadmium plated. Av. shps. wt.. $1 / 4 \mathrm{lb}$.

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { Mrr's } \\ & \text { Type } \end{aligned}$ | $\begin{aligned} & \text { Max. } \\ & \mathrm{MmI} \end{aligned}$ | $\begin{gathered} \operatorname{Min} \\ M \mathrm{mf} \end{gathered}$ | Plates Section | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 611159 | *LC. 1660 | 15 | 3 |  | 3.23 |
| $61 L 156$ | LC-1845 | 11 | 5 | 5 | 5.14 |
| $61 L 157$ $61 L 158$ | LC-1846 L-1847 | 17 | 5 | 7 | 5.73 |
| 61 L/58 | [C-1847 | 25 | 6 | 9 | 6.11 |

# Hammarlund and E. F. Johnson Variable Capacitors 

 <br> \section*{\title{HAMMARLUND CAPACITORS
}} <br> \section*{\title{
HAMMARLUND CAPACITORS
}}

## TYPE MC

A Versatile single section tuning capacitors A Have siliconized steatite base, nickel-plated urass plates. Panel or chassis mtg, Stralghtiine capaciacteristic. Nominal air gap: Single${ }_{\text {spaced }} 11$ and S types. . $0245^{\circ}$; wide-spaced SX apace $075^{\circ}$. Tested at 1000 v . and 1750 V . ( 60 cycle rms) respectively. Capacity increases with clockwise rotation. Continuous rotation. Size: S type, ${ }^{111 / h}$
Shpg. wt.. 10 oz.

| Stook No. | $\begin{aligned} & \text { Mir's } \\ & \text { Type } \end{aligned}$ | Max. <br> Mmit | Min. Mmi | $\begin{aligned} & \text { NET } \\ & E A C H \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 72 L 425 | -MC-20-S | 20 | 5.5 | 2.27 |
| 72 L 426 | -MC-35-S | 35 | 6.0 | 2.31 |
| 72 L 427 | *MC-50-S | 50 | 6.5 | 2.48 |
| 72 L 428 | ${ }_{*}^{\mathrm{MC}} \mathbf{} \mathrm{C} 0-\mathrm{M}$ | 50 80 | 6.3 8.0 | 2.46 |
| 721429 | *MC-75-S | 80 | 7.3 | 2.57 |
| 72 L 431 | *MC-100-S | 100 | 8.3 | 2.69 |
| 72 L 432 | MC-100-M | 100 | 7.7 | 2.72 |
| 72 L 433 | MC-140-M | 140 | 9.0 | 2.88 |
| 72 L 434 | -MC-140-S | 140 | 10.0 | 2.85 |
| 72 L 435 | MC-200-M | 200 | 10.3 | 3.27 |
| 72 L 436 | M C-250-M | 250 | 12.0 | 3.41 |
| 72 L 437 | MC-325-M | 320 | 13.5 | 3.90 |



DOUBLE-SPACED MC's

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { Mfr's } \\ & \text { Typo } \end{aligned}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 72 L 451 | - MC-20-S |  |  |  |
| 72 L 452 | -MC-35-SX | $32$ | 5 |  |
| 2 | *MC-50-SX |  | 11.5 |  |

## TYPE MCD DUALS

(B) Designed for single hole panel-mounting. Bi) Require only $31 / 2$ in length behind paaneled at 1000 v . Exhlbit same features as Type ed at 1000 . Exhbit same above; have terminals on both sides. Have mid-line characteristic. Size opened, $3 / 3 x$ $2 \not 22^{2}$ " Shps. wt. 11 oz .


| 72 L |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 7266 | MCD-100-M |  |  |  |
| 7268 | MCD-140-M | 140 | 7.8 | 8.16 |



## TYPE MAPC

Midget padding, trimming and general-pur C. posecapacitors. Similario APC, but smaller. Ideal for small space applications. Gap. $0135^{\circ}$ Rotors and stators are nickel-plated brass. Nlckel-plated bersilium copper wiper contact Tapped ( $4-40$ thread) brass stude in steatite base permit mounting without grotmding rozor. Tested at 600 volts rms. 60 cps . Overall size: ${ }^{25 / 32^{\circ}}$ wide. ${ }^{1566^{\circ}}$ high. All are adjustable with screwdriver or hex wrench. Shps. wh., 4 oz.

$$
\begin{aligned}
& \text { Stoen } \\
& \text { No. }
\end{aligned}
$$

## $72 L 208$ 72

$72 L 209$
$72 L 210$

| 72 | $L$ | 2 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 72 | $L$ | 2 | 2 |
| 72 | $L$ | 2 | 3 |


Sturdy capacitors, simllar to HF, but larger (D) Slates and wider air saps. For generalpurpose and transmitting applications. Singlehole panel mounting. Also bracket for base mounting. End letter A in type no. denotes. 02 air gap. $1 \mathrm{~B}-03^{\circ} ; 800$ and 1200 test volts T spectively. $19 / 4 \times 17 / 2^{\circ}$. Shps. wt.. 1 lb.

| Stock | $\begin{aligned} & \text { Mrr's } \\ & \text { Type } \end{aligned}$ | Max. Mmf | Min. Mmi | $\begin{aligned} & \text { NE } \\ & \text { EA } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 9 | 2.3 | 1.62 |
| $72 \div 225$ | HFA-15 | 16 | 2.8 | 1 |
| 72 L226 | 11Fh-25B | 25 | 3.0 | 1.7 |
| 72 L 227 | HFA-50B | 50 | 75 | . |
| 72 L 228 | HFA-1008 | 100 | 4.5 |  |
| 72 L | HFA-100 | 145 | 6.0 | 2.39 |

## TYPE MAC

(Not illustrated.) Extremely small variable capacitors. Excellent for use as VHF trimmers. Steatite base; only " $x^{8 / 5}$ ". Screwdriver adjustment. Have threaded sleeve for convenient panel mounting. Shog, w-t., 4 oz.

| $\begin{gathered} \text { Stock } \\ \text { No. } \end{gathered}$ | $\begin{aligned} & \text { Mfris } \\ & \text { Type } \end{aligned}$ | Max. Mmi | Min. Mmi | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 2 | MAC-5 | 5.4 | 1.3 | 1.00 |
| 72 L 256 | $\mathrm{MAC}-10$ | 9.6 | 1.5 | 1.05 |
| $72 L 257$ | MAC-15 | 15.8 | 1.9 | 1.20 |
| 72 L 258 | M AC-20 | 21.5 | 2.2 | 1.3 |



TYPE HF
(Ideal for critical bigh-frequency circtits. E Isolantite insulation. *Double-spaced unita. $\mathrm{HF}: 1 \% \mathrm{x} \times 15 / 6^{\circ}$ : HFD: $11 / 2 \times 1^{\circ}$. Shpg. wt. 602.
 72L215

| Typo | M mi | MmI | EACH |
| :---: | :---: | :---: | :---: |
| HF-15 | 17.5 | 2.8 | 1,1 |
| HF-35 | 36 | 3.2 | 1.25 |
| HF-50 | 52 | 3.7 | 1.35 |
| 11F-100 | 102 | 5.3 |  |
| HF-140 | 142 | 6.3 |  |
| HF-15-X | 15 | 3.6 5. | 1.29 |

HFD SPLIT-STATOR


## TYPE APC

## F

 Isolantite base. Screwdrivadjust. $17 / 3 x^{16 / 4}$. Wt. 4 o 72 L
72
72
72
72
72
$L 250$
$L$
251
252
2
253
254
$\qquad$


#### Abstract

25 75 75


 2550
75
100
140

| 3.0 | 1.35 |
| :--- | :--- | :--- |
| 3.9 | 1.55 |
| 4.6 | 1.70 |
| 5.5 | 1.85 |
| 6.7 | 2.15 |

## BFC BUTTERFLY TYPES

(G) Straight-line eapacity type; $90^{\circ}$ minimut G to maximum. Spacing . Tapped ( $6-32$ thread) studu in steatite base permit mounting capacitor without grounding he rotor. Silver contact. $11 / 1^{\times 1} 1 / \%^{\circ}$. Wt. I Ith Stock No. Typo Max. Min. $\mid$ NET


## NEUTRALIZING CAPACITOR

(H) Type N Z-10. Rated, 3000 v. AC peak. Fine H) adjustment. Capacity, 2.3-10 mmf . 21/8

net 4.77

## E. F. JOHNSON CAPACITORS


(J)

TYPE "M" MINIATURE VARIABLES
Fxcellent for design of compact VHF and UHF equipment. Bridge-type stator terminal proSides low inductance; oversize bearing, heavily anchored stator supports insure rigidyy. $3 \times 5 / 4$ manel mig, space, $1 /{ }^{1 / 2}$ hole. Sotted shait break-down. Low-loss steatite insulation. Nickel-plated. Av. shpg. wt., 2 oz.
(J) SINGLE

| Stock No. | $\begin{aligned} & \text { Mifr's } \\ & \text { Type } \end{aligned}$ | Max. Mmi | MIn. M mi | No. of Plates | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 75 L 175 | 160-102 | 5.0 | 1.5 | 5 |  |
| $75 L 176$ | 160-104 | 8.7 | 1. |  |  |
| 751177 | $160-107$ | 14.2 | 2.3 | 1 |  |
| 5 L 178 | $160-110$ $160-130$ | 19.6 | 2.7 | 28 | 1.20 |

(k) butierfly

| 75 | $L$ | 179 | $160-203$ | 3.1 | 1.5 | 5 | 1.20 |
| ---: | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| 75 | $L$ | 80 | $160-205$ | 5.1 | 1.8 | 9 | 1.30 |
| 75 | $L$ | 81 | $160-208$ | 8.0 | 2.2 | 16 | 1.45 |
| 75 | 182 | $160-211$ | 10.8 | 2.7 | 22 | 1.60 |  |

1. DIFFERENTIAL


(M)

## TYPE "R" VARIABLES

M For transmitting and receiving. Feature (M) extra heavy steatite stator support insulators. Corrosion resistant, nickel-plated parts. Double bearing construction. Plate spacing 024". $1^{11 / 0 \text { high and } 1 \text { "/ " wide. Bearing }}$ threaded $\%-32$ for panel mounting. Shaft diameter, Y $^{-}$. Ay shps. wi., 1 lb .

| Stock No. | $\begin{aligned} & \text { Mif's } \\ & \text { Type } \end{aligned}$ | Max. Mmi | M1n. Mmit | No. of Pidtes | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 75 L 053 | 149-1 | 20 | 5 | 3 | 2.35 |
| 751054 | 149-2 | 35 | 6 | 5 | 2.4 |
| 75 L 055 | 149-3 | 50 | 6.5 | 7 | 2.55 |
| 75 L 056 | 149-4 | 80 | 8 | 11 | 2.70 |
| 75 L 057 | 149-5 | 102 |  | 19 |  |
| 75 L 058 | 149-6 | 140 | 13.5 | 19 | 3.0 |

TYPE "S" VARIABLES
(N) Ideal for use in YFO's. receivers, and trans N mitter tuning circuits. Steatite end frame nickel-plated brass plates. Plate spacing, 013 2 -mtg. studs tapued 40 on 40 centers. ${ }^{21} / \mathrm{ax}^{13} \mathrm{~m}^{\prime}$ parel space. "/ hex shaft. Av. shps.

$$
\begin{gathered}
\text { Stook } \\
\text { No. }
\end{gathered}
$$

Mars

| Stock No. | $\begin{aligned} & \text { Mir's } \\ & \text { Type } \end{aligned}$ | Max. Mmi | Min. Mmi | No. of Plates | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 75 L 905 | 148- | 15 | 2.3 | 6 | . 00 |
| 75 L 906 | 148-2 | 25 | 2.6 | 0 |  |
| 75 L 907 | 148-3 | 35 | 2.9 | 14 | 1.10 |
| L 908 | 148-4 | 50 | 3.2 | 19 | . 15 |
|  | 148-5 | 75 | 3.9 | 29 | 1.2 |
|  |  |  |  | 38 | . 3 |



P


R


## TYPE "L" VARIABLES

Top quality, general purpose capacitors. SteaTop quality, general from bearing and stator support rols soldered directly to the ceramic frames-providing a virtually vibration-proof unit. Plate spacink, o3u" bearings threaded space. Av. shps. wt., 1 lb.


## R BUTTERFIY

| Stock No. | $\begin{aligned} & \text { Mifr's } \\ & \text { Type } \end{aligned}$ | Max. Mmi | Minif | No. of Plates, | NA |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51923 | , | 10.5 | 2.8 | -5 |  |
|  | 1 | 26 |  | 12 |  | | 75 | L 927 | $167-22$ | 26 | 4.3 | 12 | 2.50 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 75 L | 928 | $167-23$ | 51 | 6.8 | 23 | 3.05 |

## (S) DUAL SECTION

| Stook No. | Mifr's Type | Max. <br> Mmi | M1n. Mmis | No. of Plates |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 75 L 935 | 167-51 | 27 | 5.0 | 7 | 3.75 |
| 751943 | $167-52$ 167.53 | 51 99 | 6.5 9.8 | 13 25 | 4.15 5.20 |

## RF Chokes, Coils, and IF Transformers

!
B

$K$

## FAMOUS-NAME RF CHOKES FOR EVERY PURPOSE

$\mathbf{R}-175 \mathrm{~A}$ is for transmitters with plate supply up to 3000 volts modulated meters. R-152 is ideal for high-power $80-160$ all bands from 80 through is for usc in 20-80 meter transmitters; has third mer transmitters. R-154 that permits use of higher voltages; $R-154 U$ is same as $R-154$, but less Stock No Mir Type Fig. RMm perivound; R-3 types

| Stock No | Mir. | Type | FIg. | \$Mh | Ma | Onms | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 61 G 115 \\ & 61 G 116 \end{aligned}$ | National | R-33 $\mathrm{R}-33$ | ${ }_{\text {C }}$ | 11** | 350 | 1.8 | 36 |
| 61G117 | National | R-33 | G | 50** | 225 | 3.5 | . 36 |
| 61 G 118 | National | $R-33$ $R-3$ | G | 100** | 200 | 5.0 | . 36 |
| 61 G119 | National | R-50 | G | 750** | 125 | 16 | . 36 |
| 61 G 160 | National | R-50 | A | 1.0 | 150 | 15 | . 42 |
| 61.9161 | National | R-50 | A | 1.0 | 135 125 | 23 38 | . 42 |
| $61 . G 162$ | Nationa! | R-50 | A | 10.0* | 1115 | 38 | . 72 |
| 61 61 6168 | National | R-60 | A | 2** | 1500 | ${ }^{36} .06$ | . 29 |
| 616301 | National | R-60 | A | 4** | 700 | 15 | . 29 |
| 61 G 329 | National | R-100 | C | 2.5 | 115 | 44 | 57 |
| 61 G 367 | National | R-100 | C | 5.0 | 70 | 90 | . 90 |
| 61.368 | National | R-100U |  | 10.0 | 60 | 130 | 1.27 |
| 61 G 398 | National | R-100US | D | 2.5 5.0 | 115 | 44 | . 74 |
| 61 G 399 | National | R-100US | D | 5.0 | 70 | 90 | 1.04 |
| 61.6495 | National | R-100S ${ }^{\text {R }}$ ( | D | 10.0 2.5 | 100 | 130 | 1.26 |
| 61 G 496 | National | R-100S | E | 2.5 5.0 | 115 | 44 | . 99 |
| 61 G 497 | National | R-100S | E | 5.0 10.0 | 70 | 90 | 1.32 |
| 616498 | National | R-100ST | $\stackrel{\mathrm{E}}{\mathrm{F}}$ | 10.0 2.5 | 60 | 130 | 1.49 |
| 61 G 499 | National | R-100ST |  |  | 115 | 44 | . 66 |
| 61 G 500 | Nationa! | R-100ST | F | 10.0 | 70 | 90 | . 99 |
| 61 G 501 | National | R-152 |  | 10.0 4.0 | 60 | 130 | 1.12 |
| 61 G 502 | National | R-154 |  | 4.0 1.0 | 600 6610 | 10 | 2.31 |
| 61 G 503 | National | R-154U | 1. | 1.0 | 600 600 | 6.0 6.0 | 2.31 |
| 61 G 504 | National | R-175A |  |  | 800 | 5.0 | 2.01 |
| 61 G 505 | National | R-300 | $\stackrel{P}{\text { P }}$ | 145 | 800 400 | 5.0 | 3.56 |
| 61 G 506 | National | R-300 | c | 1.0 | 400 | 7.0 | . 57 |
| 61 G 507 | National | R-300 | C | 2.5 | 400 375 | 11 | . 57 |
| 61 G 508 | National | R-300 | C | 2.5 5.0 | 375 325 | 17 | .74 .90 |
| $\begin{aligned} & 61 G 509 \\ & 61 G 510 \end{aligned}$ | National | R-300U8 | D | 0.5 | 400 | 7.0 |  |
|  | National | R-300US | D | 1.0 | 400 | 11 | 77 |
| 61 G 512 | Nationa! | R-300U | D | 2.5 | 375 | 17 | . 92 |
| 61 G 513 | National | R-300Us | D | 5.0 | 325 | 24 | 1.02 |
| $1 G 514$ | National | R-300S | E | 0.5 | 400 | 7.0 | . 95 |
| 1 G 515 | National | R-300S | E | 1.0 | 400 | 11 | 1.00 |
| 1 G 516 | National | R-300S | E | 2.5 | 375 | 17 | 1.12 |
| 1 G 517 | National | R-300S | E | 5.0 | 325 | 24 | 1.25 |
|  | National | R-300ST | F | 1.0 | 400 | 11 | 63 |

have 2 sections, $R-50$ types, 3 or 4 sections. Types with suffix " U " end. "Wound on powi at one end; with ST, threaded stud at each ite chokes are on low power factor plastic cores; highest frequency Ohm tite tubes. SOn standoff insulator for vertical mig. CM Millihearies. $\% \mathrm{Mi}$ -
Stoc

## STANCOR RF COILS AND IF TRANSFORMERS



R MIniature Translstor if Transformondary. Size, $1 / 2$ sq. $x 1 / 4$ primary juntuned sec-

| Stoek No. | $y p e$ | $1 \mathrm{mp}$. Ohms | Use | NET |
| :---: | :---: | :---: | :---: | :---: |
| 61 G | RTC-9083 | 10K-.6K |  |  |
| 61 G 556 | RTC-9084 | $10 \mathrm{~K}-1 \mathrm{~K}$ | Out put | $\begin{aligned} & 3.30 \\ & 3.30 \end{aligned}$ |
| $\begin{aligned} & 6: G 557 \\ & 6: G 558 \end{aligned}$ | $\begin{aligned} & \text { RTC-9085 } \\ & \text { RTC }-9086 \end{aligned}$ | $\begin{aligned} & 25 \mathrm{~K}-6 \mathrm{~K} \\ & 25 \mathrm{~K}-1 \mathrm{~K} \end{aligned}$ | input | $2.1$ |
| $\begin{aligned} & 01 G 558 \\ & 61 G 559 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { RTC-9086 } \\ & \text { RTC-9087 } \\ & \hline \end{aligned}$ | $\begin{aligned} & 25 K-1 K \\ & 100 K-1 K \end{aligned}$ | Output Input | $\frac{2}{2}$ |

S Mor compact recelvers. Fhielded, Iron-core. ables. Series pad renuired for 455 kc tpa reguired for $262 \mathrm{kc} .3 / 4 \mathrm{x} \frac{1}{4} \times 2^{2} .3 \mathrm{oz}$.

| Stock No. | Mif's <br> Type | U se | Freq. Aange | NET |
| :---: | :---: | :---: | :---: | :---: |
| 61 C 560 | RTC-8756 | Ant | $140-425 \mathrm{kc}$ | 1.68 |
| 61 G 561 | RTC-8757 | KF | 140.425 kc | 1.68 |
| 61 $G$ 5 <br> 61 $G$  <br> 6   | RTC-8758 | Osc. | * 120 mmf | 1.68 |
| 61  <br> 61 564 | RTC-8631 | Ant | $540-1700 \mathrm{kc}$ | 1.05 |
| 61 G 565 | RTC.8760 | Osc |  | 1.50 |
| 61 G 566 | RTC-8761 | Osc. |  | 50 |
| 61 G 567 | RTC-8762 | Ant. | 1000 mmf $2.1-6.3 \mathrm{mc}$ | - |
| 61 G 568 | RTC-8763 | RF. | $2.1-6.3 \mathrm{mc}$ $2.1-6.3 \mathrm{mc}$ | . 50 |
| 61 G 569 | RTC-8764 | Osc. | , 1600 mmf | . 50 |

[T] Mormiature Printed Circuit IF Transcifcuit applications; also excellent printed equipment design or as replacement fran new ers for receivers pressntly on the trankermhave lagh gain and good selectivity with Al ing from top or bottom of shield. Available in all standard IF frequencies. *Wit diode filter capacicors. tFor use in battery radios; $\ddagger A C-D C$ radios. IS, in applicatery column below, indicates interstage use. $3 / 4$, square $\pi 2^{\circ}$ high. Shpg. wt.. 3 oz.

(W) Minlature IF Transformers. Shell core mental permbility tuned transformers for experimental use and general replacement in "personal radios. Offer exceptional gain and selectivity. Tune from top and bottom of shield. With diode fitet. fFor battery radios: :AC DC radios. IS indicates interstage use. With mtg. clip. $3 / 4^{*}$ square $\times 2^{*}$ high. Wt., 3 oz .

| Stock No. | Type | Frea. | Application | NET |
| :---: | :---: | :---: | :---: | :---: |
| 616594 | RTC-8638 | 262 kc | Input | 1.80 |
| $61 . G 595$ | RTC-8639 | 262 kc | Output | 1.80 |
| 61 G 596 | RTC-8640 | 262 hc | Output* | 1.80 |
| $\begin{array}{lll}61 & G & 597 \\ 61 & G 98\end{array}$ | RTC-8632 | 455 kc | Input | 1.80 |
| $\begin{array}{r}61 \\ 61 \\ 61 \\ 6 \\ \hline\end{array}$ | RTC-8633 | $\frac{455 \mathrm{kc}}{455}$ | Output | 1.80 |
| $\begin{array}{lll} 61 & G 599 \\ 61 G 600 \end{array}$ | RTC-8634 | 455 kc | Output* | 50 |
| $\begin{aligned} & 61 \text { G } 600 \\ & 61 G 601 \end{aligned}$ | RTC-8675 | 455 kc | Input | 1.80 |
| 61 G 6 | RTC-8636 | 455 kc | Output ${ }^{\text {a }}$ | 1.80 |
| 61 G 603 | RTC-8636 RTC-8637 | 455 kc 455 kc | Indut $\ddagger$ | . 80 |
| 61 G 604 | RTC-8676 | 455 kc | If |  |
| 61 G 605 | RTC-8677 | 455 kc | Tapped Pri. | 2.25 |
| 61 G 606 | RTC-8678 | 455 kc | Discrim. | 2.55 |
| 61.6 | RTC-8686 | 1500 kc | Input or IS | 1.80 |
| 61 G 609 | RT | 1500 kc | Output | 1.80 |
| 61 G 610 | RTC-8665 | 10.7 10.7 mc | Input or IS |  |
| 61 G611 | RTC-9052 | 10.7 mc | Discrim. | $2.50$ |
| 61 G612 | RTC. 8600 | 10.7 mc | Ratio Delec. | 2.50 2.40 |
| 61 G613 | RTC-9054 | 10.7 mc | Ratio Delec. | 2.64 |
| 61 G 64 | RTC-8545 | 4.5 mc | Input of IS | 5 |
| 61 G615 | RTC-8618 | 4.5 mc | Discrim. | 2.25 |
| 61 G 616 | RTC-8620 | 4.5 mc | Ratio Detec. | 2.25 |
| G1G618 | RTC-9249 | $21.25 m \mathrm{mc}$ 21.25 mc | Input of IS | 2.88 |
| G 619 | RTC-9251 | 21.25 mc | Ratio Detec. | $\frac{2.40}{2.40}$ |
| 61 G 620 | RTC-8557 | 44 mc | TV Convert | 2.40 1.80 |
| 61 G621 P | RTC-8558 | 44 mc | TV First If | 1.80 |
| 61 G 622 R | RTC-8559 | 42.5 mc | TV Second If | 1.80 |
| 61 G 623 R | RTC-8561 | 45.5 mc | TV Third If | 2.25 |
| 61 G624 R | RTC-8563 | 44 mc | IV Fourth if | 1.80 |

# J. W. Miller and CTC Components 

## J. W. MILLER COILS, CHOKES, INDUCTORS, AND TRANSFORMERS

FM STEREO MULTIPLEX INDUCTORS
New units designed specifically for ase receivers. sary separation of AM modulated (L-R) suppressed carrier signal, $L+R$ audio signal, and 19 -ke pilot sub-carrier. Genernte 38 - kc signal and 19 kc pilot sub-carrier, Combine $L-R$ sijsignal in such a manner that $L$ signal appears at one output terminal and $R$ signal at another. $1 / 6^{\circ}$ square $\times 17 / z^{6}$ high. Shpg, wt., 3 oz . Stock No. Type Description 61 G 0001351 Low Pass Filter
$\qquad$ $6: G 0001351$ Low Pass Filter GI G
6
G
G
0 61 G 003 1354 Locked Oacillator 19 kc |. 86 6 G G 004 1355Output Transformer 38 kc 2.25

## CTC COILS, COIL FORMS

For broadband RF amplifiers, All have HF paper bas* phe-
 All havedies papept tceramic Vertical mounts. except 2270 and 2271, horizontal. §Unassembled coil forms. All parts are non-ferrous and electro-plated. Av. Wt., 4 oz . COILS

|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ock | Type | Mc | $\mathrm{L} \times$ Dla. ${ }^{\text {N }}$ | NE |
| 61 | LSM | 1 | 27/0x1/: |  |
| 616006 | LSM | 3 |  |  |
| 61 G 007 | LSM |  |  |  |
| 616010 | LSM | 10 | $21 / 2$ | 1.03 |
| 61 G | LSM | 30 | $\begin{aligned} & 27 / 32 x \\ & 27, ~ \end{aligned}$ |  |
| 61 Gols |  | 60 |  | $\begin{aligned} & .93 \\ & 1.12 \end{aligned}$ |
| 616016 616019 | $\begin{aligned} & \mathrm{LS} 3 \\ & \mathrm{LS} \end{aligned}$ | $\frac{1}{3}$ |  | $1.12$ |
| G | LS | 5 |  | 1.07 |
| 61 G 021 |  | 10 | $11 / 0$ |  |
| 616022 | LS3 | 30 | $11 / 8$ | 1. |
|  |  | 60 |  |  |
| 61 G 024 | 2060-1 | 2.0-3.7 |  |  |
| $6025$ | $2060-21$ | $\begin{aligned} & 3.5-7.0 \\ & 6.5-10.6 \end{aligned}$ | ${ }^{27 / 12 x} 27$ | 1.06 |
| G 6026 | 2060-4 | 6.510 .8 10.18 | $23 / 82 x^{1}$ | . |
| 619 | 2060-5t | 16-30 | 2783 |  |
| 616029 | 2060.64 | 28.63 | 27/32 |  |
| 61 G 030 | 2060)-74 | $61-122$ $120-243$ |  |  |
| 616 | 2061)-8t |  |  |  |
| $\begin{aligned} & 61 G 032 \\ & 616033 \end{aligned}$ | $\begin{aligned} & 2060-9 \dagger \\ & 2060-104 \end{aligned}$ |  |  | 1.6 |
| COIL FORMS FOR 1-20 MC |  |  |  |  |
| ck No. | Typo |  | - $\times$ | NE |
|  | PLS5-2C4L/Bt |  |  |  |
| 1.035 | $\begin{aligned} & \text { PLS6-2C4L/E } \\ & \text { PLS } 72 \mathrm{C} 4 \mathrm{~L} / \mathrm{K} \end{aligned}$ |  |  |  |
| $\begin{aligned} & 61 G 036 \\ & 61 \\ & 60 \end{aligned}$ |  |  | $111 / 16 \times 1 / 2 x^{2}$ | 26 |
| 6 | SPC-2B-4L SPC-11A-4L ${ }^{5}$ |  |  |  |
| 616039 |  |  |  |  |
| 61 G040 | SPC-12A-4Lt |  |  |  |
|  |  |  |  |  |
| 616043 | LSM-E |  |  |  |
| 61 G 044 | $\begin{aligned} & \text { LS3/B } \\ & \text { LS4/K } \\ & \hline \end{aligned}$ |  | $11 / 8$ |  |
| 616045 |  |  | $2 \times 1 / 2$ |  |
| $61 G 046$ | $\begin{aligned} & \text { PLS5/ } \\ & \text { PLS } \end{aligned}$ |  | $\begin{aligned} & 11 / 6 \times 3 \times 1 / 0^{0} \\ & 27 / 3 \times 1 / 4 \end{aligned}$ | . 59 |
| COIL FORMS FOR 20.50 MC |  |  |  |  |
| tock No. | TYPE |  | $\mathrm{L} \times$ Dia. | NET |
| 6160486160049616050616001616 | PLST-2C4L/H |  |  |  |
|  | PL.ST-2C4L/1 |  | $1960{ }^{19}$ |  |
|  | PLSS-2C4L/N ${ }^{\text {P }}$ |  |  |  |
|  | $\begin{aligned} & \text { PLS6-2C4L/Ot } \\ & \text { PLS7-2C4L/O } \end{aligned}$ |  |  |  |

## MORRIS "COILMASTER"



Lowest Prices-Highest Quality


## DUO-LATERAL FILTER CHOKES

(A) Effective line filters. Duo-lateral wound for A low distributed capacity. Ideal for use inac lines to filter RF or noise pulses. Type 7825 is $13 \times 13 / 4$ wound on bakelite form. Stock No. Type Amps Ohmsioz. Mh/NET
 $\begin{array}{lllllllllll}61 & G & 055 & 7827 & 10 & \text { is } & 16 & .370 & 4.12\end{array}$

## CENTER-TAPPED CHOKE

(B) Typo 691-T. Dino-lateral wound, single B section RF chokes wound with silk-covered enameled copper wire. Unshielded dowels; wind ings impresmated asainst moisture. Inductance, $00 \mathrm{~m}=50$ DC resistance, 100 ohms; current rating. $125^{\circ} \mathrm{ma}, 11 / 4 \times /^{*}$ high. Wt., 4 oz .97

## CAPACITY-OPERATED RELAY COIL

C Type 695. For use in alarm systems, window displays. etc. Supplied wit 61 G057 NET

## 100 KC HI-Q IF TRANSFORMER

Type 1890-P1. Iron-core transformer has D high $Q$ windings for exceptionally sharb gelectivity characterintlis. ans. $31 / 4 \times 11 / \mathrm{NED}^{2} / \mathrm{S}^{*}$. Wt., 4 oz . ....... 5.88 $61^{\circ} 059$ NET
BEAT FREQUENCY OSCILLATOR COIL (E Type 612-M5. Mica tuned air core. Frefor adjustmerte $31 / 4 \times 11 / \not \times 1^{3 / 1 / 2 *}$. Wt... 402.2 .50

## PRINTED CIRCUIT RF CHOKES



## MIDGET RF COILS <br> Type A-320-A. Permeability-zuned broadcast band coils enclosed in aluminum shields. For receiver antenna stage use. Adjustable iron core permits accurate alignment. Frequency range. $540-1700 \mathrm{kc}$. high. $16-32$ spade bole mounsting Shpg. wt. 4 oz. | Shpg. WL.. |
| :--- | :--- |
| 6102 | <br> Typo A-320•RF. Same as above except fo 



SOUND DETECTOR AND OSCILLATOR TRANSFORMERS
(F Quality TV components. Type 1468 is a F sound ratio detector transformer for 4.5 mc will provide good operition with only one or wion preses of amplification preceding it. Type wo stages of ampliwcalindings: one tapped for horizontal oscillator circuit : the other centerhapped and balanced for a sine-wave discriminator arrankement (synchrolock). Type 6183 has dual windings for Sync. Frequency and Phase circuit. All have aluminum shields with 6.32 spade bolt mitg. Sizes: Type 1468, $11 / 8 \mathrm{x}$ $11 / 3 \times 21 / 5^{\circ} ; 6194$ and $6183,1^{17 / 6} \times 11 / 66 \times 21 / 2^{\circ} \cdot 5 \mathrm{oz}$.

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | $\left\lvert\, \begin{aligned} & \text { Mir } \\ & \text { Type } \end{aligned}\right.$ | Description | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
|  |  | Horizontal Oncillator | 2.0 |
| 616090 | 6194 | Horizontal Oxcillator | 2.0 |
| 616091 | 1468 | Ratio Detector | 2.4 |

SYNC STABILIZER (RINGING) COIL
G Type 6210 . Has bakelite form with $3 / 40$ $21 / 2^{2}$. Shag. Wt., 2 oz. ......... NET 1.62

## HORIZONTAL LINEARITY AND WIDTH CONTROLS

(1)
Iron-core variable inductance coils for horizontal sweep circuits. Permit adjustinents over a wide inductance range to obtain the projer match for best operating charatre hole *Has AGC winding. Mtg. clip fits $36{ }^{*}$. hole $166^{\circ}$ hole with adapter supplied. $1 / 2 \times 21 / 4$ long on phenolic forms. Shpr. wt., 4 oz

| Stock No. | $\begin{aligned} & \text { Mir's } \\ & \text { Type } \end{aligned}$ | Millitunfics | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| $61 G 093$  <br> 61 6094 <br> 61 6095 <br> 6 6096 | 6313 <br> 6314 <br> 6315 | $\begin{array}{r} .5 .5 \\ 2.018 \\ 4.0-30 \\ 4.030 \\ \hline \end{array}$ | $\begin{aligned} & 1.29 \\ & 1.21 \\ & 1.79 \\ & 1.76 \end{aligned}$ |
| $\begin{aligned} & 616097 \\ & 61 G 6098 \\ & 6160099 \\ & 6 \end{aligned}$ | $\begin{aligned} & 6318 \\ & 6319 \\ & 6322 \\ & 6324 \end{aligned}$ | $\begin{gathered} 2.3 \\ 15.0-60 \\ 1.5010 \\ 60-130 \text { tapped } \end{gathered}$ | $\begin{aligned} & 1.09 \\ & .62 \\ & 1.21 \\ & 1.62 \end{aligned}$ |

## HIGH-VOLTAGE RF POWER SUPPLY TRANSFORMERS

Type 4526. RF power supply transformer $J$ for use in TV receivers, cathode ray oscilioSize. $11 / /^{4}$ dia. $x^{31 / 40}$ high. 4 oz . 5.88 Type 4526. Provides voltage up to 10.000 DC (30.000) when used lu a voltage rectifier (ripler circuit). Size, $21 / 4^{\circ}$ diameter $£ 6^{\circ}$ high ${ }_{6} \mathrm{Shpg}_{\mathrm{G}}$ WR. $102 .{ }^{4}$ NET
8.82

## VIDEO PEAKING AND FILAMENT CHOKE COILS

[K Type 6175 is filament choke. Reduces ntray 1. coupling, feedback, etc. Others are video peaking coils for proper bandwidth and wave shape of video signals. Coils witaoue shame types wound on resistor. Oser-all slze: Type 6175. wound on resistor, all other types, $1 / 2 \times 3 / 6^{2}$ diam$7 / 6 \times 9 / x^{\prime \prime}$ diameter; all other
eter. Av. shpg. wt., 2 oz.

| $\begin{aligned} & \text { Stock } \\ & \text { NO } \end{aligned}$ | Mfr's Type | $\mu$ hys | Shunt | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 61 $G$ 103 <br> 6 $G$ 104 <br> 61 $G$ 105 | $\begin{aligned} & 6172 \\ & 6153 \\ & 6174 \end{aligned}$ | $\begin{array}{r} 73 \\ 120 \\ 500 \\ \hline \end{array}$ | None None None | 56 |
| $\begin{array}{l\|l\|l\|l} 6 & G & 06 \\ 6 & G & 07 \\ 6 & G & 08 \end{array}$ | $\begin{aligned} & 6175 \\ & 6152 \\ & 6176 \end{aligned}$ | $\begin{array}{r} 0.8 \\ 20 \\ 36 \\ \hline \end{array}$ | None None None | 56 |
| $6: G$ $G$   <br> 6 $G$ 0  <br> 6 6 10  <br> 6 $G$ 1 1 | $\begin{aligned} & 6177 \\ & 6178 \\ & 6180 \\ & \hline \end{aligned}$ | $\begin{array}{r} 93 \\ 120 \\ 180 \\ \hline \end{array}$ | None <br> Noue | 56 |
| $\begin{array}{l\|l\|l} 61 & G & 2 \\ 6: G & 3 \\ 6: G & 4 \end{array}$ | $\begin{aligned} & 6154 \\ & 6181 \\ & 6155 \end{aligned}$ | $\begin{array}{r} 200 \\ 250 \\ 300 \\ \hline \end{array}$ | None None | 56 |

## J. W. Miller Coils and IF Transformers



Double-tuned air-core, universal input, inound insulated compression-t ype trimmers by mica mum temperature-capacity drift. RETMA (EIA) leads. Size, $113 \times 18 / 3 \times 2 \%{ }^{\circ}$. Wt. 4 oz . Stock No- Type Applleation EA. $\begin{array}{lll}60 \mathrm{G} 739 & 512 \text {. C1 Input IF } \\ 60 \mathrm{G} 740 & 512 \text { C2 } \\ 60 \mathrm{G} 741 & 512 . \mathrm{C} 3 \text { Full-wage IF }\end{array}$ | 60 G | 512 | $512-\mathrm{C} 4$ |
| :--- | :--- | :--- |
| $\mathrm{Half-wave}$ output IF |  |  |

1.94

## MINIATURE IF TRANSFORMERS

(B) Shell core, permeability tuned IF transplacement For experimental and general replacement use. Tunable powdered iron cores; tuning from top and bottom of shield. *Built-1m diode fiter capacitors. Size: $\boldsymbol{M}^{\circ} \mathrm{sq} . \mathrm{x}^{\circ}$. With


## MIDGET IF TRANSFORMERS

C] Air-oore mica trimmer tuned IF's. Excel-


| No. | Type | Frea. | Uso | EA. |
| :---: | :---: | :---: | :---: | :---: |
| 60 G 735 | ${ }_{1}^{12-C 1}$ | 455 kc | Inp |  |
| 60 G 736 | 112-C2 | 455 kc | Interstage |  |
| 60 G 737 | 112-C3 | 455 kc | CT Output | 4 |

## SUBMINIATURE 455 KC IF TRANSFORMERS

(D) Extremely small IF transformers with ex-(Derrite-shell cores provide high characteristics. Ferrite-shell cores provide high efficiency. Pri. by $11 / 2^{*}$ high. Shpg. Wi. 3 oz.
60 G 860. Type 10-C1. Input. NET
60 G 861. Type 10-C2. Output. EA.... 1.65

## TRANSISTOR IF TRANSFORMERS

S Subminlature. A tiny 455-kc IF trans performan with cup-core construction for top mary impedance 25,000 uare by "ŕ" high. Pripedance, ${ }^{*} 600$ ohms. $\dagger 1000$ ohms. Will match CK7ance, *i00 ohms $\dagger 1000$ ohms. Will match tuned and tapped. Slipg. wt., 3 oz. 60 G 802 . Type 9-C1. Input. NET
$60 \mathrm{GB03}$. Type $9-\mathrm{C} 2 \mathrm{t}$. Output. EA. 2.35
(E Minlature. High-quality 455-ke JF trans. Primary impedance 25,000 transistor recelvers. impedance. $\mathbf{0 0 0}$ ohms. $\$ 1000$ olims. Wecondary CR760 and CK761 transistors. Primary is 60 G 896 . Type 2041 . wht. ${ }^{3}$ oz. 60 G 973 . Type 2042t. Output. EA. 2.06

BANDPASS COUPLING COIL f] Negative mutual coupling coll for hi-fitRF
receivers 1 1/x $x^{2}$ Shpg. Wt. 4 oz. 97

G (H) Cover $540-1600$ with a 365 mmf capacisecondary. Series 5480 (Fig. H): single-section secondary with high-impedance primary; for Use with pentagrid converters. Series 5481 (Fiz. return for use with 6BE6 and similar mixers and with separate oscillator and mixer. Size, $1 \times 1^{\prime \prime}$. Shpg. wt., 4 oz.

| Stock | MPr's Type | IF | Padder | NET |
| :---: | :---: | :---: | :---: | :---: |
| 60 G 743 | 5480-C | 455 kc |  |  |
| 60 G 744 | 5481-C | 455 kc | . 00004 mfd |  |
| 60 G981 | 5481-K | 175 kc | . 001 mfd |  |

## DELUXE BANK-WOUND COILS

(J) Shielded antenna RF and bandpass coils. Two-bank $540-1740$ kc with 365 mmf capacitor primaries. $17 \times 3^{*}$. Shpg wt High impedance 60 G 783 . Type 242-A. Ant 4 Oz
60 G 784. Type 242-RF. RF. EACH
1.47

## MINIATURE RF COILS

K Shiellied iron-core coils for compact reAnterna and For 365 mmf tuning capacitors.


 $\left.$| 60 G 706 | $\overline{\text { A-121-A }}$ |
| :--- | :--- | :--- |
| 60 G 707 | $\mathrm{~A}-121-\mathrm{RF}$ |\(\overline{\begin{array}{c}Antenna <br>

RF\end{array}} \right\rvert\, $$
\begin{aligned} & 540 \cdot 1700 \\
& 540 \cdot 1700\end{aligned}
$$\)


## ADJUSTABLE RF COILS

[1. Compact, variable-inductance Iron-core The with $250-450$ ment use. Shielded type. Ose with $250-450$ mmf variable capacitors.
Oscillator coils have tapped secondary. Size. Oscilator coils have tapped secondary. Size.
$13 \times 13 / 1 \times 2 \mathrm{l/}{ }^{\prime \prime}$. Indicates IF frequency. Av. 136x1 $3 / 1 \times 2$ 1/2".
shpg. wt., 5 oz.

| Stock No. | Mfr's Type | Use | $\begin{gathered} \text { KC } \\ \text { Range } \end{gathered}$ | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 60 G 748 | 73-A | Ar |  |  |
| 60 G 749 60 G 752 | 73-RF $73.0 S C$ | RF | + $\begin{array}{r}500-1800 \\ * 100-550\end{array}$ | 2.06 |

## ANTENNA AND RF COILS

(M) Untuned. Broadly self-resonant from 540 to capacitor. Can size, $21 / 5 \times 15 / 5$. Shps. wt., 4 oz. 60 G 758. Type 472.UA. Ant. NET. 1.76

## HIGH "Q" BROADCAST RF COILS

(N) High-efficiency, unshielded, iron-core coils. (1) Adjustable core. Range indicated obtained using 365 mmf variable capacitor. Mount in Size: $1 / 8 \times 2^{\circ}$. Shpg. watues shown for 455 kc IF. Size: $1 / 8 \times 2^{\prime \prime}$. Shpg. wt.. 4 oz .

| Stock No. | $\begin{aligned} & \text { Mifr's } \\ & \text { Type } \end{aligned}$ | Use | $\begin{gathered} \text { KC } \\ \text { Range } \end{gathered}$ | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \hline 60 \text { G } 862 \\ & 60 \text { G } 863 \\ & 60 \text { G } 864 \\ & 60 \text { G } 865 \\ & \hline \end{aligned}$ | $\left\|\begin{array}{\|l\|} \overline{A-5495 \cdot A} \\ A-545 \cdot R F \\ A \cdot 5495 \cdot C \\ A \cdot 5496-C \end{array}\right\|$ | $\begin{aligned} & \text { Antenna } \\ & \text { RF } \\ & \text { Sid. Osc. } \\ & \text { Tapd Osc. } \end{aligned}$ | $550-1700$ <br> $550-1700$ <br> +400 mmf <br> 400 mmi | 1.62 |

## MINIATURE ADJUSTABLE RF COILS

(P) Variable-inductance RF coils. Une wlth ity. Type 70-OSC coil has tapped secondary. 70 series installed self-supported. 71 -OSC has 2 tap primary. Both track 100 to 550 ke 1 F . Max. size: $5 / 5 \times 11 / 5^{\prime \prime}$ high. Av. shng. wt., 4 oz

|  |  | U | $\begin{gathered} \text { KC } \\ \text { Range } \end{gathered}$ | NE |
| :---: | :---: | :---: | :---: | :---: |
| $0 \text { G } 869$ | $\begin{aligned} & 70 \cdot \mathrm{~A} \\ & 70 \cdot \mathrm{RF} \\ & 70-0 \mathrm{SC} \\ & 71-0 \mathrm{SC} \end{aligned}$ | $\begin{gathered} \mathrm{RF} \\ 0 \mathrm{sc} . \\ 0 \mathrm{sc} . \end{gathered}$ | $\begin{aligned} & 540 \cdot-1600 \\ & 540-1600 \\ & 540-1600 \\ & 540 \cdot 1600 \end{aligned}$ | $\begin{aligned} & 1.12 \\ & 1.12 \\ & 1.62 \end{aligned}$ |

## TRANSISTOR OSCILLATOR COILS

R Type 2020. Use in one transistor oac. cir$3 / 4 \pi 1 / 0^{\circ}$. Shpg. wt. 3 oz opacitor. 455 KC IF. 60 G 895 . NE Wt.. 3 oz. .................... 1.62 Type 2022. Similar to above, except for use 60 G 974. NET........................... 1.62

## SUBMINIATURE TRANSISTOR OSCILLATOR COIL

(S Type 2021. Shicided. For use in converter mizer. Use with 100 mmf variabie oscillator, Size $\$ 0^{\circ}$ high $x 300 \mathrm{~mm}$. Shpg. wh. 2 oz . 60 G 975 . NET ${ }^{3 / 1 / 2}$ sq. Shpg. we., 2 oz. 2.06

## ADJUSTABLE CERAMIC RF COILS

TT W, $X$ Adjustable coils for the most exactimpregnated ceramic forms. Tuned by powdered iron core. Fig. T is single-layer wound powderedis twin-pi wound, Fig. $\mathbf{X}$ is single-pi wound. Standard. High " $Q$ " units with a wide range oize: $1 \mathrm{~m}^{1}$ aces. Require $1 / \mathrm{H}^{*} \mathrm{mtg}$. hole. Form No. Av. shpg. we., 3 oz

| No. | Type | Fig. | Mlerohenrlee | NET |
| :---: | :---: | :---: | :---: | :---: |
| $60 \text { G } 982$ | $4400$ |  | Form only | 1.12 |
| 60 G 984 | 4404 | T | 0.9-1.6 | 1.59 |
| 60 c 985 | 4405 | T | 3. 1-6.8 |  |
| 60 G 986 | 4406 | T | 6.7-15 |  |
| 60 G 987 | 4407 | X |  | 1.76 |
| 60 G 988 | 4408 | \% | 30.69 | 79 |
| 60 G 989 | 4409 | $\mathbf{X}$ | ${ }_{68-130}$ | 1.85 |
| 60 G 990 | 4410 | X | 126-250 |  |
| 60 G 991 | 4411 | X | 245-475 |  |
| 60 G 992 | 4412 | X | 450.800 | 1.94 |
| 60 G 993 | 4413 | W | $750-1400$ | 1.97 |
| 60 G 994 | 4414 | W | 1300-2100 |  |

 Form size: $1: \times 7 / \mathrm{s}^{*}$. Av. shpg. wt., 3 oz .

| $\begin{aligned} & 60 \text { G } 870 \\ & 60 \mathrm{G} 日 71 \\ & 60 \mathrm{G} 872 \\ & 60 \mathrm{G} 873 \\ & \hline \end{aligned}$ | $\begin{array}{r} 4500 \\ 4502 \\ 4503 \\ 4504 \\ \hline \end{array}$ | $\begin{aligned} & \mathbf{T} \\ & \mathbf{T} \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Form only } \\ & 1.0-1.6 \\ & 1.6-8.8 \\ & 2.8-5 \\ & \hline \end{aligned}$ | 1.03 1.47 1.53 1.56 1.62 |
| :---: | :---: | :---: | :---: | :---: |
| 60 G 874 | 4505 | T | $5-9$ | 1.62 |
| 60 G 875 | 4506 | T | 9-16 | 1.6 |
| 60 G 876 | 4507 <br> 4508 | W | 16-24 | . 7 |
| 60 G 878 | 4509 |  |  |  |
| 60 G 879 | 4511 | X | $\begin{aligned} & 35-60 \\ & 60-120 \end{aligned}$ | 1.79 |
| 60 G 880 | 4512 | X |  | 1.85 |
| 60 G 881 | 4513 | X | 1190.330 | 1.85 |
| 60 G 882 | 4514 | X | 320-500 | 1.91 |

Subminiature. For ultra-compact equipment


| 60 G 995 <br> 60 <br> 60 <br> 60 <br> 60 | 4300 <br> 4301 <br> 4302 <br> 4303 | $\frac{\mathrm{T}}{\mathrm{T}}$ | Form only $0.17-0.27$ $0.27-0.41$ $0.40-0.65$ | 1.03 1.47 1.47 1.53 |
| :---: | :---: | :---: | :---: | :---: |
| 60 G 999 | 4304 | T | 0.64-0.95 |  |
| 60 G 927 | 4305 | T | $0.94-1.55$ | 1.56 |
| 60 G 928 | 4306 | T | 1.5-2.57 | 1.68 |
| 60 G 929 | 4307 | T | 2.5 .440 | 1.73 |
| 60 G 930 | 4308 | T | 4.3-7.15 | 1.76 |
| 60 G 931 | 4309 | X | 7.1-12.5 | 1.76 |
| 60 G 932 60 | 4310 | 8 | 12.4-20.3 | 1.82 |
| 60 G 933 | 4311 | X | 20. 1-32.8 | 1.85 |
| 60 G 934 | 4312 | X | $32.5-51.5$ | 1.88 |
| 60 G 941 | 4313 | X | 51-102 | 1.91 |
| 60 G 942 | 4314 | X | 101-180 | 1.91 |
| 60 G 943 | 4315 | X | 178-300 | 1.91 |

## TYPE 20 ECONOMY TRF COILS

Y Unshielded TRF coils for 540 to 1750 kc With for with 365 mmf variable capacitor. on adjustable sleeve over secondary primary on adjustable sleeve over secondary. 1 /1 " $22^{\prime \prime}$ 60 high. Shpg. wt.. 3 oz .
60 G 753. 20-A. Antenna Coin. NET.... 82
60 G 590.20 RF. RF Coil. NET.

RUBBER-COVERED MICROPHONE AND SHIELDED POWER SUPPLY CABLE
Recommended for greater abrasion resistance and extra flexibility Especially suited for make tight bellds around corners or lie perifctly 1 lat. 8414 is extra flexible and limp; 828 has heav lansy neoprene jackel; 8 .or price of continuous lature-sized cables. $100^{\prime}$. P'ER FOOT column in table below. Be sure to specify footage ootage over $100^{\circ}$, use


VINYL PLASTIC-COVERED MICR OPHONE AND SHIELDED POWER SUPPLY CABLE
VINYL PLASTIC-COVERED MICROPHON
values and lower loss figures than standard

Feature lower capacitance values deterioration; have high resistance rubber-covelte chather chemicals' solvent action. All are relatively o oil, gasolne, and other chemicas. Type 841 is especially suited for
and lapel or lavalier microphones. 8420 is a miniature type cable. *Order on standard length spools and save money. For price of continuous footage over $100^{\circ}$. use PER FiOo courm order to specify the footage you desire on your order. to specify the footage you desire
STANDARDSPOOLS


| Mir's | No. | vG | Cap; | O.D. Inches | Wkg. Volts | $\begin{aligned} & \text { Wt., Lbs. } \\ & \text { per } 100^{\prime} \end{aligned}$ | $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | $15^{\prime}$ | $25^{\prime}$ | $50^{\circ}$ | $100^{\prime}$ | 250 | 00' | $1000^{\circ}$ | FOOf |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type | Cond. | $\frac{\text { Stranding }}{25(7 \times 33)}$ |  |  |  |  | 47 W 564 | . 85 | 1.18 | 2.30 | 4.21 | $\begin{aligned} & 8.82 \\ & 6.57 \end{aligned}$ | $\begin{aligned} & 17.64 \\ & 13.08 \end{aligned}$ |  | . 05 |
| $8401$ | 1 | $25(7 \times 33)$ $25(7 \times 33)$ | 25 34 | . 200 | 5000 3500 | ${ }_{1}^{21 / 4}$ | 47 W 604 <br> 47 | .70 .73 | 1.99 1.71 | 1.71 3.18 | 3.09 5.73 | 6.57 12.89 16 | 13.08 25.72 33.07 |  | . 06 |
| 88422 | 2 | 22(16x34) | 18 | . 231 | 1000 | 4 | 47w 4756 | 1.42 |  | 3.53 | 6.61 | 16.17 | 33.07 | 5 |  |
| 8403 | 3 | 20(26x34) | 25 | 245 | 600 |  |  |  |  |  | 7.50 | 19.11 | 37.48 | 74.97 | 08 |
| 8404 |  | 20(26x 34 ) | 25 | 255 | 600 |  |  | 1.47 |  |  |  | 22.78 | 44.83 29.40 | 89.67 |  |
|  | 5 | $20(26 \times 34)$ | 25 | . 275 | 600 | 21/4 | 47 W 635 | 1.47 | 2.20 | 3.33 | 6.27 | 6.1 |  |  | 07 |

## 8420 2 $24(45 \times 40)$ (COILED) MICROPHONE AND TELEPHONE CABLE

RETRACTILE (COILED) MICROPHONE AND TELEPHONE CABLE Rugged coiled cables; have tinned cadmium-bronze conductors. Atlded telephone cords with spade terminals and 8496.8497 have one shicitid


STANDARD AND MINIATURE BROADCAST AUDIO CABLES
 Two-conductor, color-coded 8437 and 8441 whlch have braided shields; 8450 anpper shields, except ard aluminum-"Mylar" shields. All have lengehs. Specitypootagedosiredonorder.

| $\begin{aligned} & \text { Mir's } \\ & \text { Typo } \end{aligned}$ | Typo | Stranding | O.D. Inchee | Wha. Volts | Jaeket | Wt., Lbs. per ' $100^{\prime}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8436 | ABC |  | 180 | 100 | Black Vinyl |  |
| 8430 8437 | ${ }_{\text {ABS }}$ | 22 (solid) | . 200 | 200 | Black Vinyl |  |
| 8441 | CBS | $22(16 \times 34)$ | . 210 | 200 | Black Viryl |  |
| 8440 | Standard | 22 (solid) | . 185 | 100 | Chrome Vinyl |  |
| 8450 | Miniature | 22 (solid) | . 118 | 200 | Black Vins |  |
| 8451 | Miniasure | $22(7 \times 30)$ | . 135 | 200 | Black Vin |  |

## Steck NET PRICE

## HI-FI, STEREO AND PHONO CABLES



STANDARD CABLE

Cables with stranded, tinned copper conductors vinyl or rubber insulated. Feature extrenie flexibility, 8421 is hi-fi connecting cable with
or stereo heads. \#For price of continuous footage over 100 , use ''ER FOOT price column


RUBBER-JACKETED SERVICE CORDS AND MULTIPLE CONDUCTOR CABLES

Cords and cables for appliances, power tools, P.A. sys- Jackets; color-coded. stranded copper conductors. *For
tems, speakers. remote control circuits, etc. Max. rating:
300 v . at ; $-60^{\circ} \mathrm{C}$. Have rubber insulation; black rubber

| $\begin{aligned} & \text { Mir's } \\ & \text { Typp } \end{aligned}$ | $\underset{\text { Type }}{\mathbf{U} . L}$ | Cond | AWG Stranding |
| :---: | :---: | :---: | :---: |
| 8452 | SV | 2 | $18(41 \times 34)$ |
| 8478 | SJ | 2 |  |
| 8472 | SJ | $\begin{array}{r}2 \\ 2 \\ \hline\end{array}$ | $\begin{aligned} & 16(65 \times 34) \\ & 14(41 \times 30) \end{aligned}$ |
| 8474 |  |  |  |
| 8453 | SV | 3 | $18(41 \times 34)$ |
| 8454 |  | 4 | ${ }_{3}^{18(41 \times 34)} 20(26 \times 34): 2-18(41 \times 34)$ | price of continuous footage over tion , use PER

POSJ AND POT TYPE LAMP CORD
Two-conductor lamp cord with parallel No. 18 bare stranded copper con ductors. Jackets are polarity ribbed.

|  |  |  |  | Wt. Lbs. | Stock | STANDARDSPOOLS* |  |  |  |  | $\begin{aligned} & \text { PER } \\ & \text { FOOT } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mir' Type | Jacket | Color | Type | per 100 | No. | 25 | $100^{\circ}$ | 250 | $600^{\circ}$ |  |  |
| POSJ | Rubber | Brown | SP-1 | 3 | 4 4 W 763 | . 73 | 2.70 2.70 | 5.00 5.00 | 9.40 9.40 | 17.50 | 03 |
| POSJ | Rubber | Black | SP-1 | 3 | $48 w 76$ | . 63 | 2.33 | 3.40 | 6.30 | 11.90 | . 025 |
| POT | Vinyl Plastic | Brown | SPT-1 | 3 3 | 48 w 766 | . 63 | 2.33 | 3.40 | 6.30 | 1.190 | 025 |
| POT | Vinyl Plastic | Black | SPT-1 | 3 | 48 W 786 | . 63 | 2.33 | 3.40 | 6.30 | 11.90 | $\begin{aligned} & .025 \\ & .025 \end{aligned}$ |
| POT | Viny! Plastic | Gray | SPT-1 | 3 | 48 W 767 | . 63 | 2.33 | 3.40 | 6.30 | 11.90 |  |

Be Sure to Specify Desired Footage on Your Order

STANDARDSPOOLS*


## Belden Wire and Cable

## VINYL-COVERED PLASTIC-INSULATED CABLE

Top-quality chrome vinyl jacketed intercom cable tors. Especially sulted for plastic insulated conduc speakers, control and intercom circuits, as well as other applications requiring a highly durable, light copper stranded wire, with color-coded vinyl plastic insulat tinned cabled tokether and enclosed in an overall chrome vinyl plastic jacket ( $7 \times 30$ ) wire. Typey slzown with and stranded ( $16 \times 30$ ) wire; the other conductors are No conductors of No. 18 slown with an \& have conductors which are all No. 18 stranded ( $16 \times 30$ ) All flexible and easily stripped. For price of continuous footage in odd \& Buy in standard spool lengths and save. Bo sure to indicate footao desired on your order.

| $\begin{aligned} & \text { Mir's } \\ & \text { Type } \end{aligned}$ | Stock No. | Cond. | O.D. | $100 \mathrm{ft} .$ | STANDARD SPOOLS: |  |  |  |  | $\begin{aligned} & \text { PER } \\ & \text { FT. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $15^{7}$ | $25^{\prime}$ | $100^{\prime}$ | $500^{\prime}$ | 1000' |  |
| *8443 | 47 W 362 | 3 | . $150^{\circ}$ | , |  | . 81 | $2.43$ |  |  |  |
| *8444 | 47 W 372 |  | . $168^{\circ}$ | $21 / 4$ |  | 96 | $2.94$ | $12$ | $24.26$ |  |
| +84464 | 47 W | 6 | $180^{\circ}$ | $21 / 2$ |  |  | 3.6 | 4. | , |  |
| +84474 | 47 W 322 | 7 | . $246{ }^{\prime \prime}$ | $41 / 2$ |  |  |  |  |  |  |
| \$8448 4 | 47 W 332 | 8 | .251" | 43/4 | 1.18 |  |  |  |  |  |
| 184494 | 47 w 342 | 9 | . 261 " | 5 | 1.27 |  | 7. | 8.67 |  |  |
| *84564 | 48 W 223 | 10 | -260 | $51 / 4$ |  |  |  | 2. |  |  |
| *84574 | 48 W 225 | 12 | .260 | $51 / 2$ |  |  | 7.35 | 4.5 |  |  |
| \$8465 4 | 48 W 227 | 5 | . 2720 |  |  |  |  |  |  |  |
| \$84674 | 48 W 229 | 7 | 320 ${ }^{\circ}$ |  |  |  |  |  |  |  |
| \$84694 | 48 W 233 | 9 | . $375{ }^{\circ}$ | $91 / 2$ |  |  |  |  |  |  |

## SHIELDED P.A. AND SOUND SYSTEM CABLE


ackets for inned copper conductors use. All have enameled copper. *Polyethylene insulated conductors, aluminum "Mylar" insulated shield, stranded tinned copper ground wire 4Chrome vinyl jacket. \& Spiral-wrapped tinned shield. ABraided tinned sulated conductors with cotton braid conductors. 8732 has rubber in 22 stranded conductors: $8761,8771(7 \times 30)$. No. $20 \mathrm{stranded}$.8432 . 10 $8791(7 \times 26)$, $8772(7 \times 28)$. No. 18 stranded: $8760,8770(16 \times 30) ; 8789,8790$, 779 $8780(19 \times 29)$ solid: 8731 . No. 16 stranded PER FT " price For prica of continuous footage $100^{\circ}$ use "PER FT." price state deslred footage.

| Mfr's Type | Stock No. | Cond. | O. D. | $\begin{aligned} & \text { Lbs. } \\ & 100 \mathrm{ft} \end{aligned}$ | $\begin{aligned} & \text { PER } \\ & \text { FT. } \end{aligned}$ | STD. SPOOLS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 100' | $500^{\circ}$ | 1000 ${ }^{\circ}$ |
| 84327 | 48 W 884 | 2 | 225*' | $31 / 2$ | . 075 |  | 28.67 |  |
| $18731+1$ \| | 47 W 000 | 3 | . $178{ }^{\prime \prime}$ | $21 / 2$ | . 04 |  | $13.97$ | $\begin{aligned} & 57.33 \\ & 27.93 \end{aligned}$ |
| 8760* | 48 W 753 | 2 | . $222^{\prime \prime}$ | 3 | . 05 |  | 18.38 | $\begin{aligned} & 27.93 \\ & 36.75 \end{aligned}$ |
| $8761 *$ $8762 *$ | 48 W 754 | 2 | . $167^{*}$ | $13 / 4$ | . 03 |  | 11.76 | $23.52$ |
| 8762** | 48 W 809 | 2 | . $184^{\prime \prime}$ | 1 | . 04 | 3.38 | 15.44 | $30.87$ |
| 8770* | 48 W 755 |  | . $236{ }^{\circ}$ | $31 / 6$ | . 06 |  |  |  |
| $8771{ }^{\text {8 }}$ 8 8772 \% | 48 W 756 | 3 | . $175{ }^{*}$ | 2 | .035 |  | $\begin{aligned} & 23.16 \\ & 14.70 \end{aligned}$ | $\begin{aligned} & 46.31 \\ & 29.40 \end{aligned}$ |
| 8772* | 48 W 757 | 3 | .200* | 3 | . 045 |  |  | $\begin{aligned} & 29.40 \\ & 36.75 \end{aligned}$ |
| $8779+1$ | 48 W B 14 | 2 | .225* | 41/2 | . 06 |  | $\begin{aligned} & 18.38 \\ & 24.26 \end{aligned}$ | $\begin{aligned} & 36.75 \\ & 48.51 \end{aligned}$ |
| 8780 个18 | 48 W 815 | 2 | . $266{ }^{\circ}$ | 5 | . 07 |  | $\begin{aligned} & 24.26 \\ & 26.46 \end{aligned}$ | $\begin{aligned} & 48.51 \\ & 52.92 \end{aligned}$ |
| 8789†: | 48 W 865 | 2 |  |  |  |  |  |  |
| 87901 | 48 W 803 | 2 | $231$ | $4$ | . 05 |  | 18.96 19.60 | $\begin{aligned} & 37.93 \\ & 39.20 \end{aligned}$ |
| $8791+55$ | 48 W 804 | 3 | $.236$ | $43 / 4$ | . 06 | 5.29 | 24.70 | $\begin{aligned} & 39.20 \\ & 49.39 \end{aligned}$ |
| 8799 | 48 W 885 | 2 | .165* | $3^{*}$ | . 05 |  | 21.32 | $\begin{aligned} & 49.39 \\ & 42.63 \end{aligned}$ |

## UNSHIELDED P.A. AND SOUND SYSTEM CABLE

Hishaquality cable for PA and intercom installations, speaker extensions, assure low-noise circuits free from remstance and precision cabling vinyl insulated, untinned conductors, except tand interference. Have All have outer jackets of chrome vinyl jacket and $8481,8482,8460$. 8470 and 8492 which are twisted pait types without jacket. 8483 and 8493 are cabled and without jacket Stranded $(19 \times 29)$. For price of continuous ( $7 \times 26$ ). Siranded ( $10 \times 30$ )



2-CONDUCTOR SHIELDED INTERCOM CABLE

$\begin{array}{llllll}8734 & 8763 & 8732 & 8733 & 8722 & 8792\end{array}$
Type B734. 3 vinyl insulated cond.; tinned copper shield on one, other Type 8763.3 polyethylene insulated overall. Wt., $100 \mathrm{ft} .23 / 4$ Ibs. over 2 cond.; 1 unshielded. No. 20 stranded groumb wire. Chrome vinyt type 8732 . 4 polyethylene insulated cond. 1 pair tinned copper shielded Type 8733.3 conductors separately jacket. 100 ft . 3 Ibs. Type 8733 . 3 conductors separately aluminume "Mylar" shielded
 ping; 2 unshielded. Tinned ground; chrome vinyl jacket. $100 \mathrm{ft}, 41 / 2 \mathrm{bs}$ ype 8792. Telephone cable. 13 sets of vinyl insulated triplet conductors Type 8793 . As above, but 27 triplet sets jacket. 100 ft $171 / 2 \mathrm{lbs}$.
Fope prlce of continuous footage over. Wh.. 100 ft.. $361 / 1 \mathrm{lbs}$.
For prlce of continuous footage over 100', use "PER FT." price-
Mir's Stock Cond.
 373248 W B 97

| 8722 | 47 W 021 | 4 |
| :--- | :--- | :--- | :--- |
| 8792 | 47 | W 02213 |


|  | O. 0. | PER | STD. SPOOLS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stranding |  |  | $100^{\prime}$ | $500^{\prime}$ | 1000 |
| 22 ( $7 \times 30)$ | 194 | . 045 | 3.68 | 7 |  |
| $20(7 \times 28)$ | 210 | 05 | 4.36 | 17.64 | 35.28 |
| $22(7 \times 30)$ | $188 \times .296$ 225 | . 055 | 4.41 | 20.94 | 41.90 |
| $22(7 \times 30)$ | . 225 | . 045 | 3.68 | 15.81 | 31.6 |
| 20 (7x28) | 260 | . 06 |  | 23.52 | 4 |
| Solid | . 540 | . 30 | 4.99 | 24.95 | 249 |
| Solid | 770 | . 563 |  | 2 | 49. |

## PAIRED VINYL UNSHIELDED CABLE

## For intercom and telephone wiring. No. 22 solid inned copper except tNo 22 sirande 22 solid

 color-coded vinyl plastle insulation. Conductors cabled in iwisted pairs Vinyl giny plastic averall. Provide a quiet circuit, free from crosstalk vinyl glastic insulation for high dielectric strength. For price of con. tinuous footage over 100', use "PPR FT."price-state desired footage| Mir's |  | Cond. | O. D. |  |  | S | DARD | LS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type | No. | Cond. | O.D. | 100 ft . | T. | 100' | $500^{\prime}$ | 1000' |
| $\begin{aligned} & 8442^{*} \\ & 8740 \end{aligned}$ | 48 W 236 | 2 | .165* |  | . 02 |  |  | 6.17 |
| $\begin{aligned} & 8740 \\ & 8741 \end{aligned}$ | 48 W 4890 |  | . $150^{\circ}$ | 11 | . 02 | 1.76 | 6.47 | 2.50 |
| 8742 | W891 | 4 | 20 |  | . 035 | 2.89 | 11.76 | 22.79 |
| 8757 | 48 W 759 | 8 | 240 $25{ }^{\circ}$ | $4^{1 / 2}$ | $.05$ | 3.82 | 16.17 | 31.61 |
| 8743 | 48 W 893 | 12 | . 305 |  |  |  |  |  |
| 8747* | 47 W 030 | 12 | . $3400^{\circ}$ |  |  | 5.88 | 27.20 |  |
| 8744 | 48 W 894 | 18 | . $354{ }^{\text {² }}$ |  | $.10$ | 8.09 7.94 | 36.75 37.88 | $73.50$ |
| $8748^{\circ}$ | 47 W 035 | 18 | . $389{ }^{\circ}$ |  | $.145$ | 11.94 | 37.88 52.92 | $\begin{array}{r} 75.71 \\ 105.84 \end{array}$ |
| 8753 | 48 W 898 | 22 | .384* | 8 | 13 | 10.73 | $51.45$ | $\begin{aligned} & 105.84 \\ & 102.90 \end{aligned}$ |
| 8754 | 49 W 845 | 26 | . 409 | 11 | .15 |  |  |  |
| 8745 | 48 W 895 | 30 | $420^{\prime \prime}$ | 10 | . 16 | $13.67$ | $\begin{aligned} & 58.07 \\ & 66.15 \end{aligned}$ | $\begin{aligned} & 116.13 \\ & 130.83 \end{aligned}$ |
| 8755 | 49 W 846 | 38 | . $480^{\prime \prime}$ | 15 | . 23 |  | $\begin{aligned} & 66.15 \\ & 90.41 \end{aligned}$ |  |
| 8756 | 49 W 847 | 46 | $.510^{\prime \prime}$ | 171/4 | . 28 |  |  | $\begin{aligned} & 180.81 \\ & 211.62 \end{aligned}$ |
| 8746 | 48 W896 | 54 | . $5500^{*}$ | $17^{1 / 4}$ | . 243 | 22.79 | 105.84 | 211.6 a |
| 8750 * | 47 W 036 | 54 | . $595^{\circ}$ |  |  |  |  |  |
| 8751 | 4 W 776 | 102 | .745" | $33^{1 / 2}$ | -72 |  |  |  |

## SHIELDED SOUND SYSTEM CABLE



A have copper shielded. f18 stranded cond. cotton or paper wrapped, rubber insulation (ex tion). 8209 in weatherproof cotton insula 8208. 8735 plastic; 8206 is shielded hookup wire with copper braid. For price of continuous footage over 100 ft., use "PER FT." column. State desired footade.

| Mir's <br> Type | Stock No. | Cond. | 0.0. | Lbs. 100 ft | STANDARD SPOOLS |  |  |  |  |  | $\begin{aligned} & \text { PER } \\ & \text { FT. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $15^{\prime}$ | $50^{\circ}$ | $100^{\prime}$ | $250^{\prime}$ | $500^{\circ}$ | $1000{ }^{\prime}$ |  |
| 8206 | 47 W 833 | 2 | .156" | 21/2 | 73 | 1.99 | 3.53 | 7.74 |  |  | . 06 |
| 8208 | 47 W 854 | 2 | ${ }^{27}{ }^{2} 50^{\circ}$ | 4 | 1.15 | 3.19 | 5.83 |  | 24.99 | 49.98 | . 09 |
| 8735 | 48 W 874 | 3 | . $198{ }^{\circ}$ | 3 | . 85 |  |  |  | 24.99 | 49.98 | . 09 |

## RG TRANSMISSION CABLE

(

## Belden Wire and Cable

## MIL-W-76A SRIR THERMOPLASTIC HOOK-UP WIRE

Heavy-duty, thermoplastic insulajed hook-up wire. Rated 1000 v . rms. Meet MIL specs. Have tinned cop ger conductors. $.017^{\circ}$ thick insulation. Avallable in black, brown, red, orange, yellow, green, blue, vilet, gray, and white except 8520 and avallable in violet or gray). Speciry choice. Av.; shpl. wt.. $25-\mathrm{ft}$ spoo
1000 -ft. spool, $51 / 2$ ibs.

25-FOOT SPOOLS-SPECIFY COLOR

| Stock No. | Mip's Type | Size | Strands | O. D. | NET EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 47 TT 214 | 8530 | 22 | Solid | .059** | . 35 |
| 47 TT 215 | 8524 | 22 | $7 \times 30$ | . $0644^{\prime \prime}$ | . 38 |
| 47 TTT 216 | 8529 8523 | 20 | Solid $10 \times 30$ | . $0708{ }^{\text {² }}$ | . 47 |
| 47 TT 109 | 8522 | 18 | 16×30 | .080" | . 47 |


| Mir's Type | Slze | Strands | O. 0. | 100' SPOOL |  | 1000 SPOOL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | No. | EACH | No. | EAC |
|  | 24 | $7 \times 32$ | .058 ${ }^{\circ}$ | 47 TT 244 | . 92 | 47 TT 24 |  |
| 8530 | 22 | Solid | 059** | 47 TT 218 | .73 | 47 TT 22 | 4.41 |
| 8524 | 22 | 7×30 | .064* |  |  | 47 TT 223 | 9 |
| 8559 | 20 20 | Solid $10 \times 30$ | .066 .070 | 47 TT 47 TT 220 | .94 1.03 | 47 <br> 47 <br> 7 TT <br> TV <br> 2225 | 5.29 7.01 |
| 8523 | 20 |  |  | 47 TT 221 | 1.03 | $\frac{47}{47}$ TT 1225 | 92 |
| 8528 | 18 | 16x30 |  | $\begin{array}{lllll} \hline 47 & \text { TTT } & 1 & 0 \\ 47 & T \end{array}$ | 1.13 | $\begin{aligned} & 47 \text { TT } 111 \\ & 47 T 1 \\ & \hline 10113 \end{aligned}$ | 8.92 7.35 |
| 8528 8531 | 18 16 | Solid Solld | $\begin{aligned} & .074^{\circ} \\ & .085^{\circ} \end{aligned}$ | $\begin{array}{lll} 47 & T T & 112 \\ 47 & T T & 246 \end{array}$ | 1.13 | $\begin{aligned} & 47 \text { TT } 113 \\ & 47 \mathrm{TT} \\ & \hline \end{aligned}$ | 7.3 |
| $\begin{aligned} & 8531 \\ & 8521 \end{aligned}$ | $\begin{aligned} & 16 \\ & 16 \end{aligned}$ | $\begin{aligned} & \text { Solid } \\ & 2 \times 30 \end{aligned}$ | .085* | $\begin{aligned} & 47 \text { TT } 246 \\ & 47 \\ & \hline \text { TT } 114 \end{aligned}$ | 1.55 | 47 TT 115 | 11.6 |
| 8520 | 14 | $41 \times 30$ | .111* | 47 TT 116 | 1.99 | 47 TT 117 | 16.9 |
| 8527 | 12 | $65 \times 30$ | . $130^{*}$ | 47 TT 118 | 2.79 | 47 TT 119 | 23. |

## POPULAR ANTENNA WIRE

High conductivity copper antenna wire. Ideal for all receiving and transmitting antenna requirements. Maximum tensile strength assures minimum stretch. *Formvar insulation protects wire from corrosion. Av. shpg. wt.. per 100 -ft. coil, 1
spaol lengthis hown below.


## STRANDED BARE COPPER

| Type 8000-7x22 |  |  | Type 8002-7x24 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stock No. | Spool | NET | Stock No. | Spool | NET |
| 47 T 680 | 50 ft . | . 81 | 47 T 654 | 50 ft . | . 59 |
| 47 T 681 | 75 ft . | 1.11 | 47 T 655 | 75 ft . | . 73 |
| 47 T 682 | 100 ft . | 1.42 | 47 T 656 | $1{ }_{1}^{100} \mathrm{ft}$. |  |
| 47 T683 | 1.000 ft . | 13.23 | 47 T 657 | $1,000 \mathrm{ft}$ | 8.82 |


| Type 8008 No. 12 |  |  | Type 8009 No. 14 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 47 \text { T } 670 \\ & 47 \text { T } 735 \\ & \hline \end{aligned}$ | $\begin{aligned} & 100 \mathrm{ft} . \\ & 200 \mathrm{ft} . \\ & 5 \mathrm{mf} \end{aligned}$ | 2.50 4.56 10.68 | $\begin{aligned} & 47 \text { T } 740 \\ & 47 T 742 \\ & 47 T 741 \end{aligned}$ | $\begin{aligned} & 100 \mathrm{ft} . \\ & 200 \mathrm{ft} . \\ & 500 \mathrm{ft} . \end{aligned}$ | $\begin{aligned} & 1.70 \\ & 3.23 \\ & 7.20 \end{aligned}$ |

## INDOOR AERIAL WIRE

Type 8014. Extra flexlble. No. 25 stranded (13x36), tinned copper conuctor, with chrome vinyl plastic insulation. O.D., $044^{\prime \prime}$. Shpg. wte. 25 -ft. spool. 2 oz ; 500 -ft. spool, 2 lbs.
47 T 930.25 -ft. spool. NET. 3747 T 933.500 -ft. spool. NET 2.65

## NYLCLAD HEAVY MAGNET WIRE

Type HNC. This heavy-duty Nylciad copper magnet wire combines the most desirable features of Formvar wire with the toughness and solvent resistance of nylon enamel. Unexcelled for difficult and exacting windings of any type. Outstanding features: withstands winding abuse and forming operations; resists solvent action of all types of thimerers resists softening and brittleness at extreme temperatures; Infinite moisture resistance.


| 1/2Ib. Spool |  |  |  | 1 lb Spool |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Stock No. | Slxe | Foot | NET | Stook No. | Slio | Foet | NET |
| 48 T 036 | 14 | 40 | . 67 | 48 T 086 | 14 | 80 | 1.15 |
| $48 T 037$ | 16 | ${ }^{63}$ | . 67 | 48 T 087 | 16 | 126 | 1.15 |
| 48 T 038 | 18 | 100 | . 67 | 48 48088 | 20 | 315 | 1.22 |
| 48 T T039 | 20 | 250 | . 71 | 48 T 090 | 22 | 501 | 1.28 |
| 48 T 041 | 24 | 396 | . 75 | 48 T091 | 24 | 793 | 1.35 |
| 481042 | 26 | 630 | . 81 | 48 T 092 | 26 | 1260 | 1.49 |
| 48 T 043 | 28 | 995 | . 88 | 48 T 4893 | 28 30 | 1990 3140 | 1.62 1.84 |
| 48 T 044 | 30 32 | 1570 2440 | 1.02 1.09 | 48 T 994 48995 | 30 32 | 4880 | 2.02 |
| 48T045 | 32 34 | 3930 | 1.25 | 48 T 096 | 34 | 7860 | 2.35 |
| 48 T 047 | 36 | 6200 | 1.55 | 48 T097 | 36 | 12400 | 2.94 |
| 48 T048 | 38 | 9700 | 1.91 | 48 T 098 | 38 | 19400 | 3.75 |
| 48 T049 | 40 | 16050 | 2.75 | 48 T 099 | 40 | 32100 | 5.52 |

## DUPLEX LIGHTING CABLE

Weatherproof 2 -conductor stranded lighting cables for outdoor use only. Ideal for extending power linea to yard, garden, garaze, barn, etc. Consist of two stranded, tinned copper, vinyl Insulated conductorg: parallel through an oval-shaped, chrome viny! outer jacket of .022" thickness. 8677 is No. 16 AWG ( $19 \times 29$ ); O.D., $164 \times .276^{\circ} .8675$ is No. 14 AWG (19x27); O.D., $189 \times .326^{\circ} .867 .3$ Is No. 12 AWG (19x25); O.D. $.213 x .384^{\circ}$. Av, slipg. wt ., per 100 ft., 5 lbs.

| Stock No. | Type | Per ft. | 100 ft. Spool | 500 ft. Spool |
| :---: | :---: | :---: | :---: | :---: |
| $47 w 405$ | 8677 | .77 | 5.59 | 26.46 |
| $47 w 415$ | 8675 | .09 | 7.30 | 33.81 |
| $47 w 425$ | 8673 | .11 | 9.11 | 44.10 |

## TEST PROD WIRE

Rubber-covered lead designed for use with rest equipment. Made to withstand extremely high voltages. No. 18 conductor is $65 x 30$ Type 8898 tinned copper with cotton rurapping. $230^{\circ \prime}$ O.D. and $.088^{\circ}$ ruber insulation. 10.000 v . working voltage. 29,000 v. puncture voltage. Type 8899 has $144^{\prime \prime} \mathrm{O} . \mathrm{D}$. and $.045^{\circ}$ rubber insulation. 5000 v. working voltage, $20,000 \mathrm{v}$. puncture voltage. Shpg. wt. per $100 \mathrm{ft.:} 8898$, 4 lbs. 8899 , 2 lbs. Lengths under 100 ft . are wat. per 100 only In 10 and $25-\mathrm{ft}$. spool sizes.

| TYPE 8898 |  |  |  | TYPE 8899 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Stack No. | Color | Length | EA. | StockNo. | Color | Length | EA. |
| 47 TBII | Red | 10 ft .spool | . 71 | 48 T911 | Red | $10 \mathrm{ft.spool}$ | 47 |
| 47 T801 | Black | $10 \mathrm{ft.spool}$ | . 71 | 48 T901 | Black | 10 ft .spool | . 87 |
| 47 T812 | Red | 25 ft .spool | 1.25 | 48 T912 | Red | 25 ft .spool | . 81 |
| 47 T 802 | Black | 25 ft .spool | 1.25 | $48 T 902$ | Black | 25 ft spool 100 ft spool |  |
| 47 T 810 | Red | 100 ft .spool | 3.53 3.5 | 487910 | Red | 100 ft . spoo: 100 ft . spool |  |
| 47 T800 | Black | 100 ft . spool | 3.53 | 48 |  |  | 2.35 |
| $47 \mathrm{~W} 813$ $47 \text { W } 803$ | Red Blac | 500-ft. Spool | 16.02 | $\begin{aligned} & 48 W 913 \\ & 48 W 903 \end{aligned}$ | Red Black | 500-ft. <br> Spool | 9.95 |

## NEW COILED TEST PROD CABLE

Pair of tinned copner cables; red and black rubber insulation. Retract to 8 -in.; stretch up to 5 -feet. Seranded copper conductors. Handles 5000 v. working voltage; $20,000 \mathrm{v}$ breakdown v. test. Wt., 4 oz. per pair.
47 T 037. Type 8878. With prods...
47 T 050. Type 8879. Without prods


NET PER PAIR 2.21
COPPER BRAID SHIELDING AND BONDING CABLE

| Type | 1.D. | Stranding | ned copper for shield- |
| :---: | :---: | :---: | :---: |
| 0 | $1 /{ }^{\circ}$ | $96 \times 34$ |  |
| 8668 | 。 | - | cables. Useful for form |
| 8663 |  | $0 \times 34$ |  |
| 8661 |  | $92 \times 34$ | Braided in tubular form or casy slip |
| 8669 |  | $336 \times 34$ $576 \times 34$ | installation over wirins. Av. shps |
| 8662 | $3^{2}$ | $576 \times 34$ | per 50 ft .. $11 / 2 \mathrm{lbs}$. |


| $\begin{aligned} & \text { Mir's } \\ & \text { Type } \end{aligned}$ | 10 ft. Spool |  | 50 ft Spool |  | 250 ft. Spool |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stock No. | NET | Stock No. | NET | Stoek No | NET |
| 8660 | 49 T 351 | . 50 | 49 T 350 | 1.47 | 47 T 060 | 6.61 |
| 8668 | 49 T356 | . 68 | 49 T 355 | 2.02 | $47{ }^{47}$ T 061 | 10.82 |
| 8661 | 49 T 361 | . 67 | 49 T 360 <br> 49 | 2.30 5.39 | 47 T 063 | 24.40 |
| 8669 | 49 T 366 | 1.18 | $\begin{array}{r}49 \text { T } 365 \\ 49 \\ \hline\end{array}$ | 5.31 | 47 T 064 | 33.81 |
| 8663 | 49 T 842 | . 59 | 49 T843 | 1.86 | 47 T 065 | 8.08 |

## JUKE BOX CABLE

All have vinyl inner insulation. vinyl outer
jacket and stranded, color-coded tinned cop
per conductors. 8783 has 3 conductors. 1-
$120,2-16.8785$ oval has $5-122$ conductors; 3 twisted under: shield, 2 twisted unshielded. 8786 oval has 6 condetors: 4 - 124 twisted shield, a shield. $2-122$ twisted, unshielded. 8787 has 10 conductors: 2 under a shield 124 gauge, each group twisted under a separate shield. and 2 conductors 122 unshielded. (All shields are tinned copper braids.)


## TYPE 8782 JUKE BOX SPEAKER CABLE

Has 2 paraliel conductors $\$ 24$ sauge, $7 \times 32$
stranded-1 tinned. 1 bare. Vinyl insulation.
chrome vinyl jacket. $058 \times 115^{\circ}$ O.D. 100 ft.. 10 oz. 50 -ft. Spool
48 T 848, 25-ft. Spool...... 5248 T 828. 50-ft. Spool..... 76
48 T 829.
47 T 052.100 -ft. Spool. N1.21 1000 -ft. Spool. NET......................................... 8.82

## TYPE 8885 SHIELDED GRID WIRE

Single conductor 20 stranded ( $10 \times 30$ ) tinned copper conductor; $.015^{\prime \prime}$ rubber insulation; cellulose acetate yarn braid; lacquered. tinned copper braid shield. Break-down voltage. 4000 volts. O.D., $117^{\prime \prime}$. Shpg. wt., $100 \mathrm{ft} 11 / 4 \mathrm{ibs}$. Avallable only in lengths 3 hown
47 T 791.15 -itt. Spool..... 68 47T 792. 25-1t. Spoot..... 1.00


## ASSORTED WIRE KITS

Type 8822. Contalns ten $25-\mathrm{ft}$. spools of Type 8529 hook-up wire and a convenient dispenser rack. Colors: black, blue, green, red. white, yellow, orange, brown, gray, and violet. Shps. Wt. $7^{21 / 2} 226$. NET.
4.31

Type 8824. Contains eight $25-\mathrm{ft}$. apools of
Type 8523 hook-up wire and a dispenser rack.
Colors: black, blue, green, red, white, yellow, orange, brown. Slipg. wt., $21 / 4 \mathrm{ibs}$.
47 T 227. NET....
3.76

Type 8818. 8-25-ft. spools of 8941 No. 20 solid, cellulose acetate hookup wire. With dispenser. Black, blue, green, red, white, yellow, oranse, brown. Slipg we. 2 lbs.
4.94

Type 8820. Contains 8-25-ft. spools of 8943 No. 20 stranded ( $10 \times 30$ ),



## Coaxial Cable, Lacing Cords, Insulation Tubing

## AMPHENOL RG COAXIAL CABLE



Low-loss coaxial cable for RF applications, All meet risid military and commercial specs. Have vinyl jacket and polyethylene dielectric except fteflon dielectric. Teflon types operate at temperature ranges from -74 to $+200^{\circ} \mathrm{C}$., making thens ideal for aircraft alkalis. and gasoline. Have low moisture absorpiont to weather. acids. Have low moisture absorption qualities.

| Stock No. | $\begin{aligned} & \text { RG } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { Imp., } \\ & \text { Ohms } \end{aligned}$ | $\begin{array}{\|c} \mathrm{Mml} \\ \mathrm{Pepft} \end{array}$ | 0.0. | $\begin{aligned} & \text { Lhs, } \\ & 100^{\circ} \end{aligned}$ | $\begin{aligned} & \text { 1.99 Ft, } \\ & \text { PER FT. } \end{aligned}$ | $\begin{gathered} 100-499 \mathrm{Ft} \\ \text { PER FT. } \end{gathered}$ | $\begin{gathered} 500-999 \text { Ft, } \\ \text { PER FT. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 49 W 460 | $8 / \mathrm{J}$ | 52 | 29.5 | .405 ${ }^{\circ}$ | 12 | . 128 | .119 | .119 |
| 49 W 315 | $8 \mathrm{~A} / \mathrm{U}$ | 52 | 29.5 | . $405^{\circ}$ | 12 | . 142 | 132 | -132 |
| 49 W 470 | $11 / 4$ | 75 | 20.5 | . $405^{\circ}$ | 12 | 119 | -110 | .11 |
| 49 W 306 | 17/4 | 52 | 29.5 | .870 | 47 | .637 | . 583 | . 525 |
| 49 W 485 | $58 / 4$ | 53.5 | 28.5 | . $195^{\circ}$ | 3 | . 053 | . 049 | . 049 |
| 49 W 487 | 58A/U | 50 | 28.5 | .195 | 3 | . 053 | . 049 | . 049 |
| 49 W 319 | 58C/U | 50 | 28.5 | .195 | 3 | . 058 |  |  |
| 49 W 490 | 59/U | 73 | 21 | 242* | 41/2 | . 055 | . 051 | . 054 |
| 49 W 638 | $598 / \mathrm{U}$ | 75 | 21 | 2420 | 4 | . 063 | . 059 | . 059 |
| 49 W 488 | $62 / 4$ | 93 | 13.5 | $242^{\circ}$ | 41/2 | . 058 | . 054 | . 054 |
| 49 W 312 | 63.4 | 125 | 10 | 405* | 12 | . 142 | . 130 | . 130 |
| 49 W 473 | $174 / \mathrm{L}$ | 50 | 30 | 100* | 2 | .052 | . 048 | . 048 |
| Stock No. | $\begin{aligned} & \text { RG } \\ & \text { No. } \end{aligned}$ |  |  | mf Ft. | O.D. | $\begin{aligned} & \text { Lbs. } \\ & 100^{\prime} \end{aligned}$ | $\begin{aligned} & 1.99 \mathrm{Ft} . \\ & \text { PER FT. } \end{aligned}$ | $\begin{aligned} & 100.249 \mathrm{Ft} . \\ & \text { PER FT. } \end{aligned}$ |
| 49w636 | $115 \mathrm{~A} / \mathrm{U}$ | 5 |  | . 5 | .415 | 18 | 2.080 | 1.870 |
| 49 w 193 | 178A/U | 5 |  |  | . 075 * | 1 | . 2.240 | . 220 |
| $49 w 194$ | 179A $\sim$ |  |  | . 5 | . $105^{\prime \prime}$ | 1 | . 275 | 247 |
| 49 W 195 | 180/ ${ }^{\text {+ }}$ | 9 |  | 5 | .141* | 11/2 | . 430 | 390 |
| 49 W643 | 210/U | 9 | 1 | 3.5 | 242* | 12 | 1.170 | 1.050 |

## 'SUB-MINAX" MINIATURIZED COAXIAL CABLE

Type '21-597, Identical to full-size coaxial cable. Has polyethylene dielectric vinyl jacket. bralded copper slield, and stranded copperweld
inner conductor. $7 x .0056^{\circ}$ construction. 1 mp . 75 ohms ; capacitance, 20 mnif per ft. $150^{\circ}$ O.D. Slipg. 49 W 472. 100-499 Ft., PE R FT. . $053^{1 / 2}$ 1-99 FE., PER FT.... 058

## POLYFOAM COAX AND MICROPHONE CABLE

Type 21-146 is microphone cable with, polyethylene dielectric. Types
$621-100.621-111$ and $621-715$ are similar to types RFil/U. RG8/U and RG59/U respectively, but have polyfoam dielectric.

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { Mrr's } \\ & \text { Type } \\ & \hline \end{aligned}$ | Imp., Ohms | Mmf $\text { Per } \mathrm{Ft} \text {. }$ | 0.0. | $\begin{aligned} & \text { Lbs: } \\ & 100^{\prime} \end{aligned}$ | $\begin{aligned} & \text { 1-99 Fi., } \\ & \text { PER FT. } \end{aligned}$ | $\begin{aligned} & 100-499 \mathrm{FL} . \\ & \text { PER FT. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 49 W313 | ${ }^{21-146}$ | 45 | ${ }^{35}$ | .155 ${ }^{\circ}$ | 2 | . 049 | . 045 |
| 49 W 337 $49 W 39$ | $621-100$ $621-715$ | 75 73 | ${ }_{17}^{16.5}$ | . $405^{\circ}$ | 8 | . 144 | . 132 |
| 49 W644 | 621.111 | 50 | 26.5 | . $405^{\circ}$ | 10.4 | . 156 | . 143 |



## BELDEN LITZ WIRE

Type 8817. Sx44 stranded copper Celenamel insulated with one nylon wrap Specifically made for rewinding antenna primaries. hand-winding RF coils. If coils, and similar radlo frequency applications. Outside diameter:

## VARNISHED SPAGHETTI TUBING

## ASSORTED $8^{\prime \prime}$ LENGTHS

Highly popular with servicemen. experimenters and builders. An assortment of
26 pieces of vinyl and cambric spaghet $i$ tubing in various colors and diameters. Shpg. Wi.0 3 oz .
.39

## SELECTION OF $36^{\prime \prime}$ LENGTHS

| $\begin{aligned} & \text { For } \\ & \text { Wire } \\ & \text { Slize } \end{aligned}$ | Stock No. |  |  |  | $\begin{aligned} & \text { Per } \\ & \text { Pkg. } \end{aligned}$ | or Mare Pkgs., Per Pkg. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Black | Yellow | Red | Green |  |  |
| 20 | 49 T 164 | 49 T 165 | 49 T 166 | 49 T 167 | . 53 | Per Pkg. |
| 18 | 49 T 469 | 49 T 170 49 T 75 | 49 <br> 49 | 49 T 172 | -57 | . 52 |
| 14 | 49 T179 | 49 T180 | 49 T 176 | 49 T 477 | . 68 | . 53 |
| 12 | 49 T184 | 49 T185 | 49 T1时 | 49 T 487 | .64 |  |
| 10 | 49 T189 | 49 T 190 | 49 T 191 | 49 T 192 | . 68 | .62 |



## GENERAL-CEMENT CABLE TIES

Made of high dielectric polycthylene with 45 lb . breaking point. Designed 20 withstand temperatures of up to
$+120^{\circ} \mathrm{F}$. Each is $41 /{ }^{\circ}$ long wil $+120^{\circ} \mathrm{F}$. Each is $41 /{ }^{\circ}$ long. Will make 2 oz . 50 perpact harnesses as large as Stock No diameter. Shpa wh. 2 oz. 00 Der pkg.

| Stock No. | Type | Color | PER PKG. | Stock No. | Type | Color | PER PKG. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 49 \mathrm{~T} 142 \\ & 49 \mathrm{~T} 143 \\ & \hline \end{aligned}$ | $\begin{aligned} & 34.432 \\ & 34-440 \\ & \hline \end{aligned}$ | Red Blue | $\begin{array}{r} .61 \\ .61 \end{array}$ | 49 T 144 | 34.436 | Yellow | . 61 |

## STRANCO WIRE MARKERS

Flat Stran Code niarkers. Consist of 3.3 numeral markers ( $1 / 4 \times 11 / 3$ ) per card in numerical sequence from 1 through 33 . On cloth or $003^{2}$ goft

 | 49 T 898. Cloth. 10-49, EACH |  |  |
| :--- | :--- | :--- | :--- |
| 49 T 899. Aluminum. $10-49$, EACH | 24 | $1-9$, PERCARD.... 28 |

## CABLE LACING CORD

Waxed linen $t$ wine. Ilard-t wist gray 8 -cord; 50 -lb. epat. $1-\mathrm{lb}$ spool. 450 yds. $1 / 2-\mathrm{lb}$. sj, wol. 225 yds. Shps. 49 T 245 . $11 / 4 \mathrm{lb}$. Spoul. NET. $1 / 2-1 \mathrm{~b}$ spool, $1 / 4$ lb. 49 T $246.1 / 2-\mathrm{lb}$. Spool. NETY $\qquad$

## ALPHLEX FIT-275 SHRINKABLE TUBING (Specify Color)



At-purpose "ubing supplied expanded ered inside diameter within 8 seconds when heated. to form permanent. tight fitting bond. Use soldering iron, match or heat-gun below to heat. For Jacket ing, color-codlng, etc. Self-extnguishing; resists fungus, acids, alkalls, oils. In choice of 2 sizes; $6^{\circ \prime}$ and 4 -ft. lengths. Packed one size and one color to a box. Avallable in black, red, white and yellow-specify color. Av. w't. per $100 \mathrm{ft} . \mathrm{I} \mathrm{lb}$.

| $\begin{aligned} & \text { Wre } \\ & \text { Size } \end{aligned}$ | $1.0 .$ | $\begin{aligned} & \text { Recor } \\ & 1 . D . \end{aligned}$ | Nom, Wal! Thickness | Stock No. | $6^{\circ}$ Lgths. Der Box | $\begin{aligned} & \text { PER } \\ & \text { BOX } \end{aligned}$ | Stock No. | 4' Lgths. per Box | $\begin{aligned} & \text { PER } \\ & \text { BOX } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 24 | . 050 | 027 | . $012{ }^{\circ}$ | 48 TT 000 | 40 |  | 48 TT 117 | 25 | 16.00 |
| 22 | . $055{ }^{\circ}$ | . $032^{\circ}$ | .012' | 48 TT 001 | 36 |  | 48TT 118 | 25 |  |
| 20 | $060^{\circ}$ | . $039^{\circ}$ | . $016^{\circ}$ | 48 TT 002 | 34 | 3.75 | 48 TT 119 | 25 | 7.5 |
| 18 | .076 ${ }^{\circ}$ | .049 | . $016^{\prime \prime}$ | 4871003 | 32 |  | 48 TT 120 | 25 | 19.1 |
| 16 | .093* | 061 | .016" | 48 TT 004 | 30 |  | $48 T 121$ | 25 | 20.75 |
| 14 | . $120^{\circ}$ | .072 | . 016 | 48 TT 00 | 28 |  | 48 TT 122 |  |  |
| 12 | . $153{ }^{\circ}$ | .089' | . $016^{\prime \prime}$ | 4871006 | 24 |  | 48 TT 123 | 25 |  |
| 10 | . $191^{*}$ | .112* | . $016{ }^{\prime \prime}$ | 48 TT 007 | 20 |  | 48 TT 124 | 25 | 27. |
| 8 | $240^{\circ}$ | .141 ${ }^{\circ}$ | . 020 " | 48 TT 008 | 18 | 3.75 | 48 TT 125 | 25 | 27 |
| 6 | .302* | . $178{ }^{\circ}$ | . 020 * | 48 TT 009 | 18 | 3.75 | 4 ¢TT 126 | 25 | 34.30 |
| 4 | . $378{ }^{\circ}$ | 224* | 020" | 48 TTO10 | 16 |  | 48 TT 127 | 25 | 37.30 |


| BLACK ONLY |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | . $430{ }^{\circ}$ | . 275 | . $020^{\prime \prime}$ | 48 TTO111 | 12 |  | 48 TT 1 28 | 5 | 8,20 |
| 5 16. | .500 | $334{ }^{\circ}$ | .025' | 48 TT 012 | 10 |  | 48 TT 129 | 5 | 8.9 |
| \%" | . $600{ }^{\circ}$ | . $399^{\circ}$ | . $025^{\prime}$ | 48 TT O13 | 10 |  |  | 5 | 11.11 |
| $7 / 6$ | . $693^{\circ}$ | . $462{ }^{\text {² }}$ | .025** | 48 TTO14 | 8 | 3.75 | 48 TT 131 | 5 | 14.09 |
| $1 / 2 *$ | .787 ${ }^{\text {² }}$ | . $524^{\circ}$ | .025* | 48 TTO15 | 6 |  | 48 TT 132 | 5 | 16.30 |
|  | . $982^{\circ}$ | 65 | .030 | 48 TT 016 | 6 |  | 48 TT 133 | 5 | 19.40 |
| $1 / 4$. | .180 ${ }^{\circ}$ | . $786^{\circ}$ | .035" | 48 TTO17 | 5 |  | 48 TT 134 | 5 | 19.40 23.09 |
|  | . $365{ }^{\circ}$ | .911 ${ }^{\circ}$ | .035* | 48 TT O18 | 4 | 3.75 | 48 TT 135 | 5 | 27.31 |
| $1^{\circ}$ | 555 | .036* | . $0355^{\circ}$ | 48 TTO19 | 4 |  | 48 TT 136 | $\begin{aligned} & 5 \\ & 5 \end{aligned}$ | 32.21 |



Model HG-1 Heat Gun. Powerful centrifugal-type blower with heating element provides heat for easily and quickly shrinking above Alphlex tubing. Has triangulat base for bench use or may be hand held. Has on-ofl switch on handle. For $110-120$ v. 60 cycle AC. 48 T 576 . NET
41.25

ALPHLEX PVC-105 PLASTIC TUBING (Specify Color) Extruned plastic tubing for protection of wire and cable from effects of heat. oil corrosion, fungl, etc. orms to military specifications MIL-1.631C ASTMD876, and ASTM-D922. Rated at 800 volts; resistance, over ASillion mess. Tensile strength 2500 PSI. Sizes 24 and 22 012, others, $016^{\circ}$. In clear, black, Sed yellow, 22 . 012 wall thickness; white, and orangespeclfy color. Av. shpg. wt.. $100 \mathrm{ft.}$.5 oz .

| Size | Nom. I.D. | 25.51. Coll |  | 100-Ft. Coll |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Stock No. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ | Stock No. | 1-9. | 10-49. | 50.UP. |
|  |  |  |  |  | EACH | EACH | EACH |
| 24 | . $022^{\circ}$ | 71 T 300 | . 65 | 71 T1307 |  |  |  |
| $\begin{aligned} & 22 \\ & 20 \end{aligned}$ | .027** | 71 TT 301 | . 66 | 71 T1 308 | 1.62 | 1.31 | 1.09 |
| $\begin{aligned} & 20 \\ & 18 \\ & \hline \end{aligned}$ | . $033^{\circ}$ | 71 TT 302 | .67 .68 | 71 T1309 71 T1310 | 1.66 | +.35 | 1.11 |
|  |  | 71 TT 304 | . 71 | 71T311 | 1.73 | 1.38 | 1.14 |
| 14 | . $0566^{\circ}$ | 71 TT 304 | . 71 | 71T15311 | 1.85 | 1.46 | 1.21 |
| 12 | . $0855^{\circ}$ | 71T 306 | . 79 | 71T1313 | 2.14 | 1.66 | 1.38 |

Tubing as above. Size $10,016^{\circ}$ wail thickness; all other sizes, $.020^{\circ}$ Avallable In cholec of six popular colors: clear, black, red, yollow, green, and whlte-speclfy color. Av. shpg. wt., 100 ft .. 10 oz .

| 10 | .1060 | 71 TT 314 | . 10 | 71 TT 319 | 2.31 | . 85 | 1.55 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | .133' | 71 TT315 | 1.10 | 71 TT 320 | 3.39 | 2.66 | 2.23 |
| 4 | . $366^{*}$ | 71 TT 316 | 1.23 | 71 TT 321 | 3.91 | 3.02 | 2.5 |
| 2 | 208 26 | $71 T 317$ $71 T 318$ | 1.40 | 71 Tr 322 | 4.58 | 3.47 | 2.84 |
| 2 | 263 | 71 TT |  | TT 32 | 5.34 | 4.00 | 3.32 |

Wall thicknesses, size $0 . .020^{*} ;{ }^{*} .025^{*} ; \uparrow .030^{\prime \prime} ; 8.035^{\circ}$, Choice of oloar or blaek-specify. Av. wt., $100^{\circ}, 5 \mathrm{lbs}$.

| 3/** | ${ }^{33} 30^{\circ}$ | 71 TT 324 | 1.8 | 71 TT 335 | 6.23 | 4.64 | 3.89 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3/1/6** | $3122^{\circ}$ | 71 TT 325 | 2.11 | 71 TT 336 | 7.44 | 5.54 | 4.64 |
| \%** | .375 ${ }^{\circ}$ | 71 TT 326 | 2.40 | 71T 337 | 8.59 | 6.41 | 5.49 |
| \%/90 | . $625{ }^{\circ}$ | 71TT 328 | 2.91 | 71TT338 | 10.64 15.30 | +1.07 | 6.87 9.83 |
| 1/4.8 | . $750^{\circ}$ | 71 T1 329 | 5.53 | 717339 | 15.30 | 11.73 | 9.83 |

## ALPHLEX ELECTRONIC LACING TAPES



High-quality flat lacing tapes in assorted colors. Designed to treet the most stringent military reMIL T713A, Type P. Class Il. Shpg. wis.: 200 yd. spool, 8 oz.; 500 -yd., 1 ib.
BRAIDED NYLON-200-YARD SPOOLS

| $\begin{gathered} \text { Stock } \\ \text { No. } \end{gathered}$ | $\begin{aligned} & \text { Mfr's } \\ & \text { Type } \end{aligned}$ | Color | Width | Tensile Strength | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 49 T 978 <br> 49 T | $\begin{aligned} & 1 . C 137 \\ & 1 . C 137 \end{aligned}$ | White Black | $1 / 40$ | $\begin{aligned} & 145 \text { lbs. } \\ & 145 \text { lbs. } \end{aligned}$ | $\begin{aligned} & 5.84 \\ & 6.08 \end{aligned}$ |
| BRAIDED NYLON-500-YARD SPOOLS |  |  |  |  |  |
| 49 T 980 49 T 981 49 T 982 49 T 983 | $\begin{aligned} & \text { l.C136* } \\ & \text { LC136 } \\ & \text { lCI } 34 \\ & \text { I.C } 34 \\ & \hline \end{aligned}$ | White Black Whate Black |  |  | $\begin{aligned} & 7.89 \\ & 8.51 \\ & 5.06 \\ & 5.67 \end{aligned}$ |
| BRAIDED DACRON-500-Y ARD SPOOL5 |  |  |  |  |  |
| $\begin{align*} & 49 \text { T } 984 \\ & 49 \text { T } 985 \\ & \hline \end{align*}$ | $\begin{aligned} & 1 \mathrm{Cl} 62 \\ & \mathrm{LC} 162 \end{aligned}$ | White Black | $\begin{aligned} & Y_{2}^{\circ} 0^{\circ} \\ & y_{12}^{\prime \prime} \\ & \hline \end{aligned}$ | 50 lbs <br> 50 lbs. | $\begin{aligned} & 7.89 \\ & 8.51 \end{aligned}$ |

## TV Tube, Telephone, Pickup Arm, Hook-Up Wire and Cable

## belden cathode-ray tube cable

High dielectric. corona resistant. minimum surface leakage CRT cables. No. 22 ( $7 \times 30$ ) tinned copper, polyet hylene insulated. 8868 has red vinyl jacket; rated $25,000 \mathrm{v}$, working; 50.000 v. breakdown. 8869 has black vinyl jacket; rated 17.000 v . working; 35.000 v . breakdown.



## BELDEN RUBBER-COVERED LEAD-IN

Type 8200. Flexible No. 18 tinned copper wire, stranded $7 \times 27$ ), with $.040^{\circ}$ live rubber insulation. Overall diameter


## TELEPHONE WIRE

-Conductor Interior. For interlor
se 22 sild inned copper wire

No. 22 solld, tinned copper wire. $1 / 2 \mathrm{Vt}, 100 \mathrm{ft}, 21 / 2 \mathrm{lbs}$
48 W 810 . PER FOOT... 04100 tt . or More, PE R 100 FT. 3.73 2-Conductor Exterior. No. 22 solid tinned copper wire. Each conductor has rubber Insulation; overall black, weatherproof brald. Shpg wt., 100 ft., 3 lbs.
48 W 826 . PER FOOT. . 04100 ft . or More, PER 100 FT. 3.38 3-Conduetor Exterlor. As above, but 3-cond. Wt, 100 . 4 lbs. 5.08
48 W 825 . PER FOOT. 055 iOO ft. or More, PER 100 FT.. 5.08

## TWISTED-PAIR ANTENNA LEAD-IN

Htgh-quality, twisted-pair antenna lead-in wire. Designed especially for use with noise-reducing.
doublet-type recelving antennas. Close imped18 ance match assures endent signd with tough. long-life rubber insulation. 18 stranded-wire conductors with crougble or dry out during prolonged


## ROME FLEXALL CABLE

A non-metallic sheathed waterproof and
rot resistant cable-designed specifically
or buriar in the ears insulated with Type TW thermoplastle. An all-glass yarn wrap covers both conductors and a synthenol plastic sheath covers yarn wrap covers ideal forductaide lighting and speaker systems. Eliminates overhead wiring, Capacity 15 amps. Rated at 600 vols. U.L. 47 W 594 . PER FOOT. . 09 ( 100 ft . or More, PER 100 FT. 8.52

## ROME ROFLEX CABLE

Two-conductor cable for indoor or outdoor use. Ideal for long speaker lines and electrical feed-

为 ers or branch circuts etc. Color-coded No. 14 solid wire conductors have durable, heat resistant. thermoplastic insulation with plastic sheath durable, heat resiblant. Current capacity is is ampe. Rated at 600 volts.


## STEREO PICKUP ARM CABLES

High-quality phono pickup arm cables of exceptional flexibility. For record changers and turntables. No. $\mathbf{3 2}$ stranded ductor with $.009^{*}$ vinyl plastic insulaton. O.D.
$.055^{\circ}$. Extremely light in weight, cables have minimum effect on stylu trackins force and lateral arm movement. Types 1479, 1406, 1407, and 1410 have braided tinned copper shleld for minimizing the possibility of hum pickup. Av, shpg. wt.: $10 \mathrm{ft} . .4 \mathrm{oz} . ; 25 \mathrm{ft} ., 6 \mathrm{oz} . ; 250 \mathrm{ft}$.

UNSHIELDED WIRE

| $\begin{gathered} \text { Mrr's } \\ \text { Type } \\ \hline \end{gathered}$ | Cond. | 10-Ft. Coll |  | 25-Ft. Coll |  | 250-Ft. Coll |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Stock No. | NET | Stock No. | NET | Stock No. | NET |
| 1478 | 2 | 48 T 523 | .32 | 48 T 524 48 T 527 | .44 .90 | 48 T 525 | 8.25 |
| 1401 1402 | 4 | 48 T <br> 4826 | . 38 | 48 T <br> 4827 | 1.90 1.20 | 48 <br> 48 | 11.25 |

SHIELDED WIRE
*Individually shielded conductors.

| 1779 | 2 | 48 T 535 | . 45 | 48 T 536 | . 83 | 48 T 537 | 6.00 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1406 | 3 |  | . 60 | 48 T 539 | 1.28 | 48 T 543 | 2.00 |
| 1407 | 4 | 48 T 544 | . 68 | 48 T 545 | 1.50 | 48 T 546 | 13.50 |
| 1410 | 2* | 48 T 547 | . 60 | 48 T 548 | 1.35 | 48 T 549 | 12.75 |

## HOOK-UP WIRE ASSORTMENTS

Six 25-ft. Colls. High efficiency, atranded copper wire some tinned, some untianed. Ideal for use where high conductivity with negligible loss is essential. Unusually flexible and durable. In assorted gages, coiors and insulation. Designed or the chassis and sub-chassis wiring of radio and
moisture and heat. Shpg wt. I lb
49 T 34 NET PER PKG
Five 100-ft. Colls. Kit includes wire in assorted gauses, Insulations, colors. Stranded copper-tinned and untinned. Slipg. wt., $21 / 2 \mathrm{1bs}$. 49 T $\mathbf{3 4 5}$. NET PER PKG.

## THERMOPLASTIC HOOK-UP WIRE

U.L. Approved. Voltage breakdown test, 10,000 volts. Oil and acid resistant. Withstands temperawhere low loss and proper insulation is essential Shps. wt., per 25 ft . spool. 4 oz

20 SOLID
$\left.\begin{array}{l}48 \text { T } 455 . \text { Black. } \\ 48 \text { T } 456 . \text { Red. } \\ 48 \text { T } 457 \text { Blue }\end{array}\right\} \begin{gathered}\text { SPOOL } \\ \end{gathered}$ 48 T 458. Green. 29

## 20 STRANDED



## STRANDED HOOK-UP WIRE

No. 18 tinned soft-drawn copper wire. Cotton wrap and colored rubber insulation overall. Excellent for general wlring in radio-TV chassis, swltchboards, etc. Shpg. wt.. 25 ft., 5 oz
$\frac{\text { Spool }}{25 \text { ft }}\left|\frac{\text { Black }}{48 \text { T } 200}\right| \frac{\text { Red }}{48 \text { T } 201}\left|\frac{\text { Blue }}{48 \text { T } 202}\right| \frac{\text { Green }}{48 \text { T } 203}\left|\frac{\text { White }}{48 \text { T } 205}\right| \frac{E A C H}{48}$
$25 \mathrm{ft} . \overline{48 \text { T } 200} \overline{48 \text { T } 201} \overline{48 \text { T } 202} \overline{48 \text { T } 203} \overline{48 \text { T } 205} .48$

## PUSH-BACK HOOK-UP WIRE

 Highest quality tinned push-back hook-up wire, No. 20. Only evenly-drawn, pure copper wire is used. Insulation easily pushed back for convenient wiring, Avallable in both solid and stranded type. Unusually flexible and durable. Double-cotton covered with parafin-treated damp-proof braid. 5 different colors. Shpg wts.: $25 \mathrm{ft} ., 4 \mathrm{oz}$. 100 ft ., 1 lb

## STRANDED TYPE, 10×30

| Spoal | Red | Black | Yellow | Blue | Green | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 25 ft . | 48 T 442 | 48 T 440 | 48 T 444 | 48 T 441 | 48 T 443 | . 36 |
| 100 ft . | 48 T 447 | 48 T 445 | 48 T 449 | 48 T 44614 | 48 T 448 | . 29 |


| Spool | ed | Black | Ye | Bl | Green | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 48 T 472 | 48 T 470 | 48 T 474 |  |  |  |
| 100 ft | 48 T 477 | 48 T 475 | 48 T 479 | 48 T 476 | 48 T 478 | . 2 |

HIGH-GRADE MAGNET WIRE ON SPOOLS Insulated, soft-drawn copper wire of highest quality Specially manufactured for all types of coil winding ap plications-transformers, RF coils. chokes, etc. Al sizes indicated below are standard
$\mathrm{wts} .: 1 / 2-\mathrm{lb}$. spool, 14 oz .; $1-\mathrm{lb}$. spool, $1 / 2 \mathrm{lbs}$.

PLAIN ENAMELED $1 / 2$ LB. SPOOLS

| Stock No. | Size | Feet | NET | Stock No. | Size | Foet | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 48 T 100 | 14 | 38 | . 60 | 48 T 111 | 26 | 640 | . 71 |
| 48 T 102 | 16 | 63 | . 60 | 48 T112 | 28 | 1013 | . 75 |
| 48 T 104 | 18 | 101 | . 62 | 48 T :13 | 30 | 1602 | . 83 |
| 48 T 106 | 20 | 159 | . 62 | 48 T 114 | 32 | 2543 | . 84 |
| 48 T 108 | 22 | 253 | . 65 | 48 T 115 | 34 | 4042 6410 | .92 |
| 48 T 109 | 24 | 402 | . 65 | 48 T 116 | 36 | 6410 | . 92 |
| SINGLE COTTON ENAMELED I LB. SPOOLS |  |  |  |  |  |  |  |
| 48 T 020 | 14 | 78 | 1.44 | 48 T 028 | 22 | 490 | 1.91 |
| 481022 | 16 | 124 | 1.50 | 48 T 029 | 24 | 772 | 1.95 |
| 48 T 023 | 17 | 156 | 1.56 | 48 T 030 | 25 | 936 | 2.07 |
| 48 T 024 | 18 | 198 | 1.62 | 48 T031 | 26 | 1209 | 2.19 |
| 48 T 025 | 19 | 248 | 1.70 | 48 T 0332 | 38 |  | 2.63 3.08 |
| 48 T026 | 20 | 312 | 1.79 | 48 T 033 | 30 | 2780 | 3.08 |

HEAVY FORMVAR MAGNET WIRE IN I-LB. SPOOLS
Copper magnet wire covered with Formvar; tough, abrasion-resisting film. Stable dielectric under drying and aging effects of heat; does not fail after two hours at $105^{\circ} \mathrm{C}$. Impervious to moisture and petroleum all after resists acld and alkali. Takes up less winding space. Replaces enamel, paper. cotton, silk, and double cotton and double silk wire. We.. per spool, $11 / 2$ lbs.

| Stock No. | Size | Feet | NET | Stock No. | Size | Feet | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 48 T 180 | 14 | 78 | 1.13 | 48 T 187 | 28 | 1999 | 1.59 |
| 48 T 137 | 15 | 99 | 1.13 | 48 T 144 | 29 | 2780 | 1.77 |
| 48 T 181 | 16 | 124 | 1.13 | 48 T 188 | 30 | 3200 | 1.79 |
| 48 T 138 | 17 | 156 | 1.14 | 48 T 145 | 31 | 4410 | 2.03 |
| 48 T 182 | 18 | 198 | 1.14 | 48 T 189 |  | 4900 |  |
| 48 T 139 | 19 | 246 | 1.19 | 48 T 146 | 33 | 6441 | 2.16 |
| 48 T 183 | 20 | 313 | 1.20 | 48 T 190 | 34 | 7950 | 2.19 |
| 48 T 140 | 21 | 397 | 1.26 | 48 T 147 | 35 | 9002 | 2.51 |
| 48 T 184 | 22 | 501 | 1.26 | 48 T 191 | 36 | 12.800 | 2.54 |
| 48 T 141 | 23 | 628 | 1.34 | 48 T 148 | 37 | 15.898 | 3.45 |
| 48 T 185 | 24 | 798 | 1.34 | 48 T 192 |  | 20.000 |  |
| 48 T 142 | 25 | 941 | 1.43 | 48 T 149 | 39 | 25.188 31.700 | 5.37 5.45 |
| 48 T 186 | 26 | 1200 | 1.46 | 48 T 193 | 40 | 31.700 | 5.45 |
| 48 T 143 | 27 | 1583 | . 56 |  |  |  |  |

TINNED SOLID COPPER WIRE
Fine quality, soft-drawn copper wire. tinned for easy soldering. Excellent for circuit wiring. Av. shpg. wt : +2 ibs., +5 lbs.

* 100 FT. COILS

| Stock No. | Gauge | NET | Stock No. | Gauge | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 47 T 128 | 24 | . 38 | 47 T 523 | 16 | 1.05 |
| 47 T 127 | 22 | . 48 | 47 T 520 | 12 | 1.48 |
| 47 <br> 47 | 18 | .54 .75 | 47 <br> 47 | 10 | 4.28 |

$\dagger 1000-\mathrm{FT}$. SPOOLS

| 47 T 525 | 24 | 2.55 | 47 | 533 | 20 | 4.13 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 47 | 527 | 22 | 3.38 | 47 | 535 | 18 | 6.75 |

## Adjustable Lamps and Accessories



Model L-1A All-Angle Lamp. Extremely popular work lannp. Skillfully designed, it is famous for its precision construction and exceptional fexibiltey. Ideally suited to furnish glare-free illumination for the service fingers. Has two extension arms $45^{\circ}$ owered, or turned with a touch of the are spring-loaded; knurled nut controls tension. Porcelainized shade has large vents for heat dissipation. Off-on switch located at top of shade. supplied with clamp. Dove gray finish. U.L. Approved. Requires one 91 NX 296 . List. $\$ 23.50$. EACH Shpg. wt., 5 lbs.
3 or More, EACH
17.62

Model L-9A. (Not illus.) Same as above but only one extension arm 50 NX 735 . List. Sis.50. EACH 50 NX 735 . List. SIS.50. EACH
11.62

Model LFM-1A Lamp With Magniffer. Combines large inagnification, cool fluorescent light, and maneuverability into one wersatile unit. artion for easy positioning. Two distortion-free view. Spring balanced With mtg. clamp. Gray finish. For ension arms; $360^{\circ}$ sween; $45^{\circ}$ reach. groved. Requires Circline T9 lamp (below). Less lamp. 8 Ibs. U.L. Ap91 NX 201 . List. $\$ 14.50$. EACH.
33.37 3 or More, EACH
30.28

Model LFM-9A. (Not illus.) Same as aloove, but only one extension arm with $50 \mathrm{~N} \times 74$. reach. Shpg. wet. 8 Ibs 50 N X 743 . Llst.
3 or More, EACH.
27.37
26.01

Model FL-1A All-Angle Fivorescent Lamp. An all IC-IA cent lamp featuring "feather-touch" positioninall-purpose fluores lowered or turned with finger tip. Uninue, spring-loaded ay be raised, always stay in position. Lamp housing is also adjustable. Slade $19 x 41 / 2^{*}{ }^{\circ}$
Push-button starter. Has clamp tor desk. bench. or table mounting. Two arms extend to $45^{\circ}$. Gray finish. U.L. Approved. For $110-120$ v., 60 cycle AC. Less lamps (requires 2 T8 lamps below). Wor. 9 thas 22.12 91 NX 228 . Llst. $\$ 29.50$ EACH
22.12
20.01

Modot FL-9A. (Not illus.) Same as above. but only one extension arm 50 NX 769 . List. $\$ 21.50$. EACH
3 or More, EACH.
16.12
15.32

Model LC-1A Comblnation Lamp. Ideal for people working with color, this 3 -way lamp combines Incandescent and fivoreacent light in one fxture. Either lamp can be used individually or in combination. Two finish. U.L. Approverl. For $110-120$ v 60 eycle ach table. desk, etc. Gray and Circline Tg ftrorescent $110-120$ v.. 60 cycle AC. Uses 60 -wate bulb 91 NU 229. List. $\$ 29.50$. EACH. (less bulb and tube). 9 Ibs. 3 or More, EACH $2 . .50$. EACH
22.12

Moded LC-9A. (Not illus.) Same as above, but only one extension arm 50 NX 770 . List. $\$ 21.50$. EACM
3 or More, EACH
16.12
15.32


Model 4303 All-Purpose Lamp. A well-designed lamp for the service bench, home workshop. etc. Head tilts vertically $180^{\circ}$ and turns $300^{\circ}$ on its axis. Upper elbow swings in $160^{\circ}$ vertical arc. lower elbow swings in installed - vertical arc. Extends to $36^{\circ}$. Spring-controlled swivel joilltas. Easily Bolts removable for surface serew mounting. Bronze fin to $3^{\circ}$ thick. two T8. 15-watt fuorescent lamps. For $105 \cdot 125 \mathrm{v}$., 60 cycle AC. U.L. Approved. Less lamps (below). Shpg. wt. 10 lbs .
$9 / \mathrm{NX} 225$ Ligt, $\$ 20.95$. EACH 3 or More, EACH.
15.40

Model 5600 "Cool-Shade" Lamp. Low-cost bench or desk lamp lets you direct light where you need it. Adjusts to any position or angle. Shade vented for cool handling. Swivels at base, shade and each joint. extension $42^{\circ}$. Off-on switch on shade. Shade dia. $51^{\prime \prime}$ shade. Maximum extension $42^{\circ}$. Off-on switch on shade. Shade dia., $51 / z^{* ;} 7^{\prime \prime}$ deep. Unlversal base for clamping or screw mounting-either vertical or horizontal.
 3 or More, EACH.
8.20

## STANDARD AND CIRCLINE FEUORESCENT LAMPS

| Stock No. | Type | Watts | Size | Tube Dla. | Color | $\begin{aligned} & \text { Sid. } \\ & \text { Pkg. } \end{aligned}$ | Wt. <br> Lbs. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ | $\begin{aligned} & \text { in Std. } \\ & \text { PKg. EA. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $91 N 172$ | T5 | 4 | ${ }^{\circ}$ | \% ${ }^{\circ}$ | Cool-white | 24 | /2 | 1.45 |  |
| $91 N 521$ | 15 | ${ }^{6}$ | $9^{\circ}$ | \%\%'。 | White | 24 | \% | 1.50 | 1.17 |
| $91 N 511$ $91 N 500$ | 112 | 14 | 15" | 14/20 | Cool-white | 24 |  | 1.10 |  |
| 91N500 | 18 | 15 | $18^{\circ}$ | $1^{*}$ | Daylight | 24 | 1 | 1.15 | 2 |
| $91 \mathrm{NSI4}$ | T12 | 15 | $18^{\circ}$ | $11 /{ }^{\circ}$ | Cool-white | 24 | 1 |  |  |
| 91 NX 902 | T12 | 20 | $24^{\circ}$ | 11/2, | Daylight | 28 | 11/2 | 1.15 | . 88 |
| $91 N 535$ | 19* | 22 | 81/0 | 11\% | Cool-whlte | 12 | 11/2 | 3.60 | 2.85 |
| $91 N 516$ | 710 | 32 | $12^{\circ}$ | 14. | Coot-whlle | 12 | $11 / 2$ | 3.50 | 2.80 |
| $91 N \times 534$ | T125 | 40 | $48^{\circ}$ | 12/20 | Cool-wlite | 24 |  |  |  |
| 91 NX 506 | T125 | 40 | $48^{\circ}$ | 150. | Daylight | 24 | 2 | 1.35 | 1.04 |
| 91 NX 162 | T12 | 75 | 56 ${ }^{\circ}$ | 1150 | Coul-white | 12 | 3 | 2.90 |  |
| 91 NX 163 | 112 | 75 | $96^{*}$ | $11 / 2$ | Daylipht | 12 | 3 | 3.00 | $\frac{2.35}{}$ |

Model 4444 "Flexarm" Twin-Llght. A two-light, adjustable, fluorescent lamp. Flexible arm permits shade adjustment to any height $8^{\text {res }}$ to 14". Ideal tor fine precision work, service bench use, industrial assembly lines, etc. Heavy-gauge steel shade. $21 / 1 \times 41 / 2 \times 18$. Washable, white enameled reflector. Push-button off-on switch. Rubler bumpers on base. Requires two T8. 15 -watt fuorescent lamps. Less lamps (see below. left). Finished in oven-fired bronze. U.L. Approved. For operation from $105-125$ v.: 60 cycle AC. Shpg. wt. 10 jbs . 91 NX 146. List. \$14.95. EACH. 10 Ibs. 3 or More, EACH
10.95

Model 4324 Portable Desk Lamp. Saves trouble of clamp or screw base. Especially useful Mordel 4303 (left, above) but with weighted Rase. Especially useful for desks where screw clamp cannot be used. Raises and lowers. extends and tilts in any direction. Fingertip controlstays in position. Double arm extends $3^{\circ}$. Pen and pencil grooves in guires two T8, 15-watt lamps (below). For $105-125$ v, 60 cycle AC. Regires wo T8, 226 . List $\$ 28.95$. EACM...................................... 21.28 3 or More, EACH.
21.28
.19 .86

## ADVANCE FLUORESCENT BALLASTS

Wide selection of high-quality ballasts for all popular fixtures. $\$ 55-65 \%$ corrected. * $90-100 \%$ corrected. U.L. Approved. For $105-125$ volts, 60 cycle AC. Lamp watts. tFor use with rapid start lamps.
†1-LAMP BALLAST-NORMAL POWER FACTOR

| Stock No. | Trpe | Watts* | Size | Cirs. | Lbs. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 49 N 400 | L-120F | 15/20 | $41 / 4 \times 2 \times 17 / 16^{\circ}$ |  | 1 |  |
| 49 N 401 | L-140 | 40 | $61 / 2 \times 118 / 16 \times 13$, | $6^{\circ}$ | 3 | $\begin{aligned} & 1.15 \\ & 1.80 \end{aligned}$ |
| 49 N 402 | LO-14-20-C | 14, 15. 20 | $314 \times 125 / 3814.4$ | 21/4. | 1/6 | $\begin{array}{r} 1.80 \\ .83 \end{array}$ |
| 49 N 408 | RLC-140 | 32.40 |  | $6^{\circ}$ | $3^{3 / 4}$ | 2.65 |

\$2-LAMP BALLAST-NORMAL POWER FACTOR

| $49 N 403$ | $\mathrm{~L}-220$ | $20 / 20$ | $61 / \times 2 \times 17 / 16^{\circ}$ | $5 \% \%^{*}$ | $11 / 4$ | 2.05 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 49 N 404 | $\mathrm{R}-22-32$ | $22 / 32$ | $6 / 2 \times 25 / 16 \times 1^{\circ} 1 / 16^{\circ}$ | $6^{\circ}$ | 3 | 3.65 |



# Lamps, Fluorescent Fixtures, Lanterns and Flashlights MITCHELL FLUORESCENT FIXTURES 

## BARGAIN SPECIAL <br>  <br> SWING-O-LITE CLAMP LAMP

- Directs Light Where You Want II
- Ideal For Service or Work Bench

Durable sooseneck lamp allows you to bring light where it does the most good. At this low price. no service bench, work amp or desk shoures on joint to direct light Lamp shade rotates on joint 30 dircle. Utilizes 60 to 100 watt bulb. Switch is in top of vented shade. In durable Dove Gray of vented shade. In durable Dove Gray baked enamel. parts U.L. Approved. Less bulb. Wt. 5 lbs. List, $\$ 9.25$ ONLY 4.98 50 NX 976.

SWING-O-LITE LAMP WITH MAGNIFIER A fine adjustable amp with 3-pow magnifer at or inspection of ub-miniature parta. printedcir cuits. machine ools, stamps oins, etc. Has witch to select hich intensity - or normal lieht magnifying ens casily swings into position or Lut of the way Lamp has spring $33^{7}$ long from
bulb to
bulb to C.clamp mitg. bracket. Neutral gray color. Uses 12-v.. 1133 bulb (supplied). Stepdown transformer delivers 12 volts from 110 AC outlet. With bulb, transformer, magnifier. Shpge wh: 8 1bs. 52 E 650. Extra Bulb for Above. $5 \mathrm{oz} \ldots .40$

## STARTERS AND SOCKETS

 all types of wet. 3 oz.
$\dagger$ Circlare. Av. wt.
(A) STARTERS

| Stock No. | $\begin{aligned} & \text { Mfr's } \\ & \text { Type } \end{aligned}$ | Watts | EAC'H | $\begin{aligned} & 10 . \mathrm{UP}, \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 78 N 850 | FS2 | 14.15 .20 | . 20 | . 18 |
| 78 N 851 | FS4 | 30 or 40 | . 20 | . 18 |
| 78 N 854 | FS12 | 32* | . 28 | . 25 |
| 78 N 855 | FS22 | $\begin{aligned} & 14,15.18 \\ & 20-22 t \end{aligned}$ | . 28 | . 25 |

[B] LAMPHOLDER SOCKETS

| Stock No. | Watts | Color | EAC'H | $10-\mathrm{UB}_{\mathrm{E}}$ |
| :---: | :---: | :---: | :---: | :---: |
| 78 N 860 | \$14.15.20 | Black | . 38 | . 34 |
| 78 N 861 | 130 or 40 | White | . 40 | . 36 |

## [C STARTER SOCKET

Standard Dual-Loc remote starter socket. 78 N 858. 1 to 9, NET EACH
(D) STARTER SOCKETS AND LAMPHOLDERS Combination Flex-Loc lamplsolder and Dualoc starter socket.


| 78 N 866 | 30 or 40 | White | .54 | .49 |
| :--- | :--- | :--- | :--- | :--- | :--- |



E RAPID-START INDUSTRIAL FIXTURE
Model 2098 RS. All-purpose high-intensity lighting. Excellent for a wide variety of induserial applications. Uses two $48^{\circ}$ Type T-12, 40 -watt fluorescent lamps. Hlgh-gloss white enamel for maximum light reflection. Power factor corrected to reduce inductive effects. Has knock-outs to permit flush or stem mountIng. Fixtures may be hung on chains, flushmounted separately, or mounted end-to-end in rows. $481 / 2 \times 111 / 2 \times 591^{\prime \prime}$. Supplied with reflector and ballasts. Less lamps and chains. U.L. Approved. For operation from $110-125 \mathrm{v} ., 60$ cycle AC. ShDs; wt. 917 lbs 11.18

3 or Mors, EACH
10.32

## (E) STANDARD INDUSTRIAL FIXTURE

Model 2098. As above, but standard starter type. With starters. Less lamps, chains. 9.43
91
3 or More, EACH .......... 8.70
9.43 Model 949. Same as Model 2098, but uses two 75 -w. $96^{*}$ fluorescent lamps. Wt.. 35 lbs. 19.10
91 NU 187 . EACH 91 NU 187. EACH 3 or More: EACH

### 17.45

## G CIRCLINE FLUORESCENT FIXTURES

Nodel 665C. Low-cost, single-lamp, chrome plated fixture with "instant-start" feature. Provides clear, glareless illumination-equivalent to light produced by a 100 -watt incandescent bulb. For use in average-size kitchens, basement work areas, small offices, dens, etc. Handsome clirome finish. With $12^{\prime \prime}$ diameter. 32-watt Circline lamp. U.L. Approved. For $110-$ 120 N. 60 cycle AC. Shpg. wt., 9 lbs. 8.95 3 or More, EACH
8.06

Model 841C. Chrome-plated 2-lamp fixture. Improved liglit diff usion. With $12^{\prime \prime}$ dia. 32 -watt and $8^{\prime \prime}$ dia. 22-watt rapid-start lamps. hard ware and slass pendant, For $110-120$ v., 60 eycle AC. U. LApproved. 11 Ibs.
13.85

3 or More, EACH
12.47

Model 847 C . Delutxe model with three selfstarting lamps for greater light diffusion. Chrome plated. With 40,32 and 22 -watt lamps. For $110-120 \mathrm{v}$., 60 cycle AC. U.L. Approved. Shpe. wt., 15 Ibs.
23.06

3 or More, EACH.
20.76

## (F) FLUORESCENT STRIP-LIGHT FIXTURES

Finlshed in handsome white. baked enamel for maximum llght intensity and easy washing. Can be installed on walls or cellings. flush or suspension mounted. singly or in continuous rows. Types 4002,4004 are normat power factor; 4031 has high power iactor. 9308 and 9328 are Slimine-type units. Less lamps. Equipped with starters.
cycle AC. U.L. Approved.

| $\begin{gathered} \text { Stock } \\ \text { No. } \end{gathered}$ | $\begin{aligned} & \text { Mrr's } \\ & \text { Trupe } \end{aligned}$ | $\left\lvert\, \begin{gathered} \text { No. } \\ \text { Lamps } \end{gathered}\right.$ | Watts | Lgth. | Wt. | NET EACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Single | 3.00 |
| NX177 | 4002* | 1 | 20 | $24^{\circ}$ | 7 | 2.76 | 2.5 |
| NX178 | 4004* | 1 | 40 | $48^{\circ}$ | 6 | 4.59 |  |
| $91 N \times 179$ | $4031^{*}$ | 2 | 40 | ${ }^{48}{ }^{\circ}$ | 30 | 8.91 |  |
| 91NX188 | ${ }_{9}^{9308}$ |  |  | ${ }^{95^{\circ}}$ | 30 |  |  |
| $91 \mathrm{NX189}$ | 9328 | 2 | 75 |  | 30 |  |  |

## BURGESS QUALITY LANTERNS AND FLASHLIGHTS

H Model TW3. A super-power, all purpose (H) lantern with sealed-beam lamp. Automatic red flashing signal swings $90^{\circ}$ on movable arm. Battery ls lantern body-can be changed in seconds. Chrome handle. $111 / 4 \times 91 / 4 \times 31 / 2^{\circ}$. Lamp has $43 / 4^{-}$dia. With TWI 6 -volt battery. Shpg. wt. 6 lbs.
8.28

Model TW4. Same as Model TW 3 above, but less flasher. Shpe. Wt. 6 lbs.
55 J 337 List $\$ 10$ 50. NET
Model TW12. As above, but with rugged TW2 12 -vol battery. Shpg. Wt... 6 lbs. 6.75 TW1 6.Volt Battery. For TW3. TW4, TW6E
 TW2 12.Volt Battery. For TW12. Wi. 31/2 1 bs.
55 J 500 . List. $\$ 2.75$. NET............. 1.83
(J) Model Jr.-1. "Radar-Mate." A rugged. d. poweriul poriable light for the outdoor enthusiast or the homeowner. Heavy-gauge steel construction. corrosion-resistant degign. plus a life-tine switch. assure years of troublefree service. The adjustable head has a special multi-facet vaporized reflector, providing a long beam with peak light distribution. Weatherproof switch has silver contact points, head moves $135^{\circ} \mathrm{up}$ and down. Gleaming chrome plate case. Requires three No. 2 batteries (below). Shpg. Wt.i. 11/4 Lbs.
3.32

No. 2 Battory. For JR-1 above, 6 oz.
.13
K Model 159. Sturdy, chrome-plated "MagK. net Light". with Alnico magnet that holds cells. With lamp; less batteries. 1 lb. . 1.20
55 j II7. List, \$1.79. NET........... 55 j 117 . List, \$1.79. NET

(1)
Modet 350. A fine 2 -cell flashlight. Fiber barrel with rubber cushioned head, end cap. Prefocused and weatherproof. Uses two No. 2 cells. With lamp. Less batteries. 1 Ib. 1.28 Model 450 . As above, but uses three No. 2 ceils and PR3 lamp. Less batteries. $11 / 1 \mathrm{lbs}$.
55 J 339. List. $\$ 2.15$. NET............. 4.4


M.Model 152 Sllm-Line Penlighe. Tu-Tone chrome finisin. Uses two No. cells. Slipg, wt. 5 oz, 88, NET 59

N Model TW7. Here's an outstanding - portable lantern with super intensity lamp. Completely leakproof and weatherproof. Simple to operate and convenient to carry. Battery can be replaced in seconds-two insulated knurled nuts hold batery firmly to head asWith Twi $6-v$. battery. Wi., $41 / 2$ lbs. 5.73 55 J 662 . List. $\$ 9.25$. NET
Model TWGE. Emer gency floodlight. Plug this unit into any $110-\mathrm{v}$. out let; when AC power fails, it automaticaly swithes diffuses over a wide area. diffuses over a wide area. Batiery continuous. With mtg. bracket. $6^{\prime}$ cord, 1.616 -V List, $\$ 20.25$. 13.48


Depend on Allied for Complete Stocks, Low Prices, Friendly Service

# Electrical Cords and Accessories 


"SNAP-IT" INTER-LINK ELECTRIC OUTLET KITS


A quick, easy way to add safe. extra outlets plug swivel cap (Fig. A) or factory. Sinnply plug swivel cap (Fig. A) into existing outlet into flexible link. Flexible link link (Fig. C) tinks follow wall contour and fasten with outlet Rated 15 amps at 125 v . AC. U. L. Approved. 1162-6.Fi. Kit. Consists of swivel cap (Fig. A) 5 -ft. flexible link (Fig. B) and 3-outhet link (Fig. C). Slipg. Wt
50 N 450 . NET.
2.45

1163-12-Ft. Klt Cont
 SO
[ 3.Outlet Link. 1 lb .
ACCESSORIES FOR EXTENSION USE

Stock No. Type Description Wt. NET | $50 N 453$ | 161 |  | Inter-LInk Link | 502 |
| :--- | :--- | :--- | :--- | :--- |
| $50 N 454$ | 164 | Inter-LInk Swivel | 202 | .73 |
| 50 |  |  |  |  | 50 N $455 \quad 183 \quad \begin{gathered}\text { Cap Plug. In } \\ \text { Inter-Link 3-Ft. }\end{gathered}$ SON $456 \quad 185 \quad \begin{gathered}\text { Flezible Link } \\ \text { Inter-Link 5-FL }\end{gathered}$ 50 N 457191 Flexible Link



## LIGHT-DUTY CORDS

Flexible, rubber-covered replacement cords. Have unbreakable vinyl plastic plugs az one
end, other end strigned. All are Fig, $\mathbf{D}, 2-$ conductor except Fig. E, 3 -conductor with 3 -prong plug. Cover black except fbrown,
sgray. U.L. Approved. Av. shpg. wt.. $1 / \mathrm{lb}$. Stock No. MPr's Type|Length|Gauge|NET


50 N 930117408 S * $8 \mathrm{ft} . \mathrm{SJ} 18.88$

## HEAVY-DUTY EXTENSION CORDS

Flexible 2-wire cord with molded vinyl cordholder plug and plastic connertor. Ty pes 173955 and 17397 S are ideal for electric lawn mowers rubber, fred vinyl. U.L. Approved rubber, fred vinyl. U.L. Aprroved.

| Slock No. | Mfr's Type | Length | Gauge | Lbs. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 50 N 931 | 17270C** | $20^{\circ}$ | SV 18 | $1$ | 1.08 |
| 50N 932 | ${ }_{173615 t}^{173955}$ | $10^{\prime}$ $50^{\prime}$ | SJ 16 | $\begin{aligned} & 1 \\ & 34 \end{aligned}$ | . 94 |
| $50 \mathrm{~N} \times 934$ | 173975 | $100^{\circ}$ | SJT 16 SJT 16 | 61/2 | 3.68 |

BELDEN EXTENSION AND REPLACEMENT CORDS


## CORDS FOR HEATER-TYPE APPIIANCES

Replacemeat line cords for 125 volt heater ype appliances. All have molded-rubber wal plugs, black neoprene covered and self-coiling (extend to 6 feet) except asbestos cotion wrapping and 7 feet long. Types without appliance plugs have terininals for screws. on-appliance plug. Av. shpg. wt., $1 / 2 \mathrm{lb}$

| Stock No. | Type | 1 | trin Spacin | Amps | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 50 N 935 | 178865 | H | $1 / 2$, slotted | 10 |  |
| 50 N 936 | 178875 | H | o slot | 10 | . 0 |
| 50 N 937 | 178885 | H |  | 15 |  |
| 50 N 938 | 178365 | , | None | 10 |  |
| 50N 945 | * 17127 S | C | None | 15 |  |

## CUBE TAP EXTENSION CORDS

[K] Sturdy, long lasting brown vinyl-covered vinyl plug and three-way connector. Cord is Sl'T rated, 18 gauge (4ix34), two-conductor wire. U.L. Approved.

| Stack No | Type | Length | Shpg. We. |  |
| :---: | :---: | :---: | :---: | :---: |
| 50 N 939 | 17156 S | $6^{\prime}$ | 1/4 1b. |  |
| 50 N 940 | 171595 | $9^{\prime}$ | ib. | . 47 |
| 50 N 941 | 17162S | 12' | 1 lb | . 53 |
| 50 N 942 | 171655 | $15^{\prime}$ | $11 / 4 \mathrm{lbs}$ | 5 |

ELECTRICAL
CORD
VALUES

$\Sigma$
(N
[1 6-Ft. Replacement Cord Set. Heavy,

1. plastic-insulated cord firmly secured in sturdy molded plug on one end; other end strlpped. Brown. Shpg. wt.. 5 oz . EA. 21
50 N 943.10 or Mors, EA. I9. EA.
(M) Cube Tap Extension. 3-way extension 50 tap. Rated at 15 amps 125 yols: 10 amps cap volts. With 6 -foot cord and bakelite nlug 52 N 605, 10 or More. EA...33. EA..... 37
(N Rubber Cube Tap Extension. An all0 rubber, solderless, 3 -way extension cord set. Consists of 9 -ft. cord, unbreakable cube tap and plug. No. 18 wire. Spring action contacts with be receptacle provide positlve connection with plugs. Brourn. Shpg. wt., 8 oz.
52 N 608 . NET.
.59
6-Ft. Extenslon. Same as above, but with 6-ft. cord. Brown. Shpg. wt., 6 oz .
52 N 621 , NET.....................

## BELDEN TV LINE CORD



Model 8895. 6-ft. long, has 2 -cond. $18-g a u g e ~ b r o w n ~$
vinyl cord plug. 1 Ib .

37
50 N 944. NET blag. 1 b .

WIRE CONNECTORS


Solderless wire connectors. Simply strip two wire ends, pusli into connector and screw cap
down. No tools needed. Wires cannot be pulled out. Made of the finest grade phenolic. U.L. Approved. Av. shpg. wts. Wire Stock Pkg. Stock

| $\begin{aligned} & \text { Wire } \\ & \text { Size } \end{aligned}$ | Stock No. | $\mathbf{P k g}$. of 25 | Stock No. | of 100 |
| :---: | :---: | :---: | :---: | :---: |
| 16-18 | 52 N 87 | . 30 | 52 N 870 | -95 |
| 14.18 12.18 | $52 N 875$ $52 N 876$ | . 40 | 52 N 871 |  |
| 12.18 10.18 | $52 N 876$ 52 | . 45 | 52 N 872 | 1.65 |
| 10.18 | 52 N 877 | . 75 | 52 N 873 | .8 |

## ELECTROSTRIP FLEXIBLE OUTLET KIT



Unique 4-ft. electrical strip
for easy instal ation on base board. wall. workbench, etc.
Includes 3 oul ets which may be moved to atrip. Has $12^{\prime \prime}$ cord wheh plug for feeding power from rekular wall oulet to the sirip. Rated 15 52 NX 696 . NET. Slase. wt., $11 / 2$ ॥t 2.62
Extra Outlots. For aluve. Slıpg. wt., 3 oz.
52 N 697. NET EACH................... 37

NEW CBC MULTIPLE OUTLET BOXES


## MO. 3

New outlet boxes for extending power to bench. lab. cte. All are fused at 15 amps .110 V ; have $10-\mathrm{fl}$. Ine cords and on-off switches. Individual morlels offer features to mect any need. Type MO-GD has filot lisht and six 3-wire. grounded outlets with 3 -wire plus. Type MO is identical except 2 -wire outlets and plus. Type SS has four outlets with each outlet in-
dividually switched. Type MO-3 has three dividually switehed. Type MO-3 has three outlets. one switch. All have brown hammer tone metal cases with mtg. ears.

|  |  | OutI lete | Slzo | s. |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 50 \mathrm{~N} 948 \mathrm{MO} \mathrm{GD} \\ & 50 \mathrm{~N} 949 \mathrm{MO} \\ & 50 \mathrm{~N} 950 \mathrm{SS} \\ & 50 \mathrm{~N} 951 \mathrm{MO} \\ & \hline \end{aligned}$ |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

(i) ELECTRICORD "REDY-REEL"

Modol SC2216.100 R.
Handy power cord on portable reel assembly. Contains 100 ft . of No. 16,2 . conductor cord, covered with red vinyl insulation. llas stand of $3 / 0^{\circ}$ cadraillin plated steel rod; heavy steel
50 NX 301. NET 8.95

## DUTCH BRAND TAPE

Friction Tape．Very nop－ ular standard width tapes． Find widespread uses in ra． Find widespread uses in ra－ shop applications．Have tough，long－wearing fabrlc base which resists the effects of abrasion and weatherlng． pings．Av．wt．， 7 oz．



Plastic Tape，Strong，black vinyl plastic eiectrlcal tape．Stretches and conforms to ir－ regular surfaces．Clings tightly－forms tight， compact insulated wrappinsio which do not mravel．even afker lon periods of time．lss high－dielectric strength and exceilent adhesive qualities make it a favorite with radiomen ando volts． $1 / 2^{\prime \prime}$ isipe is $.010^{\circ}$ ．Rated 10.000 volts． Av．shpg．wt． 6 oz；NET PER ROLL 1.00 15．49．EACH．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 90 50－Up，EACH 52 N $623.1 / 2^{\prime \prime} \times 108^{\prime}$ ．NET PER ROLLI． 84 $52 \mathrm{~N}^{2} 623.1 / \mathrm{K}^{\prime}$

## SCOTCH PLASTIC BACKED TAPE

Type 33．Plastic－backed electrical tape． 007 thick；
10.000 dielectrle strength．Molds easlly to irregular surfaces，allow－ ing neat，compact insu－ lated wrappings．Highly resistant to chemicals， abrasion，oil，salt water． weather．Av，shpg．wt．
 per roll． 6 oz ．

| Stoek No．Size | Per Roll | 12 －Up．EACH |  |
| :---: | :---: | :---: | :---: |
| $52 N 613$ | $3 / 4 * \times 20^{\prime}$ | .54 | .49 |
| $52 N 616$ | $1 / 4^{*} \times 66^{\circ}$ | 1.47 | 1.32 |

Type 88．All－weather， 8.5 mil plastic－backed electrlcal tape．Makes splice wrapping easy in cold weather，yet retains body for easy applica－ tion at normal temperatures．Abrasion．oll，and flame resistant． $3 / 4 \times 66^{\circ}$ Wt．W oz
52 N 700 ．NET PER ROLL
$52 N 700$ ．NE
$12-U p, E A C H$.
1.75

## NEW SPECIAL VALUE

## TOUCH－A－MATIC NITE－LITE

New nite－lite features Touch－A－Matic switch for outstanding convenience．Works on the slightest presaure－can be pisahed．flipped or kicked．No need to bend or stoon for laghts plugged into baseboard outc．Supplied for outce for bedrooms nurseries bathrooms basements Ideal for benrooms，nurseries，bathrooms，basements， stairways，etcion ther huss the wall adjustable streambe brown or ivory． $31 / 2^{\circ}$ long．Shpg．Wh．． 402 ． 44 50 N 904 ．Ivory．NET．
.44
50 N 905．Brown．NET
.42
52 E 356．Repl．Bulb． 4 oz ．NET
.22

NEWEST ADDITIONS TO ALLIED＇S ELECTRICAL LINE

（A Touch－A．Matlc Wali Switeh．Absolutely；
A silent．featier－touch switch with rocker－arm design that blends Into wall plate．Has both pressure and screw terminal connections and extra common terminal．SPST action． 15 amps （a） 125 v．U．L．Approved．Wt．， 5 oz．
.59
50 N 823．Ivory．NET．
50 N 日24．Brown．NET
.59
Same quality silent switch as above except 3－ way action－two switches can control lights from two different locations．Wt．， $4 \mathrm{oz} . .64$
50 N 910．Ivory．NET．．．．．．．．．．．．．．．．．．．． 64
50 N 911．Brown．NET
Duplex Wall Outlet．Parallel ground．3－
wire． 15 amps． 125 v．U．L．App＇d． 5 oz． 39
50 N B 25 ．Ivory．NET．．．．．．．．．．．．．．．．．．．．．．．．
50 N 825．Ivory．NET．
39
39
50 N B26．Brown．NET
.39
C Flush Toggle Switch．Standard SPST
C action．Rated © 10 amps， 125 v．or 5
amps， 250 v．U．L．Approved． 4 oz ．
50 N 953．Ivory．NET． 30
（D）Bakelle Triple－Cord Connector．Allows D）user to supply three outlets from one outlet． Rated at 15 amps at 125 v．Less cord．Brown
color．Wt．， 3 Oz ．
50 N 912 ．NET．

（F）Flat Rubber Side Outlet Piug．Neatly E desizned plug has side outlet for wire．Has brass prongs molded into vinyl；binding screws separated by insulationj and completely en closed whing．Rat Shpg．W゙t．2 ${ }^{2}$ Oz．
． 14

Insulated Staples．Copper staples with off－white colored insulation for holdins cords in place．Shp最 wi．．${ }^{7}$ oz NET
$50 \mathrm{~N} 915.316 x^{3 / 3}$ ．Box of 50．NET

G $⿴ 囗 十$
Clnch－Jones Cable Clamps．De－ Center．All are Fig．$G$ except 85 D which is Fig．H．Shpg．we．， 2 oz ．

| Stock No． | $\begin{array}{\|c\|} \hline \text { Mre's } \\ \text { Typo } \end{array}$ | Dia．of Are | Hole＊to Arc＊ | NET EACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $1-49$ | 50－99 |
| 51 N 350 | 85A | $1 / 0^{\circ}$ |  | 024 |  |
| 51 N 351 | 851 | 5／16 |  | ． 02 | ． 015 |
| 51 N 352 | 85 C |  |  | ． 02 | ． 015 |
| 51 N 353 | ${ }^{85 \mathrm{D}}$ |  | $1 / 2$ 。 | ． 02 | ．015 |
| 51 N 354 | 85 E |  |  | ． 02 | ． 01 |
| 51 N 355 | 85F | 5 | $1 / 2^{*}$ | ． 02 | ． 01 |

## VALUES IN HANDY ELECTRICAL ACCESSORIES

8

（W）

ग
（1）Rubber－Handle Plug．Unbreakable soft－ rubber．Approved for power tools．Excel cord extensions．U．L．Approved． 2 oz. 52 N 602．NET
.09
K Parallel Ground Plug．Sturdy，rubber K．handle plug with＂$U$＂ground．Small enough so that 2 will fit standard duplex receptacle． With cable clamp．U．L．Approved． 2 oz ．

（L）
Bakelite Plug．With convenient finger－ arip Cap size $11 / \times 176 \times 19$／5 deep，Brown finlsh．U．L．Approved．Shpg．wt．， 2 oz ．
52 N 600．NET
.08
（M）Rubber Cube Tap．Spring－action，3－way Approved．Slops．wiece， 4 oz．
47 N 076．NET
（N）Continental Adapter．Male－female adap－ （N）ter．Permits using standard flat－prong American plugs in Continental Europe outlets designed for round prongs．Wt．． 2 oz ．
47 N 077．NET
（P）Acadomy Automatle Plug．No wirestrip－ ping．，．Just insert through cap．Sure－grip needles on prongs make positive connection
U．L．Approved．Shpg．wt．， 3 oz ．
Lowest Prices－Highest Quality－Best Service

R Mat Rubber Plug．Has non－breakable molded rubber cap．Because of their narrow construction，these caps are ideal for use with multiple AC receptacles similar to Fig．$T$ above． Easily disassembled．Serew terminal wiring Rated 15 amps at 125 v．i， 10 amps at 250 v.
U．L．Approved．Shpg．wt．， 3 oz ． 52 N 641 ．NET

S Morse Mldget Cord Connector．Midset S 2－contact pull－apart type cord connector． For use in connecting AC－DC line cords．phono－ graph motors，pilot light sockets，relays，con－ trol circuits，etc．Consist of one plug and one matching receptacle．Knurled edges provide sure grip for easy disconnection．Sizc．17／8


Academy Three－Way Outlet．Standard． （1）A－conductor outlets．Connect up to three stand ard power cord plugs．Easily installed．No volts or 10 amps at 250 volts．U．L．Approved． Shipg，wt．， 5 oz
52 N 622 ．Mahogany Plastic．NET 5 EACH ． 20
W）Rubber Lino Cord Recoptacle．Rubber Wull－handle recentacle．Has knurled boxly for casier gripping．Cable clamp helps protect volts U．L．Approved．Silps．wt．． 3 oz． 52 N 603 ．NET

# Triplett and Emico Panel Meters 

## TRIPLETT UNIMETERS-WITH INTERCHANGEABLE RANGES



Complete Unimeter

10-Second Assembly


In 10 seconds . . . the precision meter of your clioice. 2 basic novements plus interchangeable face plates give you a complete range of meters. Unimeter consists of separate sections (movement and dial component) which can be snapped coget her instantly for exact scale range you need. Just select the desired dial component and slide it into the movement. No soldering or wiring necessary. Two parts lock together with thumbscrew on back. Check these features: self-shicided Bar-Ring niovements; $A C$ and DC linear scales; extreme accuracy; dust-proof construction; error-proof assembly; instant conversion; standard mounping. 41/2" dials have mirror scales for parallax-free readings. Movernents and dials are individually calibrated to $1 \%$.

## BASIC MOVEMENTS

0.1 DCMA and 0.50 DC $\& A$. *DC $\mu A$ movement is used with DC $\mu A$ dial components only. Av. wt., I $1 / 2$ Ibs!
Stock No. Model Size Baslc Movement 87F 336 327.U $31 / 2 *$ 0-1 OC MA-5CMV 12.10 E7F 341 327-U $31 / 2 \cdot 0.50$ OC HA 250 MV 17.50


## $31 / 2^{\prime \prime}$ AND $41 / 2^{\prime \prime}$ UNIMETER KITS

KIt A. One $31 / 2^{\prime \prime} 0-1$ DC MA movement; dials -1. 0-50. DCO. DC MA: 0-1. 0-10, 0-25. DC
 66FO12. Above with $41 / 2^{\prime \prime}$ movement 33.60 Kit B. Two $31 / 3^{*} 0-1$ DC M.A basic movernents and dial components $0-1,0-10,050,0-101$ 0. 300, DC MA; 0-150. AC VM;0-1, 0-10, 0-25 050 . DC AM; $0-50 \mathrm{DC} V M$; $0-300 \mathrm{DC} \mathrm{VM}$ 66 FOI 3. NET.
54.50 66 F 014 . Above with $41 / 2^{\prime \prime}$ movements. 56.70 Kit C. Foirs $31 / 2{ }^{\prime \prime}$ movements: three 0-1 DC MA ; one 0-50 DC $\mu \mathrm{A}: 23$ dials three $0-1$, one $0-10.0-50$. two $0-100$, one $0-300.0-500$ DC MA; 0-1, 0-10, 0-25, 0-50 DC AM; two 0-50. one $0-300 \mathrm{DC}$ IM; two $0-150$, one $0-300 \mathrm{AC}$ VM : $0-50,0-100,0200,0-500$ DC $\mu A$. Shpr. wht. 12 lbs.
66 F 020 66 F 020. NET
109.50 66 FO21. Above with $41 / 2^{*}$ movements. 113.90

DIAL COMPONENTS
All dial components are used with 0.1 DC MA basic movement except for use with 0-50 DC $\mu$ acasic movement. Accuracy well within $2 \%$ 500 sca/V. Shps. Wt., 2 ox. When ordering, speclfy dlal range, slze and stoek ordering,

## DIAL COMPONENT RANGES

| 0.1 | DC PA | 0.500 | DC MA |  | OC Amm |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0.5 | OC MA | 0-10 | DC Volts $\dagger$ |  | DC. Ammeter |
| 0.10 | OC MA | 0.25 | DC volls $\uparrow$ | 0.10 | AC Volis |
| C-15 | DC MA | 0.50 | OC Volts $\dagger$ | 0. 150 | AC volts |
| 0-25 | OC MA | $0-150$ | OC Volts ${ }^{\text {a }}$ | 0.300 | AC Volts |
| C. 50 | OC MA | 0-300 | DC Volts $\uparrow$ | 0.50 | DC $\mu \mathrm{a}$ * |
|  | DC MA | 0.500 | DC Volts $\dagger$ | 0.10 | DC иヵ* |
| 0.150 | DC MA | 0-1 | OC Ammeter | 0.200 | DC $\mu \mathrm{a}$ |
| 0-200 | OC MA | 0.5 | OC Ammeter | 0-500 | DC $\mu \mathrm{a}$ * |
| 0.250 | DC MA | 0.10 | DC Ammeter |  | на |
| 0-300 | DC MA | 0.15 | DC Ammeter |  |  |


| $3 \frac{1}{2} 2^{2}$ | $41^{\prime \prime}$ |  |
| :--- | :--- | :--- |
| Slock No. | Stock No. | Scale Values (Range) | 87 FF 337 B7 FF 437 0-1- 500 DC milliamps $\begin{array}{ll}87 \text { FF } 338 & 87 \text { FF } 438 \\ 87 \text { FF } 339 & 0-10-0.500 \text { OC volts }\end{array}$ 87 FF 339 B7FF 440 0. 0 OC amp


| 87 FF 340 | 87 FF 440 | $0-10-0-300$ AC volts |
| :--- | :--- | :--- |
| B7 FF 342 | 07 FF 442 | $0-50-0.500$ DC microamps * |

## NET EACH

2.75

Unimeter Stand. Not llus. Holds meters at correct angle. 5 -way terminats fit plain wire, alliRator clips, etc. $41 / 4 x^{\circ}$ base. $11 / 2$ lbs. 3.30

RUGGED, RELIABLE EMICO PANEL METERS

NF-2C

RF-2C

RF-2 $1 / 4 \mathrm{C}$

Model 13
Edgewise

Dependable panel meters at low price. DC meters have "HI-TORK" magnetic movements; meters are moving-iron type. All are accurate to wis. in $5 \%$. Calibrated in steel cases. meters need nc, furt her adjust ments. Model RF-2 $1 / 4 \mathrm{C}$ has plexiglass front. All have black enarneled or zinc irridite stecl cases. Dimensions (overall depth and flange size): NF-2C. $11 / 4 \times 21 / 4$ : RF-2C. $18 / 2 \times 21 / 6^{\circ}$ : RF-21/4C. $13 / 15 \times 25 / 46^{\circ}$-fit in $21 / 6^{\circ}$ dia. hole: Model 13 , all plastic $1 / 4 \times 113 / 15 \times 21 / 0^{\prime \prime}$. All have screw terminal binding posts and/or lugs for solder conmections. Mounting hardware included. Av. wh.. 9 oz.

| Model NF-2C |  |  |  |  | Model RF.2C |  |  |  | Niodel RF-2 $1 / 4 \mathrm{C}$ |  |  |  | Model 13 Edgewise |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Range | Stock No. | $\begin{aligned} & 1-24 \\ & \text { EACH } \end{aligned}$ | $\begin{aligned} & 25.49, \\ & \text { EACH } \end{aligned}$ | $\begin{aligned} & 50.99, \\ & E A C H \end{aligned}$ | $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | $\begin{gathered} 1-24 \\ E A C H \\ \hline \end{gathered}$ | $\begin{aligned} & 25-49 \\ & \mathrm{EACH} \end{aligned}$ | $\begin{aligned} & 50.99 \\ & \text { EACH } \end{aligned}$ | Stock No. | $\begin{gathered} 1-24 \\ \text { EACH } \end{gathered}$ | $\begin{aligned} & 25-49 \\ & \text { EACH } \end{aligned}$ | $\begin{aligned} & 50-99 \\ & E A C H \end{aligned}$ | Stock No. | EACH | $\begin{aligned} & 25-49 \\ & E A C H \end{aligned}$ | $\begin{aligned} & 50-99 \\ & \text { EACH } \end{aligned}$ |
| $\begin{aligned} & 0-1 \\ & 0-5 \\ & 0-10 \end{aligned}$ | $\begin{aligned} & 67 F 609 \\ & 68 \text { F } 970 \\ & 67 F 600 \end{aligned}$ | 3.63 2.30 2.16 | 3.33 2.11 1.98 | 3.15 <br> 2.00 <br> 1.87 | $\begin{aligned} & 67 F \\ & 67 \\ & 68 \\ & 67 \\ & 67 \\ & \hline \end{aligned}$ | $\begin{array}{r} 3.67 \\ 2.37 \\ 2.22 \end{array}$ | $\begin{aligned} & 3.37 \\ & 2.16 \\ & 2.02 \\ & \hline \end{aligned}$ | 3.19 <br> 2.04 <br> 1.91 | $\begin{array}{llll} 68 & F & 012 \\ 66 & F & 022 \\ 68 & F & 013 \end{array}$ | 3.97 <br> 2.65 <br> 2.50 | 3.64 2.43 2.29 | 3.44 2.30 2.17 | $\begin{array}{llll}66 & F & 023 \\ 66 & F & 024 \\ 66 & F & 025\end{array}$ | 3.97 <br> 2.65 <br> 2.50 | 3.64 <br> 2.43 <br> 2.29 | $\begin{aligned} & 3.44 \\ & 2.30 \\ & 2.17 \end{aligned}$ |
| $\begin{aligned} & 0-20 \\ & 0-30 \\ & 0-50 \\ & 0-100 \\ & \hline \end{aligned}$ | 67 F 601 67 F 602 67 F 603 67 F 604 | 1.86 | 1.71 | 1.62 | $\begin{array}{lllll} 67 & F & 616 \\ 67 & F & 617 \\ 67 & F & 61 & 8 \\ 67 & F & 619 \end{array}$ | 2.22 | $\underline{2.02}$ | 1.70 | $\begin{array}{lllll} 6 B & 013 \\ 68 & F & 014 \\ 68 & F & 0 & 15 \\ 68 & F & 016 \\ 6 & 6 & F & 017 \end{array}$ | $\frac{2.50}{2.25}$ | $\frac{2.29}{2.07}$ | 2.17 1.96 | $\begin{array}{lll} 66 & F & 025 \\ 66 & F & 026 \\ 66 & F & 027 \\ 66 & F & 028 \\ 66 & F & 029 \end{array}$ | 2.50 | 2.29 2.07 | 2.17 1.96 |
| $\begin{aligned} & 0-150 \\ & 0-200 \\ & 0-300 \\ & 0-500 \end{aligned}$ | 67 $F$ 605 <br> 67 $F$ 606 <br> 67 $F$ 607 <br> 67 $F$ 608 | 1.86 | 1.71 | 1.62 | $\begin{array}{lll} 67 & F & 620 \\ 67 & F & 621 \\ 67 & F & 62 \\ 67 & F & 623 \end{array}$ | 1.96 | 1.80 | 1.70 | $\begin{array}{lllll} 68 & F & 01 & 18 \\ 68 & F & 01 & 9 \\ 68 & F & 020 \\ 68 & F & 021 \end{array}$ | 2.25 | 2.07 | 1.96 | $\begin{array}{llll} 106 & F & 129 \\ 66 & F & 030 \\ 66 & F & 031 \\ 66 & F & 032 \\ 66 & F & 033 \end{array}$ | 2.25 | 2.07 | 1.96 |
| AC VOLTMETERS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & 0-15 \\ & 0-50 \\ & 0-150 \\ & 0-300 \end{aligned}$ | 67 68 68 67 F 66758 | 2.99 2.99 3.53 4.12 | 2.74 2.74 3.24 3.78 | 2.59 2.59 3.06 3.57 | 67 67 68 F 6770 | 3.09 3.09 3.63 4.16 | 2.83 2.83 3.33 3.82 | 2.68 2.68 3.15 3.61 | $\left\lvert\, \begin{array}{llll}68 & F & 022 \\ 66 & F & 038 \\ 68 & F & 023 \\ 68 & F & 024\end{array}\right.$ | 3.38 3.38 3.92 4.46 | 3.10 3.10 3.60 4.09 | 2.93 2.93 3.40 3.87 | $\begin{array}{lll}66 & F & 034 \\ 66 & F & 3 \\ 66 & F & 3 \\ 66 & F & 036\end{array}$ | 3.38 3.38 3.92 4.46 | 3.10 3.10 3.60 4.09 | $\begin{aligned} & 2.93 \\ & 2.93 \\ & 3.40 \\ & 3.87 \end{aligned}$ |
| DC AMMETERS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & 0-1 \\ & 0.5 \\ & 0-10 \\ & 0-15 \\ & 0.25 \end{aligned}$ | 68 $F$ 972 <br> 68 $F$ 974 <br> 67 $F$ 650 <br> 66 $F$ 039 <br> 68 $F$ 976 <br> 66 $F$ 040 | 1.86 | 1.71 | 1.62 | $\begin{array}{llll}68 & F & 973 \\ 68 & F & 975 \\ 67 & F & 656 \\ 66 & F & 041 \\ 68 & F & 977\end{array}$ | 1.96 | 1.80 | $1.70$ | $\left\lvert\, \begin{array}{lll} 68 & F & 025 \\ 66 & F & 043 \\ 66 & F & 044 \\ 66 & F & 045 \\ 66 & F & 046 \end{array}\right.$ | $2.25$ | 2.07 | $1.96$ | $\begin{array}{lll} 66 & F & 048 \\ 66 & F & 064 \\ 66 & F & 070 \\ 66 & F & 073 \\ 66 & F & 074 \end{array}$ | $2.25$ | 2.07 | 1.96 |
| $\begin{gathered} 0-30 \\ 3-0-3 \\ 20-0-20 \\ 30-0-30 \\ \hline \end{gathered}$ | $\begin{array}{lll} \hline 66 & F & 040 \\ 67 & F & 651 \\ 67 & F & 62 \\ 67 & F & 653 \end{array}$ | 1.86 | 1.71 | 1.62 | $66 F 042$ $67 F 657$ 67 67 | 1.96 | $1.80$ | $1.70$ | 66 $F$ 047 <br> 68 $F$ 026 <br> 68 $F$ 027 <br> 68 $F$ 028 | $2.25$ | $2.07$ | $1.96$ | $\begin{array}{llll}66 & F & 080 \\ 66 & F & 082 \\ 66 & F & 083\end{array}$ | $2.25$ | 2.07 | 1.96 |
| DC VOLTMETERS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & 0-3 \\ & 3-0-3 \\ & 0-10 \\ & 0.15 \\ & 0-20 \\ & 0-30 \\ & 0-50 \end{aligned}$ | 67 $F$ 630 <br> 67 $F$ 631 <br> 67 $F$ 63 <br> 66 $F$ 090 <br> 66 $F$ 091 <br> 68 $F$ 980 <br> 68 $F$ 982 | 1.86 | 1.71 | 1.62 | $\begin{array}{llll}67 & F & 635 \\ 67 & F 636 \\ 67 & F & 637 \\ 66 & F & 69 \\ 66 & F & 193 \\ 68 & F & 981 \\ 68 & F & 983\end{array}$ | 1.96 | 1.80 | 1.70 | 68 $F$ 082 <br> 68 $F$ 083 <br> 68 $F$ 084 <br> 66 $F$ 092 <br> 66 $F$ 093 <br> 66 $F$ 096 <br> 66 $F$ 097 | 2.25 | 2.07 | 1.96 | 66 $F$ 168 <br> 66 $F$ 188 <br> 66 $F$ 189 <br> 66 $F$ 190 <br> 66 $F$ 191 <br> 66 $F$ 192 | 2.25 | 2.07 | 1.96 |

## AC AMMETERS



# Panel Meters, Testers, Rectifiers 

## Simpson "Wide-Vue" $31 / 2^{\prime \prime}$ and $41 / 2^{\prime \prime}$ Panel Meters

## EASIEST TO READ

Reduce eye-strain-get accurate meter readings at a glance. "Wide-Vue" panel meters feature longer scales than conventional types. $31 / 2$ meter has a scale more Wide spacing between scale calibrations Increases readability from sreater distances with less strain on your eyes. All panel meters have onepiece, wrap-around flastic covers. 13 reak-resistant covers provide maximum protereion for meter faces against accidental blows or dropping. All DC meters, exceft. 0-2.5 and 0-50 microammeters, have magnet movements are not affected by steel panel mounts or proximity of meter to magnetic fields.

| METER DIMENSIONS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Model | Flange | Body DIa | Depth | Scele |
| 1327 | $3.25 \times 3.25^{\circ}$ | $2.73^{\circ}$ | $1.08^{*}$ | $3.14^{*}$ |
| 3329 | $4.00 \times 4.8^{\circ}$ | $2.75^{\circ}$ | $1.08^{\circ}$ | $3.93^{\circ}$ |
| 1357 | $3.25 \times 3.25^{\circ}$ | $2.73^{\circ}$ | $1.22^{*}$ | $3.14^{*}$ |
| 1359 | $4.00 \times 4.68^{\circ}$ | $2.75^{\circ}$ | $1.20^{\circ}$ | $3.93^{\circ}$ |

0-25. 0-50 DC microammeters hove external inagnet inovesnerts: AC meters have iron-vane movements. "Wide-Vue" meters are practical for use in communications extuipment. measuring Instruments. Ham gear. etc. Flne quality meters qive dependably acculate readings within $=2 \%$. Av. shpg. wt.. 1 bb.


| Model 1327-31/2* |  |  |  | Rango | Model 1329-4/2" |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { Slock } \\ \text { No. } \end{gathered}$ | NET EACH |  |  |  | Stock | NET EACH |  |  |
|  | 1.9 | 10,24 | 25-49 |  |  | 1-9 | 10-24 | 25-49 |
| $68 F 991$ <br> $68 F 149$ <br> $68 F$ <br> $68 F$ <br> 68 F 5152 | 4.25 | 12.83 | 12.11 | $\begin{aligned} & 0.5 \\ & 0.10 \\ & 0.10 \\ & 0.15 \\ & 0.50 \\ & 2.100 \end{aligned}$ | $\begin{array}{lll} \hline 68 & F & 992 \\ 68 & 157 \\ 68 & F & 58 \\ 68 & 159 \\ 68 & F & 60 \\ \hline \end{array}$ | 15.75 | 14.18 | 3.39 |
| $\begin{aligned} & 68 F 153 \\ & 68 F 993 \\ & 67 F 660 \\ & 68 F 155 \end{aligned}$ | 4.25 | 12.83 | 12.11 | $\left[\begin{array}{l} 0.150 \\ 0.200 \\ 0.250 \\ 0.300 \end{array}\right.$ | $\begin{array}{lll} 68 F & 161 \\ 68 F 994 \\ 67 F & 661 \\ 68 F & 163 \end{array}$ | 15.75 | 14.18 | 3.39 |
| $\begin{aligned} & 68 F 905 \\ & 68 F 995 \end{aligned}$ | 15.00 | T3.50 | 12.75 15.81 | $\left\|\begin{array}{l}0-750 \\ 0-1000\end{array}\right\|$ | $\left\lvert\,$68 <br> 68 <br> 68 906961\right. | 16.20 19.80 | $\begin{aligned} & 14.58 \\ & 17.82 \end{aligned}$ | $\begin{aligned} & 13.77 \\ & 16.83 \end{aligned}$ |
| DC MILLIAMMETERS |  |  |  |  |  |  |  |  |
| 68F181 $67 F 662$ $68 F 182$ $68 F 907$ $68 F 969$ | 13.50 | 12.15 | 11.48 | $3\left\|\begin{array}{l} 0-1 \\ 0.3 \\ 0-10 \\ 0.15 \\ 0.20 \end{array}\right\|$ | $\left\lvert\, \begin{array}{lll} 68 & F & 186 \\ 67 & F & 663 \\ 68 & F & 87 \\ 68 F & 808 \\ 68 & F & 997 \end{array}\right.$ | 14.25 | 2.83 | 12.11 |
| $68 F 183$ $68 F 184$ $68 F 185$ $68 F 909$ $68 F 998$ $67 F 668$ | 13.8 | 2.42 | 11.73 | $\left\lvert\, \begin{aligned} & 0-50 \\ & 0-100 \\ & 0.150 \\ & 0-200 \\ & 0.750 \\ & 0-1000 \end{aligned}\right.$ |  | $15.00$ | 3.50 | 2.75 |
| DC AMMETERS |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \hline 8 F 165 \\ & 68 F 911 \\ & 68 F 166 \\ & 68 F 168 \\ & 68 F 170 \\ & \hline \end{aligned}$ | $3.65$ | 12.29 | 11.60 | $\left\{\begin{array}{l} 0-1 \\ 0-1.5 \\ 0-5 \\ 0.10 \\ 0.15 \end{array}\right.$ | 68F 173 <br> 68 F 9112 <br> 68 F 174 <br> $68 F 176$ <br> 68 F 178 <br> $68 F$ | 15.00 | 3.50 | 12.75 |
| $\begin{aligned} & 68 F 171 \\ & 68 F 913 \\ & 68 F 915 \\ & 68 F 062 \\ & 68 F 063 \end{aligned}$ | 3.65 | 12.29 | 11.60 | $\left\{\begin{array}{l} 0-25 \\ 0-300 \\ 0-100 \\ 0-150 \\ 0-200 \end{array}\right.$ | 68 F 179 $68 F 914$ $68 F 916$ 68 F 068 6 B 069 | 5.00 | 3.50 | 2.75 |
| 68 F064 68F 065 68 F 066 <br> 68F 067 | $\begin{aligned} & 13.65 \\ & 13.65 \\ & 14.55 \\ & 14.55 \end{aligned}$ |  | $\begin{aligned} & 11.60 \\ & 11.60 \\ & 12.37 \\ & 12.37 \end{aligned}$ | $\begin{aligned} & 0-300 \\ & 0.500 \\ & 15-0-15 \\ & 30-0.30 \end{aligned}$ | $\begin{aligned} & 68 F 070 \\ & 68 F 071 \\ & 60 \end{aligned}$ | $\begin{aligned} & 15.00 \\ & 15.00 \end{aligned}$ | $\begin{array}{r} 13.50 \\ 13.50 \end{array}$ | $\begin{aligned} & 12.75 \\ & 12.75 \end{aligned}$ |


| OC MICROAMMETERS |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model 1327-31/2 |  |  |  | Range | Model 1329-4K" |  |  |  |
| $\begin{gathered} \text { Stock } \\ \text { No. } \end{gathered}$ | NLT EACH |  |  |  |  |  | ET EACH |  |
|  | 1.9 | 10.24 | 25-49 |  | No. | 1-9 | 10-24 | 25-49 |
| 68 F 074 | 22.50 | 20.25 | 19.13 | 0-15 | 68 F 075 | 24.60 | 22.14 | 20.91 |
| 68 F 191 | 20.10 | 18.09 | 17.09 | 0.25 0.50 | 68F195 | 22.20 18.45 | 19.98 | 18.87 15.68 |
| 68 FF 192 <br> 68 F <br> 67 | 17.10 | 15.29 14.04 | 14.53 | 0.50 $0-100$ | 68 <br> 68 <br> 68 1979 | 18.45 17.40 | 16.61 15.66 |  |
| 67F673 |  | 5.53 | 14.66 | 25-0-25 | 67F674 | 18.60 | 15.74 | 15.81 |
| 68 F 194 | 5.75 | 4.18 | 13.39 | 50.0.50 | 68F198 | 17.55 | 15.80 | 14.92 |
| 68F917 | 14.40 | 2.96 | 12.24 | 100-0-100 | $68 F 918$ | 15.90 | 14.31 | 13.52 |
| 68 F919 | 13.65 | 12.29 | 11.60 | 500-0.500 | 68F920 | 14.40 | 12.96 | 12.24 |

AC VOLTMETERS

| Model 1357-3\% ${ }^{\circ}$ |  |  |  | Range | Model 1359- $\mathbf{1 K}^{\prime \prime}{ }^{\prime \prime}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { Slock } \\ \text { No. } \end{gathered}$ | NET EACH |  |  |  | $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | NET EACH |  |  |
|  | 1-9 | 10.24 | 25-49 |  |  | $1-9$ | 10.24 | 25.48 |
| 68 F921 | 12.60 | 11.34 | 10.71 | 0.15 | 68 F 922 | 14.40 | 12.96 | 12.24 |
| 68 F 923 | 13.05 | 11.75 | 11.09 | 0-50 | 68 F 924 | 14.40 | 12.96 | 12.24 |
| 68 F 154 | 13.95 | 12.56 | 11.86 | $0-150$ | 68 F 162 | 15.00 |  |  |
| 68 F 156 | 13.95 | 12.56 | 11.86 | 0-300 | \|68F164 | 5.00 | 13.50 | 12.75 |



## AC MILLIAMMETERS


NEW $31 / 2^{\prime \prime}$ SEGMENTAL VOLTMETER
Type 1347C. Expanded segmental scale repisters 100-130 AC volta. Meter is used primarily in monitoring line voltage. Ciftieal scale ranze hinproves accuracy and readabilits, $3.14^{* \prime}$ scale. Operatins frequency range $20-2000 \mathrm{cps}$. Accuracy $=.5 \%$ of center scale value. Freguency infolt end scale values. Features core magnet meter movement. Shps. 66 F 081 . NET

### 40.80

## STERLING BATTERY TESTERS



Sterling pocket-size meters for general purpose testing of dry and
wet cell batterles. Dependable Sterling cesters are compact and easily portable. 2 plate inish. $5 \%$ calibrated accuracy. With learl. Av wt.. 6 oz .


J-B-T METERS


A New Type 32-JP-7 Temperature Testtemer. scale, $0.650^{\circ} \mathrm{F}$. Automatic ambient $5 \times 2^{3 / 3}$. With cave. Shpg. wt.. 3 His. 29.50
65 FOB6. NET................. 29. (B) Type 31-EX Elapsid Time Metor, Selfntepanto gyopg. 9 liry. Automatic resel. $31 / 2^{\circ}$ Hanser; monnts in $21 / 2^{*}$ hole. $31 / \mathbf{n}^{*}$ depth. For $100-120$ \%., 60 cycle AC. WL., $11 / 4$ libs. 15.95
66 F 689. NET..................... 15.9

EMICO AC VOLTAGE TESTER


Detects low line voltage. 2-prong male permits easier readpermits easier readtion. Range, 0-150 volta. $2^{\prime \prime}$ meter has damper movement. Accuracy $=5 \%$. Metal case. 8 oz .3 .38
67F626. NET
SITTLER LOW-VOLTAGE TESTER


Type T202. Handy low voltage tester Indicates from $5-50$ volts AC-DC. Uses incandesent lamp. Has red and black leads easy identitieation and use. Shpg. wh.. 3 oz .99 42F 406. NET Type 203. Similar to the above voltage tester, but tests from $21 / 2-24$ volts $A C-D C$

UNIVERSAL METER CASE


Front panel holds 2* meter. Knockolit ring entarges hole for mocter. -piece back and bothord bindiny post banana jacks in heads. Black wrinkle finisls. Size. 41/4x 4x1" without posts. W'R.. 11/4 F506. NET... 1.49

CONANT INSTRUMENT RECTIFIERS


Max. AC imput. 5 v. copper oxide: 24 K gold contacts; rev. $v_{\text {. }} 2.25 \mathrm{v}$ DC.; 3 leads; $038^{\circ}$ thick. Serles 500: 160 ma max. 60 ma DC fore ward. Resp., 0-1 mic. Dia.. $5^{5 \prime} .166^{\circ}$ center hole. 6-32 11tg, surew. Series $160: 10$ ma max 10 ma . DC forward. Resp.. 0.75 mc . Dia., $166^{\prime}$, Two 12 mitg. screws. In polystyrene base hous ing. Serics $180-\mathrm{C}$. 160 in brass case. 5 oz .

| Slock No. | Type | Series | $\begin{aligned} & \text { Body } \\ & \text { Color } \end{aligned}$ | No. of Terms | Outpul DC MA | NET EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6日F041 | M | 500 | Yellow | 4 | 100 | 2.064 |
| $68 F 043$ | HS | 500 | Black | 3 | 50 | 1.50 |
| 6 6F 047 |  | 500 | Red | 3 | 50 | 1.50 |
| $68 F 042$ | H | 500 | Green | 2 | 50 | 1.18 |
| 68 F 040 | B | 160 | veltow | 4 | 10 | 2.06 |
| $68 F 044$ | BHS | 160 | Black |  | 5 | 1.50 |
| 6日F 046 | BT | 160 | Red | 3 | 5 | 1.50 |
| 68 F 037 | В | 160 | Green | 2 | 5 | 1.18 |
|  | B-C | 160-C | Yellow | 4 | 10 | 2.06 |
| 68 F 045 | EHS C | $160 . C$ | Black | 3 | 5 | 1.50 |
| 68 F 048 | BT-C | 160.C | Red | 3 | 5 | 1.50 |
| 68 F 0491 | BH.C | 160-C | Green | 2 | 5 | 1.18 |

## Power Supplies, Converters and Rectifiers

## ELECTRO-PRODUCTS POWER SUPPLIES



## MODEL PS-2 DC POWER SUPPLY KIT

Efficient DC power supply. Ideal for servicing transistor portable radios and auto rados. Has two output ranges with separate current meters and output terminals; $0-20$ volts at 75 ma and $0-16$ volts at 5 amps . Has variable transformer for smooth voltage adjustment; pi-type filer for hash-free output. In sturdy metal case, $81 / 2 \times 8 \times 51 / 4^{\circ}$. For $117 \mathrm{v} ., 50-60$ cycle AC. Shpg. wt.. 15 lbs.
56.00

## MODEL D-612T DC POWER SUPPLY

DC power supply for servicing auto radios, battery charging, etc. Two continuously variable ranges: 0-8 volts and 0-16 volts. Full 10 amps on both ranges. Up to $100 \%$ intermittent overload. Less than $1 / 2 \%$ rlpple metering of voltage and current. 2-pos. rance switcooling. Constant fuse holder. Lab-type output terminals. Rugxed blue hammerloid steel BO FU $283 . \$ 5 \mathrm{M}^{2}$ Monthly. NET..................................... 59.95


EC-2

## EC-2 DC POWER SUPPLY

New, versatile DC power supply Provides well-fitered, adjustabie DC output of 0.16 volts at 5 amps. Ripple is lesg than $0.5 \%$ at full output. design; measures only $103 \times 43 / 4 x$ $61 / 2^{2}:$ takes up only $43 / 6^{-10}$ on service bench. Portable; easily carried any where. Includes combination volt-
meter-ammeter meter-ammeter pilot light, thise. in two-tone gray cabinet with carrying
handle. For 117 v.. $50-60$ cyele AC. 65 Fhpg wi. 11 ths. 85 Monthly. NET 39.95

## EC-I DC POWER SUPPLY

Efficient new power supply provides Output is exceptionally well-fitered; has less than $0.5 \%$ ripple. Uuput. an deal hum-iree power source for use in auto radio servicing and anto radio display stands. The EC- 1 is extremely compact in size and auto only $101 / 4 \times 43 / 4 \times 61 / 2^{2}$. Easy to carry wherever its nceded; vertical mtg. Has 4 -position voltage adjustment switch; horizontal or dium and high Includes pilot liglit; wing nut output terminals. Rekulation is 1.4 volts per amp (no-load to F.L.). DC impedance 14 Reks in two-tone gray enameled case with carryink handle. For $117 \%$ ohms. In

29.95


## PERMA-POWER

## RADIO BATTERY ELIMINATOR

Model "A". Converts battery radios. etc. to 110 v . AC operation. Selenium rectlfiers for wel- $n$ intered DC output.
 وov. DC at 3 ma. Fits in battery compartments of most radios. Large variety
 For $105-125 \mathrm{VAC}$. Wt. 41 lbs .12 .40


## SENCORE PS-103 "TRANSI-PAK"

Low-cost DC power supply espectally designed to replace batteries of transistor radios during repair. Furnishes variable DC from 0 to 24 voits with 1.5 -volt biasing tap (to aid in servicing Philco and Sylvanla transistor portables). Provides continuously metered current output up to 100 ma ( 200 ma on peaks). No hum or feedback-employs heavy-duty selenfum rect fifier and two $200-\mathrm{mfd}$ capacitors for filtering and low output inpedance. $5 x$
$41 / 2 \times 21 / 4$. With leads. For $110-120$... 60 $41 / \times 211^{\circ}$. With leads, For $110-120$ v.. 60 cycle AC. Slipge wr., 2 lbs.
83 F 985 . NET...........
19.55


NEW PRECISION P-25 BATTERY ELIMINATOR
Versatile transistor radio battery eliminator and bat tery charger. Supplies continuously variable DC volt age from $0-25$ voits. Has center tap for transistor radios without output transformers; also 1.5 volt tap. Reads 0-100 ma DC; $0-25$ volts DC. Can be used to simulate weak battery conditions during sprvicing. Also useful for recharking nickel-cadmium batteries. lis sturdy metal cask. $61 / 2 \times 31 / 2 \times 3^{\circ}$. Wt.. 2 lbs .
65 ( 027 .
19.55

NEW ELECTROTONE BATTERY CHARGERS


C- 100

C. 60

NEW MODEL C-100 HOME AUTO BATTERY CHARGER
Compact 6 and 12 volt charger features 3 -position selector for choosing sow, medium or fast charging rates. Accurate ammeter monitors charg ighter plug volteter provides check on battery condition. Cigarette eleniu plug charges battery through lighter socket.
 87 F 798 . $10 \times 8 \times 71 / 2^{\prime \prime}$. For $110-120$ v., 60 cycle AC. 91 bs .
24.95

Model C-80. As above, but less voltmeter and cisarette lighter accessory plug-unes copper-plated battery clips, Shpg, wt.. 9 lbs.
87 F 797 . NET.................................................... 20.95

NEW MODEL C-60 ECONOMY BATTERY CHARGER
Low-cost 6 and 12 volt battery charger. Has accurate ammeter; full wave selenium rectifiers; complete circuit breaker protection. Delivers

87 F 796 . Model C-40. As above, but delivers 5.5 A .7 lbs .
87 F 795 . Model C. 20 M . As above but

NEW "TEST-O-CHARGE" BATTERY CHARGER


Highly useful unit that fusictions as a battery charger, a continuity checker and a shock 12 -volt indcator. Charges 6 and amprate. Has plug that fits into cigarette lighter socket on car's dashboard-thereby eliminating need for opening up car's hood and making direct connection to battery. Also recharges 9 -volt nickel-cadmium type transistor radio batteries; batteries clip right into socket on unit's front panel. "Test-O-Charge" checks radio and TV tubes for fila ment continuity; also tests fuees, bulbs, power tools, washing machine motors, fans, ete for slsort or open circuits. When cliecking appliances for electrical shock hazard, unit's neon indicator ground. Can be used to erace "hot witial existing between appliance and ground. Can be used to erace hot wiring" in circuits. With nush-button 50 cuit breaker for over add protection. $51 / 8 \times 31 / 8 \times 27 / 8^{*}$. For $110-120 \mathrm{v}$. 65 F 028. NET
14.85

## CORNELL-DUBILIER $125 C 14$ DYNAVERTER

Compact nower unlt consists of a heavy-duty inverter and a rapid charging circuit for a
 12 volt auto battery. Battery must be used with unit as a means of storing the DC power developed by unit's charging circuit: the inverter section runs of the charged battery and provides upto 150 watts of 110 volt, 60 cycle AC. continuously. A fully charged TV bet up to power a portable player up 10 hours; a record plete recharging of a battery can be accomplished by the Dynaverter overnight froin regular $110-120$ volt. 60 cycle AC power lines. Size. $13 \times 71 / \times 31 /{ }^{\prime \prime}$. Shes. wt., 18 lbs
85 FX OOt. NET.
65.00

## MALLORY DRY-DISC RECTIFIERS

Top-quality magnesium-copper sulphide rectifiers for use in low voltage DC power supplies. Find extensive applications in battery chargers, battery eliminators, model train power supplies, etc. Alt are single-phase, full-wave bridge type. Operate in semperature range from $-90^{\circ} \mathrm{F}$ to $+265^{\circ} \mathrm{F}$.: provide constant output without the need for adjustments. Rectifying film has "welf-healing" action; keeps repairing itwelf with use. Indicates output at full load. Supplied with the following tydes of mountings: insulated bolt, torounded foot; sinsulated stud. J suffix in Type No. indicates universal mounting design.

| $\begin{gathered} \text { Stock } \\ \text { No. } \end{gathered}$ | $\begin{aligned} & \text { Mfr's } \\ & \text { Type } \end{aligned}$ | ACV OCV Cont Input Outt Amps |  |  | $\begin{aligned} & \text { Sizes } \\ & \text { H. W. D. } \end{aligned}$ | Replacement in Equipment | $\mathrm{WL}$ | Lis | $\left\{\begin{array}{l} \text { NET } \\ \text { EACH } \end{array}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 3.26.49.79.812.8 | 11.7115 |  | /4x $/$ /fx $]^{\prime}$ | CTC Battery Eliminator GTC Battery Eliminator | 1/4 |  | EACH |
|  |  | 2.25 |  |  |  |  |  |  |
|  |  | 5.2 | 1.3 | $6 \times 13 /$ | Electric Fence Supplies | 1/4 | 3.9 | 2.5 |
|  |  | 6.6 | 6.0 | x2\% |  |  | 7.25 | 4.74 |
|  |  |  |  |  |  | IS16CB7M |  |  |  |
| 56 F 171 | F16C31 |  | 13.0 | 6.8 | 3.9 | 21/x13/630 | Mallory 5535 |  |  | 6.99 |
| 56 F 186. |  |  |  |  | 4 | $\times 21 / 844{ }^{\circ}$ | Mallory 12-AC-5-2 |  |  |  |

# Power Supplies and Inverters 

## EICO POWER SUPPLIES-KITS AND FACTORY WIRED

## MODEL 1064-K BATTERY CHARGER KIT

New, easy-to-build 6 and 12 -vole battery eliminator and charger kit. Delivers the low-ripple $D C$ necessary for servicing transistorized equipment. Has two DC voltage ranges: $0-8 \mathrm{v}$. \& 10 amps continuous, 20 amps intermitent iftent. Ripple: 0.16 v. range, $1 \%$ (a) 6 amps: $0-8$ v. range, $4.5 \%$ @ 10 amps. Separate voltmeter and ainmeter permit simultaneous monitoring of voltage and current on both ranges.
$81 / 2 \times 51 / 4 \times 71 / 2^{\circ}$. For $105-125 \mathrm{v} ., 50-60$ cycle AC . Wt F 029. \$5 Monhly. NET
43.95

Modog 105. As, above, bue factory-wired.
65 FO 30 . 85 Monthly. NET........ 52.95

## MODEL 1020-K POWER SUPPLY KIT

Transistorized DC nower and bias supply. Provides variable output voltage $u p$ to $30 v$. Has dual-range voltmeter (0-6, 0-30 VDC) ior monitoring output. Perfect for servicing hybrid apparatus or all-transistor equipment. a source of ripple-free DC for lab use.

Maximum continuous output. 150 ma from 0 $12 \mathrm{y}_{\mathrm{i}} ; 200 \mathrm{ma}$ from 12-24 $\mathrm{v}_{\mathrm{i}} ; 300 \mathrm{ma}$ from 24-30 v. Uses full-wave sillicon diode reclifier circuit with electrolytic capacitor input filter followed by two power transistors in a cascaded fitter ection-maximurm ripple at full load is only $005 \%$. Fure protects circuit in case of overioad; pilot light remains lit if fuse blows.

In gray wrinkle steel case with carrying handle. AC. Shpg. Nt. M1/2 1bs. NET
19.95

Modet 1020. As above, but factory-wired.
83 F $969 . \$ 5$ Monihly. NET.........27.95


## VARIABLE AC BENCH SUPPLY KIT

Easy-to-build, lab type variable $A C$ bench supply. Provides adjustable output of 0-140 v. AC from 120 v . AC 1mput. Handles 3 amps. Precision voltmeter and ammeter permit simnltaneous nonitoring of voltage and current. Ammeter has dual range ( $0-1,0-3$ amps); ranges can be switched while unit is under load. Use-s variable auto-transformer of toroidal core design. Auto-transformer and ammeter are eparately fused. In steel case, $81 / 2 x 53 / 4 x 7$. 60 eycle AC. Shps. wt., 16 lbs. 87 FX 354. \$5 Monthly. NET...... 35.95

Model 1073. As above. but factory-wired 87 FX 355. \$5 Monthly. NET........ 47.95
Model 1078-K. Same as Model $1073-\mathrm{K}$ above, but reads $0-2.5$ and $0-7.5$ amps. Wt., 16 lbs.
87 FX $356 . ~ \$ 5$ Monthly. NET...... 42.95

Model 1078. As above, but factory-wired
87 FX 357. \$5 Monthly. NET........ 54.95

Operates any 6 or $12-\mathrm{v}$. auto radio including transistor models. Features: extra filtering and continuous voltage adjustment by variable ransformer; heavy-duty selenium rectifiers; fused primary, Low range: $0-8 \mathrm{v}$. (4) 10 amps continuous, 20 amps intermittent; $1.5 \%$ ripple at $2 \mathrm{amps}, 2 \%$ at 6 amps . High range: $0-16 \mathrm{v}$ : a 6 anips continuous, 10 amps intermittent: $0.3 \%$ ripple at $2 \mathrm{amps} .1 .5 \%$ at 10 amps . With case, parts. $81 / 4 \times 101 / 2 \times 73 / 4$, For $105-125$., 05 83 FX 875 . $\$ 5$ Monihly. NET
38.95

Model 1060. As above, but fartory-wired.
83 FU 876. \$5 Mouthly. NET........ 47.95
Model 1060.K Batery Ellminator Kit. For Gand 12 v a auto radios. Same an Model $1060-\mathrm{K}$
above,
15 lbs .
93
FX $\mathbf{8 5}$ Monthly. NET..... 29.95
Model 1050. As above, but factory-wired.

## ATR HIGH-QUALITY INVERTERS AND POWER SUPPLIES



6-12 V. DC POWER SUPPLIES
A Type 610C-ELIF. Specially designed DC A. powe supply for testing and operating auto 115 volt, $50-60$ cycle AC power lines. Provides either 6 volts © 10 amperes continuous, or 12 volts © 6 a miperes continuous with minimum ripple. Has separate voltmeter and ammeter full wave selenium rectifier. Toggle switch se lects 6 or 12 volts output. 8 position voltage selector adjusts output voltage. Has gray steel

(A) Type 620C-ELIT. Heavy-duty model. provides a ful! wave output that assures noiseless operation. Rated output: 6 volts (A) 20 amperes or 12 volts (1) 10 amperes. Has separate voltmeter and ammeter; monitors current and voltage output simultaneously. 8 -position voltage selector control permits adjusting volt age output to desired level. In mray stel case
with handle. Size, $61 / 2 \times 127 / 3 \times 81 / 2^{\text {a }}$. For $105-125$
 80 FU 234 . $\$ 5$ Monhly. NET
65.61

## 6 AND 12 V. SHAV-PAKS

(B)
Minlature inverters that operate standard B) AC electric shavers from 6 and 12 -volt storage batteries in autos, buses, trucks. boats and planes. Small and compact; measure only $4 x$ of car when bor being uged The height of conof car when not being ussed. The height of convenience for traveling salesmen, executios. sportsmen, couriats. etc. Unit simply pluks cigarette highter receptacle on car sashboard and changes DC battery power to standard divices Aoth 6 and 12 -valt models provide 115 devices. Both 6 and 12 -volt models provine 60 cycle AC output at 15 watts. In gray hammerloid steel case. Slıpe. wt., $21 / 2$ lbs.


## DC TO AC UNIVERSAL INVERTERS

- Ruggedly Canstructed - Completely Suppressed 1- Exceptionally Stable Against RF interference Universal inverters for operating $\mathbf{1 1 5}$-vole, in autos, buseg, trucks, boats, trains, planes: in autos, buses, truckR, boats, trains, pistanes, For standard 115 -volt AC power distribution, sets, radios, PA systems, electric razors, test equipment, etc. Carefully engineered and constructed for dependable operation. Operating structed for ependable operation. Four-point emoltage reculator corrects output voltage for minimum and maximum loads, and also helps compensate for input voltages lower or higher than normal. Recommended for use with loads having power factors in excess of $70 \%$. Not

| Stock | Mir's Typo | inpur DC Volt: | Output 60 Cyale | Watts |  | We. Lbs. | Llat | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Cont. | Inter. |  |  |  |
| 81FU924 | 6U-RHG | 6 | 110 v . | 125 | 150 | 27 | \$99.50 | 65.01 |
| 81 FU926 | 12U-RSF | 12 | 110 v | 100 | 125 | 22 | 75.00 75.00 | 49.00 |
| 81 FU927 | $12 \mathrm{U}-\mathrm{RSF}-\mathrm{P}$ | 12 | 110 110 | 100 150 | 125 175 | 27 | 99.50 | 65.01 |
| 81FU928 | 12U-RHJ | 12 | 110 v . | 200 | 250 | 37 | 125.00 | 81.67 |
| 8i FU930 | $28 \mathrm{U}-\mathrm{RSF}{ }^{\text {- }}$ | 28 | 110 v. | 100 | 125 | 22 | 89.95 | 58.77 |
| 8) FU931 | 28U-RHG* | 28 | 110 v . | 150 | 175 | 27 | 119.50 | 78.08 |
| 8) FU936 | 50U-RSF | 50 | 110 v . | 100 | 150 | 22 | 89.95 | 58.77 |
| $81 F U 937$ | 110U-RSF | 110 | 110 v . | 150 | 250 | 22 | 75.00 89.95 | 49.00 |
| 81 FU938 | 110AU-RHG | 110 | 110 v . | 250 400 | 325 600 | 27 37 | 145.00 | 94.74 |
| 8 ) FU940 | $110 U-H S J$ | 110 | 110 v . | 400 | 600 | 37 | 145.00 |  |

## PORTABLE PLUG-IN TYPE DC TO AC INVERTERS



Lightweight isverters for operating $110 v$. AC equipment from DC voltake sources. Feature excellent frequency stability and high fficiency. 6 and 12 -volt units plug into cigarette highrer receptacle of any vehicle; others are equipped with standard 2 -prong plugs. All are designed especially for use with dictating machines; record players, electric razors, test equipment, etc. Noi recommeriricd for lape recorders and large motor driven appliances such as refrigeralors, washing machines. etc. Gray hammerioid case with leather carrying strap, Sizes: DME, S4 $x^{4} 3 \times 23 / 4$ RMion RME MF $83 / 8 \times 8 \times 31 / 4^{\circ}$. Recommended for 24 -vole operation. RME and RMF types are equipped with an adjustable, 4 -position voltage regulator, calibrated for low, medium, high and maximum loads, All a power factors over $80 \%$. Check wallage vating of equipment before ordering.

| Stock No. | $\begin{aligned} & \text { Mires } \\ & \text { Type } \end{aligned}$ | Input DC Volts | Output 60 Cycle | Watte |  | Wt., Lbs. | Llst | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Cont. | Inter. |  |  |  |
|  | 6-DME |  | 110 v . | 30 | 40 | 5 | \$24.95 | 16.30 |
| 80 F 289 | 6C-DME | 6/12 | 110 v . | 30 | 40 80 | 12 | 28.95 49.50 | 18.9 32.3 |
| 80 F 247 | 6-RMF 6 - ${ }^{\text {CMF }}$ | $6 / 12$ | 110 v, 110 | 60 | 80 | 12 | 49.50 54.95 | 32.34 35.91 |
| 815941 | 6C-RMF | 6/12 | 110 v . |  |  |  |  |  |
| 80 F 249 | 12-DME |  | 110 v 110 | 40 90 | 50 125 | 5 12 | 24.95 49.50 | 16.30 32.34 |
| 80 F 266 | 12T-RME | 128 | 110 v 110 | 80 | 120 | 12 | 69.50 | 45.41 |
| 80FX218 | 110-RME | 110 | 110 v | 100 | 150 | 12 | 59.50 | 38.88 |

# Converters and Chargers 

## TERADO TRANSISTOR <br> DC-TO-AC 6O-CYCLE CONVERTERS



300-Watt Filtered Output For TV's Phonos Recorders
$50-191$


Remole Control

- Converts DC to 115 Voll, 60 Cycle AC - Output Frequency Stable to Within $1 / 2$ Cycle - Fully Transistorized for Greater Power

Model 50-191 "Continental" with Remote Control. high-poivered transistorized unit
 tape recorders, phonos, TV, ett. Chirome-plated remote control mounts on dashiboard plated verter may be installed in trunk, out of the able AC vollage output switch receptacle, variHas tuned frequency reed for perfect cycle. control. Conper-clad finish on steel case, $6 \times$ isstallationt Includes all plugs and cable for 80 FU 043. NET wt. 30 lbs

II4.01

Model 50-200 "Atlas" whth Remore Con${ }^{\text {trol }}$ Same as "Continental" above, but has 65 FU O31. NET....4. Slapg. wt.. ${ }^{21}$. 85.33 Model 50-201 "Titan". Same as "Atlas" | above but less remote control. Ships. wt.. 20 lbs. |
| :--- |
| 65 FU |
| 032 2. NET. ................ |
| 107 |



Remote Control
Now Model 50.202 "Dual Continental"' wleh Romote Control. Fully transistorized. heavyduty converter. Converts 12 v. DC $10110 v ., 60$ cycle AC. Provides 600 watts of filtered output: freguency stable to within $1 / 2$ cycle. Remote able voltage switch, signal light. $103 / 4 \times 13 \times 0^{\circ}$. With batery catiles. Wt.. 60 lbs. 228.03

## TERADO CONVERTERS AND CHARGERS

Converters. For operating 110 v., 60 cycle $A C$ devices from car cepterics. Converter plug fits auto cigarette-lighter socket, ex20 -ft input cord to battery terminals with clips provided; ${ }^{*}$ has and ballery zollage before selecling converter. Chargers. $1 / 2$ amp Tiny Giant for autos and boats. With clips for direct connection to battery terminals; huzzer indicates improper connection Copper-clad stcel case. Pocket-size 5-amp charger is full-wave type with 2 miniature silicon rectifiers. Charges battery through lighter of car, boat or plane with plug supplied; charge indicacor light shows battery condition. In steel case. 10 -amp charger is simflar to $5-a m p$ model, except with ammeter


VIBRATOR-TYPE CONVERTERS

| Stock <br> No. | Mfr's <br> Type | Model | Input DC Vales | Watts | Sizo | We. Lbs. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 80 \text { F } 194 \\ & 80 \text { F } 196 \\ & \hline \end{aligned}$ | $\begin{aligned} & 50-102 \\ & 50-103 \end{aligned}$ | Auto Shaver Auto Shaver | $\begin{array}{r} 6 \\ \hline \end{array}$ | $\begin{aligned} & 10.15 \\ & 15.20 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2 \times 3 \times 4^{\prime \prime} \\ & 2 \times 3 \times 4^{\prime \prime} \\ & \hline \end{aligned}$ | $\frac{2}{2}$ | 9.12 9.12 |
| 80 <br> 80 <br> 80 | $\begin{aligned} & 50-115 \\ & 50-116 \\ & \hline \end{aligned}$ | Semior Senior | 12 | $\begin{aligned} & 30-50 \\ & 40-50 \end{aligned}$ | $\begin{aligned} & 21 / 2 \times 21 / 3 \times 41 / 3^{\prime \prime} \\ & 21 / 2 \times 21 / 2 \times 4 \end{aligned}$ | $\begin{aligned} & 31 / 4 \\ & 31 / 4 \end{aligned}$ | $\begin{array}{r} 15.66 \\ 15.66 \\ \hline \end{array}$ |
| 80 <br> 80 <br> 8 <br> F 270 | $\begin{aligned} & 50-126 \\ & 50-127 \end{aligned}$ | $\begin{aligned} & \text { Super } \\ & \text { Super } \end{aligned}$ | 16 12 | $\begin{aligned} & 60-75 \\ & 75-100 \end{aligned}$ | $\begin{aligned} & 6 \times 5 \times 4^{\prime \prime \prime} \\ & 6 \times 5 \times 4^{\prime \prime} \end{aligned}$ | $8$ | $\begin{aligned} & 32.65 \\ & 32.65 \end{aligned}$ |
| $81 F 043$ | 50-167 | Electral | 12 | 42-52 | $3 \times 51 / 2 \times 21 / 2^{*}$ | 31/4 | 17.62 |
| 81 FU 044 | 50-175 | Recorder | 12 | 150-175 | $10 \frac{1}{4} \times 6 \times 6{ }^{\prime \prime}$ | 21 | 65.04 |
| $81 F 045$ | 50-179* | Sportsinan | 12 | 42-52 | $51 / 8 \times 3 \times 21 / 4^{\prime \prime}$ | , | 20.88 |
| 80 F 276 <br> 80 <br> 80 | $\begin{aligned} & 50-137 \\ & 50-138 t \\ & \hline \end{aligned}$ | Chief Chief | $\begin{array}{r} 6 \\ 12 \\ \hline \end{array}$ | $\begin{array}{r} 75-125 \\ 100-125 \end{array}$ | $\begin{aligned} & 6 \times 5 \times 4^{\prime \prime} \\ & 6 \times 5 \times 4^{\prime \prime} \end{aligned}$ | 9 | 45.73 45.73 |
| 80 F 197 | 50-134 | Automatic | 6 and 12 | 55.110 | $4 \times 5 \times 6$ | 9 | 37.88 |
| 80 FU 193 | 50-153* ${ }^{\text {+ }}$ | Supreme | 12 | 175-200 | $6 \times 6 \times 11^{\prime \prime}$ | 24 | 71.87 |

## CHARGERS



## CORNELL-DUBILIER CONVERTERS

Famous "Powercon" DC-to-AC converters, Efficient vibratortype units recommended for operating AC appliances from DC power sources. All have well-regulated outputs of 110 voits, 60 cycle $A C$-output stability is maintained regardless of load. Have high ratings for intermittent overloads; wattage figures for intermittent use are rated for power factors from 70-100\%. Superior RF filtering assures an output free of "hash" - permits clear, interference-free TV. shortwave, AM and FM reception. Units start instantly, even under heavy load-no warmup period 12 S 期 4 comes For small, portable type dictating machines. Model (supplled less battery). Model 12 SP 2 is desinned especially for
 use with electric shatvers; Its small size permits It to be stored in car's glove compartment when
not in use. Model 1101125 is specifically designed for use with TV sets.


## SCHAUER BATTERY CHARGERS AND ACCESSORIES



Compact, efficient battery chargers. Car owners who use their electrical accessories. such as heater, radio, fan, etc., to a great extent fiud these units excellent for restoring their car batteries to full charge overnight. Models A5612, B4612 and C4612 have selector switches for changing from 6 -volt 2012 -vole operation. Ahl have aulomatic safeguard provision ayainst B4612,C4612, B.312 and C412. Models A.561 2. meral dlal anmeter to sho 412 have accurate numeral dal anmmeter to showexact rate of charge
entering battery. Model A3 Is an economy unit that inctudes full-wave charging output which
makes possible higher efficiency of operation Model $\mathbf{C} 4612$ rectifiers for dependable service. Model C4612 will recharge the average 6 or 12 volt battery in 6 hours or less; it is ideal for quick charging during intervals when equipment is $\mathrm{C}+12$ iss , but must be ready in a hurry. Noretractor batteries charit for keeping truck or 12 -volt or two series connected 6 volt batteries. All chargers have handy clip tepminala for attaching to battery; no need to disconnect or remove baitery from car. All units operate from $110-120 \mathrm{v}$.. 60 cycle AC.

| Stock No. | $\begin{aligned} & \text { Mfr's } \\ & \text { Type } \end{aligned}$ | Charging Rate (Amps) | Volts | Fully Charges Average Battery in | Size | $\begin{aligned} & \text { Wt., } \\ & \text { Lb's. } \end{aligned}$ | List | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $75 \text { F } 283$ | A5612 |  |  | 10 hours | $61 / 9 \times 41 / 4 x+1 / 4$ | $\frac{\text { L65 }}{431 / 4}$ | \$18.95 |  |
| 80 F 161 | A3 <br> B4612 | $\begin{aligned} & 4 \\ & 6 \end{aligned}$ | $6$ | 10 hours | $619 \times 4 / 4 \times 48$ | 4 | 12.95 | 9.70 |
| 8 F 072 | B312 | 6 | $6{ }^{6} 1212$ | 8.9 houra | \% $6 \times 610 \times 6 \times 1 /$ | $881 / 2$ | 25.95 | 17.70 |
| 81 F 071 | C4612 | 10 | 6 and 12 | 6 hours or less | $619 \times 60 \times 7 \%$ | $10^{1 / 2}$ | 22.95 | 17.20 |
| B0 F 164 | C+12 | 10 | 12 | 6 hours or less | $61 / 4 \times 61 / 4 \times 79 *$ |  |  |  |

MODEL A-8478 HANDY "KAR-START" Helps start cars in cold and wet weather-at
instant of starting. "Kar-Start" sends $\$$ times instant of starting, "Kar-Start" sends S times
the normal spark intensity through engine's the normal spark intensity through engine's
spark plugs. गas no effect on encine rerform-ance-unit dlaconnects an engine rerformas ensine is rurning: is not harmfill in any soon to pluge or rumning: is not harmfill in any way co nugg or distributor. Especially helsful on battery. gasoline and time installs suick saves easily-has only three wires to connect and both 6 and 12 volt auto igntomect. For


TYPE A-8412 CHARGER PLUG


Connects charger to battery by plugging lishter. May also be lighter. May also be
nsed as a replacement plug for power con-
verters. fiom 12 -volt cars. Wt.,
oz. 81 F 059 . NET............................. 1.08

# RCA Batteries, Sonotone Rechargeable Battery 

## RCA PORTABLE, TRANSISTOR, INDUSTRIAL BATTERIES

- You Always Gef Freshest Replacement Batteries at Allied
- Tables Give RCA Equivalents for Your Present Batleries Listlng covers types for hundreds of industrial appllcations and virtually all portable radio types. If you cannot determine which make and model number of your set. $*$ Mercury batteries. §Oiner voltage taps: $11 / 2,3,41 / 2,6$.


PORTABLE "A" BATTERIES

| StoekNo. | $\begin{aligned} & \text { Mif's } \\ & \text { Type } \end{aligned}$ | List Price | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ | Voits | Sire | Wt. Lhs. | Burgess | Eveready | Philco | Replaces |  | Ray-0-Vac |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Zenith | $\frac{\text { Mallor }}{\text { M15F }}$ |  |
| 55 J 736 | VSo34A | . 20 | .13 | $11 / 2$ |  | $10 z$ | $\begin{aligned} & 2 \\ & 1 \end{aligned}$ | 915 935 | P15F | 28 | M15F | 11.P |
| 55 J 737 | VS035A | . 20 | . 13 | $11 / 2$ |  | 1/4. | 2-2R | 950 | P907 | 22NL | $\mathrm{MinF}-\mathrm{M}$ | 2 LP |
| $55 J 716$ | $\checkmark$ S036 | . 20 | $\begin{array}{r}\text { a } \\ \hline 115 \\ \hline 15\end{array}$ | $71 / 2$ |  | $11 / 4$ | ${ }^{2} 5$ | 717 |  | 2750 | M9 | 9 |
| 55 J 744 | VS065 | 1.65 <br> 1.35 <br> 1.00 | 1.15 .95 | $71 / 2$ $41 / 2$ | 4x11/4 $\times 43 / 32^{\prime \prime}{ }^{\text {a }}$ | $1^{1 / 4}$ | F3 | 736 | P38 | 2736 | M3 | A3 |
| 55 J 745 | VS067 | 1.35 |  |  |  |  |  |  |  |  | M2 | A2 |
| 55 J 746 55 J 774 | VS068 V S069 | 1.00 1.20 | . 70 | 6 |  | 1/1/2 | 2 l | 720 |  |  | M18 $\mathrm{M24F}$ | 18 |
| 55 J 774 | VS069 | 1.20 .15 | . 10 | $11 /$ | 13/2x123\% | 2 | 7 | ${ }_{912}{ }^{2} 153$ | K | 2912 | M11F | 11. |
| 55 J 775 | VSI41 | 1.10 | . 77 | $11 / 2$ |  | ${ }^{1} 1 / 2$ |  | ${ }_{964}$ |  |  | M 20 | 20 |
| 55 J 725 | VS236 | . 45 | . 32 | $7^{11 / 2}$ | $13 / 8 \times 4316^{\circ} \times 213 / 10^{\prime \prime}$ | $1^{1 / 2}$ | DS | 964 | P26 | 2707 | M26 | 26 |
| 55 J 550 | VS315 | 1.50 | 1.05 | $71 / 2$ | 2916 $\times 21 / 2 \times 2 \times 13 / 10^{\circ}$ |  |  |  |  |  |  |  |


| $\begin{array}{llll} \hline 55 & \mathrm{~J} 711 \\ 55 & \mathrm{j} & 722 \\ 55 & 723 \\ 55 \mathrm{~J} & 710 \end{array}$ | $\begin{aligned} & \text { VSO13 } \\ & \text { VSO16 } \\ & \text { VSSO5 } \\ & \text { vSOO8 } \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.85 \\ & 3.50 \\ & 2.95 \\ & 3.45 \\ & \hline \end{aligned}$ | $\begin{array}{r} 2.70 \\ 2.45 \\ 2.08 \\ 2.42 \\ \hline \end{array}$ | $\begin{aligned} & 45 \\ & 671 / 2 \\ & 45 \\ & 671 / 2 \end{aligned}$ |  | $\begin{aligned} & 2 \\ & 1 \\ & 3 / 4 \\ & 3 / 4 \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathrm{M} 30 \\ & \mathrm{XX} 45 \\ & \mathrm{X} 30 \\ & \mathrm{~K} 45 \end{aligned}$ | 482 467 455 457 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 55 \mathrm{~J} 749 \\ & 55 \mathrm{~J} 756 \\ & 55 \mathrm{~J} \end{aligned}$ | $\begin{aligned} & \text { VSU86 } \\ & \text { VS218 } \\ & \text { VS219 } \end{aligned}$ | $\begin{aligned} & 2.50 \\ & 3.25 \\ & 3.95 \end{aligned}$ | $\begin{aligned} & 1.75 \\ & 2.27 \\ & 2.77 \end{aligned}$ | $\begin{aligned} & 45 \\ & 671 / 2 \\ & 90 \end{aligned}$ | $\begin{aligned} & 11 / 15 \times 5 / 8 \times 3116^{\circ} \\ & 129 / 1 \times 1 \times 5716^{\circ} \\ & 1312 \times 11 / 2 \times 71 / 12^{\prime \prime} \end{aligned}$ | $i^{1 / 4}$ | $\begin{aligned} & \text { U30 } \\ & P 45-\mathrm{M} \\ & \text { P60 } \end{aligned}$ | 415 477 479 |


|  | VS019 | 7.75 | 5.43 | 71/2-9-90 | 97/2x $\times 22$ Y/ $\times 45 / 16^{\circ}$ | 6 | F6A60 |  | P841A | 2979 | M401 | 4014 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 55 J 728 | VS0s0 | 7.25 | 5.08 | $6-71 / 2.75$ | $896 \times 33 / 4 \times 276^{\circ}$. | 4 | T5750 | 755 | P350 |  | M 403 M 405 | 405 |
| 55 J 732 | V5057w | 6.95 | 4.87 | $71 / 2-9.90$ 000 | $87 / 1 \times 21 / 6 \times 323 / 42^{\prime \prime}$ | 4 3 | T6260 | 756 |  | Z962 | M428 | 428 |
| 55 J 776 | V S059 | 7.45 | 5.22 | 9-90 |  | 3 | TS260P | 785 |  | 2775 | M431 | 4.31 |



## SONOTONE RECHARGEABLE BATTERY

Model FC-3. Rechargeable heavy-duty fashlight battery that can be used in place of 2 " $D$ " cells. End of battery unscrews to expose prongs-unit plugs into any 110 . AC wall outlet. Buile-in charker fully charges nickel-cadtmum cell PR-2 bulb concinuously for 2 hours without recharge. Leakproor, chan 10 oz . 55 J 332. T-3, EA...... 8.50 46-U'P EACH FC-2. As above, but powers ${ }^{2} \mathrm{k}-2$ bulb for $45-55$ minutes. 8 o



- Recharges in any AC outlet.. charges overnight


## Burgess Batteries



## BATTERIES FOR ALL APPLICATIONS

- Includes Most Up-to-Date Types
- Always a Fresh Supply at Allied

Most portable batteries are listed below. We can supply additional replacements if make and models to be replaced are known.

MERCURY BATTERIES FOR RADIOS, HEARING AIDS, INDUSTRIAL USES


## BATTERIES FOR ALL PURPOSES

If you do not find the battery you need in this listing, write us. Give the make and type of both battery and set. We'll supply an equivalent battery.
"FEATHERWEIGHT" "B" BATTERIES-INCLUDING HEARING AID TYPES


## TYPE 2UG-FOR TRANSISTOR PORTABLE RADIOS

Fits Most Jopanese-Import Models Nine volt transistor portable battery that fs physically and electrically equivalent to the following Americanmade batteries: Eveready Mal M1604; General 604 i Ray-O.Vac 1804 . Mary 1604 . Mont 179; Western Auto 38646; Mar Renith 216. Also fits gomory Ward 123; Sears sure peak pertormance. $17 / 1 x^{39} / 4 \times 1^{\circ}$. Shpg. wt., 2 oz. 48 sure peak pertor mance. N1/x
55 J 650 . List, $\$ 0.69$. NET

## STANDARD DRY BATTERIES

Syitable for all radio, laboratory and hobby requirements. Ideal for running model boats, planes, cars. transmitters, etc. Burgess quality construction and insulators allow use of very active ingredients, providing maximum useful life. All have exceptionally large power reserves and highly active depolarizink asents which puickly regenerate power producing capacity when basteries are not belns used. Cetters following batiery type umbers denote terminals: Pl-plug-in terminals; SC-spriag-clip terminals. All others have screw termintals
"A" BATTERIES

"B" BATTERIES

| $\begin{array}{lll}55 & J & 556 \\ 55 & 557 \\ 55 & J & 55 \\ 55 & 558 \\ 55 & \\ 560\end{array}$ | $\begin{aligned} & 10308[1 / \\ & 10308 S C \\ & 21308 S C \\ & 2308 S C \\ & 4156 \end{aligned}$ | $\begin{aligned} & 45 \\ & 45 \\ & 45 \\ & 45 \\ & 221 / 2 \end{aligned}$ |  | $\begin{aligned} & 111 / 2 \\ & 113 / 4 \\ & 13 \\ & 8 \\ & 1 \end{aligned}$ | $\begin{aligned} & 4.84 \\ & 4.84 \\ & 5.36 \\ & 3.84 \\ & 1.61 \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  | $5156 P^{1} 1$51.56 SC530811.200$1) 30$ | $\begin{gathered} 221 / 2 \\ 221 / 2 \\ 45 \\ 300 \\ 45 \\ \hline \end{gathered}$ |  | 13/4 | 3.12 |
|  |  |  |  | $11 / 4$ | 3.12 |
|  |  |  |  |  | 3.05 8.37 |
|  |  |  |  |  | 8.37 3.47 |
|  |  |  |  | 41/2 | 3.47 |
| 55 J 10955 J 56755 J 6955 J 998 | $\begin{aligned} & \text { Z30T } \\ & \text { W30BPX } \\ & \text { Z30NX } \\ & \text { Z60Bi } \end{aligned}$ | $\begin{aligned} & 45 \\ & 45 \\ & 45 \\ & 90 \end{aligned}$ | $\begin{aligned} & 3 \times 2316 \times 41 / 6^{\prime \prime} \\ & 3 \times 11 / 83290^{\prime \prime} \\ & 17 / 3 \times 314 \times 419 y^{\prime \prime} \\ & 31 / 4 \times 21 / 32 \times 515 / 16^{\circ} \end{aligned}$ |  | 2.62 |
|  |  |  |  |  | 2.49 |
|  |  |  |  | $\frac{1}{21 / 4}$ | 8.60 |
|  |  |  |  | 23/4 | B. 90 |

## "C" BATTERIES

| $\begin{aligned} & 55 \mathrm{~J} 583 \\ & 55 \mathrm{~J} 663 \\ & 55 \mathrm{~J} 565 \\ & 55 \mathrm{~J} 564 \end{aligned}$ | 2370 237011 $53(1)$ 5540 | $\begin{aligned} & 41 / 2 \\ & 41 / 2 \\ & 41 / 2 \\ & 71 / 2 \end{aligned}$ |  $2^{13 / 6} \times 27 / 2 \times 2^{21 / 2}$ $4 \times 7 / 4 \times 21 / 4$ | $11 / 4$ | $\begin{array}{r} 1.33 \\ 1.58 \\ 1.88 \\ 1.65 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 55 \mathrm{~J} 591 \\ & 55 \mathrm{~J} 566 \\ & 55 \mathrm{~J} 568 \end{aligned}$ |  | $\begin{aligned} & 131 / 2 \\ & 71 / 2 \\ & 71 / 2 \end{aligned}$ | $23_{3} \times 231_{1} \times 213,2_{2}^{\prime \prime}$ $4 y_{0} \times 1 y_{8} \times 22 y^{\circ}$ $2^{31 / 4} x^{2 / 3 / 4 \times 13 / 4}$ | $\begin{aligned} & 1 / 2 / 1 \\ & 1 / 4 \end{aligned}$ | $\begin{aligned} & 3.76 \\ & 2.63 \\ & 1.47 \end{aligned}$ |

## FLASHLIGHT BATTERIES

Burgess batteries have chrome protected cells for guaranteed fieshness. .eak-proot construction girards 2 and 210 cells sealed in corstic and steel Type (size C)-for baby plastic and steel. Type (size C)- 210 (size D) - for standard fiashlighus; Type Z (size AA)-for standard senlights; Type 7 (size AAA)- (or slim penlichts; Type N -for minlature and novelty lishts. II eavy-duty minlature and novelty lishts. Yeavy-duty
type-last up to $21 / 2$ timen longer than No. 2 cells. Av. wi., 5 oz .

| $\begin{gathered} \text { Stock } \\ \text { No. } \end{gathered}$ | $\begin{aligned} & \text { Mir's } \\ & \text { Type } \end{aligned}$ | $\left(\begin{array}{c} \text { Sizo } \\ \text { (Lia. } \end{array}\right.$ | Llst | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ | Replaces |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Eveready | $\begin{aligned} & \text { Ray- } \\ & \text { O-Vao } \end{aligned}$ |
|  |  |  | 20 | .13 | 935 | 1 LP |
| $55 j 005$ | 2 | $23 / 8 \times 1{ }^{1 / 64}$ | . 20 | 13 | 950 | ${ }_{400}$ |
| 55 j 340 | 7 |  | . 15 | .10 | 1050 | ${ }_{31}$ |
| 55 J 501 | 210* |  | . 25 | . 16 | 1050 | 716 |
| 551076 | N | $11160 \times 7 / 16$ | . 125 | . 10 | 915 | 7 R |

PORTABLE "AB" PACKS

| Stock | $\begin{aligned} & \text { Mris } \\ & \text { Typo } \end{aligned}$ | Volts | Slzo | Shpg. Wt. Lbs. | $\begin{array}{\|c\|} N E T \\ \text { EA. } \end{array}$ | Replaces Ray-O-Vao |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 |  |  |  | 4.38 | 5 |
| 55 J 578 | 6TA60 | $11 / 2.90$ | 931,9x2 |  |  | 401 |
| 55 <br> 55 | F6A60 | (1/2.9.90 ${ }_{9}^{71}$ | $913 / 18 \times 22 / 10 \times 43 / 16^{6}$ |  | 5.57 | 6 |
| 55 J 589 | F6A60P | $\frac{9.90}{90}$ | $1329 / 22 \times 213 / 16 \times 421 / 32$ | 7 | 5.78 | 400 |
| 55 J 59 | $\begin{aligned} & G 6800 \\ & \mathrm{G} 6160 \end{aligned}$ | $711 / 2.9 .90$ | $1329 / 3 \times 21 / 16 \times 421 / 22$ | 6 | 6.62 | 402 |
| J 653 | T5Z50P | 71/2. 75 | $81 / 2 \times 311 / 3 \times 21 / 1$ |  | 4.83 | 405 |
| 55 J 587 | 16260 | $71 / 3,9,90$ | $23 / 4 \times 81516 \times 31$ | 4 | 4.87 5.22 | 428 |
| 55 J 646 | T6260 |  | 23/6x ${ }^{1 / 1 / 16 \times 31}$ |  | 5.22 | 428 |

IGNITION, TELEPHONE AND ALARM BATTERIES
Designed for emersency illumination. portable lighting. alarm systems. Used by rallroads police, fire departments and emergency crews. Depend lephoi metal container. Types 4 F 2 H and 4 FH recommended for general ignition, telephone and lantern service, etc.

| Stock No. | Mif's Type | Volts | Size | Shpg. Wt.. Lbs. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{llll} 55 & \mathrm{~J} & 13 \\ 55 & \mathrm{~J} & 15 \\ 55 & \mathrm{~J} & 14 \\ 55 & 584 \\ 5 & \mathrm{~J} & 021 \end{array}$ | $\begin{aligned} & 4 F H \\ & 4 \mathrm{~F} 2 H \\ & 4 \mathrm{~F} 41 \\ & 4 \mathrm{~F} 5 H \\ & 4 \mathrm{~F} 6 H \end{aligned}$ | $\begin{aligned} & 11 / 2 \\ & 3^{1 / 2} \\ & 7^{1 / 2} \\ & 9^{1 / 2} \end{aligned}$ |  | $\begin{aligned} & 11 / 2 \\ & 23 / 4 \\ & 61 / 4 \\ & 71 / 2 \\ & 9 \end{aligned}$ | $\begin{array}{r} .84 \\ 1.45 \\ 3.34 \\ 4.86 \\ 5.53 \end{array}$ |
| 55 J 641 <br> 55 J 642 <br> 55 J 647 <br> 55 J 643 | $6-1 \mathrm{gn}$. <br> 6 -Tel. <br> 6-1 nd. <br> S461 | $\begin{aligned} & 11 / 2 \\ & 11 / 2 \\ & 11 / 2 \\ & 6 \end{aligned}$ | $65 / 1621 / 2^{\prime \prime}$ dia. $65 / 8 \times 21 / 3^{\prime \prime}$ dia. $65 \times 21 / 2$ dia. $101 / 2 \times 2 \frac{3}{4} \times 711 / 3 z^{\prime \prime}$ | $\begin{aligned} & 2 \\ & 21 / 2 \\ & 2 \\ & 81 / 2 \end{aligned}$ | $\begin{array}{r} .84 \\ .84 \\ 3.90 \\ 3.34 \end{array}$ |

## LANTERN BATTERIES

For use with rallroad-type lanterns. Type F4H has positive coilspring contacts-a lavorite of railroadmen. Type TW1S for underwater use.

| Seack No. | $\begin{aligned} & \text { Mrr's } \\ & \text { Type } \end{aligned}$ | Voles | Slze | Wt. Lbs. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 4 F 2 H | 3 | $329 / 2 \times 211 / 6 \times 513 / 16^{\circ}$ | $23 / 4$ | 1.45 |
| 55 J 016 | F4 ${ }^{\text {H }}$ | 6 | $25 / 6 \times 25 / 6 \times 41 / 6^{\circ}$ | $11 / 2$ | . 79 |
| 55 J 009 | F4BP | 6 |  | $11 / 2$ | . 79 |
| $55 \mathrm{~J} 113$ | F4SC | 6 | $25 / 8 \times 25 / 18+1 / 2^{\prime \prime}$ | $31 / 2$ | 1.83 |
| $55 J 658$ | TWI | 6 |  | $31 / 4$ | 2.05 |
| $\begin{aligned} & 55 \mathrm{~J} 114 \\ & 55 \mathrm{~J} 500 \end{aligned}$ | $\begin{aligned} & \text { TWis } \\ & \text { Tw2 } \end{aligned}$ | 12 | $53 / 8 \times 2 / 10 \times 415 / 16^{\circ}$ | 31/4 | 1.83 |

## SPECIAL-PURPOSE TAPE RECORDER BATTERIES

Extremely compact, highly dependable hatteries. Designed specifically for use in pocket tape recorders. "Flat contact. tSnap type.

| Stock No. | Type | Volts | Sizo | Lbe. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $11 / 2.9$ | 2 汭 $\times 1^{13} / 6 \times 2110$ | 1/2 | 1.82 |
| 55 J 111 | $2 \times 7 \dagger$ | $101 / 2$ |  | $1 / 2$ | 1.82 2.00 |

## Mallory and Burgess Batteries

## MALLORY MERCURY TRANSISTOR RADIO BATTERIES

Assure peak periormance of portable radios. Feature uniform discharge voltage, exceptionally long storage life.

As new mercury batteries become avallable from the manu facturer, Allied will stock them. Av. shpg. wt., 2 oz.

| Replaces |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Eveready | Burgess | RCA | Philco | Zonith |
| $\begin{aligned} & \text { E9 } \\ & \text { E9N } \end{aligned}$ | HG9 | VS-313 | P9 | 28 |
| $\begin{aligned} & \text { E133 } \\ & \text { E146 } \\ & \text { E164 } \end{aligned}$ | H133 <br> 11146 <br> H164 | $\begin{aligned} & \text { VS- } 149 \\ & \text { VS- } 312 \\ & \text { VS- } 164 \end{aligned}$ | $\begin{aligned} & \text { P133 } \\ & \text { P146 } \end{aligned}$ | 2146 |
| $\begin{aligned} & \text { E177 } \\ & \text { E233 } \\ & \text { E42 } \end{aligned}$ | $\begin{aligned} & \mathrm{H} 177 \\ & \mathrm{H} 233 \end{aligned}$ | $\begin{aligned} & \text { VS- } 309 \mathrm{~A} \\ & \text { VS-400 } \end{aligned}$ | P696 |  |
| $\begin{aligned} & \text { E401 } \\ & \text { E630 } \\ & \text { E640 } \end{aligned}$ | $\begin{aligned} & \mathrm{HO} 801 \\ & \mathrm{H} 8630 \\ & \mathrm{H} 640 \end{aligned}$ | $\begin{aligned} & \text { Vs } 401 \\ & \text { VS-147 } \\ & \text { vS-150 } \end{aligned}$ | P630 |  |

## MALLORY MERCURY BATTERIES

Extremely long shelf life. unlform discharge voltage and extended operaung life make these units ideal for applications where high reliability is required. Suftix T of RM batteries indicates $1 /{ }^{-2}$ tab on negative terminal; venting construction designed to relieve excoss pas which with self venting construction desimned to relleve excoss gas which may form of electronic equipment.

| $\begin{gathered} \text { Stock } \\ \text { No. } \end{gathered}$ | $\begin{aligned} & \text { Mir's } \\ & \text { Type } \end{aligned}$ | Volts | Size (Dia, xHt. or HWD) | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 55 J 510 | RM1 | 1.4 | 5/3 $\mathrm{x}^{2} 1 / 33^{\prime \prime}$ | 38 |
| 55 J 703 | RM1R | 1.35 | 308 ${ }^{210}$ | 44 |
| 55 J 372 | RMIRT | 1.35 | $5 / 8 x^{211210}$ | . 49 |
| 55 J 704 | RM1RT2 | 1.35 1.35 | $5 / 1 x^{2} 100^{\prime \prime}$ | . 53 |
| 55 J 705 | RM4R | 1.35 | $1 x^{1 / 5 \times 21 / 80}$ | . 64 |
| 55 J 679 | RM4RT | 1.35 | $13 / 16 \times 1 / 1 / 6^{\prime \prime}$ | . 74 |
| 55 J 373 | RM4Z | 1.4 | $1 / 66 \times 1 /{ }^{\prime \prime}$ | . 58 |
| $55{ }^{5} 5{ }^{5} 711$ | RM12 | 1.4 | $5 / 8 \times 16$ | .75 |
| 55 J 706 55 | RM112R | 1.35 1.35 | $5 / 8{ }^{61}$ | . 82 |
| 55 J 512 | RMi2RT2 | $\begin{aligned} & 1.35 \\ & 1.35 \end{aligned}$ |  | . 87 |
| 55 J 687 | RM42R | 1.35 | $1136 \times 23$ |  |
| 55 <br> 55 <br>  <br> J | RM42RT | 1.35 | $13 / 6 \times 23 / 8{ }^{\prime \prime}$ | 1.90 |
| 55 <br> 55 <br> 5 <br> J | RM42RT2 | 1.35 | $1316 \times 2 \%^{\prime \prime}$ | 1.95 |
| 55 J 513 | RM400R | 14.35 | $15 / 8 \times 1 / 8$ | . 24 |
| 55 J 514 | RM412 | 14.0 22.4 | $1{ }^{19} 10 \times 113 / 4{ }^{\prime \prime}$ | 2.00 |
| 55 J 515 | RM413 | 28.0 | $1 \times 18 / 2 \times 21 / 3^{\prime \prime}$ |  |
| $55 J 516$ | RM415 | 42.0 | $11_{6} \times 2 \times 6 \times 31 / 2^{\prime \prime}$ | 3.25 5.10 |
| 55 J 682 | RM450R | 1.35 | 1592x ${ }^{1 / 2}$ | . 34 |
| 55 J 683 | RM601R | 1.35 1.35 | $1 / 2 \times 2{ }^{\text {a }}$ | . 62 |
| 551684 | RM625R | 1.35 1.35 |  | .65 .34 |
| 551708 | RM625RT | 1.35 | 3\%/4 $\times^{13 / 6}$ |  |
| 55 J 376 | RM625RT2 | 1.35 | 396x ${ }^{1 / 4}$ | . 34 |
| 551517 | RM640RT2 | 1.35 | $7{ }^{16} \times 5 / 9^{\circ}$ | . 40 |
| 55 J 548 | RM675 | 1.4 | 29,601 ${ }^{1 / 3} 4^{\prime \prime}$ | . 26 |
| 55 J 691 | TR-113R | 4.05 5.4 | ${ }^{21 / 28 \times 27 / 3 x^{\prime \prime}}$ | $\begin{array}{r}1.29 \\ 1.50 \\ \hline\end{array}$ |
| 55 J 518 | TR-114RT2 | 5.4 |  |  |
| 551672 | TR-115R | 6.75 | ${ }^{2} / 162 \times 115 / 32^{\circ}$ | 1.70 |
| 55 <br> 55 <br>  <br>  <br> 675 | TR-132R | 2.7 | $21 / 2 \times 1596$ | . 92 |
| 55 J 676 | TR-134R TR-135R | 5.4 | $2 y_{3} \times 25 \%$ | 1.45 |
| 55 J 677 | TR-135R TR-136R | 6.75 8.1 |  | 1.85 |
| 553689 | TR-145 |  |  |  |
| 551678 | TR-152R | 2.7 | 1/2x17/20 | 1.55 |
| 55 J 692 | TR-153R | 4.05 | $1 / 2 \times 12{ }^{1 / 2}{ }^{\prime}$ | 1.02 |
| $\begin{aligned} & 55 \mathrm{~J} 693 \\ & 5559 \end{aligned}$ | TR-162R | 2.7 | ${ }^{23} / 2 \times 2{ }^{2} 9^{4}$ | . 87 |
| 55 55 5 519 520 | TR-163 | 4.2 | $21 / 38 \times 15{ }^{\circ}$ | 1.02 |
|  | R-165 | 7.0 | ${ }^{21 / 22 \times 23} 36{ }^{\circ}$ | 1.50 |
| 55 J 360 | TR-169 | 12.6 | 21/2x ${ }^{361 / 64}$ | 3.20 |
| 55 J 361 |  | 8.6 | $1 x^{19} 93^{\prime \prime}{ }^{1 / 4}$ | 2.50 |
|  |  |  | $43 / 6 x^{1+16 \times 21 / 3 *}$ | 6.33 |

## MALLORY GRID BIAS CELL AND CELL CLIPS

Grid Bias Cell Type BC-3. (Not illus.) For biasing first audio ampliher tubes. No by-pass capacizor to ground is needed. Stack units with clips listed below. $11 /$ valts. Size. $11 / 16 x^{3} / 4_{4}{ }^{*}$. Shpg, wh.. 2 oz
hold grid bias cells list leads. Cells easily inserted or removed. Shpg. wist., 2 above. $11 / 2^{\prime \prime}$ tinned

| Stock No. |
| :---: |
| $55 J 842$ <br> $55 j 843$ <br> $55 J 844$ |



## BURGESS WINK-LIGHT BATTERY AND BULB KIT

Type K30P-K. Battery and bulb replacement kit. Includes a 45-volt. K30p battery, designed 428 especily for Wink-Light operation, and a No metal jacket prevents leakage. Kit is specified metal jacket prevents leakage. Kit is specified
by camera manufacturer as replacemment for original Wink-Light equipment. 1 Ib .
55 J 118 . NET.................... 1.67
BURGESS BATTERY ENGINEERING MANUAL
Treats dry batteries and curves for rewerve type power units, 38 K 874 . Postpald in U.S.A. .
1.00

## BURGESS NICKEL-CADMIUM BATTERIES

High energy, compact. hermetically sealed nickel-cadmium batteries and cells. Long-lasting, economical power-may be charge or a quick charge. Unaffected by idle periods. Supplied with solder lug terminals. Prismated by ide perions. "Supplied with pressure contacts. 110 hour rate (ma.). Sealed in steel.


## CYLINDRICAL CELLS



## NICKEL CADMIUM BATTERIES



## NICKEL CADMIUM HIGH CURRENT PRISMATICS



Sencore Transi-Pak PS103. 0-24 v. DC power supply for charging 83 F 985 . NET............................................................ 24.45

BURGESS PHOTO-FLASH BATTERIES
§Designed for high initial current discharge

| Stock No. | Mif's <br> Type | Voles | Slze | Shpg. We. | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ | Replaces Eveready |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $55 \pm 038$ | 1208 | $11 / 2$ | $115 / 16 \times 1{ }^{\prime \prime}$ | 4 oz. |  | 835 |
| 55 J 037 | 2208 | $11 / 2$ | $22564111 / 42^{\prime \prime}$ | 6 oz . | .16 | 850 |
| 55 55 5 | 9205 | $11 / 2$ | $131 / 34 x^{35} / 44^{4}$ | 4 oz . | .13 | 815 |
| 55 J 052 | D3 | $41 / 2$ | $37 / 8 \times 15 / 6 \times 215 / 6^{\prime \prime}$ | $1 / 4 \mathrm{ib}$. | . 95 | 726 |
| 55 J 596 | R45 | $671 / 2$ | $21 / 16 \times 176 \times 21 / 4^{\prime \prime}$ | 1/2 lb. | 2.42 | 457 |
| 55 55 5 $J$ | M130 Ni50 | 45 | $3916 \times 11 / 4 \times 51 / 2$ | $2118 s$. | 2.70 | 482 |
| 55 55 5 J 5 | Ni50 | 225 | 3\%6x23/4x43" | $21 / 2 \mathrm{lbs}$. | 6.13 | 492 |
| 55 J 597 | V60) | 91 | 311/16x17/3x $31 \% / 12$ | 1 | 3.15 | 40) |
| 55 55 J J 662 | 1310 U160 | 25 |  |  | . 81 | 411 |
| 55 55 J | U160 | 240 | $296 x 1^{16 x} \times 413 / 12$ | $3 / 416$ | 5.56 | 491 |
| 55 55 J J 5964 | U20 $\mathrm{U} 200$ | 30 | $1 x^{3} 64 \times 2173$ | 2 oz . | 1.23 | 413 |
| 55 J 594 | U200 | 300 | 23/4×2\% $2 \times 37$ | 1 ib | 8.37 | 443 |
|  | $11320$ |  | $275 / 16 \times 117 / 32 \times 57 / 16^{7}$ |  | 11.16 | 497 |
| $\begin{aligned} & 55 \text { J } 655 \\ & 55 \\ & 5 \end{aligned}$ | $\begin{gathered} \mathrm{XX} \\ \times 85 \end{gathered}$ | $225$ | $41 / 4 \times 25 \times 4$ | $21 / 2 \mathrm{lbs}$. | 6.96 | 489 |
| 55 55 J 069 |  | $671 / 2$ | 21/4x111/3x ${ }^{4} 44^{4}$ | $3 / 416$. | 2.45 | 467 |
| 55 J 075 | $Y 15$ | 221/2 |  | 302. | .81 | 504 |
| 55075 | $Y$ | $221 / 2$ | $1832 \times 1918 \times 131 / 4{ }^{\prime \prime}$ | 3 oz. | 1.05 | 505 |

Depend on Allied for Everything in Electronics

# Batteries-Battery Plugs-Holders 

## BURGESS BATTERIES

NEW MINIATURE BATTERIES-SOLVE DESIGN PROBLEMS 42 new types of miniature bateries help solve power supply design problems related to ransistonzed circuits. Wafer Cell construction provides as much as $30 \%$ oved shelf characteristics. Wafer artificial manganese dioxide artificial mamg of dioxid between discs of hat zinc and carbon electrodes. Sandwich is sealed ratings ranging from 3 to 13.5 volts. Economical and dependable power ratings ranging from transistorized circuits in radios, cameras, test equipment. transceivers, toys and hobby kits. Av. shpg. Wt., 2 oz.

| $\begin{array}{c\|c} \text { Stoek Mer's } \\ \text { No. } & \text { Tyope } \end{array}$ | Voles | $\begin{gathered} \text { Terminal } \\ \text { Type } \\ \hline \end{gathered}$ | Slee (HWD) | $\begin{aligned} & \text { List } \\ & \text { Price } \end{aligned}$ | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 55 J 832 K | 6.0 | Snap |  | 1.10 | 77 |
| 55 J 83 K 5 | 7.5 | Snap | $11 / 4 \times 18 x^{5 \%}$ | 1.15 1.20 | .81 |
| 55 J 34 K 6 | 9.0 | Snap | $11 / 0 \times 19{ }^{19} x^{5} /{ }^{4}$ | 1.65 | . 45 |
| 55 <br> 55 <br> 5 <br> 5 <br> J 82019 <br> 14 | 4.5 6.0 | Flat |  | . 80 | . 56 |
| $\frac{551821}{\text { L5 }}$ | 7.5 | Flat | $143 / 4 x^{3 / 4}{ }^{\prime \prime}$ dia. | 1.10 | 77 |
| 55 J 22 L7 | 10.5 | Flat | $293{ }^{3 / 4}$ dia. | 1.35 | 1.01 |
| $55 \mathrm{~J} 23 \mathrm{L8}$ | 12.0 | Flat | $2374 x^{3 / 4}{ }^{\text {c }}$ dia. | $\begin{array}{r}1.45 \\ 1.55 \\ \hline\end{array}$ | 1.01 |
| $55 \mathrm{~J} 824 \mathrm{L9}$ | 13.5 | Flat | $27 / 6 \times 3 / 4 \mathrm{dla}^{\text {a }}$ | . 1.90 | . 63 |
| 55 J 835 N3 | 4.5 | Snap | 1/64 $6180 x^{5} 64$ |  |  |
| 55 J 794 N4 | 6.0 | Snap |  | 1.00 1.10 | . 77 |
| 551795 N5 | 7.5 | Snap | 1310x19\% ${ }^{5}$ | 1.20 | . 84 |
| 55 J 796 N6 | 9.0 3.0 | Snap | $15 / 8 \times 19819 \times$ | . 80 | . 56 |
| 55 J 797 NT2 $55 \mathrm{~J} 798 \mathrm{NT3}$ | 3.0 | Flat |  | 90 | . 63 |
| 55 J 799 NT4 | 6.0 | Snap | 11/6x $1 \% x^{59} 9$ | 1.00 | 70 |
| 55 J 800 NT5 | 7.5 | Snap | $147 / 0 \times 19 / 8 \times 594$ | 1.10 | . 87 |
| 55 J 801 NT6 | 9.0 | Snap | $2{ }^{2} 64 \times 19.19 x^{59} 64^{6}$ | $\begin{array}{r}1.20 \\ \\ \hline\end{array}$ | . 82 |
| 55 J 25 PM2 | 3.0 4.5 | Flat |  | . 90 | . 63 |
| 55 J 826 PM 3 | 4.5 | Flat | ${ }^{61 / 4 x 1}$ dia. |  |  |
| 55 J 827 PM4 | 6.0 | Snap | $11 / 1 x^{\prime \prime} 1^{\prime \prime}$ dia. | 1.00 |  |
| 55 J 828 PM 5 | 7.5 | Snap | $1^{121 / 3 \times 1} \times 1{ }^{10}$ dia. | 1.10 1.30 | . 97 |
| 55 J 829 PM7 | 10.5 | Snap |  | 1.35 | . 95 |
| 55 J 830 PM8 | 12.0 13.5 | Snap | $211 / 16 \mathrm{x} 1$ dia. | 1.45 | 1.01 |
| 55 J 831 PM9 |  |  |  |  |  |
| 55 J 812 U | 3.0 |  |  | . 60 | . 42 |
| 55 J J13 U3 | 4.5 6.0 | ${ }_{\text {Flat }}$ |  | . 75 | . 52 |
| 55 55 J 815 U | 7.0 | Flat | $1356 \times 11 / 6 x^{19} 6^{\prime \prime}$ | 1.00 | . 70 |
| $55 \mathrm{~J} 816 \mathrm{U7}$ | 10.5 | Snap | $25 / 32 \times 11,4 x^{3} 9$ | 1.30 | . 91 |
| 55 J 817 U8 | 12.0 | Snap | 27/6x $11 / 6 x^{39} / 4$ | 1.40 | 98 |
| 55 J 818 U9 | 13.5 | Snap | $25 / 4 \times 1164 \times 19$ | 1.50 | 1.05 |
| 55 J 802 V 3 | 4.5 | Flat | $17 \times 13 \times 172$. | 1.00 | . 70 |
| 55 J 803 V 4 | 6.0 | Snap | $1136 \times 19 \times 10^{2}$ | 1.10 | . 77 |
| 55 J 804 V5 | 7.5 9.0 | Snap <br> Snap |  | 1.20 | . 84 |
| 55 J 805 V 6 | 9.0 |  |  |  |  |
| 55 J 806 | 4.5 | Flat |  |  |  |
| 55 J 807 Y 4 | 6.0 | Flat |  | 1.00 | . 70 |
| 55 J 808 Y5 | 7.5 | Flat | 25/0x19/2x ${ }^{19 / 43^{2}}$ | 1.30 | . 91 |
|  | 10.5 12.0 | Snap | ${ }_{2}^{13 / 3 x} x^{19} / 8 x^{19} / z^{\prime \prime}$ | 1.40 | 98 |
| 55 <br> 55 | 13.5 | Snap | 221/3x $\times^{19 / 82 \times 19}$ | 1.50 | 1.05 |



## EVEREADY BATTERIES

## alkaline energizer batteries

Revolutionary alkaline energizer batteries specially designed for high drain, continuous service applications. Deliver higher amperage over a much longer period than do standard nashlight batteries. Also feature lonser shelf life and greater recuperative powers than conventionar zincharge. Ideal Maintain constant output during periods of discharge. $\mathbf{~ d e a l}$. sets, hashlights, etc. Sizes: E90-N E91-AA; E93-C; E94-1/2D; E95-D


NO. 6 STANDARD IGNITOR BATTERY
Rugged, long-life, $1 / 2$ volt general-purpose dry cell battery. Ideal for industrial use, annunciat or and signal systems, battery operated ignition systems, etc. Provides 30 ampere-hours of current. Highly active depolarizing agents agure raph recuperation of battery between uses. Battery maintains constant output of current during alscharge. Size. $6 \%$. dlameter. With screw terminals. Shpg. wt., 2 lbs. 55 J 686. List, \$1.25. NET


## CATHODIC ENVELOPE BATTERIES

Economical zinc-carbon cathodic envelope batteries employ unique "sandwich" type construction to provide 50 to $100 \%$ more service-life than conventional types. Zinc anode plate is placed betwer mathor metal of surpounding "sandwich" serves as cathode collector. Foil is bonded rounding er alls are then enclosed in a weatherproof battery case

| Stock No. | Tyde | Volts | Contacts | Slze | Lbs. | List | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 55 J 122 | 2356 | 9 | Snap | $61 / 4 \times 11 / 4 \times 29 / 32^{7}$ | $11 / 4$ | $\begin{aligned} & 1.60 \\ & 1.50 \end{aligned}$ | 1.10 1.05 |
| 55 J 528 | 2709 | 9 | Snap | $411 / 10 x^{47} 60 \times 111 / 22^{\prime \prime}$ | $1 /$ | 1.50 1.00 | 1.05 |
| 55 J 128 | 2713 | 6 | Min. Sand | $811 / 16{ }^{4} 94 \times 1112{ }^{\prime \prime}$ | $3$ | 2.75 | 1.93 |
| 55 J 129 | 2731 | $41 / 2$ | Socket | $\begin{aligned} & 811 / 3 \times 13 / 4 \times 213 / 16 \\ & 37 / 6 \times 2^{2} 1 / 2 \times 2^{21 / 120} \end{aligned}$ | $11 / 2$ | 1.60 | 1.10 |
| 55 J 132 | 2744 | 6 | Socket |  | 11/2 |  | 1.10 |
| 55 J 133 | 2745 | 6 | Springs <br> Screw | $\begin{aligned} & 476 \times 2^{21} / 13 \times 2^{21} 122^{10} \\ & 41 / 4 \times 2^{21 / 32} \times 2^{2113} \end{aligned}$ | $11 / 2$ | 1.60 1.60 | 1.10 |
| 55 J 142 | 2746 2761 | 6 | Screw Socket |  | $11 / 2$ | 2.25 | 1.58 |
| 55 J 143 | 2761 | 9 | Socket |  | 3 | 2.75 | 1.93 |
| 55 J 144 | 2762 2780 | 12 | Socket | $45 / 32 \times 22^{27 / 3 \times 514 / 88}$ | 3 | 3.40 | 2.37 |

## WILLARD RECHARGEABLE BATTERIES

Type 26-2. For Portable Radlos. Compact, rechargeable battery reaturing convenient, non-spill constrecion. Lightweight polystyrene container is extremely sturdy and corrosion-proof. Supplies 2 volts for 21 ampere-nours. Plug-in terminals. Orlginal equipment in 31 , Model 5 Plug 260 portables. $6 \times 21 / 2 \times 25 / 4{ }^{2}$. Shpg. wt., $31 / 4$ lbs. 9.41
55 JU 851 . List. $\$ 12.80$. NET....................... 4.
Type ER6-2B. Fop Photo Flash. As above, but for photo flash units. Supplies $2 \%$ for 6 amp-hours. Up to 250 flashes per charge. $111 / 16 \times 2 \frac{1}{6} \times 41 / 4^{\prime \prime} .11 / 2$ ibs. 639 5 JU 849. List. \$8.70. NET....... Type ER-34-2. For Portable Padios. Supplies 2 volts for 34 athperehours. Has plain posts. $41 / 2 \times 311 / 6 \times 41 / 2^{n}$. Wt.. $51 / 41 \mathrm{bs}$.
 55 JU 852. List. \$17.05. NET
KEYSTONE BATTERY HOLDERS
Battery holders for transistor assemblies, radios, meters, model airplanes, etc. Feature snap-chips, moisture-prolloy, nickel-plated eyelets. *nd to end. Av. shpg. wt.; 3 oz .


FAMOUS QUAM SPEAKERS FOR REPLACEMENT AND NEW EQUIPMENT USE
GENERAL REPLACEMENT SPEAKERS

# Oval <br>  <br> Pincushion <br>  <br> Square <br>  <br> Round <br>  

'For radios, phonograplıs, TV sets, etc. U-shaped pots provide unmagnetic field. Have heavy gauge metal baskets, large efficient magnetic field. Have beavy gauge metal baskets, large, efficient supplied with universal mounting bracket. Magnets are Alnico-V. Baked enamel finish. Endicates very shallow frame. Voice coil impedance. 3.2 ohms except tspeakers for transistor application;

- voice coil impedance indicated by digits following $Z$ in Type number.

\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline C Slock
No.

590848 \& \[
$$
\begin{aligned}
& \text { Mfr's } \\
& \text { Type } \\
& \hline
\end{aligned}
$$

\] \& Shape \& Size \& Max. Watts \& Magnet Weight \& | Wt. |
| :--- |
| Lbs. | \& \[

$$
\begin{aligned}
& \text { NET } \\
& \text { EACH }
\end{aligned}
$$
\] <br>

\hline 590424
-590425 \& 2240628
224062100 \& Round \& 21/\% \& . 25 \& . 4502 . \& Lbs. \& <br>
\hline 590425
590422 \& 22 A 062100 \& Round $\dagger$ \& 21\%" \& . 25 \& . 4502. \& 48 \& 3.09 <br>

\hline -90426 \& $$
\begin{aligned}
& \text { 25A07 } \\
& 27 A 06 Z 12
\end{aligned}
$$ \& Square Round $\dagger$ \& 2\%, \& 2.0 \& .6502. \& $1 / 4$ \& 2.35 <br>

\hline 590453 \& $3 \mathrm{~A} 07{ }^{\text {a }}$ \& Square* \& 3\%. \& 2.5 \& .5502.
.6502. \& $1 / 4$ \& 2.76 <br>
\hline 590417 \& $4 \mathrm{AO5}$ \& Square \& 4 \& \& . 5502 oz . \& h \& 2.35 <br>
\hline 590421 \& 35405 \& Oya \& $3 \times 5$ 。 \& 2.0 \& . 550202. \& $1 / 1$ \& 1.73 <br>
\hline 59 D 434 \& 4 A07 \& Squape* \& $4^{3}$ \& 2.0 \& . 5502. \& $1 /$ \& 2.47 <br>
\hline 1590435 \& 4Al \& Square \& $4{ }^{*}$ \& 3.0 \& . 6502 \& $1 /$ \& 2.53 <br>
\hline 59 D 436 \& 4A15 \& Square \& $4{ }^{\prime \prime}$ \& 3.0
3.0 \& 1.0 oz. \& $3 / 4$ \& 2.70 <br>
\hline 59D454 \& 46 A07 \& Oval* \& $4 \times 6$ \& \& 4702. \& \% \& 2.97 <br>
\hline 59 D 460 \& 46 Al \& Oval \& $4 \times 6^{\prime \prime}$ \& 3.5 \& 6502 \& 1/4 \& 2.79 <br>
\hline 590461 \& 46 A15 \& Oval \& $4 \times 6{ }^{\text {4 }}$ \& 3.5 \& $1.0{ }^{0} \mathrm{oz}$. \& \& 3.00 <br>
\hline 59 D 427 \& 48A2 \& Oval* \& $4 \times 8{ }^{\circ}$ \& 4.5 \& 1.4702. \& 1 \& 3.23 <br>
\hline 590484 \& 410A2 \& Oval \& 4x10* \& 4.5
6.0 \& 1.403. \& 1 \& 4.67 <br>
\hline 590437 \& 5 A07 \& Pincushion* \& \& \& \& $1 / 4$ \& 5.26 <br>
\hline 590438 \& SA1 \& Pincushion \& 5 \& 3.5
3.5 \& . 6502. \& 1/6 \& 2.65 <br>
\hline 59 D 49 \& 5A15 \& Pincushion \& 5 " \& 3.5 \& $1.0{ }^{0} 02$. \& $!$ \& 2.85 <br>
\hline 59 D 48 \& 52Al \& Pincushion \& 54. \& 3.5
4.0 \& 1.4702. \& 1 \& 3.09 <br>

\hline 590433 \& 52A21 \& Pincushion \& \$1/4. \& 4.0 \& | 1.0 |
| :--- |
| 2.1502. |
| 1.02 | \& \& 2.91 <br>

\hline 590405 \& 52 Cl 10 \& Pincushion \& \& \& \& \& . <br>
\hline 59 D 455 \& 57al \& Oval \& $5 \times 7^{\circ}$ \& 10.0
5.0 \& 10.0 oz. \& 21/6 \& 5.85 <br>
\hline 59 D 447 \& 57A21 \& Oval \& $5 \times 7^{\circ}$ \& 5.0 \& 1.0
2.1502. \& \& 3.24 <br>
\hline 590440 \& 6A1 \& Pincushion \& 61/. \& 5.0 \& 2.1502. \& 11/4 \& 3.97 <br>
\hline 590441 \& 6A15 \& Pincushion \& 6\%. \& 5.0
5.0 \& $1.0{ }^{1.08} 08$. \& 1 \& 3.12 <br>
\hline 590442 \& \& \& \& \& 1.4708. \& 1 \& 3.38 <br>
\hline 590445 \& 6431 \& Pincustion \& \& 5.0 \& 2.1502. \& 11/4 \& 3.79 <br>
\hline 590462 \& 69A2 \& Pincushion \& $6 \%$. \& 6.0 \& 3.1602. \& 11/2 \& 4.47 <br>

\hline 59 D 463 \& 6943 \& $$
\begin{aligned}
& \text { Oval* } \\
& \text { Oyal }
\end{aligned}
$$ \& 6x9 ${ }^{\circ}$ \& 8.0 \& 1.402. \& 112 \& 4.41 <br>

\hline 59 D 428 \& 69A1 \& $$
\begin{aligned}
& \text { Ovat } \\
& \text { Oval }
\end{aligned}
$$ \& $6 \times 9$

689 \& 10.0 \& 3.208. \& 11/4 \& 5.41 <br>
\hline 59D 407 \& \& \& $68^{\circ}$ \& 6.0 \& 1.202. \& 11/2 \& 3.53 <br>

\hline 59 D 464 \& $$
\begin{aligned}
& \text { 69A1S } \\
& 7431
\end{aligned}
$$ \& Oyal \& ${ }^{619} 9^{\prime \prime}$ \& 6.0 \& 1.202 \& $21 / 2$ \& 5.00 <br>

\hline 590443 \& 8 821 \& Pincushion \& $7^{\circ}$ \& 9.0 \& 3.16 oz . \& \& 5.14 <br>
\hline 59 D 444 \& 8 A31 \& Pincushion \& $8{ }^{\circ}$ \& 7.0 \& 2.1502. \& $11 / 2$ \& 4.56 <br>
\hline 59 D 465 \& 10831 \& Pincushion Round \& $8^{\circ} 0^{\circ}$ \& 9.0 \& 3.16 oz . \& 21/4 \& 5.29 <br>
\hline 590479 \& 10A4A \& \& \& 9.0 \& 3.1602. \& 2\% \& 6.76 <br>
\hline 59 D 480 \& 10A6A \& Ro \& $10^{*}$ \& 10.0 \& 4.6402. \& 31/4 \& 7.61 <br>
\hline $590 \times 528$ \& 12A31 \& Round \& $10^{\circ}$ \& 12.0 \& 6.802. \& $31 / 2$ \& 8.53 <br>
\hline 59 DX 533 \& 12A6A \& Round \& 12 \& 10.0 \& 3.16 uz \& 3/4 \& 7.03 <br>
\hline \& 12A6A \& Round \& $12^{\circ}$ \& 14.0 \& 6.802 \& 41/2 \& 9.38 <br>
\hline
\end{tabular}

## WEATHER-PROOFED OUTDOOR SPEAKERS

Quam speakers with the exclusive "Humi-Gard" cone of plastic moisture-proofed cones. Voice coil impedance, 3.2 ohms. Yordinary moisture-proofed cones. Voice coil impedance, 3.2 ohms. Yor can
save by buying in large quantilies. Wrile for save by buying in large quantilies. Write for quotalions.

| Stock No. | Type | Size | Shape | Watts | Magnet | 5. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 590432 590467 | 3 A 070 T | $31 / 2^{\circ}$ | Square | 2.5 | . 6502. |  |  |
| 590467 590431 | AA10T 5 AlSOT | ${ }^{4}$ | Square | 3.5 | 1.002. | $1^{1 / 2}$ | 2.35 2.73 |
| 590496 | 6A150T | $6^{\circ}$ | Pincustion Pincustion | ${ }^{3.5}$ | 1.47 <br> 1.47 <br> 02. <br> 2. | 11/4 | 3.15 3.53 |

## HIGH-IMPEDANCE INTERCOM SPEAKERS

PM speakers designed for replacement in intercommunications systems. Voice coil impedance is 45 ohms.

| Stock No. | Type | Slie | Shape | Magnet | Staps. Wi. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 590481 \\ & 590482 \\ & 590483 \end{aligned}$ | $\begin{aligned} & 3 A 07245 \\ & 4 A 1 Z 45 \\ & 5 A 1245 \end{aligned}$ | $\begin{aligned} & 31 / 2^{\circ} \\ & 4^{\circ} \\ & 5^{\circ} \end{aligned}$ | Square <br> Square Pincushion |  | lb. | $\begin{aligned} & 2.50 \\ & 2.85 \end{aligned}$ |

## FEDTRO ALL-PURPOSE EXTENSION SPEAKER

Use it indoors-outdoors-anywhere, Can be connected to the speaker leads of your hi-fi system, radio, TV set, phonographand even yourcar radio! Can be lung from wall, stood up on its wire frame stand, or mounted on posts with screw-on bracket supplied. Beautifully styled too-heavy black plastic housing, with speaker grille in gold mesh. Includes $20-\mathrm{ft}$. connecting cable tipped with miniature alligator clips-no soldering, no tools. $31 / 2^{\prime \prime}$ speaker for clear sound. 8 ohms. Shpg. Wt., 11 lb .
57 D 598 , List, $\$ 7.95$. NET...
3.69



## EXTENDED RANGE

 SPEAKERS AND TWEETERS- ECONOMY mOdels
- FOR home hi-fi
- standard sizes


## 8 A 4 CO <br> 12 A 6 CO

8A10X
MODEL 8 A $10 \times 8^{\prime \prime}$ SPEAKER. Extended-range speaker, ideal for remote speaker in home music systems. Frequency response is $\pm 5 \mathrm{db}, 50$ 12.000 cys. Power capacit $y, 10$ watts. $1^{\prime \prime}$ voice coil diameter. 10 -oz. Alnico V magnet. Imped ance, 8 ohms. Wt., $31 / 4 \mathrm{lbs}$.
59 D 452. NET
.11 .76
MODEL 3A15T 31/2" TWEETER. (Not illus.) Response, 2000-12,000 cps. $\pm 6 \mathrm{db}$. Impedance, 14 ohms. 1.47 -oz. Alnico $V$ magnet. Power capacity. 10 watts. $21 / 16^{\prime \prime}$ deep; $315 / 16^{\prime \prime} \mathrm{mtg}$. ctrs. $3 / 4 \mathrm{lbs}$. 59D448. NET.
3.38

MODEL SAIST 5" TWEETER, (Not illus.) Moderately priced for home hi-fi. Frequency response, $2000-12,000 \mathrm{cps} . \pm 6 \mathrm{db}$. Voice coil impedance, 14 ohms. 10 watts power handling capacity. $1.4^{7}-\mathrm{oz}$. Alnico 59 D 449 . NET.... $41 / 16^{\prime \prime}$ mtg. ctrs. Wt.. 1 lb . MO44. NET
MODEL 8A4CO $8^{\prime \prime}$ COAXIAL SPEAKER. $8^{n}$ COne has 4.64 -oz..... masnet. $21 / 2^{n}$ t weeter with $65-$ oz. magnet. Rated at 10 watts. Range: 50 -
15.000 cycles, $\pm 5 \mathrm{db}$. Impedance. 8 ohms. Wit.. $23 / 4$ lbs. 590 418 . NET. $\pm 5 \mathrm{db}$. Impedance. 8 ohms. Wit. $23 / 4$ lbs. 59D418. NET.
13.49
net. $31 / 2$ "tweeter with 1.47 -oz. TPEAKER. $12^{\prime \prime}$ woofer has $6.8-\mathrm{oz}$. magnet. $31 / 2$ tweeter with $1.47-\mathrm{oz}$. magnet. Power capacity. 14 watts. Response. 50 to $15,000 \mathrm{cps}, \pm 5 \mathrm{db} .1 \mathrm{mp} ., 8 \mathrm{ohms} .61 / 2 \mathrm{lbs}$.
59 DX 526 . NET .
. 20.29

## REAR-DECK AUTO-RADIO SPEAKER KIT



MODEL AS.2. Deluxe kit with heayy-duty $6 \times 9$ speaker-withstands severe road shock. Has 2.15 oz. Alnico V magnet and 1" voice coll. Provides ex ceptionally fine tonal quality. Kit is supplied com plete with fader control, 18 feet of cable. flocked screen grille, baffle plate, sponge rubber gasket $31 / 2 \mathrm{lbs}$ mardware and instructions. Shpg. wt., $31 / 2 \mathrm{lbs}$
59 D 446 . NET
8.20

## JENSEN "CONCERT SERIES" SPEAKERS



Jensen's highly popular "Concert Series" PM speakers. DP-Alnico $V$ magnets for exceptionally high efficiency and distinct reproduction. Cones are selected for maximum frequency response characteristics. Rigid frame malntains proper alignment of voice coil and magnet structure. All speakers listed below have 3.2ohm voice coil impedance. All except P4-IV have
bracket for mounting matching transformer.

| $\begin{gathered} \text { Stock } \\ \text { No. } \end{gathered}$ | $\begin{aligned} & \text { Mfr's } \\ & \text { Type } \\ & \hline \end{aligned}$ | Size | Shape | Magnet | Watts | We. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 D 498 590499 | P4.W | $4^{\circ}$ | Square | 1.002 | 4.5 | 1/2 |  |
| S9 <br> 59489 <br> 9.486 | PS.W | 5* | Square | 1.002 | 5.0 | 11/4 | 2.56 |
| 590 506 | P6.W | ${ }^{\circ}$ | Square Squate | 14702. | 5.5 | 11/4 | 2.85 |
| 590487 | P6-V | $6^{\circ}$ | Squate | 1.002 1.4702 | 6.0 | 2 | 2.88 |
| 590488 | P6-T | $6^{\circ}$ | Square |  | 75 | 2 | 3.20 |
| 59 D 492 | P69-V | $6 \times 9^{\circ}$ | Oval | 3.16 1.47 02. | 7.5 | 21 | 4.59 |
| 59 D 489 | P8. ${ }^{\text {P6 }}$ | $88^{\circ}$ | Square | 1.7402. | 7.5 9.0 | $21 / 2$ | 4.26 |
| 59 D 490 | Pe.7 | $8{ }^{8}$ | Square | ${ }_{2} .5020$ | 9.0 | 21/2 | 4.23 |
| 59 D 491 $59 \mathrm{D} \times 34$ | P10.T | $10^{\circ}$ | Round | 2.502. | 11.0 | 294 | 4.94 |
| 59 DX 534 | P12-T | $12^{\circ}$ | Round | 2.502. | 12.0 | 5 | 6.32 |

"LITTLE GENERAL" MODEL S.WD-5-DS. 5"
 speaker performs nearly as well as an $8^{\prime \prime}$ in sensitivity and response, 5 watt power capacity makes it suitable for outdoor use. Speaker will not rattle, even at full 5 watt input. Sand color, hi-impact Styron baffle can be hung on a wall, placed on a desk or used outside. Hanging bracket with screw slot is molded in. Speaker is held in place with push-on nuts. Styron baffle is easily drilled for insertion of controls. 8 olm impedance. Wt., 31 bs .
57 D 833 . NET......
5.38

# Knight, Utah, Fedtro, Misco Speakers 

## TOP BUYS IN REPLACEMENT SPEAKERS

Excellent quality permanent magnet' speakers at very low prices. Actually cost less than a reconing job. Designed for universal replacement usealso recommended for original equipment. Big money savers for radio and TV servicemen, as well as "do-it-yoursclfers." Built to EIA standard dimensions-rugged construction throughout. Rigid frame assures permanent alignment of integral parts. Magnet and voice coil are precision tegral parts. Magnet and voice coil are precision
centered. $4^{\prime \prime}$ and $5^{\prime \prime}$ speakers have four holes in pot for easy mounting; furnished with universal mounting bracket. Fully dustproofed. Made in U.S.A. Impedance, 3.2 ohms except $\dagger 8$ ohms.


| Stock No. |  | Size | Shape | Mag. We. | Max. Watts | We.Lbs: | NET EACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1205 |  |  |  |  | 6 or More |
| 59 | O 476 |  | $4{ }^{\prime \prime}$ | Square | . 68 oz. | 3.0 | 1/2 | 1.13 | 9 |
| 59 | O 477 | 5 | Round | . 68 oz | 3.5 | 3/4 | 1.30 | . 17 |
| 59 | - 472 | 5x7* | Oval | $1.0{ }^{\text {oz }}$ | 5.0 8.0 |  | 1.60 2.15 | 1.4 |
| 59 | 0471 | $6 \times 9{ }^{\circ}$ | Oval | 1.47 oz | 8.0 | 11/4 | 2.15 | 1.9 |
|  | 0493 | *6x9" | Oval | 1.47 oz . | 8.0 | $11 / 4$ | 2.30 | 2.07 |
| 59 | 0416 | +6x90 | Oval | 1.47 oz | 8.0 | $1 / 4$ | 2.15 | 1.94 |
| 59 | 0470 | $8^{\circ}$ | Round | 2.15 oz | 9.0 10.0 |  |  |  |
| 59 | D×529 | 12* | Round | 3.16 oz. | 10.0 | $31 / 4$ | 3.90 | 3.51 |

## NEW! UTAH "THIN-DRIVE" SPEAKERS

A major breakthrough in design ends speaker replacement guesswork! New super Thin-Drive speakers are sure to fit because they're thinner than original speakers. The slim profile is made possible by a new wafer-thin Lodex magnet developed by G.E. And you get far more drive per ounce with the new featherweight one-piece pot. Fidelity often exceeds that of original equip-
 ment. Speakers are highly resistant to changes
 in temperature, humidity. 3 watt max. Impedance

| nce, 3.2 ohms. |  |  |
| :---: | :---: | :---: |
| Lbs. | Lisi | NET |
| $1 / 4$ | $\$ .3 .70$ | 2.18 |
| $1 / 4$ | 3.40 | 2.00 |
| $1 / 2$ | 3.50 | 2.06 |
| $1 / 2$ | 4.30 | 2.53 |
| $1 / 2$ | 3.80 | 2.23 |
| $3 / 4$ | 4.70 | 2.76 |
| $3 / 4$ | 4.40 | 2.59 |
| $1 / 4$ | 5.40 | 3.16 |

## TOP BUYS IN COAXIAL SPEAKERS

Outstanding coaxial speaker values for budget-minded music lovers. Ideal for use in economy lovers. Ideal for use in economy hi-fi systems. as extension speakers in recreation room or den, and for improving the tone of radios and phonographs. Clear highs and faithful lows. Impedance. 8 ohms. Large " Alnico $\mathbf{V}^{\prime \prime}$ magnets. Built-in crossovers. Made in U.S.A. New $6 \times 9^{\prime \prime}$ Coaxial Speaker. $6 \times 9^{\prime \prime}$ cone; has 2.15 oz. magnet. $2^{\prime \prime}$ tweeter with 0.53 oz . magnet Rated at 8 watts. Range: $50-10,000 \mathrm{cps}$. Cross Rated at 8 watts. Range:
over frequency: 3500 cycles. Shpg. wt., $11 / 2 \mathrm{lbs}$. 59 D 535. NET


59 D 535 . NET ............................. 5.95 up 8 peaker. 8 ency response: $55-12,000$ cycles. Crossover frequency: 3000 cycles. Shpg. wt., 3 lbs.
59 D 475 . NET
5.95

12" Coaxial Speaker. $12^{\prime \prime}$ cone; has 6.8 oz . magnet. $31 / 2^{\prime \prime}$ tweeter with 1 oz magnet. Rated at 15 wattg. Range: $55-12,000$ cycles. Crossover: 2000 cycles. Shpg. wt., 8 lbs .
7.85

## 59 DX 531. NET

$15^{\prime \prime}$ Coaxial Speaker. $15^{\prime \prime}$ cone; has 6.8 oz. magnet. $5^{\prime \prime}$ tweeter with 1.47 oz. magnet. Rated at 20 watts. Range: $45-12,000$ cycles. Crossover frequency: 1800 cycles. Shpg. wt., 11 lbs.
59 DX 530. NET
13.95

## ALLIED SPEAKER REPAIR SERVICE

Hi-fi Speaker Service. Includes replacing cone, gasket, voice coil, spider and dust cover. Pack speaker and ship to us by insured parcel post or express. Allow 30 days return delivery.

Stondord Speaker Service. General purpose speakers are rebuilt. Additional charges for field coil repair or replacement as follows: $\$ 1.25$ for $4^{\prime \prime}-9^{\prime \prime} ; \$ 2.25$ for $10^{\prime \prime}-12^{\prime \prime}$. Field coils welded into frames cannot be replaced. Ship speaker prepaid. Send remittance fincluding postage) with order. Allow $30-45$ days return delivery.

| Sixe | Service | Slze | Service | Size | Service |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 4^{\prime \prime} \text { to } 6^{\prime \prime} \\ & 61 / 2^{\prime \prime} 10^{\prime \prime} 9^{\prime \prime} \end{aligned}$ | $\begin{aligned} & 1.75 \\ & 2.55 \\ & 2.95 \end{aligned}$ | $\begin{aligned} & 14^{\circ} t 015^{\prime \prime} \\ & 4^{\circ} \times 6^{\circ} \text { oval } \\ & 11^{\circ} t o 12^{\prime \prime} \end{aligned}$ | $\begin{aligned} & 3.85 \\ & 2.00 \\ & 3.25 \end{aligned}$ | $\begin{aligned} & \hline 5^{\prime \prime} \times 7^{\prime \prime} \text { oval } \\ & 6^{\prime \prime} \times 9^{\prime \prime} \text { oval } \end{aligned}$ | $\begin{aligned} & 2.55 \\ & 2.75 \end{aligned}$ |

## FEDTRO PERSONAL DUAL REMOTE-CONTROL SPEAKER

Enjoy personalized listening. For use with TV sets, radios, and phonos. Has 2 controlsone adjusts set volume, other adjusts remote speaker. Elther speaker can be turned all the way off, or both can be on simultaneous-
 ly. Easy to installconnect cable from remote unit to speaker leads in radio or TV set. In high-impact ivory plastic case with $20^{\prime}$ remote cable. Imported from Japan. Shpg. wt., 1 lb . S9D 4 19. NET.
3.85

## NEW MISCO ALL WEATHER SPEAKER

Model MS-3-B. Completely self-contained $\because$ Mini Speaker" in 20 gauge steel enclosaure, It's conipact weatherproof and dustproof. So tough that it's used in our Navy's atomic submarines. Witlistands extreme humidity,
 shock. For outdoor theater speakers, extension, test. P.A.. intercom or paging uses.
All-weather enclosure is electro-static finished with two coats of baked-on enamel. Acoustically designed enclosure has horizontal louvers with perforated plate backing. Plastic impregnated cloth cone. Floating mount cushions speaker. Has Alnico V, 1-oz. magnet and removable audio input phono jack. 8 ohms. $33 / 4 \times 33 / 4 \times 21 / 2^{\prime \prime} .11 / 2 \mathrm{lbs}$. 59D 404. List, \$7.95. NET

## KNIGHT REAR-DECK AUTO SPEAKER KITS

Standard Kits. New low prices for a luxury item. Economy kits are ready for quick installation in any car. Assure excellent tone and greatly improved sound distrlbution. Speakers allow passengers in rear to hear radio clearly without it being too loud for the driver. Kit consists of: quality PM speaker. dash-mounted, pre-wired control switch, grille, wire, template. Iandy screw terininals for easy mounting and instructions. Made in U.S.A.

| Stock No. | Slue | Grille | Lbs. | NET | Stock No. | Sizo | Grille | Lbs. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
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| Stock No. | Type | Termination | $1-9$, EA. | 10-24. EA | $25-$ Up, EA |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
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14.20 25-UP, EACH
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32.75
25.UP, EACH
33.81
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BA- 215 Eorcushions. Foam cushions same as illustrated in Fig. C. Fit all Clevite "Brush" phones except ED-300. Shpg. wt.. 5 oz.
3.28

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$\begin{array}{r}3.53 \\ \hline\end{array}$
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1. By the Howard W. Sams Engineering Staff.
Contalns Photolact folders on forty-six 1961 Citizens Band transceivers. Includes invaluable editorial section on servicing CB equipment, outlining typlcal servicing problems and their solutions. Contents: Hallycralters Latayette; RCA; Reath; Gonset; Recancy; etc. 160 pages. $81 / 2 \times 11^{\prime \prime}$. 295 37 K 677.
2.95

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## HI-FI AND RECORDING

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2.90

HIGH FIDELITY TECHNIQUES. By Joha H. Newitt (Rinehart Books). A comprehensive hook for the hi-fi enthusiast and rechnician. binaural effects, amplifiers, tuners, buying enuipment, etc. 494 pages. $6 \times 91_{4}$. 9.25 37 K 351
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HI-FI MADE EASY. By Norman Crowhurst (Gernsback). Written in easy-to-understand stye individual components of illity. uxplasys tem; contains many helpful illustrations and diagrams. 224 pages. Size, $51 / 2 \times 81 / 2^{\circ} .2 .90$ BUILT-IN STEREO HIGH-FIDELITY. Allied's own publication. Explains built-in home music systems; describes the various components and their correct acoustic placement. Includes glant-size blueprint; component mounting and wiring instructions. 16 pazes. 39 K 241 。

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YOU WANT NOW . . . USE ALLIED'S CREDIT FUND PLAN NO MONEY DOWN
Books can be conveniently purchased on our Credif Fund Pion-make them o part of any order totaling $\$ 20$ or more!

## Auto Antennas and Vibrators



## "LOK-MATIC" UNIVERSAL TYPE

Model L-1000. Exclusive mounting principle permits quick and easy one-man installation from top of fender- the interlocking parts drop Into place automatically. Provides tighter installation, built-in watterseal. Fits any hole $7 / 3$ cable. Adjusts up to $45^{\circ}$ angle. Comes precable. Adjusts up to $45^{\circ}$
assembled. Shpg. wh. 1 lb .
92 CX 579 . List, \$4.65. NET
2.71

## TOP.COWL AND FENDER TYPES

Model TCF-3C. A top-noteh, rattleproof auto antenna that combines smart appearance and deluxe performance. Popular "Eight Ball" mount for simplified installation on top cowl. Will fit any auto. Adjustable to any desired angle. Has 3 sections. Extends to $56^{\circ}$, telescopes to $22^{\circ}$. Ruggedly constructed of triple chromeplated brass tubing. Complete with $54^{\circ}$ lowplus. Comes preassembled with Motorolity ye plug. Comes preassembled; with complete inatructions. Shpg. wt. 1 lb .
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1.98

Model TCF.A. High-quality smartly styled antenna for elther top-cowl or fender mountIng. Ball mounting permitting adjusting up to
$35^{\circ}$. The four telescoving sections extend to $57^{\prime \prime}$ from $18^{\prime \prime}$. Ateractive chrome finish for lasting beauty. Sleek and modern-easy to install. locks into place. With $54^{\prime \prime}$ low-loss lead cable. Shpg. wt, $11 / 4$ lbs.
$92 \mathrm{C} \times 576$.
92 CX 576 . List. S5.95. NET
3.49

## SIDE-COWL TYPES

Model SC-6. Chrome-plated brass, side-cowl antenna. 3 sections-extends to $56^{\circ}$. Low-loss 2 -stanchion mount with bakelite and clirome insulators. Positive shielding eliminates use of shield can. Detachable $36^{\circ}$ polyethylene insu lated vinylite covered, high " $Q$ " lead-In. Simple to install. Shpg. we. ${ }^{1}$ lb
92 CX 105. List, $\$ 5.45$. NET
3.20

Modol SC-8. Popular side-cow antenna. 4
 $36^{\prime \prime}$ vinylite covered high " $Q$ " lead-in. Fits ir regular car bodies. Shpg, wt., $11 / 2 \mathrm{lbs}$.
92 CX 11 I . List, 57.70 . NET.
4.52

## DISAPPEARING TYPE

Modol D-2000, Easily-installed "Lok-matic" type that virtually disappears when collapsed to minlmum of $611^{\circ}$. ${ }^{3}$ sections extend to $52^{\prime \prime}$ Installed from outside the car on cowl or fender. Completely waterproof, poly styrene insulation. With $54{ }^{2}$ lead. Shpg. wt. 11 b . 92 CX 580 . List. S6.15. NET
3.61

## REPLACEMENT ANTENNA MAST

Model TCFR-1. 3-section replacement mast for weather-worn or broken antennas. Easily fits over stub of old antenna. Set screws pro vide secure mounting. Extends to 57 . Shpg.
${ }^{\text {wt. }} \mathrm{C}^{1 / 2} \times 595$, List, $\$ 2.43$. NET.
1.32

GC-TELCO AUTO ANTENNAS


SPRING-MAGIC
CONSTRUCTION

## (C) ModelNSF-29F. Modern,

 (C) hish-quality auto radio antenna. Features a rugged univeral mounting. adjustable to $30^{\circ}$ angle. $21 / 2^{\circ}$ chromeplated spring bends up to $90^{\circ}$ to prevent broken or bent antennas. 3-section unit extends to $58^{\circ}$ telescopes to $251 / 2^{\prime \prime}$. Easy to install-mounts in minutes. With $54^{\circ}$ lead-in cable and easy-to-follow instructions. Made of highquality brass tubins. chrome (1) 91 Cl 398 . NET.4.41

## SPRING-MAGIC BALL-TENNA

(D) Model A517-1. Universal ball-swivel an(1) tenna adjusts to any angle. Spring helps prevent broken or bent whip. 3 sections extend $50^{\circ}$, close to $241 / 2^{\circ}$. Chronie-plated brass tubing wit $h 54$ lead. Wt.. $11 / 2 \mathrm{lbs}$. $\quad 5.26$

KNIGHT FM AUTO ANTENNA


Attaches to
Existing AM
Whip Antenno in Seconds your present AM antenna. Improves FM reception, increases range. decreases backyround noise, minimizes flutter and fading Enhances AM reception tool Converts existing whip ato $\mathbf{F M}$ wave antenna at FM frequencies. Loases due to crosspolarization are climgain of approximately 3 db . Attaches easily to any standard AM antenna. Anodized alumiany standard AM antenna. Anodized aluminum with chromed brass fittings. Weighs only $91^{\text {oz C }} 164$. OtNLY ${ }^{\text {oz }}$
4.85

## FEATURE VALUE ANTENNAS

(A) Enjoy all the advantages of a popular teleprisingly antenna while kaving at this sur as high as $38^{\prime \prime}$ to bring in distant sections raise as high as 38 to bring in distant stations more plated brass qubing. quality triple chrome placrificed, even at this low price. Easy boen stall too-employsfront-mounting "Eight-Ball* design. Has 5s" low-loss "Elektran" lead cable fer full power picke-loss Elekran lead cable Telescopes to $15^{\circ}$. Wt., $11 / 2 \mathrm{lbs} . \quad 1.29$
91 C080. NET.

B Flexible spring mast replacement antenna $B$ at less than a dollar! Single-section re places your corroded or broken antenna. Your radio cannot deliver good sound if a worn antenna is preventing good reception, Easily fits over stub of old antenna. Has $271 / 2^{*}$ fixed length. Set screw for secure mounting. Shps ${ }^{W 2} 2^{1 / 2}{ }^{16}$

NET
.98
WARD ANTENNA LEAD EXTENSIONS
Additional lead cable lensths for replacing old cable or extending present antenna. For fender cable or extending present a
or rear mount installations.

| Stock No. | $\begin{aligned} & \text { Mfr' } \\ & \text { Type } \end{aligned}$ | Length | Shpg. Wt. | NET |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{l\|ll} 91 & c & 051 \\ 91 & 6 & 5 \\ 91 & 0 & 5 \\ \hline \end{array}$ | $\begin{aligned} & \mathrm{C}-9 \\ & \mathrm{C}-12 \\ & \mathrm{C}-42 \end{aligned}$ | $\begin{aligned} & 18^{\circ} \\ & 24^{\circ} \\ & 15-\mathrm{ft} \end{aligned}$ | $\begin{aligned} & 6 \mathrm{oz} . \\ & 7 \mathrm{oz} . \\ & 1 / 2 \mathrm{lb} . \end{aligned}$ | .53 .71 1.91 |

## MALLORY REPLACEMENT

## VIBRATORS

Carefuliy designed. precision built vibrators offering long, trouble-free life. Springs are fabricated of high grade clock-spring steel. Flexible 105 -strand lead wire won't breakconnections stay intact. Backed by years of performance. If Maltory type number is not known, write to Allied. stating make, model, tube antenna. Attaches to lineup of set. or part number of the original

## CORNELL-DUBILIER INVERTER VIBRATORS



Heavy-duty vibrators for CornellDubilier "Powercon" inverters, Also replace vibrators in many mobile amplifiers. Vibrator with VB in Type No. is mounted in a solid steel box
equipped with a sponge rubber liner for minimum noise and maximum stability; VD less iner for greater heat dissipation. *Tandem type has higher power capacity, has two 6-pin plugs on case. Av, shpg, wt., 1 ib

| $\begin{gathered} \text { Stook } \\ \text { No. } \end{gathered}$ | $\begin{aligned} & \text { Mfr's } \\ & \text { Type } \end{aligned}$ | Volts | Used in "Powercon" Modeis | $\begin{aligned} & \text { NET } \\ & \text { EACH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{lll} \hline 91 & C & 310 \\ 91 & c & 3 \end{array} 1$ | $\begin{aligned} & \hline 6 \mathrm{VB6H} \\ & 2563 \\ & .12 \mathrm{VD} 6 \mathrm{H} \end{aligned}$ | $\begin{array}{r} 6 \\ 6 \\ 12 \\ \hline \end{array}$ | 6DC6, 6/110DH6, 6R5, 6S8, 6SW8 6/12D5, 61.6, 121.B8 <br> $12 \mathrm{DCl} 2,12 \mathrm{H} 15,12$ RU15, 12 SH 20 . | $\begin{array}{r} 8.35 \\ 6.41 \\ 4.52 \end{array}$ |

vibrator-we will recommend correct replace ment. Av. shpg. wit. 8 oz

| Stock No. | Mir" ${ }^{\text {s }}$ Type | V. | Slze | List | $\begin{aligned} & \text { NET } \\ & \text { ER. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 91 C 280 | 4.4 | 6 | 142x\%" | 2.35 | 32 |
| 91 c 281 | 12-3 | 12 | 136x23. | 2.45 | 1.38 |
| 91 C 282 | 12.4 | 12 | 1\%×2\% | 2.45 | 1.38 |
| 91 C 283 | 509P | 6 | 11/20/8. | 4.15 | 2.44 |
| 91 C 284 | 716 | 6 |  | 7.70 | 4.53 |
| 91C293 | 903M | 6 | 11/2\% ${ }^{\circ}$ | 3.60 | 2.12 |
| 91 C 294 | 1501 | 6 | 11/2 $\times 2{ }^{\circ}$ | 6.35 | 3.73 |
| 91 C 285 | G1501 | 12 | 11/202\%" | 6.90 | 4.14 |
| 91 C 288 | G1502 | 12 | 11/2x2\% | 4.90 | 2.94 |
| 91 C 289 | 1512 | 6 | 132 $21 /{ }^{\text {c }}$ | 6.90 | 4.14 |
| 91 C 290 | 1513 | $6 / 12$ | 14/22\%" | 6.90 | 4.14 |
| 91 C 292 | 1514 | 6 | $14 / 82{ }^{\circ}$ | 6.90 | 4.14 |
| $91 C 295$ | 1601 | 6 | 11/20\% | 4.70 | 2.76 |
| 91 C 320 | G1601 | 12 | 11/20\% ${ }^{\text {a }}$ | 4.70 | 2.76 |
| 91 C 297 | W1601 | 4 | 1 $1120 \%$, | 4.90 | 2.88 |
| 91 C 298 | 61602 | 12 | 11/2 $\times 2 \%$ " | 4.70 | 2.76 |
| $91 \subset 299$ | 1610 | 12 | 11/2x29/8 | 5.50 | 3.30 |
| 91 C 301 | 1701 | $6 / 12$ | 1420 | 9.60 | 5.64 |
| 91 C 302 91 C 300 | 1751 | 6 | 11/2x3* | 9.80 | 5.76 5.76 |
| 91 C 300 91 C 303 | 1752 | $6 / 12$ | $11 / 2 \times 3^{\circ}$ | 9.70 | 5.82 |
| 91 C 303 | 1801S /725C | 6 | $11 / 2 \times{ }^{18 / 16}$ | 8.55 | 5.03 |
| 91 C 304 | G1801S | 12 | 1/2x215 ${ }^{\circ}$ | 9.95 | $\overline{5.85}$ |
| 91 C 305 | 61801/G4549 | 12 | 1/2x31/4 | 8.55 | 5.03 |
| 91 C 306 | 1807 | 6 | 1\%x2\% | 7.70 | 4.53 |
| 91 C 308 | 1808 | 6 | 11/2x ${ }^{2} / 6^{\circ}$ | 7.70 | 4.62 |
| 91 C 307 | 1813 | 6 | 11/2x2\% | 7.70 | 4.53 |
| 91 C 309 | 1852 | 6 | $1 \% \times 2 \%$ " | 9.70 | 5.82 |

## Allied's Most Popular Knight Deep-Fringe Corodized Antenna



Up to 150 Miles

ALLIED'S OWN
KNIGHT FRINGE AREA ANTENNAS

## Only

$\$ 22^{23}$
26 Elements Provide High Signol Gain

Improved Design for
Color, Black and White

High-gain, twin-driven VHF antenna equals or surpasses the performance of many higher-priced arrays. 21 elements on high band and 5 elements on low provide extremely high sensitivity on channels 2 through 13. Allaluminum construction with gold corodized finish-even on bracketsoffers greater resistance to corrosion. Features a compact, heavy-duty square boom with sturdy braces-much stronger than ordinary tubular construction. Has easy-to-install "snap-out" assembly; and positive no-tilt bracket -can be put together in minutes. Heavily reinforced sleeve elements at point of snap-out action is used for extra protection against high winds, etc. Less mast, $\mathbf{3 0 0}$-ohm line. Shipg. wt.. $81 / 2 \mathrm{lbs}$.
91 CZ 331 . Shipped by Truck or Express.
ONIY 2I. 23
tht DEEP-FRINGE NON-CORODIZED ANTENNA
Same as above, but non-corodized. Shpg. wt., $81 / 2 \mathrm{lbs}$.
91 CZ 332
ONLY 18.70

Knight Fringe-Area


- 19 Elements-15 on High Band, 4 on Low-Lels You Beneft from Greater "Pull-In" Power
- Designed for Color and Black and White Sets

Get superior fringe-area reception with this broadband (channels 2 through 13), efficiently engineered antenna. Its multiple directors and dual reflectors for high front-to-back ratio-provide increased sensitivity and sharp directivity. All elements are completely gold corodized to resist corrosion. Special-design "Lock-Tite" saddle bracket assures permanent, horizontal mounting of the boom-guarantees no-tilt installation. One-inch square boom construction with vertical and horizontal plane surfaces, gives maximum rigidity for ice and wind loads. Supplied less mast, and 300 -ohm line. Shpg. wt., 7 lbs.
91 CU 333. Shipped by Truck or Express... ONty 15.26
91 CU 334. As above, but non-corodized. ... ONtY 14.02

## 3 AND 4 STAR ANTENNA STACKING KITS

GOLD.CORODIZED TYPE. For stacking two corodized antennas for greater gain. Shpg. we., $1 / 2 \mathrm{lb}$.
91 CX 335.
OnLY 1.47
NON-CORODIZED TYPE. For stacking two non-corodized antennas for greater gain. Shpg, wt., $1 / 2 \mathrm{Jb}$.
91 CX 336.
ONLY 1.18

## Knight's Amazing 5-Star Anfenna



Even deepest fringe areas can receive best possible TV signals with this super-powered. 40 -element antenna. Duo-Twin-Drive gives performance equal to 6 half-wave driven elements-provides remarkably increased gain. Built for amazing strength and rigidity: split boom ( $13^{\prime}$ long, $1^{\prime \prime}$ square) reinforced with triple U-bolt saddles, "Lock-Tite" designed no-titt bracket. boom suspension rods. and triple tapered elements with three-wal! thickness at bracket end. Gold corodized to prevent corrosion. Less mast and 300 -ohm twin line. Shpg. wt., $151 / 2 \mathrm{lbs}$.
92 CU 267. Shipped by Truck or Express.
ONIY 46.45
92 CU 268. As above, but non-corodized aluminum........ ONtY 42.63

## STACKING KITS FOR 5-5TAR ANTENNAS

92 CX 079 . Gold Corodized. Shpg. wt., $1 / 2$ !b.
ONLY I. 47


## Knight 5, 4 and 3-Star Antenna Kits



OPTIONAL ROTATOR PACKAGE


- CDR Rotator
- Control
- 10.ft. Mast
- 100.ft. Cable
- Lightning Arrester


# Allied's Famous Knight TV Anfenna Kits Complefe with Mast and All Accessories 

\author{

- Quick and Easy Installation <br> - For Both Color or Black and White <br> - Choice of 20,30 or $40-\mathrm{ft}$. Mast <br> - Complete With All Hardware
}

Gef excellent TV reception-at big savings, tool Knight antenna kit prices are actually less than the total cost of components purchased separately. Kits for "Deep-Fringe" and "Fringe" areas are listed with a choice of 20, 30 or 40 -foot masts; "Super-Fringe" with 30 or 40 -foot masts. Distance to TV stations determines which antenna to use; local terrain (hills. trees, tall buildings. etc.), determines which mast height to use. The fully-automatic AR-22 rotator aims the antenna for best reception of any station. All kits are complete with weather-resistant antenna; steel mast: all-angle mount; guy wire; 100 - ft . tw in line; $50-\mathrm{ft}$. ground wire; ground rod; twin-line lightning arrester; all hardware; and detailed instructions. Rotators are for operation from $110-120$ volts, 60 cycle AC. Shipped by truck or express only.

## $\star \mathbf{~} \boldsymbol{\star} \boldsymbol{\star} \boldsymbol{\star}$ SUPER-FRINGE KNIGHT ANTENNA KITS

Include Knight's Deluxe 5 -Star antenna (described on preceding page) with extrastrength. triple-walled elements; and all accessories and instructions for making a quick, easy installation. Antenna gold-corodized to prevent corrosion.

| Stock No. | Type | Description | Shpg. W | EACH |
| :---: | :---: | :---: | :---: | :---: |
| 91 c2316 | E-30 | 30-ft. mast ; with | s. |  |
| 91 cz 317 | E-30-L | 30 -ft. mast ; less rotator package | 56 lbs. | 59.86 |
| 91 Cz 318 | E. 40 | 40-ft. mast; with rotator package | 91 lbs. | 103.11 |
| 91 C2 319 | E-40- | $40-\mathrm{ft}$. mast; less rotator package | 67 lbs . | 65.21 |

## $\star \star \star$ DEEP-FRINGE KNIGHT ANTENNA KITS

Include the Knight 4-Star gold-corodized antenna for clear, snow-free pictures on channels 2 to 13; all installation accessories; and detailed instructions.

| Stock No. | Typo | Description | Shpg. Wi. | EACH |
| :---: | :---: | :---: | :---: | :---: |
| 91 C2 383 | C-20 | $20-\mathrm{ft}$. mast; with rotator | 55 lbs . | 35 |
| 91 C2 384 | C-20-L | 20 ft . mast; less rotator package | 31 lbs. | . 93 |
| 91 C2 385 | C-30 | $30-\mathrm{ft}$. mast; with rotator package | 71 lbs. | 72.44 |
| 91 Cz 386 | C-30-L | $30-\mathrm{ft}$. mast; less totator package | 47 lbs. | 34.54 |
| 91 C2 387 | C-40 | 40-ft. mast; with rotator package | 82 lbs . | 76.51 |
| 91 Cz 388 | C. 40 -L | 40.ft. mast; less rotator package | 58 lbs . | 39.09 |

## 丸 $\star$ \&FRINGE KNIGHT ANTENNA KITS

Include the Knight 3-Star gold-corodized antenna for outstanding performance in fringe areas; all installation accessories; and easy-to-follow instructions.

| Stock No. | Type | Description | Shpg. Wi. | EACH |
| :---: | :---: | :---: | :---: | :---: |
| 91 cz 389 | B-20 | 20-ft. mast; with rotator packag | 50 lbs . | 62.38 |
| 91 C2 390 | B-20-L | $20-\mathrm{ft}$. mast; less rotator package | 26 lbs. | 24.96 |
| 91 cz 391 | B-30 | $30 \cdot \mathrm{ft}$. mast; with rotator package | 66 lbs. | 66.47 |
| 91 cz 392 | B-30-L | $30-\mathrm{ft}$. mast; less rotator package | 42 lbs. | 28.57 |
| 91 Cz 393 | B. 40 | $40-\mathrm{ft}$. mast ; with rotator package | 77 lbs. | 70.54 |
| 91 cz 394 | B-40-L | $40-\mathrm{ft}$. mast; less rotator package | 53 lbs. | 33.12 |

Lets you "aim" antenna in any directiontfor clearest reception of any TV station in your area. Provides convenient and easy operation

# ALLIED'S Catalog is Your Complete TV Antenna Guide 

Replace Your Weather-Worn Antenna


Bent, Broken,
Worn Elements


Corrosion on Connectors
enjoy the best picture quality your set can deliver. Don't let a weather-worn antenna spoil your TV enjoyment. Weathering can cause a gradual decrease of picture quality. So before blaming your TV set, check your antenna! A new antenna can restore lost picture brightness and detail.
DEPEND ON ALIIED for your antenna needs. Whether your location requires a simple indoor type or a more elaborate fringe-area array, Allied has the antenna you need, listed in these pages. Our stocks include a full selection of antennas as well as necessary installation accessories.

## How To Select Your TV Antenna



Indoor Antenna


Oupdoor Antenna


Installation Accessories

Ranges are indicated below. If in doubt, select antenna in next higher group. Stacking two (of same type), gives up to $50 \%$ more signal-needed in locations over 200 miles from station or where hills, etc., interfere.
$\star$ Melropolitan-Suburban (up to 40 miles).
$\star \star$ Semi-Fringe (up to 60 miles).
$\star \star \star$ Fringe (up to 85 miles).
$\star \star \star \star$ Deep-Fringe (up to 125 miles),
$\star \star \star \star \star$ Super-Fringe (up to 200 miles).


- Highly Efficient 2-Band Design
- Receptors "Aim" SeparatelyGive Best Signal on Each Band
- Mounting Hardware Included


## $\star$ hIGH-LOW ANTENNA KIT WITH CHIMNEY MOUNT

A two-band VHF Knight antenna kit at a remarkably low price. Separate directional adjustments permit "aiming" high and lowband elements individually. Gives peak performance in areas where high and low-band signals come from different directions. Provides excellent reception of color and black and white programs. channels 2 to 13.
Elements are sturdily constructed of $1 / 2^{\prime \prime}$ aluminum tubing. Connecting loop. supplied assures correct impedance match for maximum signal gain. Kit includes: antenna; 5 -foot steel mast; 5 screw-in standoffs; 2 mast standoffs; 50 -feet of t win line; light ning arrester; and all chimney mounting hardware. Shps. wt., 10 lbs . 92 CX048

Onty 7.95

## t HIGH-LOW ANTENNA KIT WITH ROOF MOUNT

Same as above, but with a universal-angle roof mount. Shpg. wt., 9 lbs
92 CX 047
ONLY 6.95

## * HIGH-LOW ANTENNA ONLY

Above 2 -band antenna, but less all acces sories. Shpg. wt., 5 tbs.
92 CXO 016
Onty 4.19

Metropolitan and Near-Fringe Antennas


## GOLD ANODIZED IN-LINE ANTENNA KITS

- Resist Carrosian and Rust
- Rugged $1 / 2^{\prime \prime}$ Aluminum Tubing
- Quickly, Easily Installed


## * IN-LINE KIT

 WITH CHIMNEY MOUNTComplete VHF Knight antenna kit at a low, money-saving price. Time-proven inline design provides sharp. clear color and black and white pictures on channel 2 through 13. Has a flat response-important for consistent picture quality in color TV reception-and good directivity
Elements are of rugged, tempered $1 / 2^{\prime \prime}$ aluminuin tubing; with $1^{\prime \prime}$ aluminum cross arm. Gold anodizing resists smoke, soot and ravages of weather. Provides excellent impedance match for color reception. Using "Quick-Rig" design, it takes just seconds to install. Kit includes: antenna assembly; 5 foot steel mast; 50 -feet of $\mathbf{3 0 0}$-ohm t win line; 5 screw-in standoffs; 2 mast standoffs; straps and clamps for chimney mounting. Shpg. wh., 10 lbs.
$91 \mathrm{C} \times 326$.
Onty 8.95

## t IN-LINE KIT WITH ROOF MOUNT

Same as above, but with a universal-angle roof mount. Shpg. wt.. 10 lbs .
91 CX 327.
only 8.70

## - IN-LINE ANTENNA ONLY

Above in-line antenna, but less all accessories. Shpg. wt., 5 lbs .
91 CX 328.
onty 5.85

## STANDARD IN-LINE ANTENNA KITS

$\star$ IN-LINE KIT WITH CHIMNEY MOUNT
Complete VIfF Kniglit antenna kit with a chimney mount and all of the accessories listed with 91 CX 326 above, but without gold anodizing. Shpg. wt., 10 lbs .
$92 \mathrm{C} \times 045$.
onty 7.75
As above, with accessories; but with univet-sal-angle roof mount. Wt., 9 lbs.
92 CX 041.
ONIY 6.95
Above standard antenna; less alt accessories. Shpg. wt.. 5 lbs.
92 CX 042.
onty 3.95

## CONICAL ANTENNA KITS

- "Quick-Rig" Installation
- Highly Efficient Reception On All VHF TV Channels
- Rugged, Trouble-Free Design
$\star$ SINGLE-BAY CONICAL KIT WITH CHIMNEY MOUNT

Value-packed Knight antenna kit for excellent reception of all VHF channels (2 through 13). Solidly constructed elements are made of $3 / 3^{\prime \prime}$ aluminum tubing; cross. beam of heavy-1" aluminum. Provide high gain performance for both color and black and white sets. "Quick-Rig" design cuts down installation time. Kit includes: conical antenna; sturdy 5 -foot steel mast; 50 -feet of 300-ohm twin line; 2 mast standoffs; 4 screw-in standoffs; lightning arrester; straps and clamps for chimney mounting. Everything for a first-class TV antenna setup. Shpg. wt., 7 tbs.
92 CX 174.
ONLY 6.45

## t SINGLE BAY CONICAL KIT WITH ROOF MOUNT

Same as above, but with a universal-angle roof mount. Shpg. Wt. 6 lbs. 92 CX 135.

ONLY 6.25

## to TWO-BAY CONICAL KIT WITH CHIMNEY MOUNT

Complete 2-bay Knight antenna kit for es* cellent near-fringe VHF TV reception. Includes all of the accessories listed with 92 CX 174 above, but with two $5-\mathrm{ft}$. masts. Shpg. wt., 10 lbs .
92 CX 173.
Onty 8.95

## th TWO.BAY CONICAL KIT WITH ROOF MOUNT

As above, but with a universal-angle root mount. Shpg. wt., 9 lbs.
92 CX 133.
ONLY 8.25

## t SINGLE-BAY ANTENNA ONLY

Above single-bay, but less all accessories. Shpg. wt., 3 lbs
92 CX 136.
ONIY 2.65
STACKING KIT. To stack 2 single-bay conicals into 2 -bay array. Wt., 8 oz .
92 CX 116.
ONIY. 65
STACKING KIT. To stack two 2-bay conicals into 4-bay array. We.. $11 / 4 \mathrm{lbs}$.
92 CX 115.
Onty 1.55


\author{

- Absolute Flat Response for Color and Black-White TV Reception
}
- Gold Corodizing, 100\% Protective Surfacing on Aluminum Antennas


## TWIN-DRIVEN "GEOMATIC" VHF ANTENNAS

\author{

- High Gain-Sharp Directivity - Boom Suspension-Heavy Duty
}
- Pre-Assembled for Easy Set-Ups Flat Response for Color Reception $\star \star \star \star$ MODEL GB-8-125 Miles. Deluxe, gold-corodized aluminum unit with 3 direc. tors and 2 reflectors for top-notch deep-fringe performance. Exclusive "Fidelity Plasing" simplifies design; gives in-phase colinear currents for greater signal gain. Less mast, lead-in. Shps. wt.. 10 lbs
92 CZ 594. List. \$43.25. Shipped by Truck or Express Only.
net 25.43
$\star \star \star \star$ MODEL B.8-125 Miles. As above. but without gold corodizing. Wt., 10 lbs . 92 CZ 085. List. \$39.00. Shipped by Truck or Express Only............... NET 22.93 $\star \star \star \star$ MODEL B-7-125 Miles. Has same features as Model B-8 above. but with 1 reflector instead of two. Shpg. wt., $61 / 2 \mathrm{lbs}$.
92 CZ 093. List, $\$ 25.90$. Shipped by Truck or Express Only............... NET 15.23
$\star \star$ MODEL B-6-85 Miles. Same as Model B-8, but has 1 reflector, 1 director. $51 / 2 \mathrm{lbs}$.
92 CU 094. List, \$19.65. Shipped by Truck or Expiess Only.
NET 11.55

- Lefs You Use One Antenna-

One 300 -ohm Twin line

- High Sensilivity and Directivity $\star \rightarrow+$ MODEL 400.A- 125 Miles. A deepfringe double co-lateral antenna for outstanding reception on all UHF and VHF TV channels. 32 driven elements achieve extremely high gain. directivity and signal-to-noise ratio. Permits excellent reception on VHF channels at distances of 125 miles and more. Lightweight construction weighs only 8 Jbs. Element brackets selflocking and self-aligning. Rugged allaluminum construction and stainless steel hardware. Only one lead-in required (tubu(minimum) mast. (minimum) mast. Less mast and 300 -ohm line. Wt., 12 lbs .
92 CZ 269. List. $\$ 43.65$.
NET 25.67

$+\star t+$ MODEL F-4-150 Miles. Super fringe VHF antenna with exclusive "Fidel-ity-Phasing." Produces superior perform ance on all VHF channels from 2 througls 13. Excellent reception even at locations extremely distant from TV stations. Highly suitable for color-TV reception-has very flat frequency response; less than 1 db variation in frequency response on any channel. 4 driven low-band, in-phase folded dipoles. plus 12 driven high-band, in-phase, folded dipoles form a highly effective colinear array. Extremely high sensitivity and directivity. Rugged, lightweight, aluminum construction. Preassembled for quick, simplified installation. Less mast, 300 -ohm twin line. Shpg. wt., 13 lbs.
92 CZ 072 . List, $\$ 47.85 \ldots .$. NET 28.14

1
VHF BROAD-BAND TV ANTENNA KIT

$\star$ MOOEL B-213-60-Miles. Own a low cost compact. twin-driven antenna witl excellent gain on both low and high bands. Modern design provides performance rivalling that of more costly stacked conicals and many yagi-type antennas. "Fidelity-Phasing" assures remarkable reception on both color and black and white. Has extremely narrow pick-up pattern and very high front-to-back ratio. All-aluminum preassembled design. Witlistands icing. Less mast, and 300-ohm twin line. Slipg. wt., 4 Jbs.
91 CZ 396. List, \$11.85....... NET 6.97
-

- $\star$ MODEL B-2135-85 Miles. Same antenna as above, but stacked for extra gain Shpg. wt., 6 lbs.
\| 91 CZ 397. List. \$24.00
NET 14.11


Fully Transistorized

## T-AMB TV-FM BOOSTER/COUPLER

Bring in stations you've hardly been able to receive! Improves reception in fringe and weak-signal areas, and permits signal distribution to up to 4 TV sets or FM receivers. Booster/coupler mounts on antenna; remote power supply uses flashlight batteries. Gain with one FM set is 12 db (a) 108 mc . 15 db (a) 88 mc ; with TV set, gain is 8.5 db on channels 7-13. 15 db on channel 6 , and 17 db on channel 2. Less batteries. below. Power supply. $17 / 8 \times 3 \times 71 / 4{ }^{\prime \prime}$; booster/ coupler, $13 / 3 \times 21 / 4 \times 3^{7}$. Shpg, wt.. $11 / 2$ lbs.
91 C 157 . List, $\$ 29.95 \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~$
. Net 18.62
91 C 276 . AC Version of Above. List. $\$ 34.95$.
5
. .NET . 14

## STACKING KITS

MODEL A. For stacking all Series B antennas, above. Gives increased gain on Channels 3, 7-13 with Models B-6, B-7: Chs. 7 through 13 on all other models. Shpg. Wt., 8 oz 92 C 086 . List, $\$ 2.10$.

NET 1.23
MODEL C. For stacking GB-8, B 8, B-7, or B-6. Gives increased gain on Chs. 2-6 with Model B-6; Chs. 2-6. 11-13 with B-7; Chs $2-6,10-13$ with $8-8$ and GB-8. Wi., 1 ib.
92 CX 087 . List. $\$ 3.10$.
"GEOMATIC" TWIN-DRIVEN 2-BAY VHF ANTENNAS


## Net $24^{34}$

\$5 monthly

* $\star$ MODEL B-6 $6 . A$. Deep-fringe antenna featuring very great front-to-back channels. "Fidelity Phasing" efficiently combines the low-band tolded dipole operation and light-band 3-element colinear operation tolded dipole operation and high-band 3-element colinear operation
without complicated phasing harnesses-assures correct impedance match, too. Preassembled for surprisingly simple installation. Less mast and tivin line. Slipg. wt., 10 lbs .
92 CU 568. List. \$41.40, Shipped Truck or Express. NET 24.34
MODEL B.66-C. For maximuin front-to-back ratio on channels 2 and 3. and maximum gain on 2-6. Slipg. wt., 10 lbs.

92 CU 569. List. \$12,40. Shipped Truck or Express. NET. 24.93

- Offer Maximum Gaìn Per Element - Solid Rod Construction-10 Times stronger than Tubing
- Complete Instruction Sheets



## METROPOLITAN TV-FM ANTENNAS

GOLD-CORODIZED TYPE. 5 -elements for TV - 3 for high-band and 2 for low band; plus an all-directional hato for pickup of FM stations within 20 miles. No switches, no couplers needed-2 lead-ins let you enjoy both sources in different roomsl Less mast and twin line. Shpg. wt., $31 / 2 \mathrm{lbs}$.
92 CX 367 . List, $\$ 15.95 \ldots .$. . NET 6.67 92 CX 368. Non-Corodized. As above. plain aluminum. $31 / 2 \mathrm{lbs}$. List. $\$ 12.95$. NET. 5.85

## SEMI-FRINGE TV-FM ANTENNAS

GOLD.CORODIZED TYPE. 14-elements for TV -10 for high-band and 4 for low-band; combined with a directional 3-element yagi for FM reception within $40-45$ miles. One compact antenna makes possible sharp color. black and white pictures-plus the finest in FM sound. Less mast, line. 5 lbs. 92 CU 370. List, \$20.00. $\qquad$ 92 CU 371. Non.Corodired. As above, plain aluminum. 5 lbs. List. $\$ 17.95$.. NET 10.55

## FRINGE-AREA TV-FM ANTENNAS

GOLD.CORODIZED TYPE. 20 twin-driven elements for TV- 15 for high-band, 5 for lowband; along with a directional twin-phase 4 -element yagi for FM up to 75 miles. Longlasting corodized finish prevents corrosion. Preassembled for easy installation. Less mast and twin line. Wt., 8 lbs.
92 CU 373. List, \$37.50.... . NET 22.05 92 CU 382. Non-Corodized. As above. plain aluminum. 8 lbs. List. $\$ 33.95 .$. NET 19.96

## "GEOMATIC" FRINGE-AREA TV ANTENNAS

High-quality yagi TV antennas for superfor black-and-white and color reception in fringe areas. Feature durable, aluminum construction for dependable performance and resistance to weather extremes. Provide maximum gain, sharp directivity pattern, flat frequency response, and high front-to-back ratio.

SINGLE-CHANNEL YAGI VHF TV ANTENNAS

| Stock No. | Model | Channel | List | EACH |
| :---: | :---: | :---: | :---: | :---: |
| 92 CU 387 | Hi4-7 | 7 |  |  |
| 92 CU 388 | H14-8 | 8 |  |  |
| 92 cu 391 | H14-9 | 9 |  |  |
| 92 CU 393 | H14-10 | 10 | 22.95 | 3.49 |
| 92 CU 399 | H14-11 | 11 |  |  |
| 92 cu 400 | H14-12 | 12 |  |  |
| 92 CU 401 | H14 13 | 13 |  |  |
| $\star \star \star \star$ MODEIS YIO AND HIO. Ten element units. Av. shpg. wt., $41 / 4$ lbs. |  |  |  |  |
| Stock No. | Model | Channel | List | EACH |
| 92 CU 236 | Y10-2 | 2 | \$22.20 | 13.05 |
| 92 CU 237 | Y10-3 | 3 | 21.65 | 12.73 |
| 92 CU 238 | Y 10.4 | 4 | 20.55 | 12.08 |
| 92 CU 240 | Y10-5 | 5 | 19.55 | 11.50 |
| 92 cU 241 | Y10-6 | 6 | 18.80 | 11.05 |
| 92 CU 552 | H10-7 | 7 | 9.95 | 5.85 |
| 92 cu 553 | H10.8 | 8 | 9.95 | 5.85 |
| 92 Cu 554 | H10-9 | , | 9.95 | 5.85 |
| 92 CU 555 | H10-10 | 10 |  |  |
| 92 CU 556 | H10-11 | 11 | 9.95 | 5.85 |
| 92 CU 557 | H10-12 | 12 | 9.95 |  |
| 92 CU 558 | H10-13 | 13 |  |  |

$\star \star$ MODELS Y5 AND H5. Five element units. Av. shpg. wt., 2 lbs.

| Stock No. | Model | Channel | List | EACH |
| :---: | :---: | :---: | :---: | :---: |
| 92 CU 242 | Y5.2 | 2 | \$11.05 | 6.50 |
| 92 Cu 243 | Y5-3 | 3 | 10.77 | 6.33 |
| 92 CU 244 | Y5-4 | 4 | 10.42 | 6.13 |
| 92 CU 245 | Y5-5 | 5 | 9.72 | 5.71 |
| 92 CU 251 | Y5-6 | 6 | 9.31 | 5.48 |
| 92 CX 560 | H5-7 | 7 | 6.65 | 3.91 |
| $92 \mathrm{c} \times 561$ | H5-8 | 8 | 6.65 | 3.91 |
| $92 \mathrm{c} \times 562$ | H5-9 | 9 | 6.65 | 3.91 |
| 92 CX 563 | H5-10 | 10. |  |  |
| 92 CX 564 | H5-11 | 11 | 6.65 | 3.91 |
| 92 CX 565 | H5-12 | 12 | 6.65 | 3.91 |
| 92 CX 566 | H5-13 | 13 |  |  |

MODEL A STACKING KIT. For all Finney H5 and H10 antennas; H 14-713. H10-713. and H6-713. Shpg. wt., 8 oz.
92 C 086. List, \$2.10.....
net l. 23
MODEL B STACKING KIT. For stacking all Finney Y5 and Y10 single-channel an tennas. Shpg. wt., 8 oz.
92 CX 075 . List, $\$ 2.60$
..net 1.53
model C stacking kit. For stacking Model Lantennas, below. Wt., 1 lb . 92 CX 087. List, \$3.10........ .NET 1.82

| Areo | Stock No. | Model | Boom | Elements | Wi. | List | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| * * 大 | 92 CU 402 | H14-713 | $15^{\prime} 6^{\prime \prime}$ | 14 | 6 lbs . | \$24.95 | 14.67 |
| 大 ${ }_{\text {+ }}$ | 92 cu 559 | H10.713 | $6^{\prime} 11^{\prime \prime}$ | 10 | $43 / 8 \mathrm{lbs}$. | 12.95 | 7.61 |
| + | 92 cx 567 | H6-713 | $4^{\prime} 10^{\prime \prime}$ | 6 | $23 / 6 \mathrm{lbs}$. | 8.75 | 5.14 |

## $\star \star \star \star$ "GEOMATIC" LOW-BAND ANTENNAS

MODEL L. High gain, sharp directivity and high front-to-back ratio are featured in these "customized" antennas. Designed for outstanding deep-fringe reception an the low band channels-Model L- 26 covers the entire low band; all others cover specific portions. Have preassembled "snap-out" elements; heavy, square aluminum boom. For higher gain, stack with Model C Kit. above. Less mast and 300 -ohm line. Av. shpg. wt.. 81/2 lbs.

| Stock No. | Model | Channels |
| :---: | :---: | :---: |
| 92 CZ 283 | L-26 | $2-6$ |
| 92 CZ 284 | L.25 | 2.5 |
| 92 CZ 285 | L-24 | $2-4$ |
| 92 CZ 286 | L-36 | $3-6$ |
| 92 CZ 287 | L.35 | 3.5 |
| 92 CZ 288 | L-46 | $4-6$ |
| 92 CZ 289 | L-45 | 4 and 5 |

List. \$24.90. NET EACH............... 14.64

for Peak Performance in Remote Signal Areas


Popular, High-Effciency Antenna


For Outstanding Performance on Low-Band Channels

You Can Order Your TV Antenna and Accessories on Allied's Credit Fund Plan NO MONEY DOWN

# JFD VHF TV Antennas-IV Signal Booster 

## JFD ANTENNAS SHRINK THE MILES-FLATTEN THE MOUNTAINS



## \$5 monthly

$\star \star \star \star$ VXIIIIG "Saqteure helx"

- 25 Multi-Function Elements
- Gold-Alodized Aluminum
- High Gain on All Channels

Deluxe unit for superior color or black and white reception in deep-fringe areas. 25 multi-function physical elements operate along with a highly directive micro-wave helical probe to provide sharp directivily and exiremely wide vertical beam width-pinpoints remotest stations and side-steps ghosts and noise. Exceptionally high front-to-back ratios give flawless picture definition-up to 28 db gain on high-band, 25 db on low-band. Alodized finish aluminum (described below), withstands corrosion and
icing. $1^{\prime \prime}$ square boom securely locks to mast: las 2-1" tubular icing. $1^{\prime \prime}$ square boom securely locks to mast: has
braces. Less mast and twin line. Slipg. wt.، 15 lbs.
92 CZ 404. List, $\$ 49.50$
net 29.11

* $\#$ \# MODEL PX91IG "PO WER-MELIX." Similar to Model VX1111G above. but has 22 elements. Special spacing and phasing develops front-to-back ratios of up to 28 db . Gold alodized. Wt. 15 lbs . 92 CZ 191. List. \$36.95

NET 21.73


## SINGLE CHANNEL IO-ELEMENT TYpES

Provide very high gain and sharp directivity for maximum reception in deep fringe areas. Ten elements on a full length, $1^{\prime \prime}$ O.D. crossarm deliver over $111 / 2 \mathrm{db}$.ain- $52 \%$ more signal gain than conventional 5 -element type yagis. Each antenna is designed for best performance on one channel. Y-type boon brace supplied wit h low-band antennas (for channels 2 to 6 ). to give additional support. "AAA Gold-Alodized" to resist effects of weather. Preassembled for surprisingly easy installation. Less mast and 300 -ohm twin line. Av. shipg. wi., 9 lbs.

| No. | PModel | Channel | List | EACH | No. | Madel | Channell | List | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $92 \mathrm{C2} 309$ | 1022 | 2 | \$23.60 | 13.88 | 92 Cz 316 | 1028 | 8 |  |  |
| 92 Cl 310 | 1023 | 3 | 22.90 | 13.47 | 92 CZ 317 | 1029 | 9 | 9.50 | 5.59 |
| 92 CZ 311 | 1024 | 4 | 22.05 | 12.97 | 92 C2 318 | 10210 | 10 |  |  |
| 92 CZ 313 | 1025 | 5 | 21.25 | 12.50 | 92 CZ 320 | 10211 | 11 |  |  |
| 92 CZ 314 | 1026 | 6 | 20.85 | 12.25 | 92 CZ 321 | 10212 | 12 | 9.50 | 5.59 |
| 92 Cl 315 | 1027 | 7 | 9.50 | 5.59 | 92 CZ 328 | 10213 | 13 |  |  |

## "PACE-SETTER" STACKING HARNESSES

Matching harnesses for stacking any of the single channel, 10 -element yagi antennas listed above. for even greater signal gain-needed for distant stations and hilly areas. Gold-alodized. Av. shpg. wt.. $1 / 2 \mathrm{Ib}$.

| No. | Model | Channel | EACH | No. | Model | Channel | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 92 CX 405 | YT2G |  |  | 32 cx 40 | YT5G | 5 |  |
| 92 CX 407 | YI3G | 3 | 1.03 | 92 CX 411 | YTG6 | 6 | . 03 |
| 92 CX 408 | YT4G | 4 |  | 92 CX 412 | YT7136 | 7.13 | 73 |

## "AAA GOLD ALODIZED"

JFD's "Gold Alodized" antennas ore Atractive, Anti-Carrosive, and Alodine Treatedl Keeps your antenna laoking like new-working like new. The process consists of immersing the antenna in a gleaming golden alectro-chemical bath thot actually becomes a permanent part of the aluminum. This coating protects the antenna by preventing corposion or discoloration from atmospheric gases, salt air, dust and soot, and wind or ice. And, this lustrons gold alodizing will never floke, peel or chip-is is as durable as the aluminum to which it is bonded... electrically conductive for maximum signal transfer for terminals. . . . assures best antenna performance.


Engineered to bring sharp. clear pictures to decp-fringe areas. Twin-driven elements. procision cut and spaced directors and reflectors extend high-gain response across VHF band. Increased sensitivity obtained througlı use of loading coils on the director elements. Low silliouette offers little wind resis-tance-gold alodized finisl prevents corrosion. Two braces of $1^{\prime \prime}$ aluminum tubing solidly support $I^{\prime \prime}$ square boom. Driven elements are rugged $1^{\prime \prime}$ and $3 / 8^{\prime \prime}$ dia. tubing. Preassembled. Less mast, lead-in. Shpg. wt. 9 lbs.
92 CZ 195 . List. $\$ 38.75$
NET 22.78

## $\rightarrow \star$ MODEL ANS3OCG "SUPER BLITZ BANSHEE"

15 Elements-Up to 125 Miles-Gold Alodized-Low Silhovelte High performance antenna employing efficient multi-function element design. Features twin driven elements in a super. sensitive broad-band array. Includes two $1^{\prime \prime}$ diameter braces for support. Very simple installation. Less mast and 300 -ohm twin line. Shpg. wt.. 9 lbs. 92 CZ 413 . List. \$35.27.
net 20.74

## th MODEL A.H3OOG "BLITZ BANSHEE"

9 Elements-Up to 85 Miles-Gold Alodized-Low Sthovetre Efficient VHF antenna similar to above. Driven elements are of $1^{\prime \prime}$ round, seamless tubing; have capped ends to prevent wind whistling. Less mast. t win tine. Shpg. wt., 9 lbs . 92 CZ 416 . List. $\$ 24.30$.

NET 14.29

## * LOW-COST VHF CONICAL HINDOW ANTENNA



MODEL GII9G-For up to 40 Miles. Jow-cost. all-aluminum sold alodized conical window antenna for strong-signal areas. Ideal for apartment buildings, hotels. etc.. or wherever roof-top installations are not practical. but where the greater signal gathering power of an outdoor antenna is desired. Provides sharp viewing on all VHF channels- 2 through 13. Extremely simple to Install. Easily fits on the outer frames of most windows-adjustable from $32^{\prime \prime}$ to $42^{\prime \prime}$ in widtlo. Antenna can be adjusted to proper position for best reception. Comes complete with all necessary mounting hardware-ready for quick. convenient installation. Less $300-\mathrm{hm}$ twin line for connection to TV set. Shpg. wt., 7 lbs.
92 CX 081 . List. $\$ 9.73$
. NET 5.71

(iple set operation. With mount-
8) ing hardware; less antenna. For $110-120 \mathrm{~V}$., 60 cycle AC. Shpg. wt. $11 / 2 \mathrm{lbs}$.
91 C 277. List, $\$ 36.95$
NET 24.26

# JFD and All-Channel's TV Antennas and Kits 



Translator UHF TR-1212

4.Bay UHF-VHF Model UNIOS



## TRANSLATOR UHF ANTENNAS

t $t$ MODEL TR1212-Up to 85 Miles. 12 bay UHF antenna designed especially for excellent reception over long distances. Sharply directive and highly sensitive on UHF channels 70-83. Average 14 db gain is obtained from 12 horizontally and vertically wide-spaced and phased "cardioid" dipoles working off an oversized reflector. Features extremely narrow forward lobe-no side or rear lobes. Reflector also shields antenna from undesirable rear signal and noise pick-up-eliminates "ghosts." Has rigidly constructed galvanized wire screen with preci-sion-formed $1 / /^{\prime \prime}$ solid aluminum dipoles. Unitized preassembled construction for quick, easy installation. Less mast and 300 ohm twin line. Shpg. wt., 10 lbs. 92 CZ 172 . List. $\$ 24.95$. NET
14.67
\#MODEL 1206-Up to 40 Miles. Similar to UHF antenna Model TR1212 above, but has 6 wide-spaced and plased "cardioid" dipoles working off an oversized reflector. Provides an average signal gain of $12 \mathrm{db}-$ brings in sharper, clearer pictures for your viewing pleasure. Less mast and 300 -ohm twin line. Shpg. wt. 7 lbs.
92 CU 187. List, \$11.95. NET
7.03

## UHF AND VHF-UHF ANTENNAS

+ UNIOS-Up to 60 Miles. UHF-VHF antenna for channels 2 to 83. 4-bay for extra gain and signal sensitivity for semifringe areas. Features redwood crossarms. Preassembled. Simply swing sections open and tighten. Has anti-rust, anti-corrosion, all-aluminum elements. Less mast and 300ohm twin line. Shpg. wh., $51 / 2 \mathrm{lbs}$.
92 CU 107. List, \$11.60. NET
6.82
$\rightarrow$ MODEL UHF410G-40 Miles. UHF unit with extremely sharp directivity. High front/back and front/side ratio cuts down interference and "ghosts." Twin-angled. multi-grid reflectors trap naximum signal strength, concentrating it in-phase on bowtie dipole. Solid aluminum. gold alodized finished. Easily installed. Less mast, line. 6 lbs.
92 CX 403. List. \$8.35. NET
4.91
* MODEL UHF208-60 Miles. 8-bay. VHF bowtie antenna for semi-fringe area reception. Wire mesh reflector and matched clements provide optimum gain on all channels. Rigidly constructed; solid aluminum rods and galvanized screen. Preassembled for easy installation. Less mast and twin line. Shpg. wt.. 8 Ibs.
92 CU 5 50. List. \$19.95. NET
11.73
$\star+\star$ MODEL UHF212-Up to 94 miles. 12 bay UHF bowtie antenna for fringe area reception. Super-sensitive "cardloid" dipole design provides extremely high gain, averaging 15 db , over all UHF channels, 14 through 83. Screen is engineered for efficient shielding of conical sections-wire grid offers higher signal-to-noise ratios and nolse rejection. Provides sharp directivity; greatly reduces interference and "ghosts." Elec. tronically welded vibration-less assembly is preassembled for swift sinuplified installa. tion. Less mast and 300 -ohm twin line. Shipg. wt., 10 lbs.
92 CU 551 . List. $\$ 33.50$. NET
19.70
* MODEL UHF2O2-Up to 40 Miles. 4-bay vertically stacked UHF bowtle antenna for metropolitan and suburban areas. Gives high gain averaging 8 db on all channelsreduces snow and reflections, "CustomChannel" calibrator peaks individual channels for best response. Precision spaced elements and phasing harness for maximum gain. Galvanized grid wire screen with $1 /{ }^{\prime \prime}$ O.D. solid aluminum rods. Preassembled for fast. convenient installation. Less mast and $300-0 h m$ twin line. Shpg. wi.. 6 lbs.
92 CU 151 . List, $\$ 8.95$. NET
5.26


## ALL-CHANNEL "REMBRANDT" ANTENNA KITS

- All-Direction Pickup
- Handy Switch Autamatically Cannects Praper Element
- Covers Channels 2-13
- Made of Sturdy Aluminum
- Preassembled ElementsQuick, Easy Installation



## thtirt

All-directional. 2-bay antenna complete with all accessories for easy installation. Sixteen $60^{\circ}$ elements provide excellent deep-fringe reception. Convenient 12 -position switch can be positioned at the TV set - selects proper elements for best reception from any direction. Lets you enjoy sharper. clearer viewing with color sets and black and white. Sturdy aluminum construction includes four $45^{\prime \prime}$ stacking bars. Diamond-embossed. $1 / 2^{\prime \prime}$-diameter elements are preassembled-simply fold out for quick set-up. Kit includes: two 5 -foot masts; 100 feet of lead-in; 3 mast insulators; 5 wall insulators; and chimney mount. Shpg. wt., 15 lbs.
92 CU 137. $\$ 5$ Monthly. Shipped by Truck or Express Only
net 32.92
"RIVIERA" ANTENNA AND SWITCH. As above, but less mast and all installation accessories. Shpg, wt., 10 lbs . 92 CU 351 . $\$ 5$ Monihly. NET
19.85

WIRE FOR "RIVIERA." 4-conductor lead-in. Wt., per 100 ft., 2 lbs.
47 TX 589. 100 -fs. Coil. NET ..... 8.90 47 W 599. Over 100 fs, PER 100 гT. 8.90

## * ${ }^{*}$ 2-8AY "AILAS" Vhf Kir

UP 1085 MilES. Near-fringe antenna with eight $45^{\prime \prime}$ fip-out elements (preassembled) in each of 2 bays; plus four $45^{\prime \prime}$ stacking bars. Supplied complete with same 12 -position selector switch featured in the "Riviera" kit, described above. Has $1 / 2$-diameter elements, tiamond-embossed for extremely efficient signal pickup. Can be used for color TV reception, as well as black and white. Kit includes: 70 feet of flat transmission line. Iugged and wired to the antenna; two 5 -foot mast sections; 4 standoff insulators; and $4^{\prime \prime}$ wallmount brackets. Shpg, wt.. 14 lbs. 91 CU 337.85 Monthly. Shipped by Truck or Express Only. NET
22.45




## INLINE VHF ANTENNAS

*MODEL 114-005. For all VHF channels. Ideal for metropolitan and suburban use. Unusually broad frequency response. Uni-directional pattern and excellent Impedance match on high and low-bands reduces stray reflections and "ghosts." Antenna elements constructed of sturdy aluminum tubing. Mast is heavy-gaugesteel. Includes one $5^{\prime} x^{3} / /^{\prime \prime}$ mast. guy ring. mounting bracket, hardware. stand-off insulators, 75 feet of high quality $\mathbf{3 0 0}$-ohm twin line. Shpg. wt., 7 lbs. Truck or Express only.
92 CU 300. List, $\$ 21.85$. NET
13.13
*MODEL 114-009. Same antenna as 114-005 above. but less 300 -ohm tu'in line. Shpg. wt., 6 lbs. Truck or Express only.
92 CU 301. List. $\$ 19.25$. NET.
11.55
$\star$ MODEL 114-040. Same as $114-005$ above, ess mast, twin line and stand-off insulators. Shpg. wt., 5 libs. Truck or Express.
92 CU 303. List, \$15.75. NET.
9.45

## INLINE STACKED ARRAY

$\star$ MODEL 114.314 - 80 Miles. Ruggedly constructed, 2-bay stacked antenna. Consists of a top and bottom bay properly phased for all VHF channels. Each bay consists of 2 folded dipoles and a low-band reflector element. and is similar in construction and performance to Model 114 -005 inline antenna shown above. Low-band folded dipole of each bay acts as reflector for highband dipole when receiving channels $7-13$. Less 300 -ohin line and $10-\mathrm{ft}$. mast. Slipg. wt., 12 lbs. Truck or Express.
92 CU 302. List. \$32.50. NET
. 19.50

## TELCO "IMPERIAL" VHF TV ANTENNAS



Barrier Disc
Insulator

- Excellent Directivity and Sensitivity
- Resist Salt, Moisture, Soot, etc.
- Provide High Gain on All VHF Channels
* MODEL A8126. Extremely popular "Imperial" 2-bay VHF conical antenna for all TV channels. Advanced design provides very high gain on all charnels in fringe and high signal strength areas under all kinds of weather conditions. Has excellent directivity and sensitivity- provides unusually clear picture reception. Employs weather-proofed terminal structure.
The "Imperial" can be used in sea coast or heavy industrial areas. Features a barrier disc type insulator with $2^{\prime \prime}$ of air space between the terminals. Salt, moisture, soot. corrosion. etc. will not affect the gain or picture quality. Contact surfaces and terminals will never. rust or oxidize. Stainless steel. front-end hardware prevents signal losses through corrosion.
Front-end elements are pre-assembled to holding plates which fasten to insulator with one wing nut. Just fold elements in place and fasten wing nut. Less twin line and mast. Shpg. wt.. 8 lbs .
92 CU 346. NET
10.73
$\rightarrow$ MODEL A8124- 40 Miles. Same as above, but single-bay. Slipg. wt.. 4 lbs.
92 CU 350 . NET
5.06

MODEL A8126-1 STACKING KIT. For stacking two Model A8i24 single-bay antennas. With all hardware. Shpg. wt.. I lb.
92 CX 120 . NET

TACO UHF TRANSLATOR ANTENNA



3088 T Stocked

- Eosy-to-Install; Preassembled
- Uses Solid Rod Phosing Lines
-MODEL 30881-40 Miles. Horizontally stacked, eight bay bow-tie designed for ETV and tramslator frequencies. Large reflector screen increases capture area and front to back ratio for peak Derformance. Reinforced screen edge and rigid element positioning for high stability. Provides 18.5 db gain on translator channels 70 to 83 . With stacking line, hardware, instructions; less mast and twin line. 7 lbs
92 CZ 207. NET
11.73
$\star \star$ MODEL 3088 STACKER- 60 Miles. Two Model 3088 T eight-bay UHF translator antennas. described above. but stacked vertically for an additional 3 to $5-\mathrm{d}$ b increase in signal pick-up. Total gain is from 21.5 to 23.5 db Shpg, wt.. 14 lbs .
92 CZ 216 . NET
24.40

$\star \star$ *MODEL 1007. This "Wavebooster" VHF antenna utilizes 7 folded dipole elements for increased signal gain and greater mechanical stability. Provides excellent color and black and white reception on all channels from 2 to 13. Elements are designed for decreasing impedance from fesd point to front end-each element receives an equal amount of current for maximum total gain. High front-to-back ratio and close line impedance match provide sharp. clear pictures-very effective in minimizing ghosts and interference.
Has "snap-lock" design for quick, easy installation. Unique, "quadro-grio" U-bolt assembly secures antenna to mast 4 timesprevents turning and slipping. Less mast and 300 ohm line. Shpg. wt. 16 lbs.
92 CZ 197. List. $\$ 14.30$. NET....
26.05
* MODEL 1005-85 Miles. Similar to 1007 above. but 5 dipole elements. 12 lbs. 92 CZ 198. List, \$31.40. NET...... 18.46


# Knight, Finney and Amphenol FM Antennas 

KNIGHT FM ANTENNA KITS


## ALL-DIRECTIONAL KNIGHT FM KIT

A top-quality FM antenna kit at a moneysaving price. Two folded dipoles mounted at right angles to each other provide uniform sain from all directions. Eliminates need for rntator. Excellent response across the entire FM band. Elements constructed of heavy walled, extruded aluminum for maximum weather resistance.
Complete kit includes: rugged $5-\mathrm{ft}$. mast; 50 feet of 300 -olim twin line; sturdy. universal mounting base; 1 mast stand-off in sulator: and other necessary liardwareat one low price. Instructions included for easy assembly. Shps. wt., $71 / 6 \mathrm{lbs}$.
-2 CU 583.................... Onty 6.17
92 CU 590. Antenno Only. As above, but less accessories. Shpg. wt.. 3 lbs. ONLY 4.35
 on any existing TV mast.
fect for attic or closet installations. Kit includes: $50-\mathrm{ft}$. of 300 ohm lead-in; 4 screweye standoff insulators; mast standoff; directions. Shpg. wt., $31 / 2$ tbs.
92 CX 015
ONLY 3.25
92 CX020. Antenna Only. As above, but less accessories. Slipg. wt. 3 lbs . ONLY 2.10

## AMPHENOL $114-010$ FM ANTENNA KIT

Dipole
Design
Provides gain equal to that of an efficient folded dipole across the entire FM band, 88 to 108 mc . Widely used where statlons are received from many different directions. Elements are of $3 / 8^{7}$ O.D. aluminum tubing to resist weathering and corrosion.

Receives FM Stations From All Directions Antenna is ruggedly constructed to withstand high winds and icing. Employs 2 folded dipoles mounted at right angles to achieve an essentfally circular pickup pattern. Quarter wave phasing stub precisely matches both elements to $300.0 h \mathrm{~m}$ twin line. Includes convenient, universal, swivel-type mounting base bracket for simplified mounting of antenna on flat or sloping roofs; 75 feet of 300 -ohm twin line; all hardware, and sturdy $5-\mathrm{ft} . \mathrm{x}^{3 / 4^{*}}$ O.D. mast. Wt.. 7 Jbs .
92 CU 292 . List, $\$ 18.25$
NET 10.95

Popular TV and FM Antennas


A sensitive, all-direction FM alleenna kitat an exceptionally low price. "Stereo Cone: turnstile design insures optimum signal strength from stations in all direc-tions-greatly improves $F \mathbf{M}$ multiplex reception. Gold alodized aluminum weatherresistant construction. Completely preassembled for easy installation. Kit includes antenna, $\mathbf{5}$-foot aluminum mast, steel guy ring and wire, universal base mount for wall or roof. 4 standoff s. 50 feet of 300 -olim line. and all hardware-everything you need for a professional quality installation1 Shpg. wt.: $51 / 2 \mathrm{lbs}$. $91^{\circ} \mathrm{CX} 987$. List. \$15.95...... NET 9.38

## AFM-175G-75 MILES

As above, but for mounting all-directional antenna on existing TV antenna mast. With gold alodized curnstile antenna and sup porting mast. ' 2 sets of $U$ bolts, brackets. $50^{\prime}$ of 300 ohm $t$ win line, 4 stand-offs, and all necessary mounting hardware for surpris insly simple installation. 4 lbs. 91 CX 219. List, $\$ 13.95$.

NET 8.20

## TACO FM ANTENNAS



6448 G-ELEMENT FM ANTENNA
Single-bay. 6-element yagi for top FM performance in weak signal areas. Unidirectional design. High F/B ratio. Up to 9 db gain. Completely assembled. Elements swing out-lock in place. Less mast. $\mathbf{3 0 0}$-ohm twin line. Slipg. wt., 7 lbs.
$92 \subset 2546$. List, $\$ 21.20$. NET 12.72
610 10-ELEMENT FM ANTENNA Single-bay, 10 -element yagi for longdistance FM reception. 8 to 10 db gain. Sharp directivity-extremely high F/B ratio. Simplified installa. tion, arms swing out-lock in place. Less mast. 300 -ohm twin line. Shpg. wess. $101 / 2 \mathrm{jbs}$.
w゙l., $10^{1 / 2}$ lbs.
9247 . List, $\$ 30.70$. NET 18.42
646 STACKING KIT. Phasing line, insulators. hardware for stacking two 644 B or 610 antennas. 1 lb .
92 CX 548 . List. $\$ 2.80$...neT 1.68


## K-G DELTA-BEAM UHF-VHF ANTENNA

- 6-Position Switch
- Tip.Proof Base
- Compaci Design
- Easy-to-Install

An efficient all-channel indoor antenna providing excellent reception on all VHF channels 2 through 13 and UHF channels 14-83. Six-position switch matches line impedance, tuning antenna to match receiver input. Also has highly effective "ghost" chasing switch. Dipoles are easily adjusted to the length and angle providing reception for the best picture, Has tip-proof brown bakelite base. Size $9^{\prime \prime}$ high; each arm extends to $15^{\prime \prime}$. Supplied with 6 feet of win line. Shpg. wt., $21 / 2 \mathrm{lbs}$. 92 CO 13.
.net 5.85

## TRICRAFT VHF ANTENNA KIT



Highly efficient VHF indoor antenna for bringing in sharp. clear pictures in metropolitan areas. Carefully engineered helix coil, mounted on sturdy. mahogany plastic base. For channels 2-13. Minimizes "snow," "ghosts," and interference. Requires no adjustment. Tip-proof base. Height. $14^{\prime \prime}$; width, 32". Easy to assemble. With 6-ft. of twin lead. Shpg, wt., 2 lbs.
92 CX 126.


## KNIGHT VHF ANTENNA

## Popular indoor antenna for FM

 and TV channels 2 to 13. Effi: clent, time-proven "rabbit ears" design-adjust easily for clear picture with a minimum of "gliosts" and interference. Uses sturdy. 3-section, brass-plated telescoping elements for convenient adjustment to desired length. Tip-proof porcelain base is felt padded. With $3 \cdot f \mathrm{f} .$. twin line. Slipg. wt., 2 lbs. 92 CXO25...... ONLY I. 24hloco unf.vhe antinnas


MODEL 202. UHF-VHF SPIRAL-TENNA. Popular indoor TV antenna for excellent gain on UHF.VHF bands. Minimizes "ghosts" and interference. Gold finish. Tip-proof basc. Height $14^{\prime \prime}$ : width $32^{\prime \prime}$. With $6-f t$. twin line attached. Shopg, wt., 2 lbs.
92 CX 127.
NET 5.85
MODEL 101. VHF. As above, but VHF only. 92 CX 118.

NET 5.24

## FM TWINLINE ANTENNA



Ideal for use where outdoor installation is not practical
Unusually low.cost, folded dipole type an. tenna designed for FM reception. Ideal as concealed indoor antenna where outdoor antenna instaliation is nol feasible. Simply place under rus. behind hi-fi equipment cabi-net-in any out-of - the way location. Consists of 300 -ohm twin line with 6 -feet of lead-In wire. Shpg., wt.. 6 oz.
92 C 019.
NET .99

# Indoor TV and FM Antennas 

## JFD INDOOR ANTENNAS

TA-147 VHF-UHF ANTENNA Features smart styling and outstanding. performance. Has high signal gain; minimizes interference and ghosts. 6 position switch, and 4-section brass dipoles permit adjustment for clearest picture. Elements extend to $38^{\prime \prime}$ Weighted base with felt pad. With twin

line and terminals. Wt., 2 lbs. $92 \mathrm{CX1} 124 \ldots \ldots . . . . .$. ............. 2.70

## TA-149 UHF

 ANTENNATwin-bowtie di poles and screen reflector provide excellent reception on channels 14 to 83. Gold alodized. Tip. proof base. Includes 300 -ohm twin lead. tipped with spade lugs. HWD. $12 \times 12 \times 6$ 92 CX 598.


## "MERLIN" VHF-UHF ANTENNAS



Efficient indoor antenna that provides excellent TV reception. Mounts with only 12 position selector switch and elements in view. 4 -section elements have $360^{\circ}$ swivel bases to permit positioning for best reception. Elements extend to $38^{\prime \prime}$; telescope conveniently out of sight. Lustrous plastic construction blends well with styling of any TV set. Attaches easily to back of set with screws supplied. Includes 300 -ohm twin line with spade lugs. Shpg. wt., $11 / 2$ lbs. 92 C 572. Model L20. Mahogany. 92 C 573. Model llo. Ivory. NET EACH.
5.30

## G-C TELCO

## VHF ANTENNA

Compact, plastic-cased "hide-a-way" antenna. For excellent all-channel metropolitan-area reception. Telescoping elements of durable, nickel-plated brass tubing. mounted on balljoint swivels; rotate $360^{\circ}$. 5 -section elements extend to $37^{\prime \prime}$; retract out of sight when not in use. With spade-lugtipped 300-ohm twin


## JFD PORTABLE TV EXACT-REPLACEMENT ANTENNAS



Altied can suply peplacement antennas for most portable TV sets. If not llated below. Affed cansupply replacementantennas know the Make and Model Numbor your set. Av. shpg. wt.. $3 / 4 \mathrm{lb}$. ADMIRAL MAGNAVOX

| Stock No. | $\begin{aligned} & J F D \\ & \text { Typo } \end{aligned}$ | Orig. Mfg. Part No. | ENET |
| :---: | :---: | :---: | :---: |
| 916374 | TA155 | For all Admiral 1956-57 sets | 2.54 |
| 91 C 166 | TA361 | $69 \mathrm{C} 220-1$ and $69 \mathrm{C} 220-5$ |  |
| 91 C 167 | TA370 | 69 C 238.1 $69 \mathrm{C} 234-1$ | 3.67 3.67 |
| 1 C 168 |  | 69 C 234 |  |
| EMERSON |  |  |  |
| 91 C 376 | TA360 | 471090 | 4.50 |
| $91 C 377$ | TA442 | 471003: $471069 ;$ 471076; 471146 | 2.16 |
| OENERAL ELECTRIC |  |  |  |
| 91 C 377 | TA442 | For 1956.57 sets |  |
|  | TA 360 | (sold less ant | 4.16 |
|  | TA362 | P1255590-2 | 5.73 |
| 91 <br> 91 <br> 91 | TA 363 | P1251590-1 | 5.73 4.50 |
| 91 C 200 | TA387 | W183816.19-28-29 | 4.50 |
| PHILCO |  |  |  |
| 91 C 170 | TA385 | 76-10734-3 |  |
| 91 C 174 | TA386 | 76-11538-1 | 3.18 |


| MAGNAVOX |  |  |  |
| :---: | :---: | :---: | :---: |
| Slock No. | $\begin{gathered} \text { JFD } \\ \text { Type } \\ \hline \end{gathered}$ | Orig. Mig. Part No. | ENET |
| $91 \subset 375$ | TA359 | $1957.588^{17^{\circ}}$ sets $1959.7^{\circ}$ and $21^{\circ}$ sets | 2.65 |
| MOTOROLA |  |  |  |


| 91 C $375 \mid$ TA359 | 1 V740989 and |
| :--- | :--- | :--- |
| TK76 |  |$| 2.65$


| CA |  |  |  |
| :---: | :---: | :---: | :---: |
| 91 c 375 | TA359 | 973447 | 2.65 |
| 91 C 175 | TA369 | 962344-1 thru 10 | 4.85 |
| 91 C 202 | TA398 | 109-139 | 2.86 |

SILVERTONE-SEARS

|  |  |  |  |
| :---: | :---: | :---: | :---: |
| 91 $C$ 375 <br> 91 $C$ 76 | TA359 | $82-116-0$ $82-127-0$ | 2.65 4.50 |
| 91 c 176 | TA383 | $\left\{\begin{array}{l} 82-12 f-0 \\ 82-133-0 ; 82-139-0 \\ 82-164-0 \end{array}\right.$ | 5.31 |

WESTINGHOUSE
91 C $374 \mid$ TA155|1956 and 1957 sels 12.54
ZENITH

$9{ }_{9}$ C 203 TA402 S50123
3.67
4.09


Economical TV.FM indoor antenna that produces excellent results when used in locations up to thirty miles from station. Actually a full-size conical antenna projected on a flat surface $52 \times 12^{\prime \prime}$ in size. Extremely convenient where use of an outdoor antenna is impractical. Designed for use in attics. on garage or utility room ceilings. beneath rugs. on walls, under sofas, etc. Antenna elements are deposits of finely powdered pure silver in plastic binder, imprinted on a tough. flexible, fibrous sheet. Recommended for use at the highest practical level within the home (away from metallic plumbing and lieating systems). Very simple to install-just set it in position that provides best reception-tack it and forget it. Since it is not exposed to the weather, it will last for years. Gain characteristics are similar to those of standard outdoor conical antennas. Supplied complete with

line. Shog. wt., 1 lb.
92 C 029.
.NEt 1.71

## Blonder-Tongue TV-FM Amplifiers, Distribution Systems

VHF TV-FM
High-Gain
Amplifier
NET
$\$ 4258$
$\$ 5$ monthly


## TV-FM BOOSTERS AND DISTRIBUTION SYSTEMS

## MODEL HAB VHF AMPLIFIER

- 25-db Gain Channels 2-13 and FM Band
- Use in the Home, Apartments, Hotels
(A) Efficient, high-gain VHF television and FM ampilifer. Provides more than 25 db xain on all channels from 2 to 13, and on the FM band. Ideal as a preamplifier for home or small master TV antenna systems. Permits brighter, sharper pictures and increases number of TV stations set can pick up. Uses one 6DJ8 and two 6EJ7 tubes to provide higliest possible signal-to-noise ratio with maximum reliability and long life. Features stripless 300 -ohm terminals and 75 -olm solderless coax connectors for input and output-can use 300 -ohm tivin line or 72 -ohm coaxial cable.
In compact, sturdy. ventilated metal cabinet. $6 \times 53 / 4 \times 43 / 8^{\prime \prime}$. For $110-120$ v.. 60 cycle AC. Shpe. wt., $41 / 2 \mathrm{lbs}$.
93 C 078. List, $\$ 72.75$.
NET 42.58


## MLA-B VHF TV SIGNAL AMPLIFIER

(B)
The "Masterline" VHF TV slgnal amplifier. Provides an effective signal boost of not less then 40 db . Assures maximum output of 2 volts rms on each band-flat within .75 db . May be installed in coax line going to single TV set, or used with antenna distribution system in installations feeding 100 or more TV sets from a single antenna. Units may be cascaded when extremely long transmission lines are used.
Offers maximum fidelity for color TV as well as black-and-white sets. Gain is adjustable on high and low bands. Response flat within $\pm .5$ dh over any 6 mc channel.
Cascode circuits assure minimum noise level. 75 ohm coax input and output connectors. 7 tubes. $9 \times 6 \times 5^{\circ}$ deep. Perforated gray AC. Shpg. wet. For $110-120$ volts, 60 cycle AC. Shpg, wt., 9 lbs .
92 C 090. List, $\$ 142.50$.
NET 83.79

## BT-3 VHF TV-FM AMPLIFIER

©All-transistor VHF TV-FM amplifier. Broadband circuit design for use with color as well as black-and-white TV. Highgain, low-noise amplification makes it ideal as preamp in large master systems, or as amplifier in smaller systems. Two inputs permit separate high and low band antennas; also has combined high and low band inputs. Has monitor jack for system checking without interrupting service. Solderless 75-ohm coax connectors. $15-18 \mathrm{db}$ low-band kain; 19 db on high band. Output: 0.7 v . with $1 \%$ cross modulation (total of both bands). $4 \times 9 \times 41 / 2^{\circ}$. For $110-120$ v., 60 cycle AC; also has input socket for 22 volt battery supuly. Shpg. wt., $23 / 4$ lbs.
93 C 358. List. $\$ 79.95$.

## "PACEMAKER" TV-FM AMPLIFIER

(D) Superior-quality broadband amplifier for use with TV and FM sets-brings very weak signals up to full reception level. Minimum gain is a full 35 db for all TV channels 2 through 13, and 30 db on the $F \mathrm{M}$ band. Has separate antenna inputs for ligh TV band. FM, and low TV band; jumper is provided to permit combined high-low-F M input for use with all-band antennas.
Tubes and components are conservatively operated for long, trouble-free use. Noise is better than 6 db down for low-band and FM; 7 db down for the high band. Output to TV set is 2 volts (totai of all carriers) on low band and FM; 2 volts on high band. Amplifier is well ventilated, completely covered and tamper-proof. Coaxial input and output connections. Size, $43 / 4 \times 12 \times 4^{\prime \prime}$. For operation from $115-120$ volts, 60 cycle AC. Shpe. wt. 5 lbs.
91 C 255 . List, $\$ 102.10$
NET 63.45

## DA8-B VHF DISTRIBUTION SYSTEM

(E)A versatile, combination booster and iso-lation-distribution system for use with up to 8 TV sets. Features exclusive lownolse all-triode circultry. Ideal for use in small apartment buildings, hotels, motels, etc. Permits operating up to 8 TV sets from a single antenna. 22 db rinimum isolation between outputs. Provides 10 db sain to each TV set to assure full-strength signals. System overload is prevented through a 10-1 gain control range. Has inputs for $75-$ or 300 -ohm line. Eight outputs accommodate 75 - or $300-0 h m$ line; one of these outputs may be used to feed another DA8-8 to permit hook-up of additional TV sets. Unit includes power supply, terminating resistors and grounding clamp. Screw terminals permit fast installation. $5 \times 9 \times 51 / 2$. For $110-120$
$\mathbf{v} ., 60$ cycle $A C$. Shpg. wt., 6 bs . v., 60 cycle AC. Shpg. wt., 6 jbs.

91 C 248 . List, $\$ 99.50$.
NET 58.80

## NEW IT-4 TV-FM BOOSTER-COUPLER

(F) N
New, improved transistorized TV-FM booster for the home. Delivers amplified ( 3 to 6 times stronger), noise-free signals to up to 4 TV and /or FM sets on the same antenna. All-transistor circuitry provides low power drain, minlmum maintenance. Isolated outputs preveņt interaction of sets. provides true $\mathbf{3 0 0}$-ohm impedance to each set. Input impedance is matched to antenna impedance-no separate balun needed. Noise figure: minimum of 4 db . Easy to install, stripless terminals make solid electrical connection with the turn of a screw. Needs no adjustment. Size, $11 / 2 \times 61 / 4 \times 31 / 4^{\prime \prime}$ For operation from $110-120 \mathrm{v} . \mathrm{O}_{6}$ cycle AC Shpg. wt.. 1 lb .
91 C 261 . List. $\$ 33.00$
NET 19.40

## B24-C TV-FM BOOSTER-COUPLER

G) Highly efficient booster-coupler. Per mits using a single TV antenna with up to 4 TV or FM sets. Provides excellent isolation between sets for minimum interac, tion. Boosts signal strength of VHF statlons up to 10 db when using just one set, up to 5 db with two sets; gives unity gain with four. Wide response assures excellent color TV and FM performance. Low-noise broadband circuit requires no tuning. Quickly, easily installed-simply attach to antenna terminals. Compact chassis may be installed at rear of one of sets. 300 -ohm input and output, $33 / 4 \times 61 / 4 \times 21 / 2^{\circ}$. For 110 $120 \mathrm{v} ., 60$ cycle AC. Wt., $11 / 2 \mathrm{lbs}$. 92 C 342 . List, $\$ 24.95$.

NET 15.63

## MODEL BTA TV-FM BOOSTER

G A budget-priced TV-FM booster depictures and improve FM reception. This extremely compact unit boosts TV signals 7 to $9-\mathrm{db}$ when used with a single set. Gain on FM band, 4 to 8 db . A 2 or 4 -set coupler is required when used with more than one set. Has on-off switch, simple stripless screwdriver connections for quick hoolsup. Input and output impedance. 300 ohms. Uses single 6FY5/6FQ5 tube. Size, $21 / 2 \times 61 / 4 \times 31 / 4$. For operation from $110-120$ v $4 / 20$ cycle $A C$. Shpg. wt., 2 lbs.
93 C 356 . List, $\$ 15.70$.
net 10.73

## TV CABLE TAPOFF CONNECTORS



MT-11


MIT. 4

MODEL MT-11 TV CABLE TAPOFF. Weather proof, spliceless tap for use with RG-11/U cable. 12, 17 or 23 db isolation. Installation tool. 75 -ohm coax output. 6 oz , 93 C 11 2. List. $\$ 5.60$

NET 3.28
MODEL MIT-4 COAXIAL TAPOFF. Offers four 75 -ohm coax outputs from 75 -ohm thru line. Provides 17 db isolation. Thru loss 0.35 db per output used. $41 / 2 \times 37 / 8 \times 21 / 2^{\prime \prime}$. Wt., $11 / 2 \mathrm{lbs}$.
91 C 263. List, $\$ 28.00$ $\qquad$ NEt 17.15
MODEL P-S9S MALE CONNECTOR. For use with "Masterline" Model MLA-B signal amplifier. Fits RG-59/U cable. 3 oz .
91 C 074 . List. $\$ 1.70$ NET EACH. 98 MODEL P-IIS CONNECTOR. As above. bul for RG-11/U coax cable. 91 C 075 . List, $\$ 1.70$.
net each .98


## MAST-MOUNTED TV-FM BOOSTER-AMPLIFIERS

## NEW MODEL UB UHF BOOSTER

- 14-db Gain, Channels 70 Through 83 - Uses Two UHF Frame-Grid Tubes Long LIfe A. $B$ Unique antenna-mounted broadband UHF TV booster. Especially designed for use in translator and MPATI (Midwest Program on Airborne Television Instruction) areas to improve reception of Channels 70 through 83. Provides at least 14-db gain.
Consists of two individual units-the UB Broadband Amplifier and the RPS Remote Power Supply. UB amplifier is mounted at the TV antenna to eliminate line noise. Utilizes two UHF frame-grid tubes for high gain, low noise and long life.
RPS remote power supply delivers 24 volts DC to the amplifier through the transmis sion line. Automatic-shutoff feature may be used with any set drawing between 135 and 500 watts. Has 300 -ohm input and output impedance. "no-strip" terminals. Size: amp.; $43 / 8 \times 7 \times 511 / 16^{\prime \prime}$; supply, $25 / 8 \times 5 \times 4^{\prime \prime}$. For $110-120$ v., 60 cycle AC. $51 / 2 \mathrm{lbs}$. 91 C 264 . List. $\$ 88.00$.

NET 58.31 UB "STRATO-BOOSTER." As above, but provides $20-\mathrm{db}$ gain on UHF Channels 72 through 76 only. Wt., $51 / 2 \mathrm{lbs}$. 91 C 265 . List, $\$ 103.75$

## MODEL AB- 2 VHF BOOSTER

Antenna mounting booster amplifies all VHF stations (channels 2-13) up to 12 db. Weatherproof amplifier may be located up to 500 feet from remote control at TV receiver. Installation at antenna permits amplification of signal with no increase in line noise picked up on lead in. Power is delivered to booster by 300 -ohm twin line-no separate line required. 6DJ8 provides highest possible signal-to-noise ratio with maximum reliability. Operation is automaticbooster turns on and off at remote control. 300 -ohm input and output. Easy to install. Amplifier. $67 / 6 \times 37 / 6 \times 41 / 2^{\prime \prime}$. Remote control, $5 \times 27 / 6 \times 33 / 3^{\prime \prime}$. For $110-120$ volts, $50-60$ cycle AC. Shpg, wt., 7 lbs.92 C 545 . List. $\$ 53.95$.
NET 31.75

## AB-3 DELUXE TV-FM AMPLIFIER

C
Provides 25 db gain on VHF TV and FM bands. Designed to let you locate amplifier a full mile from nower supply (when open lead is used). $\mathbf{3 0 0}$-ohm input. 300 and 75 -ohm outputs. Automatic on-off 300 and 75 -ohm outputs. Automatic on-off Amp. $73 / 4 \times 53 / 6 \times 51 / 4$; power supply, $61 / 4 x$ $33 / 4 \times 41 / 4^{n}$. For $110-120$ VAC. 7 lbs. 93 C 359 . List, $\$ 104.95$.

AB-4 TRANSISTORIZED BOOSTER

- Choice of Batfery or AC Operation
- Reliable High Gain, Low Noise Circuir

(D) EAll-transistor VHF TV-FM boostercoupler. Provides brilliant reception. Amplifies antenna signal up to 5 times. Features high signal-to-noise ratio for best nosnow reception. Extremely light, compact design-mast need be no stronger than required to support antenna alone. Maintenance is virtually eliminated-no tubes to burn out. Remote power supply (Fig. D) runs on 4 low-cost flashlight cells; also serves as 4 -set coupler-provides isolation and 300 -ohm match for up to 4 TV or FM sets. Average gain: channel 2,17 db; channel 6 . 15 db ; channels $7-13,8.5 \mathrm{db}$; FM. 12 db . "No-strip" terminals. Lead-in supplies DC to amplifier. no external wiring needed. Amplifier. $13 / 4 \times 21 / 4 \times 3^{\prime \prime}$; supply, $17 / 8 \times 3 \times 71 / 4^{\prime \prime}$. Less batteries, below. Wt., $11 / 2$ lbs. 91 C 148 . List. $\$ 29.95$

NET 18.62 551005 . $11 / 2$-Volt Battery. For above. Takes 4. Wt.. 5 oz.............NET EACH . 14 MODEL AB4-AC BOOSTER. Same as AB-4 but power supply operates from $110-120 \mathrm{v} ., 60$ cycle AC. Shps. wt., $11 / 2$ lbs.
91 C 266 . List, $\$ 34.95$
NET 21.27


MODEL MLF AC LINE FILTER, 60-db RF line to amp isolation. 2 AC receptacles. Surface mtg. $51 / 2 \times 2 \times 11 / 2^{\prime \prime}$. Wt. $1 / 2 \mathrm{lb}$.
91 C 267. List, $\$ 20.25$
NET 12.20
MODEL TF-731B FEED THRU OUTLET. Flush-mtg. plate. Single 300ohm output from 75 -ohm thru line. 17 db isolation. $0.7-\mathrm{db}$ thru loss. Size, $41 / 2 \times 23 / 4 \times 1^{\prime \prime}$. Shpg. wt., $1 / 4 \mathrm{lb}$.
91 C 268 . List, $\$ 3.00$.
. NET 1.76
91 C 269. Model T5.731 Outlef. As above, but surface mounting. Size, $21 / 4 \times 23 / 4 \times 11 / 8^{\prime \prime}$. Wt.. $1 / 4 \mathrm{lb}$. List, $\$ 3.25$.

NET 1.91
MODEL TF-771B FEED THRU OUTLET. Flush-mounted box. Single $75-$ ohm output from $75-$ ohm thru line. Samespees and size as TF-7318. 91 C 270. List. \$3.60.

NET 2.11
MODEL MB MATCHING TRANSFORMER. Weatherproof VHF and FM balun for installation on antenna mast or boom. Changes balanced 300 -ohm impedance to 75 -ohms for use with unbalanced coaxial transmission lines. $31 / 4 \times 21 / 6 \times 3^{\prime \prime}$. Wt., $1 / 2 \mathrm{lb}$. 91 C 271 . List, $\$ 10.00$.


MODEL TM MATCHING TRANSFORMER. Indoor. Matches 72 -ohm lines to $\mathbf{3 0 0}$-ohm in puts. Motorola-type jack input. Surface mtg. $21 / 2 \times 11 / 2 \times 1^{\prime \prime}$. Wt., $1 / 41 \mathrm{~b}$. List. $\$ 3.50$. 91 C 272

NET 2.06


## UHF TV CONVERTERS



## MODEL BTU-2S UHF CONVERTER

- Provides Ampliflcation and - Tunes All UHF Channels

UHF Conversion on VHF Sets. Easy to Install and Operate High-gain, low-noise UHF converter. Easily installed, adds all UHF stations to Channel 5 or 6 of any TV set. High signal-to-noise ratio for best reception, even in weak-signal locations. Shielded 3 -gang tuner. 2 -speed channel selector. Exact $\mathbf{3 0 0}$-ohm input and output plus efficient triode amplifier give maximum gain. Compensated oscillator minimizes drift. Instant changeover from UHF to VHF. Uses 6ER5. 6 VF 4 tubes. silicon diode and rectifier. "Nostrip ${ }^{\text {. }}$ VHF, UHF terminals. Attractive plastic cabinet. Size. $41 / 4 x$ $63 / 4 \times 43 / 4^{\prime \prime}$. U.L. Approved. For operation from $110-120 \mathrm{v}$. . 60 cycle AC. Shpg. wt. 5 lbs.
91 C 247. List, $\$ 39.95$
NET 27.44

## MODEL 99R UHF CONVERTER

Compact, low-noise converter for metropolitan area use. Sharp. one-knob all-channel tuning rejects spurious signals. Compensated oscillator prevents drift. Precise, $\mathbf{3 0 0}$-ohm impedance match assures maximum signal conversion. Channel 5 or $6[F$ output to TV set. maximum signal conversion. Channel $\ln$ "Of" position, VHF signals pass directly to TV set. Uses 6AF4A oscillator, diode mixer, selenium rectifier. Mahoxany plastic cabinet. U.L. Approved. $43 / 4 \times 63 / 4 \times 43 / 4^{\prime \prime}$. For operation from $110-120$ v., 60 cycle AC. Slipg. wt.. 4 lbs. 91 C 252 . List. $\$ 23.95$.

NET 16.41

## Jerrold TV-F̄M Distribution Systems, Preamps, Traps



You can play up to 4 sets simultaneously in your home-on a single antenna-using a comisted below. You'll appreclate the improve-

## NEW HSA-44 AMPLIFIED COUPLER

Allows use of up to 4 TV or FM receivers or combination of both on a single antenna. Provides effective isolation for best performance. Gives minimum of $1 / 2-\mathrm{db}$ gain at each out put tube for low nolse, long iffe, stable performance. inpue and output impedances: 300 ohms. Serrated washer "no-strip" terminals permit fast, casy installation. Has on-off switch. In attractlve 2 -tone. light-alloy housins. size $41 / 2 \mathrm{x} 41 / \mathrm{x}$ $3^{3}$. For operation from $110-120$ v. 60 cycle AC. 91 C 278 . $\mathrm{SH} / \mathrm{Ibs}$.
18.95
ment in the TV and FM signals you recelve and you'll enjoy the simplicity of installation Use the illustration below as a gutde coselecting your own home distribution system.

## FMX FM RANGE EXTENDER

Low nolse, high gain preamplifier for boosting FM signals. Ideal for use wherever reception of fringe-area stereo multiplex or regular FM broadcasts is desired. Minimum of 20 db gain F.M sets entire FM band. Can feed up to four FMa sets with external couplers. Sinele 6DI8 trame-grid tube provides stable performance,
long life. Noine figure: $\mathbf{S . 5} \mathrm{db}$ maximum. Serrated washers allow easy connection to 30 0-ohm twin lead without stripping. On-off sivitch. Two-tone, light-alloy cawe size, $11 / 3 \times 41 / 2 \times 3$. For


## TYPICAL DISTRIBUTING SYSTEMS



## TV COUPLERS



- For 2,3 or 4 Sefs On One Antenna
- No Wire Stripping
- Extremely-Low Loss

For use in either fringe or metropolitan area, these low-loas couplers feature AC isolation be300 -olum - DC TV sets and antenna. All have ing case. Fully conceals and protects mountnecting lead-In serminals. Types MF-2 and $\mathrm{MF}-4$ are designed for frinte area reception.

Have highly-efficient transformer-type impedance matching. Ideal for color TV. En= Size, 41 in weathernroo polystyrene cases.

| Stock No. | $\begin{aligned} & \text { Mirs } \\ & \text { Typo } \end{aligned}$ | Description | NET |
| :---: | :---: | :---: | :---: |
| 91 C 149 | MF-2 | ets. Iv | 2.70 |

## SYSTEM TAPS AND ACCESSORIES


(A) HS.135. Surface mounting putlet with 93 © Win-line jalug. Shpg. wt. 2 oz, 1.17
(B) 93 C 091 . HS-24. Twin-line plug. Attach-

C 93 C 092. HS 140 . Flush-mounting out$G$ let with plug. Mounts in wall anerture or in standard plastic outiee box. Allows convemient plug-in connection of TV and FM recelvers 10 master antenna system. Shpg. ,., 0 . NET 1.65
93 C 093. HS-36. Strapinsulators-to install twin lead indoors. 1 oz, 7kg of 24......... 1.08

## MODEL TX ANTENNA MIXING NETWORKS

TX (FM) separates FM from TV. TX (H-1) 93 C 118 . TX (FM). NET
3.57 mixes or separatea high and low VHF channels:
TX (VIIF-UHF) mixes or separates VIFF and
 3.57


## TRANSISTOR ANTENNA-MOUNT PREAMP

- Up to 18 db Gain - Extremaly Low Noiso
- Use with TV or FM
- Universol Mounting

Model APM-101 "Powermate," Versatile TV or FM booater. Consists of preampliffer that mounts on antenna boom, and remote power supply that mounts on back of TV set. Uses 2 Ni7 12 translator for high gain. low noise. Uor with 2 sets i up to 5 set A with M F-4 coupler, above, impedance, 300 ohms. Preamp. $21 / 4 \times 61 / 4 x$ 93 C 553 . Lisi. $\$ 39.25$. NET
26.63


- Recommended for Use in Fringe Areas
- For Snow on TV or Hiss on FM
- Eosily Installed; Hardware Included

(0)F) Model DSA-202, Loweosts antenna$\ln \mathrm{Ir}$ mouncing TV/F M prean plifier for use TV and areas where snow is encountered on tubes for 20 save hiss is found on FM. Uses two mum 8 db 20 db sain on entire TV band: minidb meio gain on M , Noise is kept to a 4.5 chanmeto erpioof lvidite consmmes only 25 wat s. Weath erpioof iridite cask has sliding cover termitting easy nervicing at apy time. Input impedance 300 ohms. Output tmpedance, 75 or 300 ohms Supplied with three cable fittings, mast mount and clamp. and mounting screws for the power supply. Preamplifier slize, $4 \times 81 / 2 \times 4^{\circ}$; power supply, $31 / 2 \times 31 / 2 x 6^{*}$. For $110-120 \mathrm{~V} . .60$ cycle AC. Shps. wt., 6109 . 93 . List, S89.95. NET..... 53.97 E Model DSA-132. Deluxe antennacolor and black and $u$-hite signals without stepping up snow or ampllfying interference. May be used in fringe arcas or as a distrlbution am. plfier in homes, hotels, motels, apartment build ings, etc. Covers coraplete VHF TV band with high band (channel 7 be used to boost cither high band (channel 7 to 13 ) or low band (channel 2 to 6 ). Noise only 6 db on low band; 7.5 db on high band. Input impedance is matched to both 75 and 300 ohms. Power supply delivers 24 volts $t a$ bcoster throush same llne that brings in signal. Has two-positlon switch that may be set at "set controlled" or "conpreamplifier is powered at all inous powition, controlled" posltion powed at all times; in "set ampllfer only when aet is delivered to pre weatherpronf iridite case, preamplifier ine $5 \times 5 \times 101 /{ }^{*}$ power mupply. $21 / 3 \times 51 / 3 \times 7 / 4$ g s.
 With three cable fittinus, mes acrewa for nower sipply. mast ciampr aput ntrap, For $110-120$ 92 CX 095 . Jist. $\$ 119.50$. NET......71.70

## "TRAP-EASE" TUNEABLE TV ANTENNA TRAPS



- Eliminare Adjacent Channel Interfegence - Imprave Recepilon

Tupeable interference trap provides up to 5 db attenuation of interfering signals. Permity reception of distant stations biocied out by adjacent-chanmel stationa having greater sfignal serength. Provides excellent resules with any TV reoelver and antenna that would normally oring in pictures from the distant station if the interterink signal were not present. Does not affect reception of local stations. Attaches quickly to TV set and antenna lead-convenlent screw terminals. Easy to adjust; simply $71 / 2 \times 31 / 0$ dia unth interference disappears 71/2x31/" dia, 300-ohm input and output ins pedance. In choice of two models. We., 2 lbs 91 C 254 . Model $\mathrm{HQ}-92$. Channelm $2-6$,
NET EACM
11.97

## Spaulding TV Towers - TV Twin Line

## SPAULDING "STRATO-TOWER" TV TOWERS

NEW RM SERIES ROOF MOUNT ANTENNA TOWERS

- Easy to Install. Fit Any Roof
- Strong Galvanized Beaded Steel
Easily-installed, selfs supporting TV antenna towers. Require no guy wires when roof. Adaptable to roof. Adaptable to hinged feet fit any hinged teet hit any suriace, and antenna to be asand antenna "o be ay sernbled and "walked up into place. Con structed of heaviy kalvanized beadith channel stcel to whes weather condlitions. wackates inclinde elther 4 ft or 8 ft . tower sections with 8 -ft. mast and mast antenna heights of 10 ft . or 14 ft , above roof. Towers are knocked down for shipment, assemble easily and quickly. What. instructions and clamp or antenna 8-fl. Mast RM4-8. 4-ft. Roof Mount ${ }^{1}$ owir, 8-fl. Mast 92 CZ 358. NET
 ${ }^{2}$ CZ 359 RM4 and Most Kit Assembly Mount Tower 92 Cz 364. RM8-8. 8-ft. Roof Mount Tower, 8 -ft. Mase and Mast Kle Assembly, 351 lbs 92 CZ 365 . RM8. 8-tt. Roof Mount Tower and Mast Kit Assembly. Sirps. wt., 28 11bs


## XCB SERIES, CYLINDER BASE TOWERS

- No Concrete Foundation Required-Sets into Cylinder Base - Can Be Assembled on Ground or Buili Up Vertically
(A)High-strength antenna towers featuring special "culvert A base" for quick, one man installation without concrete. Self-supporting-require no additional guyling or support of any kind. Vtilize all-riveted. 100 \% galvanized steel construction; special design for easy Installation of any rotator in top section. Minimize effects of strong wind, yet are light enough for easy handling and quick installation. Each tower package includer heavy-duty culvert type base with adjustable hinge feet, 8-ft, mast, listed quantity of 8-ft. sections, all neressary
parts and instructions. All suctions are factory assembled. parts and instructions. All suctions are factory rasembled.




## EP ECONOMY SERIES TOWERS

- Zinc-Plated Sleel Sections for Maximum Strength
- Easy to Install-Mount on Ground or Raof-Top
[B "Economy Packs" for ground installation with house B bracket of guyed roof towers. Each pack has one or more rugred 8 -ft. zinc-plated steel tower sections, ground plate. 8-ft. mast. mast kit asse mbly, drive in base stakes. May extend 16 fert above house bracket without guys; beyond this height require guying. Less house bracket and root mek. base.

| Stock No | Type | Ane. Ht | Sestions | Lbs | NET |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 92 CZ 534 | EP-S | $46^{\prime}$ | 5 | 88 | 43.83 |
| 92 CZ 535 | EP-4 | $38^{\circ}$ | 4 | 72 | 36.52 |
| 92 Cz 540 | EPP-2 | $32^{\circ}$ | 3 2 | $\begin{aligned} & 56 \\ & 41 \end{aligned}$ | 23.22 |
| 92 Cz 542 | EPP-1 | $14^{\prime}$ | 1 | 25 | 15.78 |
| $92 C \times 543$ | EP-R1 | Roof | ase | $\frac{2}{5}$ | $\frac{2}{3.88}$ |
| 92 Cx 544 | E1-H1 | House | Bracket | 5 | 3.67 |



Antenna towera areshipped by truck F.O.B. Frankiort, In. truck No Co. O. orders acdiana. Nopleasesend full romit-cepted-please with your order. Also send full shipping address-no post Office box numbers if pos. sible. Shipping charges will bo collected on delivery. NET BELDEN, AMPHENOL AND KNIGHT TWIN LINE


## BELDEN TWIN LINE

Type 8226. Flat 300-ohin twin line. Finest C quality $7 \times 28$ stranded copper conductors Hiph-quality polyethylene jacket has $58-\mathrm{mi}$ 495525 ; Chpg. WL. 100 fl.. $1 / 4 \mathrm{lb}$ 49 T $386.75^{\prime}$ Coll. NET. 49 W 384 . Over $100^{\prime}$, Per $100^{\prime}$
(C) Type 8230. Weldohm 300 oht twin-line stranded copper-coated steel wire. Copper coathigh strength wi 100 ft .02 ibs
49 T $248,25^{\prime}$ Coll. NET
49 T $387.50^{\circ}$ Coil. NET 49 T 394. $100^{\prime}$ Coil. NET 49 w 383 . Over $100^{\prime}$, Per 100
D. Type 8275. 300-ohm UHF-VHF CelD) Iuline. Recommended for color TV use. Has cellular polyethylme core inert kay-filled. Brown polyellylene jacket. $7 \times 28$ copper-coated
stect cond. Wit. prs 100 ft.. $31 / 21 b a$. 4 tect cond. We. per 100 fl. $31 / 2$ lba. 49 T 396. 50, Coll, NET 49 T 395. 100 Coil. NET
2.35 49 T 395. $100^{\prime}$ Coil. NET.
49 W 398. Over $100^{\prime}$, Por $100^{\circ}$ 3.38
4.19
[] Type 8235. 300-ohm, oval twin-line. Very coated. $7 \times 26$ steel wire conductors. Extremely ough i 85 -mil web thick ness. $100-\mathrm{ft}$. minimum.

4.70 49 W 399. Over 100', Por 100

[^23]

BELDEN TRANSMISSION LINE
G Type 8222. 72 -Onm Twin Line. $7 \times 28$ G stranded copper cond. Hixh-quality brown polyethylene jacket. $075 \times .128^{\circ}$ diam. 100 . 49 T 392. $1000^{\prime}$ Spool. NET.
1.62 49 W 379 . Over 100', Por 100

## AMPHENOL TWIN LINE

## (H) Type

14-271. Tubular 300-ohm twin line. ciency-ideal for UHF or VHF installations $7 \times 28$ copprer conductorm. $100-\mathrm{ft}$. minimum Shog. wh. per 100 ft., 31 1be
49 T. $444.100^{\prime}$ Coll. NET
49 W 4447 . Over $100^{\prime}$, Per 100
3.51
(H) Type 214-076. Heavy-duty, extremely dur H] able 300-ohm tubular twin line. May also be used by Amateurs-rated at 1 kw KF. .ow loss air-core spacing for higls efficiency and of high quality. $100-\mathrm{ft}$. minimum length. Shpg 100 fl $31 / 2 \mathrm{lb}$ 49 TX4 $416.100^{3}$ Coll. NET..... 6.36 $49 \mathrm{~W}^{2} 49$. Over 100, Por 100 1 Type 214-103. Marine core 300-olum twin d lear built especially for low loss in high precipitation and coastal arease ind industria or salt spray, Useru alwo in moper conductors areas. 20 -gauge ( $7 \times 28$ ) pure copper conductors polvfoam cores, polyethylene outer 100
 49 T $592.75^{\prime}$ Coll. NET $9{ }^{\prime}$ W94 Over 100, Per $100^{\circ}$ 5.80
7.35
7.35 49 W 594. Over 100. Per $100 \cdots . . .7 .35$ K Type 214-318. Fiat, 300-ohm twin line for indoor Installation only 60 -mil web clear polyethylene dielectric. Flexible to persmit easy nstallation around baseboards, etc. Extremely ow loss and constant impedance provide max mum transfer of sisnal from anteana to ceiver. Shpg, ivt. per 100 ft 5 lbs
49 T
49 T
49
49
49 49 W 484


## AMPHENOL TWIN LINE

K Type 214-056. Flat 300 ohm polyethylene K twin line for FM and TV antennas. $60-\mathrm{mil}$ web thicknewn. $7 \times 28$ atranded conductors. Brown polyethylene delectic for more con 4 tant Impedance. Wt. per $100 \mathrm{ft} ., 2 \mathrm{lbs}$ stant 434. $25^{\prime}$ Coll. NET.
49 T $437.50^{\prime}$ Coll. NET...
49 T 439 . $75^{\circ}$ Coll. NET.
49 T $441.100^{\circ}$ Coll. NET. 49 T $441.100^{\prime}$ Coll. NET
49 W 436 . Over $100^{\circ}$, Por $100^{\prime}$

K Type 214-100. Flat 300-ohm polyethylene K. twin line. $100-\mathrm{mil}$ web thicknens. $7 \times 28$ stranded copper conductors. Brown polyethylene dielectric assures minimum signal loss Shple " 2 per 100 ft . $21 / 2$ lbs. $49 \mathrm{~T} 417.50^{\circ}$ Coll. NET $49 \mathrm{~T} 418.75^{\prime}$ Coll. NET. 49 T $413.100^{\prime}$ Coll. NET.
49 W 419 . Over $100^{\prime}$, Per $100^{\prime}$

K Type 214-185. Flat, heary-duty. 300-ohm (win line. For VHF television and FM uae $185-\mathrm{mil}$ web thickness. Resists elrects of sun chernical fumes or matt-laden air, $7 \times 26$ stranded copper conductors. 100 -ft minimuns. Sisps, wt.

5.40
$49 \mathrm{~W}^{426}$. Over $100^{\prime}$, Por $100^{\circ}$

## KNIGHT TWIN LINE

1 UHF-VHF Opon Line. 300-ohm. Designed [] to meet the more critical requirements of UHF installations. Loss 0.5 db per 100 ft 200 me. Wt per $100 \mathrm{ft}_{\mathrm{N}} 21 / 4$ the.
47 T $578.100^{\prime}$ Coll. NET NET
2.17

M 300.0 nm VHF-TV Twin Line. HighM. qualley twin line provides excelient service at a moderate cost. $80-\mathrm{ml}$ web thickness. Low oss polyethylene jacket. No. 20 stranded con uctors Shyg. wi.. 100 fl., 2 hbs.
49 T 477, $60^{\circ}$ Coll. NET
49 T 448. $100^{\prime}$ Coll. NET 49 W 435. Over $100^{\circ}$. Per $100^{\circ}$

Television Accessories Are Available on Allied's Credit Fund Plan

## Television Antenna Rotators



## ALLIANCE TELEVISION ANTENNA ROTATORS

Choice of Three Handsome Control Units


## MODEL U-98 ROTATOR

## FEATURING AUTOMATIC-TYPE CONTROL UNIT

- Smooth, Efficient, Weather-Proofed Rotor Unis
- Automatic Control Unit for Maximum Convenience (A) B Exceptionally rugged unit used to point antenna in any direction control box-antenna stops automatically when dial of semartly styled reached. Compact rotor unit meanures $7: 5 \times 5 \mathrm{kh} \times 8^{7}$ desired posttion is factory-lubricatet for life. Has magnetic brake to prevent orcaled and and drifting. 1-rpm motor is instantly reversible for clockwent overshoot clockwise rotation. Control unit measures $7 \times 4$ for cockise or counterwith easy-to-read dlal calibrated N. NE, E. SE, S, SW W Wront panel Complete with rotor and mahogany plastic control s, ${ }^{\text {, }}$, and NW. cable (listed right). For $110-120$ v. 50.60 cycle AC. Less 4 -wire cable (listed at right). Shps. We. 12 Ibs. No Money Downt.

92 CX 336 . With ivory case. List, \$45.85. NET.
25.77

## MODEL K-22 ROTATOR

A) $D$
Heavy-duty rotator; same as above but employs touch-bar-operated control unit. Permits clockwise or counter-clockwise antenna rotation-simply requires light pressure on right or left side of tilting touch-bar. Lever is held down until best picture is obtained. Releasing down-pressure on bar stops antenna instantly-remains fixed Without drifting. Center disc on control unit lights when limit of travel is reached. With rotor, mahogany plastic control unit. Less 4 -wire cable (at right). For $110-120 \mathrm{v}$. 50 -60 cycle AC. Shpg. wt.. 12 lbs. 18.08
92 C 338 . List, $\$ 24.95$. NET............................... 18.

(D)


## MODEL T-1 2 ROTATOR

## FEATURING METER-TYPE CONTROL UNIT

- Clean Straight-lined Styling of Control Unit
- Fingertip Direction of Antenna by Touch-bar
(A) C] Heavy-duty antenna rotator, same an at left, but with meterwith dial calibrated. N. E, S. W and N. Touch-bar on migt modern styling permits instant forw'ard or reverse action. Depresing top of control unit rotates the antenna clockwise-left end, counter-clockwise. Meace of ba begins to move as soon as touch-bar is pressed. Slmply releawe promer on bar to stop at any desired position for beat reception. Conirol unit in att ractive mahogany plastic case measures $446^{\circ}$ ? inigh, $6 \% \%^{\text {" }}$ wide, und $2 \%^{\circ}$ deep. Less 4-wire cable (listed below). For $110-120$, $15^{\circ}$ wide, and 2 解 Shpg. We. 12 lbs. No Money Down.
92 C 340. With ivory case. List, \$35.85. NET .................. 22.12


## MODEL TBB2 THRUST BEARING BRACKET

[E Minimizes strail on rotators by relleving them of entire antenna 91 C 246. List, \$4.95. NET.......................................... 2.91

## 4-WIRE ROTATOR CABLE

4-Wire Cable. For use with all Alliance rotators listed. Four-No. 20 gauge conductors. Shpp. Wit, $100 \mathrm{ft} ., 3$ lbs.
97 个 365 . $100-\mathrm{ft}$ coil. NET. 47 W 576. Over $100^{\circ}$, PER $100^{\circ}$


Cordiess
Remote
Control


## CORNELL-DUBILIER RADIART TV ANTENNA ROTATORS

TR-2A ROTATOR WITH ILLUMINATEDCOMPASS CONTROL UNIT

- Convenient Fingertip Control
- Con Be Used with New Remote Control

Inclucles heavy-duty rotator, samp as used in AR-22 at riklt. and illumlnated compass-tyfe control bux. Control box can be operated directly or from your armchair by new ultrasonic AK-122 remote control. described below. For direct operation, simply depress bar lever on control box to start antenna moving. stop will light up to indicate direction of antenna. For remote operation, use with AK- 122 conerol below.
Cabinet housing control unit is sturdy, shockproof plastic-looks attractive atop TV set. below riglit. For $110-120$-conductor cable listed below right. For $110-120$ volts, $50-60$ cycle AC. 92 CX 472 . List. \$37.95. NET
26.41

## NEW AK-122 ULTRA-SONIC REMOTE CONTROL PACKAGE

- Consists of Ultra-Sonic Actuator and Amplifying Relay Switch Box
Now you can operate and precisely adjust your antenna rotor fronl the comfort of your armChair. Cordless. hand-held actuator operates TR-2A control unit above. through amplifying relay switch box included, TR-2A control unit mounts on top of and plugs into amplifying box. No wiring necessary. ro operate antenna rotor, press and release button on actuator. The indicator on amplifying box will go on and rotator will turn antenna. When the TV pelease reaches deaired clarity, press and fust press and release rotor. To reverse rotor, has mo batteries tubes, or wigain. Actuator unit operates from $110-120 \mathrm{v}$.. 60 cycle AC May beleft on continuously-uses little poiver. WV. 4 ibs. No Money Done, M.
91
273 . List. $\$ 54.95$. NET ........40.42

AR-22 ROTATOR WITH AUTOMATIC TYPE CONTROL UNIT

- Merely Set the Pointer-Unir Does the Rest - Positive, Dependable Magnetic Broking

Popular, fully-automatic rotor for TV ancennas weighing up to 150 lbs Use It for mast, tower or platform mounting. Heavy-duty precision gears hold even large TV arrays steady in ligh winds. Rotor unit employs twelve large ball-bearings in two $61 / 2^{* \prime} t$ aces. Motor reverses instantly-never drags or coasts. Overshoot is prevented by dependable magnetic brake. Weather-seated and factory' lubricated for life. Reversible clamps on rotor unit take masts Rom $1 / 8$ to 2 outer diameter.

Control unt dial is marked in compass poinls: N, S, E, W, NW. NE. SW, and SE. Operation is extremely simple: Set control unit pointer to desired direction, and antenna then artomatically rotates to this position and stops. Elimil nates necessity of watching control unit dia-
until antenna has rotated to desired directions.

Control unit is housed in attractive brown plastic cabinet which is equipped with rubber feet to protect TV set finish. Complete with rotor. Control unit and full set of instructions. Requires 4 -wire cable (see listing below). tior operation from 110-120 volts, 50-60 cycle AC. $92 \mathrm{SXP}^{\text {wit. }} 150$. List, \$45.95. NET.........31.31

## ROTATOR CABLE

4. Conductor Cable. For use with AR-22 100 antenna rotator listed above. Shpg. Wt., per 100 ft 3 1bs.
97
$\mathbf{3} 65$. 100 -ft. coil. NET
2.78

47 W 576. Over $100^{\prime}$. PER $100^{\circ} \ldots \ldots .2 .78$
8-Conductor Cable. For use with TR-2A antenna rotator unit listed above left. Handles current for bota rotor and illumination circuits.
 4.20

47 W 593. Over $100^{\circ}$. PER $100^{\circ} \ldots . . .4 .20$

## TV Antenna Mounts and Accessories

TELESCOPING TV MASTS
50-Ft. Mast Heavy-duty tele-high-carbon steel. ldeal for any teleIdeal for any teleigioned for exceptionally easy instaltionally easyinsta bolts and cotter pins lock each secgauge high-carbon steel tubing with $1 / 4-02$. per inclz zine plating inside and out. Consists of 5-10-ft. sec-
 Floating guy-ring permits rotating mast and antenna for best reception. Supplied with all hardware and assembly instructions. Slips. wt.0 39 lbs.
92 CZ 103. NET
13.35

40-Ft. Mast. Consists of 4 rugged sections (see sizes listed above): Nos. 1. 2. 3. and 4. Maximum height, 40
feet. shps. wt. 29 lbs. 9.78 92 CZ 102. NET.


30-Ft. Mast. Consists of 3 rugged sections: Nos 1. 2 , and 3 described abov.
height. 30 fcet. Shpg
7.04

20-Ft. Mast. Consists of 2 sections: Nos. 1 and 2 described above. Height. 20 feet. Shpg. wt.. 14 1bs.
92 CZ 100. NET
4.31

## ANTENNA MAST SECTIONS

Seamless, high-strenxth. steel mast sections. Ends areswaged for easier installation. Heavywall $11 / 4^{*} \mathrm{O} . \mathrm{D}$. with electro-galvanized finish.

| 9 |
| :--- |
| 92 |
| 92 |
| 92 |


| Stoek No. | Helghe | Wall | Wt. | NET |
| :---: | :---: | :---: | :---: | :---: |
| 2 CX 084 |  | $035{ }^{\circ}$ | 3 lbs . | 68 |
| 2 cx 119 | 5 ft | .051" | 4 1 bs. | 6 |
| 2 C 2274 | 10 ft |  |  |  |
| ${ }_{2}$ C2 335 | 10 ft |  |  | 1.95 |

## UNIVERSAL AND ROOF MOUNT

Heavy-duty swivel base mount. Ideal for use with telescoping mastn. described above. Extremely sturdy and versatile. it meets the requirements of almost any mast in. any surface-flat, slanted or peakerl. For masts up to 23 in diameter. Shps
92 C 536. NET. .


## GROUND RODS

An excellent selection of low-cost ground rods. Constructed of moisture-resistant copperplated ateel. Special raised lip keeps ground ead connector permanently ancthored on rith bolt. Shipped by Express or Freight
Stock No. Sizo Shpo. We NET EACH

 | 92 CU 539 | $8^{\prime} \times 1 / 2^{\prime \prime}$ |
| :--- | :--- | :--- | :--- | $11 / 3 \mathrm{lbs}$.

$21 / 4 \mathrm{llss}$. $\qquad$

## GROUND AND GUY WIRE

Aluminum Ground WIre. No. 8 solid aluminum wire. For all grounding applications.

No. 20 Galvantzod Guy Wiro. Six-strand No. 20 steel wire. Available itt $100-\mathrm{ft}$. or 1000 ft. rolls. Shipg. we.. 100 -ft. roll. 2 lbs
58 T $312.100-\mathrm{Fe}$. Roll. NET..
71 TU 513. 1000-Fe. Roll. NET
6.38

No. 18 Galvanized Guy Wire. Same as above. but for heavier-duty applications. In 100 ft . of 1000 -ft. rolls. Wi.. $100 \mathrm{ft} ., 2 \mathrm{l} / \mathrm{lbs}$.
51 T $319.100-\mathrm{Ft}$. Roll. NET.
71 TU 545. 1000-Ft. Roll. NET
9.35

(4)
(B)


## CHIMNEY MOUNT

A Type 9127. With Stalnless Steel StrapA plng. Sturdy chimney bracket. An excellent choice for economy antenna systems. Onepiece brackets for quick inatallation-can be installed in minutes. Brackets are heavy sauge steel. zinc-plated and dichromate-dipped for ionk life. Brackets securely support antenna mast-even under high wind conditions. Easily adjusted for snus. firm grip. Will support masts up to $114^{\circ}$ dia. With 2-10-ft. straps and hardware. Shpar. Wt.i 4 Ibse
91 C 113 . List. $\$ 3.82$. NET
1.75

Type 8005. With Gaivanlzed Steel. Same as above, but has salvanized steel strapping. 9 . C 274

## SNAP-IN WALL MOUNT

B Type 8306. Husky brackets for firmly (B) Type mounting antenna mast to any flat vertical surface. Perfect for buildings with overhanging surface. Perfect for buildings with overbang be eaves. Mast snaps in place unthenna installalightenerl. Permits one-inan antenna insalation. Constructed of heavy-gauge steel. Plated for resistance to moist ure and harm up to $1 \frac{1}{4}$ in diameter Shpg. wt.. 21/2lbs. ........ 1.08 Typo 8308. Same as above. but holda mast $8^{\circ}$ rom wall. Shpe, wit., 4 lbs
91 C250. List. $\$ 3.90$. NET
.1 .50

## DELUXE SNAP-IN MOUNT

(B) Typo 8312. Heavy-duty wals brackets. Supb port mast from side of building. legs of bracket are spaced $16^{\circ}$ apart to match studs of homes. Side sway prevented by sturn) mounting legs. Vertical support (not shown) Doubly protected heavy gauge steel. zinc plated and dichromate dipped for long life. For masts to $13 / \mathbf{4}^{\circ}$ dia. Shpg, wt.. 5 lbs. 1.67 Type 8318. Same as above, but provides $18^{*}$ type 8318. Same clearance. Slipe. wi.. 7 ibs. wall clearance. Shpe. wit. 7 ibs. 92 CX 129. List. $\$ 5.40$. NET............ 2.34
Type 8324 . Same as Type 8312 but provides
24. wall clearance. Shpk. wt.. 10 lbs. $24^{*}$ wall clearance. Shpk. Wt.: 10 lbs.
92 CX 130. List. $\$ 7.30$. NET............ 3.58
Stock No. Fig. ClosedOpen EA. 10-UP, EA.

| 91 C 039 | 11 | 51 | 75/ ${ }^{\text {\% }}$ | 116 |
| :---: | :---: | :---: | :---: | :---: |
| 91 c 040 | H | $6 \%$ * | $91 / 4.208$ | $18 ¢$ |
| 91 c 041 | H | 71/2. | 101/2:304 | $27 ¢$ |
| 91 c 042 | J | 51. | 73/3* 128 | 118 |
| c 043 | I | 61/ | $91 / 4.206$ | 188 |
| 44 |  | 71/2* | $101 / 2 \cdot 304$ | 278 |

## USE ALLIED'S LIBERAL <br> CREDIT FUND PLAN

Getthe AntennaEquipmentYou Want Now on Allied's Credit Fund Plan... No Money Down on Orders Totaling $\$ 20.00$ or More... Up to 24 Months to Pay.

## SPECIAL FEATURE VALUE <br> SPECIAL FEATURE VALUE LOW-COST ANTENNA MOUNT

Extraordinary value in anan tenna mast mount for mast. up to $11 /{ }^{\prime \prime}$ outaide dia. Heavy " ${ }^{\prime \prime}$ " boit and relnforced clamp with dual serrated jaws hoid mast necurely in postion Doubly zine plated and dichromate dipped for protec $91{ }^{\text {tlon. }}{ }^{1 / 2} 275$. ONLY


## FLOATING GUY RINGS

Cast aluminum. ring and collar. Fastens with set screw. Permits rotating antenna aiter kuys are installed. Lubricated for smooth rotation. For 3 or 4 -guy installations on masts to $1 / 8$. Shpg. $91 C^{8} 244$. NET
Same as above. but for masts up to $11 / 4^{\prime \prime}$ O.D. $91^{\text {Shpe }} 245$. NET

## CHIMNEY MOUNT REPAIR KIT

Type 8932. Stainless Steel. Two 12 -ft. and strad clamps. Shps. wit. 2 lbs and strap clamps. Shpg. Wt it $^{2}$91 C 114 . List. $\$ 3.55$. NE
1.33

## SNAP-IN CHIMNEY MOUNT

(D) Type 8930. With Stalniess Steel Strap(D) ping. Simply snap mast into bracket and tighten bolts. Fits masts up to $13 / 4$ diameter. Brackets of heavy-gauge steel. zinc-plated and dichromate-dipped for protection against rusting. With two $12-\mathrm{ft}$. lengtlas of stamias | strayping. Shps. we. |
| :--- |
| 91 |
| 1 242. List. $\$ 4.70$. NET |

1.99 Type 8610. With Galvanlzed Steel. As above but has salvanized steel strapping.
91 C 243. List, $\$ 3.30$. NET...............

## "NO-GUY" ROOF MOUNT

E Type 9060. Steel and cast-iron base supE. ports average antenna on up to 10 ft . mast
 91 C 251 List. §1.75. NET

## ANTENNA BASE

F Typo 9063. Sturdy antenna base. For masts FJ of 10 feet or more and up to $11 / 2^{\prime \prime}$ O.D Eliminates suywires in the average installation Set-screws anchor mast and permit orientation Electro-galvanized: dichromated. 2-ft. high Shpg.wt. $61 / \mathrm{Cl}$ lbs.
2.70

Tyou 9144. As above, but 3 feet high and con structed from $1^{\circ}$ electro-galvanized steel tub-
ing. Shpg, wt $81 / 2$ lbs. NET........... 3.24
Typ* 9143. Same as Model 9144 but 5 feet higlt. Shpg, wt.. 15 lbs
92 CU 044. List. $\$ 15.90$ NET
6.30

## HINGED-TYPE RIDGE MOUNT

G Type 9021. Adjustable hinged brackets in G stall easily on peaked roofs, flat roofs and valls. Extra heavy gauge stee. Fits mast $1 / 2$-Rust protected. Wt.. 3 lbs.
1.08

## Tube Brighteners - TV Antenna Accessories

> No wiring nesessary-simple plugin design. Identify proper type by these dimensions.


Model C-301 Isolation Type-Duodecal far use with any 6.3 -vole. 600 -mpe brightener vides normal 6.3 -volts to relieve cathode-fil ment shorts. or 7.8 -volts to increase cathore emisslon. Voltages are switch-selected for picture tubes with duodecal base-including electrostatic or magnetic fochs fypes with parallel trostatic of magnetic foctus types with parallel
or series filaments. Shpg. We. 10 oz. or se-ries filaments. Shipg. We. 10 oz .
2.62

Model C-202 Autoformer Type-Duodecal filaments. Installs on any ber or parallel-wired ture tube, $8^{4}$ or larger. with duodecal bicBoosts filanient power $50 \%$. Does not relieve cathode-filament shorts. Shps. Wt.. 8 oz .220

Model C-501 Autoformer Type-For Color Tubes. Provides increased filament voltage colo boost emission of any $21^{\circ}$ or $22^{\circ} 3$-gun tube to fally restore color fidelity and improve picture contrast. Shpg, wt.. 1 Ib.
91 . 227 . List. $\$ 9.75$. NET
only. We. $80 z$
91 C 222. List, \$1.49. NET
Model C-401 Autoform. er Type- Duodecal Base. Gives $50 \%$ power boost. Works on alt black-and-white picture tubes having duodecal base. in cluding electrostatic or electromaknetic types. $8^{\prime \prime}$ or larker. Does not relieve cathode-filament shorts.
For television For television sets having parale wired filainents 91 C 213 . NET..... 87
Model C-402 AutoformEr Type-buodecal for television atbove but for television sets featur-

87
Model C-212 $110^{\circ}$ Autoformer Type- But tubes with bicture culbe orightener for $110^{\circ}$ tubes with button base. Boosts filament powet adaptation to either parallel or series-wiant filaments. Does not relieve cathode-filament shorts. Show ivt. 8 oz . NET 205 . List. $\$ 3.75$. NET 20 Model C-222 $110^{\circ}$ Autoformer Type Shell 91 C 206 . List. \$3.75. NET ${ }^{2} . . . \mathrm{I}^{2} . . .2 .20$
Model K-101 Plcture Tube Restorer- Duodecal Base. Boosts emission, corrects open cathodes, heater-cathode shorts, open control gride, control grid-cathode shorts, plus combl-
nations of these defects. Only for nations of these defects. Only for use with $6.3-$ net, ic focus. Simbes. either electrostatic or mag91 C 223. List, \$6.65. NET
3.90

## ALLIED'S LOWEST COST TV TUBE BRIGHTENER



## ANCHOR PICTURE TUBE "KURE-ALL"

 Model UK 200-Duodecal Base. Extremely versatile picture tube re storer. Corrects cathodeneater and cathode-conrol grld shorts, open cathodes and contro

Repairs
Shorted or Open TV Tubes grids, plus low emission, or any combination of these. Control permits jes filaments of parlel or suror boosted voltaver For boosted voltake. For electromagnetic focus tubes. Supplied with in structions. Shpg. Wit. 1 Jb
91 C 104 . List. $\$ 6.50$. NET...........3.90

TV ANTENNA ACCESSORIES

A) Hanger Strap. Designed for mounting anof corrosion-resistant heavy $3 \%^{2}$ galvanizer 91 gteel atrappink. $11^{2}$ coil, Wt., 1 /b.

## .23

B Wall Stand-OH Insulator. Designed for Wecuring amienna twin-lead to base boards, Wt. perc. Pack-in type for easy installation. 91 C 119 . PER PKG ${ }^{10}$ per phg.

91 C $121.16-1 / 4^{*}$ PERPRPG.

輁

(1) Heavy-Dury Lag Bolts. For rigidly securwood, brick, masonry, or other surfores etc. to of rust-resistant, heavy cadmum-plated steel. Bolts have a $1 / 4$ " diameter shank. Av, shoeg.
 .42

M Universal Seand (M) With fral Stand-OH Insulators. For use coaxial TV lead-in. Polyethylene Insulationd Fasten securely by. Polyethylene Insulation. shpg. wt. per pkg. 10 oz. 5 per pkg.
 14
N Double-Stand-Off Insulators. Wood-eact-ins simpe insulator holds two semarate lead-ins simuttaneously. Can be used for flat, oval, cubular and coaxial lead-ins. Av. we., per

91 C $133.5 / \sqrt{3 *}$ PERPKG.
.47

(1) Cable Clamp. Provides non-slip antenna or antenna and tower guy-wlres, Euds need up to $316^{\circ}$ dia. U-bolt has 3 促 vanized collar has tapered $\times 24$ thread. Galcable, grip with each turn of wrencla. $1 / 2 x$ $1 x^{7} / \mathrm{g}^{\circ}$ Shpg, wt. 4 OZ . 44 NET EACH
[E] W-Bols. Galvanized steel. With nuts and Shry. wt. per pkg up to $1 \mathrm{ys}^{\circ} \mathrm{O}$. D. masts.

[F] Mast Clamp. Has serrated yoke for tight, mux. O.D. of in ons masts. For 2 masts with meecl. Wt., per phig. each. Marle of galvanized
91 C 123. PE per pkg. 34


$\stackrel{P}{\text { Par }}$
Strap-Type Single Stand-OH Insulalar and coaxial lead-in. In lengths oval, tubu-
 91 C $137^{\circ} .535^{\circ}$.
91
91
C PERAPKG.

23

R Strap-Typo Doublo Stand-Off InsulaR tors. Universal type for use on hlat oval. cubular, and round lead-in or coaxial lines. Holds two transmission lines-can be used
when two antennas are mounterl on a common when two antennas are mountel on a common
mast. such as in a VHF-UHF installation mast such as in a VHF-UHF installation. to any mase. In lap-type mount for clamping thpe wh. per plengehs histed below. Average ${ }^{\text {shipg. wt., per plk.. } 8 \text { oz. } 3 \text { per pkg. }}$
91 C $135.314^{\circ}$. PERPKG.
91 C $136.71^{\circ}$ PER PKG.
.33
.48
S Drive-in Stand-OH Insulators, Universal and coaxial TV lead-ins. for oval, tubular wood, brick, masonry or other suriaces into


(G) Antonna Clip. Very handy for servicemen.
(I) Clips 300 ohm lead-in to antenna terminals. Low-loss plastic clip with screw terminals for

(H) Universal Guy Ring. Designed to rest uninasts. Wed on ring clamp. For $1 / 4^{\circ} \mathbf{O . D}$ 91 C 124, PER PKG.................. 30
J Closed Hook Eye. Anchors guy wires. 5
91 CI26, PER PKG...................... 23
(K) Opon Guy Wire Hook Eye. Designed to Screws into woon). Made of galvanized steel Slipg. wt. per plg. 10 oz. 5 perpkg.
91 C
125 , PER pKG. 22


T Universal Hot Nall Stand-OH Insulalar, and coaxial TV for use with flat, oval, cubuar, and coaxial TV lead-in line. Hold securely when driven into wood, mortar, or brick. Permit extra-fast installations do not require drill ing of starting holes. Length $31 / 2^{*}$. Shpk. Wh., Der pkg. 4 oz. 5 per pkg.

Open Line Stand-Off Insulator. Hay W slots for 300,450 or 600 ohm lines. $5 \mathrm{y}, \mathrm{m}^{\prime \prime}$ hail-type mounting. Holds transmission line securely. prevests sassing-permits neat, slack-free, no-slip Installation. Av. shpg. wt., per plg.: 5 oz. 5 per pkg.
91 C 141 . PER PKG....
[X] Ground Clamp. For secure ground conHas nertion to water pipes up to $11 / 4^{*}$ diameter Has pointed screw tip for positive "bite" Convenient surew terminal for ground wire 91 C 094. EACH
91 C 094. EACH
10 or more, EACH

# TV Power Cords, Arresters, Couplers, and ciaritiers 

TV POWER CORDS AND CONNECTORS
TV Power Cord and Connector. Thls durable, all-plastic TV cord is identical to ariginal equipment on most long. Molded-con2 -conductor cord is 6 ft . long, Mo (Fig. B). Uector fits standard Upproved. Shpg. we., 8 oz . 91 CO O46. NET.
9-Ft. Cord, Same as above. except 9 fect long. $91 \mathrm{Chpg} . \mathrm{w}^{2}$., ${ }^{12} \mathrm{NET}$.

Columbla Type 145 TV Cheater Cord. A. For use in the home a Brown plastic 2 -radio-TV serviceman, too. plugs. 6 ft . long. Polarized for safety. U.L. approved. Shpg. | WI. 5 |  |
| :--- | :--- |
| 9 | OZ. NET |

B Melo Connector. Flush mounting; used on B most TV sets. Shps. wt.. 2 oz.
.09
TVPower Cord and Connector. (Not illustrated.) Identical to original equlpment on Zratelth and many other popular brands of TV sets. Plastic-lnsulated, 18-gauge 2-coser plug AC cord or feet lang. female connector, 1 " dia zenith yype, polarized female connectorpor Shpg. wt., 10 oz.


A handy device that improves reception in any Aocation by amplifying the pick-up power of your antenna clectronically, Fliters out, showy pictures. 12 - position switch for selecting clearest picture on any channel. Works with any antenna-outdoor indoor or built-in. Simply attach unit between your antenna and TV set: then plug into any 115 v. AC or With twin line, Sh
91 C 209. NET.
5.95

## BLONDER-TONGUE COUPLERS

Model A-102 Sot Coupler. A two-set coupler featuring excelient lsolation-a highly efficient phase dircuit prevents mating circuit prevents interaction between simal to each TV or FM set. No-strip
 terminals. for quick and teasy instailation. 300 -ohm impedance. Isolation, $10-20 \mathrm{db}$. Insertion loss. 3.5 db . Size,

1.76

Model A-104 Four-Set or Antenna Coupler. Slmilar to Molel A-102 above, but for connecting either 4 TV sets to one antenna, or 4 an12.20 db Loss 7.5 db . Size, $11 / 4 \times 27 / 4 \times 21 / 4$.

Shpk. wt., 4 oz.
91 C 076. List. $\$ 4.10$. NET
2.40

Model A-105 HI-Lo Antenna Coupler. An antenna coupler for connecting high and lowband TV antennas to TV wet with a single 300hm line. Designed for fast, easy installation.
 91 Ch 079 . List, $\$ 4.75$. NET.

AMPHENOL AND RCA ARRESTERS AND COUPLERS


## AMPHENOL COUPLERS

Tole-Couplers. Hishly efficient low-loss Tole-Couplers. Hishiy effient to four TV sets rom one VHF or UHF antenna. Permilt using a single transmission line to antenna. Blfilar a single transmis provides high degree of isolation to prevent interaction between bels. stalled indoors or outdoors. Av, wt.., $1 / 2 \mathrm{lb}$
Type 114-088. 2 set Telecoupler.
2.25

Type 114-090. Up to 4 set coupler.
TYOe 114-090. Up to 4 . set
91 C O89. List. $\$ 5.75$. NET
. 3.45
Antenna Couplers. (Not illus.o similar to Fis. C). Ellminate antenna switching and separate lead-lines. Permit using kindie 30 -ohm line to seperate high and low-band KHF antenna and VHF-UHF antennas. Efficient fitters for effective isolation. With mast mounting hardware Shps. wt. $11 / 2 \mathrm{lbs}$.
Model 114-094 "Duonet." Couples separate Model 1 hig and for combined operation with single $300-0 h m$ lead-in. single 300 -ohm lead-in. NET
2.25

Model 114-061 "Isonet." VHF-UHF coupling hetwork. Permits using a single 300 -ohm twin

(1) Color Couplers. Highly efficient. lowD] Coss couplers for connecting two, three or our TV sets to one antenna. Provide effective solation of sets and low signal loss through proper impedance matching. Work equally well with eitlier color TV sets or black and white. Excellent also for matching FM radios to a ingle antenna. Have attractive appearance a well as weather-proofing and durabinty-guit ble for either indoor or outdoor Instaliation. Have built-in strain relief (flanged mount) for ntenna lead-in. 2 -screw mounting. Wt. $1 / 4 \mathrm{lb}$. Type 114-097. 2 sets to 1 antenna.

Type 114-098. 3 sete to 1 amtenna. . 2.37
91 C 842. Rist. S3.95. NET.
2.97

Typo 114-099. 4 sets to 1 antenna.
2.97

## RCA 2-SET COUPLER AND LIGHTNING ARRESTER

[E] $]_{0}^{\mathbf{T}}$Type 240A1 TV Set Coupler. Permits [E] operation of 2 or more TV sets from one antenna laving a 300 -ohm transmlasion line. Saves cost of additional antennas. Uses resistance elements only-does not affect irnpedance of transmission line. Provides isolation between TV receivers to reduce interference caused by Interaction of their oscilators. Easily imstalled. Shpg. wt.. 6 oz .
$9 /$ COB3 NET
1.15

F Typo 235A1 Arroster. Expertly designed Typo 235 A1 Ar-VHF lightning arnester-no splicing. stripping, or soldering of antenna ine necessary. Screw cap y yehich pierce insulation againat staple cotive contact with conductors. U.L. Approved. Straptype mounting permits quick and easy installation on mast or water pipe. Shps. we. $80 z$
.73

## STANCOR TV TUBE BOOSTER

Model P8192. Adds life to agins picture tubes when dimness is due to low cathode emission. Boosts emission; re-
turns full brightness and contrast to picture. For all electromagnetic picture tubes with parallel-connected filaments. Simple, plus-in installation. Switcl provides two levels ${ }^{\circ}$
brilliance. Size, $31 / 2 \times I 1 / 2^{\circ}$ brilliance. Siz
91 C 212 . List. 55.44. NET


## JFD LIGHTNING ARRESTERS AND 2-SET COUPLER



G AT102 Aeguiar Fiat-Llne Llohening A Arrestor. Desixned to accommodate all ribbon-type twin las inal working loose. Alanke to preveat win ead rom work. Approved. With stainlens steel hanger stran. 4 -ft, alumiWum ground wire and mounting hardware. num grous 15
SiPd. wt.. 15 oz. 2.25 . NET
1.32
(H) AT105S Univorial Arrostor. Can be (1) mounted on mast or pipe. Connections are made by saw-toot wed lead With hanger strap. U. L. Approved. Shpg. WL. 13 oz .

88
(1) AT104 Lightning Arrester. For antenna rotator installations. Handles 4 -wire lead-ins. 8 precision-spaced tecth make positive conlact with conductor, is oz. ground lug. Lispg, \$1.50. NET.
.88
(K) AT110 Lighting Arrestor. For flat or (K) open-type tranamission lines. Serain-relief lip for protecting both types of tead-in. Mounts on outside wall or window sill. With groundIug. U. L. Approved. Shpk
91 C I
Wist. $\$ 1.50$. NET. 88

RA-2 Two-Sot TV Antenna Coupior. Fior operation of wo TV receiversfromsameancenna. Dellvers full signal strength on all VHF and UHF channels. Maialains constant 300-ohm impedance. Attaches
with sinkie screw, 6 oz . .97 with single screw. 6 oz
$91 \mathrm{C} \mid 40$. NET.....

## G-C TELCO LIGHTNING ARRESTER

Type 8642. Extremely versacile. low-cost lightning arrester for protection of TV sets. For use with round, oval, fat, or open lines. Requires no stripping. cutting, or splicing of of arrester. Toothed circular
 of arrester. Toothed circular
 contacts make firm contact.
Constructed of low-loss materlal for full signal Constructed o. Approved. Single screw mountins. Shpg. wi., 6 oz 91 C O82. Lhe. S1.25. NET

## RADIO LIGHTNING ARRESTER

A low-coat. seneral purpose lightning arpester. besigned for series insertion in single-wire lead-in lines of radio
receivers. Ruggedly constructer lain. Has high batrier between terglazed porcelain. has leake path. Sturdy hexminals for exteaded leakake parmanent connec nut terminals assures. Slipg. wt., 6 oz . 91 C 091 . NET


## FEATURE VALUE

## ALLIED'S LOWEST COST TV VHF-UHF LIGHTNING ARRESTER

## omir 240

A new low-cost VHFUHF arrester incorporating features usually ound in arresters costing much more. Has
 low-loss design; accommodates all wires including hollow line oval. open and Wall or pipe mit. U
92 C 008 . ONLY

## Television Accessories


(A) Typo F-4U 2.Way Antenna Switch. SeAers either of two antennas. Maintains 300 ohm impedance in both positions, 8 oz
91 C 013 . Brown plastic case NET EACH I Mory plastic case.
1.33
(B) Type 625 Wall-Thru Insulator. For LT to $13^{\text {- }}$ thick. RG-59/U coax. Fits any wall long, inside plate and outside cap if tube $14^{\circ}$ universal TV socket, 343 -PK (listed below) may be installed on inside plate. Shpg. we., 1 lb. C 018 , Brown plastic ends NET EACH VOry plastic ends.
1.26
[C] Type 321 Polarized Conneczor. Ef: polystyrene pluga, cach with consisting of 2 polystyrene pluss. cach with one male and one Shpse. Assures proper polarization. $13 /{ }^{\circ}$ long. 91 C 156 . PER PAIR

39
(1) Type 343-PK Transmission Line Sockside plate of Type 625 Wall Thruted on inabove. With soldere 625 Wall-Thru insulator, crews. Shpe. wt., 2 oz.
91 C 005. Brown plastle. NET
g 004. Jvory plastic. EACH
66
[E Type 27-S Flat-LIne Polystyrene Splicer. Strip wires, insert, and tighten set screws for positive electrical contact. Size, 91 C 152 . NET WEACH
.12
F Type 354 Solderless Base Sockets. Pretors for up to 4 -wire fatized multi-wire connec iursior up ro 4 -Wire fat or round cable. Molded strips. Accents 2 or 4 -wire bine pluge contack strips. Accents 2 or 4 -wire line plugs listed at right. above, Shpg. wh., 2 oz.
91 CO21. NET............

89

[G] fine Plugs. Solderless. For 2 or 4 -wire, | Stock No. | Type | Descriptlon | NET |
| :---: | :---: | :---: | :---: |
| 91 c 017 | 303 | For 2-wire cable | .20 |
| 91 col9 | 374 | For 4-wire cable | .49 |

(H) Type 364 LIne Socket. For use with up to 303 or 374 line or round cables. Accepts Type 303 or 374 Ifne plugs above. Solderless, no individual set screws. With phosphor bronze contact cirips. Shps. wt.. 2 oz.

63
J Type 301 Plug. Ideal for connecting TV antystyrene. polystyrene. $1 /$ : $^{*}$ pin spacing (fits socket be91 C 151. NET ${ }^{2}$ oz.

20
K Typo 311 Socket. For use with twinK line piug above. Standard $1 s^{*}$ spacins. Polystyrene insulation. Shpg. wt.. 2 oz. 20

1 Type 304 Mosley Antenna Conncetor Fits Connects lead-in to TV antenna terminal | Fits Type 3 I 1 socket, above. 2 oz |
| :--- |
| 91 |

[M] Type 902 Oual-Match TV Coupler. Opohm line. Polystyrene from 1 antenna. For 300 losses. Solderless cone construction minimizes 91 COIV . NET
1.92
(N) Type 2635 .
"Y-TY" for connecting all Netypes of transmission lines to TV antemna elements. Solderless, screw connections $4^{\text {² }}$ max. width. Wt., 6 ox.
91 CO24. NET
(P) Type 29-S Tubular To Flat-Line Spllcer. lines to joining tubular or oval 300 -ohm Shps. we. 3 ard flat limes. Clear polystyrene 91 C O23. NET

R Type F-1PK Flush Socket and Wall 300 Plate. For TV or FM installations using with phospin-line. Low loss polystyrene socket outlet box. Plastic plate. With conturs standard ing brackets. Shps, wh. With plug and mounting brackets. Shpg. wt. 6 oz .
91 Colo. Ivory. EACH
1.21

Type F-11PK Dual Flush Socket and Wall connectlons, with above, but for 2 twin-line $91 \mathrm{COO9}$. Brown. NET Shpg wt., 6 oz
91 C 008 . Brown. NET
1.66

Typo F-111PK Triple Flush Socket and Wall Plate. Similar to above, but for 3 twin line connections. With plug. 6 oz .
91 COIS. Brown. NEY
91 COI6. Ivory. EACH
1.73

Type F-14PK Combination Flush Socke and Wall plate. Similar to above, but for 300 -ohm twin-line and 4 -wire rotator cable Plastic plate. with plugs. Shpg. wt. 6 oz 91 C 007 . Brown. NET

Typo F-114PK Comblnatlon Flush Socket lines and 4 -wire totator above, but for 2 twin91 C 025 Brown ator cable. With plugs. 8 oz 91 C 026. Ivory plastic. EACH
2.17

S Type AC-1PK AC.TV Wall plate Sock. built-in twin line ac receptacle cover plate with Ivory finish. Shps, wit. With ewin line plug 91 C 002 . NET....... 2 oz .
1.22

Typo AC-14PK Wall Plate Socket. Duplex or terminating twin line and 4 win sockets bles. With twin line and rind 4 -wire rotor ca| Ivory finish. Shpg. wt., 2 oz. |
| :--- |
| 91 C 003 . NET...................... |

2.15

## TV INTERFERENCE FILTERS AND TWIN-LINE ACCESSORIES

## REGENCY HIGH-PASS FILTER

Model HP.45. Attenuates signal frequencies below 55 me. Provides effective add in elimina-
tion of TVI originnt ing of TVI originating on frequencies
helow the Vlif below the VliF TV band. Has constant cut-off frequency of 45 me in a 300 olam balanced line. Approximately 20 db attenuation at 29 mc ; 40 db or nore at frequencies of 14 me and below. With nounting bracket and instructions. Size, $91 C^{\prime} 161$. List, $31.65^{\text {Oz }}$ NET

99

## R. L. DRAKE HIGH-PASS FILTER



Model TV-300-HP. Efficient high-pass filter. Attenuates more than 40 db from $0-52$ meter Amateur TVI for 300 meter Amgteur TVI. For 300 Shpg. wi.. $1 / 2$ ib.

JFD ANTENNA SWITCH


Deluxe Model AS3. Constant 300 -ohm impedance rotary switch with low:-
loss silver contacts. lects any one of up to three antennas. Plastic minals for screw terminals for easy installa Shpg. we.. 2 lbs . $18 / 4 \times 5 \times 2$ 91 C II2. NET
2.91

## SUPEREX "CLEAR-PIX" FILTERS

$\sqrt{c L}$CLEAP-PIX unce mize or eliminate Effectively redtuce interfer of $1 \mathbf{V}$ interference. and teur transmitters in the 21 to 21.45 megacycle band. F.1. ignition and other high freguency sources. Do not affect signal strength. Quickly installed with only a screwdriver-brass lugs attach to same screws that hold antenna connections at back of receiver. For use with any model TV set using 300 -ohm twin lead transmission line. Shpg. we.. 5 oz .

| Stock No. | Mir | Used For |  |
| :---: | :---: | :---: | :---: |
| $\begin{array}{lll} 91 & c & 066 \\ 91 & c & 068 \\ 91 & 6 & 067 \\ 91 & c & 065 \end{array}$ | $\begin{aligned} & \text { CPH } \\ & \text { CPF } \\ & \text { CPI } \\ & \text { CPC } \end{aligned}$ | 21 me Amateur <br> Strong FM station IEnition or similar Citizens Band |  |



## CINCH-JONES WALL PLATES

For terminating TV antenna lead in and rotator cables in standarr chrome outlet. Wal plates are chrome-plated. Mocle! S-302 for antenna lead-in. Model S-302-4 for lead-in plus 4 rotator wires: Model S. $302-8$ for lead-in and 8
rotator wires. Shape. wi., 7 oz. WPC style TV Wall Plates
91 C 036. S-302. NET............... 1.38 91 C 037. S-302-4. NET
91 C 038. 5-302-8. NET
1.79

## CCT Styte Plugs for Above

40 H 802. P-302, Antenna plug. NET
.57 40 H 804. P-304 4-wire rotor plug NET 40 H 808 . P-308 8-wire rotor plug NET

AMPHENOL HIGH-PASS FILTER
 Model 114-330. Reduces TV interierence from transmitters, diathermy, ignition. etc Actenuation: 60 db be $15 / 4 \times 41 / 4 \times 31 / 900 \mathrm{mms}$ $91{ }^{\text {wt. }} \mathrm{C}_{6}$ Oz. NET. 4.17

TACO SELECTIVE ATTENUATOR Model 835. 300-ohm for TV and FM rector
 for TV and FM receivers. Reduces sound and pleture distortion caused by overdriving
receivers. Positions: 0 receivers. Positions: 0 is db formal neception:
 $41 / 2 \times 2$
5 oz.
2.97

92 C 046. NET

## TELCO LEAD-IN TUBES

Type 8641. Combination plastic lead-in tube and lightning arrester. Fits walls to $10^{\circ}$ in thickness. Has lightning arrester on outside lead- wail plug on is arrester and contact is under teeth of lightning 3, mounting hole. Shpg. wt inside. Requires 91 C 070. List, $\$ 2.95$. NET., 1 lb .
1.77

Type 8958. As above, less arrester and plug. Ideal for terminating open line outside and hringing standard line into bouse. 1/2 1b. 1.40

## TV Components and Accessories

## "PPEERLESS" TV TABLES





"SLIMLINE" SERIES. Slim and graceful in appearance, these sturdy. TV tables are eapecially designed to hold the ne finaromis sind dens IV sets. Compact 1 tables take upless space in All have 21 wide and $91 / 2$ deep table tops. non-chip enamel and hard-shen brass. Extremely scasbic and Clear proof, the tables can be anctive lower shelf for record or magazine storage. In black enamel or brass finish.

Model 126 Silmine TV Tabie. In rich brass finish. Uses full $8 / 4$ dia. tubing on legs for maximum strength. $24^{\prime \prime}$ high. Side arms adjust from tubing on legg for maxmumi $19^{*}$ to 31 . With easy-rolling $3^{z}$ casters. Shpg. wt.. 111 lbs .
7.50

Model 121 Slimilne TV Table. Same as Model 126 above, except has blace enamel finish. $2^{* *}$ high. Clear $3^{*}$ lucite casters. Wt., 11 ibs. 5.70
92 CX 155 . NET.
Model 116 Low Slimline TV Table (Not illus.). Similar to Model 126 above, but lower. Stands $16^{\circ \prime}$ ligh. Clear $2^{* \prime}$ casters. Finished in triple-

Model 111 Low Silmiline TV Table. Same as Model H6 above. except has long-lastin black enamel finish. Shpg. wt., 9 lbs. 92 CX 167 . NET
4.95

Model 186 Tall Silmilinc TV Table. Ideal height for bedside viewing$31^{\circ}$ hish. Highly recommended for hospitals, motels and hotels. Slimline table-top measures $91 / 2 \times 21^{\circ}$. Compact depth cnables table to hug the wall in places where space is at a premium. Quality design features 2 wire shelves for holdink a table radio, books, magazines. etc. Table arms let ; ou push or pull entire cart to varions locations with utmost ease. Arms adjust from $19^{\circ}$ to $31^{\prime \prime}$, easily accominodatirg largest table model TV's. Tip-proof table rolls almost effortlessly on $3^{*}$ clear lucite casters. Shps. We 141 bs .
92 CX 172 . NET
8.97

## TELEVISION ACCESSORIES


(A)

E日Y K-302 CRTExtenslon Harness Kit. A Makes survice jobs faster and easier. Expedites testlag of any model black and white tefevision picture tube, fonsist socket harmess for both electrostatic and magnetic tubes; 3 -ft yoke extension luarnegs for sets using octal plug and socket. In rusged, heavyduty plastic case. Slipg. wt.. 10 oz 91 C 035 . List. $\$ 5.40$, NET
3.18 B Miller Antenna Transtormers. Permits 300 ohm receiver inputs. 2 required: one at an 300 ohm receiver inpls. 2 res be used indoors or outdoors. Size. $11 / 6 x^{3 / 4} x^{3 / 4}$. Wi . 2 oz 91 C 158 . Type 6161.52 oh ms.
91 C 59. Type 6162.72 ohms.
1.76

C Clarostat TVVA Voltage Regulator. Pro4 tects TV sets from power surges: reduces surge of 140 v . to $\$ 10 \mathrm{v}$. For sets using 200 30u watts. 5 Oz.
2.06

(D)

(

$F$
(1) Amphenol 114-313 Matching Transformer. Stub type transformer or matci ing 72 olim and 300 olm impedances. Matches 72 olm line to 300 ohm antenna or rece 72 ohm puts: also matches $\mathbf{3 0 0}$ ohmiline 10 dod ohm artenna to coasiat lead-in. Spade lugs on each end. Shpg. We.i 14 oz . 91 C 093. NETT
.71

(E)Perma-Power B-101 Horizontal Bar E Generator. Provides series of horizontal lines for accurate checking of picture linearity Also used for setting of deflection yoke and focus coil for magnet. Plugs into all duo-deca type pieture tube sockets. 5 oz . $1 / 2 \times 11 / 2$ Shpg. wit., 5 oz

1.72

F CAT HI-Voltage Connector. Second anode connector. Siver-plated plug for perSlipg. wt. 4 oz .

29


G
Vidalre "Kine Test" Tester for checking G. electromagnetic and electrostatic foeus picure tubes by substitution method. No need to remove chassis from cabinet. Just plug tester ato picture tube socket. Electronray tube dynamically checks hiament. bias. and 1 st anode voly fity tool chest. With instructions. Size. easily fits in tool che 6 oz 91 C 240 . List. \$6.90. NET
4.14

(H) f
Quam OF-4 Focallzor Unit. For easy focusing and centering of raster. Fits, all picture tubes with neck diameters of $13 / 3^{\circ}$ or latger; for any anode voltage, $13 / 2 \times 41 / 0 \times 6^{4 \prime}$.
Shpe. Wh. N. NE
91 C 033 . NET 91 C O33. NET
(1) Miller 6295 Adjustablo Ion Trap. Uni J versal single-inagnet ion trap. Replaces any single trap within range of 32 to 55 gausses Wi. 602.
91 C 103 . NET88

## KNIGHT TV ANTENNA INSTALLATION KITS

Extremely useful TV antenna Installation kit at a money-saving price. Ideal for making new TV antenna instaliations or for repair of existing installations. Top-quality components for years of rellable service. Kit includes: three 3 -foot mast sections of rugged heavy wall. galvanzled steel; 100 ft . of 300-ohm twin line; U.L. Approved linhtning arrester; five screw-type stand-off insulators: two mast-type stand-off insu-
lators; 20 feet of No. 8 lators; 20 feet of No. 8 gauke, solid antenna lnstallation ground wire; plus antenna 92 CXOIB. NET.


G-C TUBE-SAVER-TRIPLES TUBE LIFE
Model 25-898. A highly effective de-
vice for extending the tube life of TV sets, hi-fi mustc systems. radios and
other electronic equipment. Plugs in quickly and easily to provide constant protection of tubes against sudden surges of voltage. Tube-saver plugs insurges of voltage. set pluga Into tube-
to wall outlet; sot $100-275$
saver Size. $21 / 421 / 2 \times 11 /$ For saver. Size. $21 / 4 \times 21 / 2 \times 11 / 4^{\circ}$. For $100-275$
watt gets. For $110-120$ v. $50-60$ cycle AC-DC. Shps. wt. 7 oz. NET...3.23
91 C $210 . L i s t . ~ \$ 4.95 . ~ N E T ~$ Model 25-900. For color TV sets. 250 400 watts. Slipg. We.. ${ }^{12}$ Oz. 3.89
91 C 211 . List. $\$ 5.95$. NET... 3.89


## AM Antennas, Antenna Kits, TV Tuner



## SUPEREX HIGH-GAIN AM LOOPSTICK ANTENNAS

A complete selection of low-cost, high-efficiency, ferrite-core antennas. Ideal for replacing old-fashioned loop antennas. Feature extremely ligh gain. stable performance and uniform response. Will greatly improve signal to noise ratio. Reception is equally sensitive from all directions. Easily mounted. Tune 540 to 1600 kc (AM broadcast band) with 365 or 410 mmf tuning capacitor.

A VLT-240 Transletor Vari-Loopstlck. Ha A impedance tapi micrometer adjuatment Simplified, olve-hole snap-in mounting. For use with 305 mmf or 410 mmf variable tuning 91 C 057. NET

## 8

Ferri-Loopstlek. Excellent low-cost, re Blacement antenna for AM broadcas teceivers. Neers no orlentation. Has " $Q$ " of
$240-275$. Single-hole snap-in mounting. $S$ Size.

91 C061. NET
C Vari-Loopstigk. For AM broadcast re Has "O" including the smallest portables peaking. Single-hole snap-in mounting. Size, / $6 \times 21 / 42$ Sinpk. WL.. 4 oz .
(D) "Energized" Forrl-Loopstick. This 5* Donpstick has a " $Q$ " of up to 350. Extremely luigh gain brings in weak, distant stations. Ad justable coil with self-locking vinyl collar per-Single-hole mtg. Size, $1 / 4 \times 5^{*}$. Wt., 6 oz . 88 91 C 062 . NET

E
7" Loopstlck. Same as "enersized" loopstick described above, but has $7^{*}$ length for even greater sensitivity. Has " $Q$ " extending up

1.32
(F) High "Q"' Transhator Loopsticks. Ideal F replacement for most transistor sets. Extremely high "Q". Movable turns and multiple taps: Flat design provides excellent pick-up. 410 mmf tuning capacitor. *Direct replacement in many Japanese radios.

C] Varl-Tenna. For use with older radio sets high equipped with built-in antenna. Features high sensitivity and excellent signal-to-noise ratio. Boosts gain up to 25 times. Single-hole 91 C 05 B . NET.

| No. | Type | $\mu \mathrm{H}$ | Sixo | We. | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $C 053$ | 2FT. 240 | 200.265 | 2\%: | ${ }_{2} 02$. | 1.62 |
| C 059 | 2FT-3y7* | 360-425 | 21/" | 202. | 1.36 |
| C 054 | 3FI-240 | 200-265 | 3\%/2 | 2 oz. | 1.62 |
| C 055 |  |  |  |  |  |
| c | 7FT.240 | 170.265 | 7/ | 30 |  |

## REPLACEMENT ANTENNA LOOP

Wound on rikid fiberboard form. Has lug terminals. Replaces antenna coil and rod antenuas in battery and midget sets or nortabies. Turns may be remoyed to match loop being replaced. Overall size, $6 \times 81 / 4$ ShPR wL 8 oz

10 or more, EACH.
53
.48

## WINDOW LEAD.IN

Soft drawn copper, covered with heavy black cotton braid. Thoroughly weatherproofed. For use with all antennas having single-wire leadn. Fits under window. Has Fahnestock ellpo $12^{\circ}$ long by $1 / 2^{\prime \prime}$ wide. Wt.. 2 oz .
91 C 069 NET.
91 C069. NET

## ALL-PURPOSE TV SERVICE CORD



Fomale Type, One flexible brown cord to service most TV sets. Mug one end into duplex AC receptacle with 2 connectors for attarhlng to TV chassis. One is standard soft-plastic TV connection; other is metal Zenith connertion. 91 C long. Shpg. wt.. 1 lb .

98

## PERMA-POWER MODEL D-200 AUTOMATIC VOLTAGE REGULATOR



Maintains normal onsets, hi-fi systems. fans, nower tools, etc used on overloated used on overloaded circhits or in areas conditions. Automat ically boosts voluage 10 voleswhenever line goes below 110 volts. Eliminates picture shrinking, flutter, and loss of brikheness due to low line voltage, AC out let ; appliance plugs into rexulator. Unit turns on and off with set. For up to 300 watts. $41 / 6431 / \times 21 / 4$. Shpg. wt., $21 / 21 \mathrm{lbs}$.
91 C 224 . NET................
5.85

Model D101 Line Volzage Regulator. As above, but has 3 -nos. selector switch for boosting or lowering voltage. Plugs into AC outlet; 91 C 221 . NET............................4. 4.09

DELUXE BC-SW ANTENNA KIT


Handy antenna kit for broadcast and short wave reception. Increases "pull-in power" of any set. Includes 100 rt . $7 \times 26$ bare copper antenna wire; 40 ft . rubber covered lead-in: 25 ft. rubber covered ground wirei 2 porcelain insulators; 1 window lead-in; 1 lightning arrester: 2 porcelail nail knobs; 1 ground clamp and full instructions. Shpg. wt., $21 / 2$ lbe. 2.04

Standard BC.SW Antenna Kit. 50 ft., $7 \times 26$ bare conper wire; 25 ft. lead-in; 2 antenna insulators; 2 nail knob insulators; 1 window lead-ln and 1 kround clamp. Shps. wt., $11 / 2 \mathrm{lbs} .1 .03$

## CINCH-JONES TV WALL PLATES



Low-loss wall outlets for UHF and VHF TV antenna \&win lead ins. WPI-8 and WPB-8 also have 8 -wire rotor outlets. WPI and WPB have knock out panel for inserting Cinchsocket if rotor is added later. FIt box-or altach to wall. With mtg. screws. Less pluss, below. Shps. we., 7 oz.

| Stock No. | Fig. | Type | Color | NET |
| :---: | :---: | :---: | :---: | :---: |
| $91 C 027$ | G | W1'1 | Ivory | 98 |
| 91 CO 08 | G | WPB | Brown | 98 |
| 91 <br> 91 <br> 91 | ${ }_{\mathbf{H}}^{\mathbf{H}}$ | WP1-8 | Ivory | 1.58 |

91 C 031 . Type TVp-2 Two-Prong Plug,
For all plates above. Slupg wt., 2 oz . NET. . 22 40 H 874. Type P-308-AB Rotor Plug. For
WPI- 8 and WPB-8 Shpg wt

## CONSOLIDATED ANTENNAS



## MODEL 615 LONG WAVE

SHORTWAVE AND BC ANTENNA KIT
An excelient antenna kit for all-wave reception. Contains all wire and parts for any one of the following antennas: balanced doublet: double bare ar inverted-1.. Includes: or mission line; 4 insulators; 2 bakelite screw eves. doublet lightning arrester; leacl-in strip; and ground clamp. Complete with assembling inatructions. Shpe. wt., $31 / 4 \mathrm{lbs}$.
91 C 084 . NET
4.26

## MODEL 635 DOUBLET ANTENNA <br> 

A highly efficlent doublet antenna. Providea excellent short-wave, long-wave, and broadcast band reception. Doublet sections are tuned to provide uniform response throughout the 16-49 meter short-wave band. Kit contains: 2-30 ft. coils of $7 \times 24$ bare copper wire: 50 ft . of wisted and braided transmission wire; 10 ft . of ground wire; 3-3 glass insulators; ground Clamp; porcelain lead-in tube; 2 porcelain nailknobs; and easy-to-follow installation instruc lons. Shpe Wt. $31 / 4 \mathrm{lbs}$.
91 CO85. NET
3.72

## COPPERWELD ANTENNA WIRE

Higli-quality, copperweld antenna wire. Fea* ures copper outer conductor and steel core. May also be used for guying antenna towers and masts.

| Stock No. | Gauge | Feet | We., Lbs. | EACH |
| :---: | :---: | :---: | :---: | :---: |
| 49 T 133 | 12 | 100 | 2 | 2.69 |
| 49 T 134 | 12 | 250 | 5 | 6. |
| 49 T 140 | 14 | 100 | $11 / 2$ | 2.37 |
| 49 T141 | 14 | 250 | 3 | 5.12 |
| 58 T318 | 18 | 250 | 2 |  |
| 58 T317 | 18 | 500 | 3 | 2.94 |
| 58 T315 | 18 | 3000 | 18 | 14.48 |

## STANDARD COIL TV TUNER



Model GK-2550 Neutrod Grid" Neutrode Re placement Tuner. wepiaces tuners allel connected heaters and $2 l-m \mathrm{~m}$ cascode tuners. Features neutral-ized-triode circuit to provide sub. ntantial improvements in gain, mig-nat-to-noise ratio and general performance. Uses new 6ER5 RF ampliner and 6CG8A oscillator-mixer. Has improved fiter circuits and shielding; greatly reduced oscillator drift and radlation. IF frequency is preadjusted at factory to 21.25 mc sound and 25.75 mc video; can be adjusted over a wide range to suit specific installation requirements. Req̧ites $125-145$ v. DC plus treater voltage. Supplied complete with set of mounting brackets to adapt to standard mtg. centers. Shpg. wt., 3 lbs.
91 C 096 . NET.......
21.07

TYPE 3IM-213 TV TUNER STRIPS Ertacment mair Replace original Standard Coí strips. Set includes antenna and osci!lator strip for VHF (chamnels $2-13$ only). Specify channel number required and tuner series leller stamped on original strips. 4 oz

| Stock No. | For Series | Stock No. | For Series |
| :---: | :---: | :---: | :---: |
| 91 CC 097 <br> 91 $C$ 098 <br> 91 CC 099 | $\begin{aligned} & \mathbf{F} \\ & \mathbf{H} \\ & \mathbf{K} \end{aligned}$ | $\left\lvert\, \begin{array}{llll} 9 & c & c & 100 \\ 91 & C & c & 101 \\ 91 & C & 102 \end{array}\right.$ | $\begin{aligned} & \mathbf{Q} \\ & \mathbf{K} \\ & \mathbf{U} \end{aligned}$ |



## Bell \& Howell 8mm Movie Outiit

## Net § $1899^{95}$

- With Zoom Lens and Coupled Eye
- Viewfinder for Easy Zoom
- 9-27 min, 12.3 Camera Lens
- Projector Takes "Half-Hour" Reels
$\$ 10$ monthly
- Ouffit Includes Every Accessory

You'll really enjoy capturing the fun of family get-togethers, vacations and other happy events with this superb 8 mm movle outfit. It's easy to be an expert with the remarkable Bell \& Howell 310 camera. Has a $9.27 \mathrm{~mm}, \mathbf{1 2 . 3}$ lens for beautiful color films that you'll dramatically zoom from normal to telephoto for exclting and interesting closeups. Coupled viewfinder shows you exactly what the lens sees while you zoom. Full-time coupled "eye" sets the correct lens opening for you, and a beacon warns against too-dim conditions. Has ASA settings from $5-40$. Speeds: 16 fos plus single-frame. Also has continuous run lock, automatic footage counter and universal focus.
In addition to an excellent camera, outfit includes famous Bell \& Howell 253RV projector that always shows your shots to best advantage. The 253RV has enclosed gear.driven reel arms for extremely reliable and quiet operation. Features a $400 . \mathrm{ft}$. reel capacity for a half-hour run. Additional highlights: exceptionally simple threading system and convenient fingertip controls; a quality 1 " 11.6 anastigmat lens that throws out an extraordinarily bright, sharp image; and still-picture feature that lets you take a "closer look." Speed is continuously variable. The 253RV projector also can reverse operation easily. Permanently lubricated at the factory.
You get even more: $30 \times 40^{\prime \prime}$ beaded screen; projector table that folds and stores in small space; reel storage case with 6 reels and cans; camera case; pistol grip handle with leather safety strap; film splicer; and a two.light bar for excellent indoor color or black and white shots. 46 lbs .
$20 \mathrm{~V} 368-5 \mathrm{~J}$.
NET 189.95

## 8 mm Movie Outfits for Year-Round Fun

## Crown 8mm Movie Outfit

## Na S4995

- Full Range Zoom Lens
- f1.8 Lens and Reflex Viewfinder
- Red Signal Shows Insufficlent Light
- Projector Capacity: 30 Minute Reel
$\$ 8$ monthly - Includes Reel of Color Fllm
Store up present events for future enjoyment with this excellent 8 mm array. Features Crown 503 automatic electric eye camera with smooth-operating 200 m lens. Crown 800 projector also has zoom lens, entarging picture area 4 times. Also offers slow mation and reverse action. 400 -ft. reel capacity for 30 -minute showings. $30 \times 40^{\circ \prime}$ screen is finely beaded to assure bright pictures -rigid tripod leg construction. Supplied complete with instruction booklet, camera case and roll of Dynachrome color film with processing charges prepaid. 25 lbs.
$20 \mathrm{~V} 369-4 \mathrm{~J}$. $\$ 8$ Monthly.
NET 149.95
24 V 804-J. 503 Camera Only. 3 ibs $\qquad$ NET 69.95
24 VU 697. Projector Only. 6 Ibs.
$\qquad$ NET 79.95
24 VU 695 . Screen Only. 8 lbs. $\qquad$ 79.95

24 V 696. Camera Case Only. 2 lbs $\qquad$
$\qquad$
$\qquad$ NET 9.95


## POLAROID 10-SECOND FILIT

Fine quality film for all Polaroid cameras at low prices. Types 32 and 42 have respective ASA speeds of 400 and 200.37 and 47 are 3000 -speed (J. 33 and J.65 require 3000 -speed film; recommended for Models 850 and 950). 8 exposures per roll. Wt., 302

| Stock No. | Type | Use WIth | $\begin{aligned} & \text { PER } \\ & \text { ROLL } \end{aligned}$ | $\begin{aligned} & \text { 3-UP } \\ & \text { EA. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| $24 \vee 608$ | 32 | 80 Series | 1.38 | 1.30 |
| $24 \times 609$ | 37 | 80 Series, J. 33 | 1.48 | 1.40 |
| $24 \vee 610$ | 42 | All but 80 Serles, J. 33 and J. 66 | 1.77 | ¢.63 |
| 24 V 611 | 47 | All but 80 Series and J-33 | 1.89 | 4.80 |


8 mm COLOR FILM. Price includes processing. 50 feet. $30 z$
24 V 621. Dynachrome Outdoor ..... 2.49
24 V 622. Dynachrome Indoor. ..... 2.49
24 V 805. Ansco Outdoor ..... 3.19
24 V 806. Ansco Indoor ..... 3.19
35 mm COLOR FILM. Price includes proc-essing. Dynachrome, 20 -exposure only.Ansco, ouldoor only. 3 oz.
24 V 618. Dynachrome Outdoor.2.29
24 V 617. Dynachrome Indoor ..... 2.29
24 V 867. Ansco 12-Exposure ..... 1.99
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## If You Wish To Refurn Or Exchange Merchandise For Any Reason



## "U" AND "Z" ITEMS

The letter " $U$ "" or " 2 " in our stock numbers (as in 35 DU 717 or 91 CZ 331 ) identifies Items which are fragile or exceed parcel post size or weight limits. We ship such items by express, truck or the best low cost method. ("U" items will be shipped by package delivery truck in Chicago and Zones 1. 2 and 3 at Parcel Post rates.)

## ABOUT C.O.D. ORDERS

For economy's sake, we strongly recommend that you send a check or money order with your order, or use the Allied Credit Fund Plan. On parcel post shipments, the Post Office charges you a C.O.D. collection fee. They also charge you a money order fee for sending payment to us. If a C.O.D. shipment is unavoidable, your order should be for a minimum of $\$ 5.00$, with a deposit of at least $20 \%$. Please include full remittance with any orders for less than \$5.00.

## PARCEL POST C.O.D. FEES

$\$ 0.01$ to $\$ 5.00 \ldots . .40 \mathrm{c} \mid \$ 50.01$ to $\$ 100.00 \ldots .90 \mathrm{c}$ 5.01 to $10.00 \ldots . .50 \mathrm{c} 100.01$ to $150.00 \ldots 1.00$ 10.01 to $25.00 \ldots . . .70 \mathrm{c} 150.01$ to $200.00 \ldots 1.00$ 25.01 to 50.00 80c

## MONEY ORDER FEES

From $\$ 0.01$ to $\$ 10.00$
From 10.01 to 50.00
From 50.01 to 100.00
35 c

## SHIPMENTS TO CANADA

Prices in this catalog are in terms of U.S. funds. We will deduct $10 \%$ from the face value of remittances made in Canadian funds. Please adjust your remittance accordingly. We limit parcel post shipments to Conada to 25 pounds and 72 inches (length plus girth). Remit 80 c for the first 2 pounds and 30 c for each additional pound. Remit for insurance in the amounts indicated at right, above. C.O.D. and air parcel post services are not available. We can ship by express and freight

## SHIPMENTS TO ALASKA

Parcel post shipments (surface and air) are made at the 8th zone rates given in the tables at right. On shipments other than parcel post (air freight or express, fruck, or boat) Marine \& Risk insurance is necessary Please send funds to cover charges on the lollowing basis: air freight or air express. 10 c per $\$ 100.00$ valuation; truck or boat, 50 c per $\$ 100.00$ valuation.

## SHIPMENTS TO APO'S or FPO'S

Shipments by both air and surface ore usually limited to 70 pounds and 100 inches (length plus girth). Exceptions exist so please determine restrictions to your APO or FPO before ordering. Please remit charges (using the tables at right) on the following basis: New York APO's and FPO's take zone 5 rates; San Francisco APO's and FPO's take zone 8 rates. All air shipments take zone 8 rates

## SHIPMENTS TO U.S. POSSESSIONS

Parcel post shipments to the Canal Zone. Canton Island, Caroline Islands, Guarn, Marianna and Marshal! Islands, Puerto Rico (*see note below). Samoa, Virgin Islands, and Wake Island are limited to 70 pounds and 100 inches (length plus girth). Please remit for charges using the zone 8 rates. *Note: The Commonwealth of Puerto Rico Imposes excise taxes on electrical appli. ances (hl-fi systems, componenls, etc.) which amount to minimum of $15 \%$ of the invoice price, collected at point of delivery.

## SHIPPING INFORMATION

## PARCEL POST INFORMATION AND CHARGES

PARCEl POST. We limit parcel post shipments to 20 pounds and 72 inches-length plus girth (measurement around widest point). Shipments of high value or those easily damaged are shipped by express even when they fall within parcel post limits. Items that are not mailable have " $U$ " or " $Z$ " in our stock number-see explanation in column at left. Parcel post rates in table below are current, but subject to change without notice
INSURANCE. To protect you, we insure all parcel post shipments with a dependable private insurance company. Please allow for insurance at the following rates:
Up to $\$ 10.00$
10c
$\$ 50.01$ to $\$ 100.00$
$30 c$
$\$ 10.01$ to \$50.00
$20 c$
$\$ 100.01$ to $\$ 200.00$
$40 c$

## HOW TO ESTIMATE PARCEL POST CHARGES

Up to 16 ounces, all zones, allow 3 c for first 2 ounces, $11 / 26$ for each additional ounce
The post office charges a fraction of a pound as a full pound. For example, if the total weight is 5 pounds and 1 ounce to Zone 4, postage would be for 6 pounds ( 70 )

| WEIGHT <br> 1 Lb. and Not Exceeding | Chicago | 1st \& 2 n Zone, to 150 m | 3rd Zone <br> 150 to <br> 300 mi . | $\begin{aligned} & 4 \operatorname{th} \text { Zone } \\ & 300 \mathrm{to} \\ & 600 \mathrm{mi} . \end{aligned}$ | $\begin{aligned} & 5 \operatorname{th} 20 \mathrm{no} \\ & 600 \mathrm{eo} \\ & 1000 \mathrm{ml} . \end{aligned}$ | $\begin{aligned} & 16 \text { th Zane } \\ & 100080 \\ & 1400 \mathrm{mi} . \end{aligned}$ | $\begin{aligned} & 7 \operatorname{th} \text { Zone } \\ & 1400 \text { to } \\ & 1800 \mathrm{mi} . \end{aligned}$ | $\begin{aligned} & 8 \mathrm{th} \text { Zone } \\ & \text { Over } \\ & 1800 \mathrm{ml} . \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | \$0.24 | \$0.33 | \$0.35 | \$0.39 | 50.45 | \$0.51 | \$0.58 | \$0.64 |
| 3 | . 26 | . 38 | . 41 | . 47 | . 55 | . 64 | . 74 | . 83 |
| 4 | . 28 | . 43 | . 47 | . 55 | . 65 | . 77 | . 90 | 1.02 |
| 5 | . 30 | . 48 | . 53 | . 63 | . 75 | . 90 | 1.06 | 1.21 |
| 6 | . 32 | . 53 | . 59 | . 70 | . 85 | 1.03 | 1.22 | 1.40 |
| 7 | . 34 | 58 | . 65 | . 77 | . 95 | 1.16 | 1.38 | 1.59 |
| 8 | . 36 | . 63 | . 71 | . 84 | 1.05 | 1.29 | 1.54 | 1.78 |
| 9 | . 38 | . 68 | . 77 | . 91 | 1.15 | 1.42 | 1.70 | 1.97 |
| 10 | . 40 | . 73 | . 83 | . 98 | 1.25 | 1.55 | 1.86 | 2.16 |
| 11 | . 42 | . 77 | . 89 | 1.05 | 1.35 | 1.67 | 2.02 | 2.34 |
| 12 | . 44 | . 81 | . 95 | 1.12 | 1.45 | 1.79 | 2.18 | 2.52 |
| 13 | . 46 | . 85 | 1.01 | 1,19 | 1.55 | 1.91 | 2.34 | 2.70 |
| 14 | . 48 | . 89 | 1.07 | 1.26 | 1.65 | 2.03 | 2.50 | 2.88 |
| 15 | . 50 | . 93 | 1.13 | 1.33 | 1.75 | 2.15 | 2.66 | 3.06 |
| 16 | . 52 | . 97 | 1.18 | 1.40 | 1.85 | 2.27 | 2.81 | 3.24 |
| 17 | . 54 | 1.01 | 1.23 | 1.47 | 1.95 | 2.39 | 2.96 | 3.42 |
| 18 | . 56 | 1.05 | 1.28 | 1.54 | 2.05 | 2.51 | 3.11 | 3.80 |
| 19 | . 58 | 1.09 | 1.33 | 1.61 | 2.15 | 2.63 | 3.26 | 3.78 |
| 20 | . 60 | 1.13 | 1.38 | 1.68 | 2.25 | 2.75 | 3.41 | 3.96 |
| 21 | . 62 | 1.17 | 1.43 | 1.75 | 2.34 | 2.87 | 3.56 | 4.14 |
| Far Each Extra lb. | $\begin{gathered} \text { Add } \\ 2 \end{gathered}$ | Add 4 | $\begin{aligned} & \text { Add } \\ & 5 \end{aligned}$ | Add 7 | Add $94$ | $\begin{aligned} & \text { Add } \\ & 12 d \end{aligned}$ | $\begin{aligned} & \text { Add } \\ & 15 \end{aligned}$ | Add 184 |
| Over 20 pounds shlpped express or truck. Sce belo |  |  |  |  |  |  |  |  |

TRUCK AND RAIL FREIGHT: Freight is the choapest form of transportation on the heavier shipments. The approximate truck freight charges shown below will differ in various sections of the country. Frelght charges are collected on delivery
how to estimate truck freight Charges

| Minimum Charge 100 Lbs. | Maximum Distence in Mlles |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 50 | 150 | 300 | 500 | 750 | 1000 | 1500 | 2250 |
|  | 4.41 | 4.41 | 4.68 | 4.91 | 5.94 | 6.46 | 8.38 | 9.83 |
| 150 Lbs... . | 4.41 | 4.41 | 4.68 | 5.12 | 6.24 | 6.88 | 12.57 | 14.76 |
| 200 Lbs...... | 4.41 | 4.84 | 6.18 | 6.82 | 8.32 | 9.18 | 16.76 | 19.68 |
| For each Extralb. | 24 | 34 | 34 | 4. | 46 | 54 | 84 | 10 |

EXPRESS: Please remit full amount for merchandise, but do not send any money for express charges with your order. Shipping charges are collected on delivery at no extra cost to you. All "U" and " 2 " items (see column at left) are usually shipped by express.

HOW TO ESTIMATE EXPRESS CHARGES
(Rates are about $10 \%$ higher to eastimn states.)

| Welght in Pounds | Mileage |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 60 | 150 | 300 | 500 | 750 | 1000 | 1500 | 2260 |
| 5 | 2.87 | 2.93 | 3.02 | 3.14 | 3.20 | 3.26 | 3.33 | 3.40 |
| 10 | 2.95 | 3.11 | 3.30 | 3.53 | 3.66 | 3.76 | 4.10 | 4.33 |
| 15 | 3.05 | 3.30 | 3.57 | 3.90 | 4.11 | 4.27 | 4.78 | 5.27 |
| 20 | 3.15 | 3.48 | 3.85 | 4.30 | 4.36 | 4.78 | 5.47 | 6.21 |
| 25 | 3.26 | 3.56 | 4.11 | 4.59 | 5.04 | 5.30 | 6.14 | 7.14 |
| 35 | 3.45 | 4.03 | 4.68 | 5.47 | 5.74 | 6.30 | 7.50 | 9.01 |
| 45 | 3.63 | 4.38 | 5.23 | 6.24 | 6.87 | 7.32 | 8.86 | 10.91 |
| 55 | 3.83 | 4.76 | 5.77 | 7.02 | 7.77 | 8.33 | 10.21 | 12.79 |
| 70 | 4.13 | 5.31 | 6.58 | 8.17 | 9.14 | 9.87 | 12.25 | 15.59 |
| 80 | 4.35 | 5.68 | 6.95 | 8.95 | 10.15 | 10.87 | 13.61 | 17.39 |
| $\begin{aligned} & \text { For eoch } \\ & 100 \mathrm{tbs} \text {. } \end{aligned}$ | 4.76 | 6.39 | 8.25 | 10.52 | 11.87 | 12.81 | 16.34 | 21.23 |

AIR SHIPMENTS: We will ship your order by Air Parcel Post. Air Express or Air Freight if you instruct us to do so. Air Parcel Post rates are given below. Consult your local express office for Air Express charges, and your nearest commercial airport office for Air Freight rates. Air freight and air express charges are collected on delivery. Air Parcel Post size and weight limils are 70 !bs and $100^{\prime \prime}$. length and girth combined.

AIR PARCEL POST RATES
(7c per ounce, up to 8 ounces)

| ZONES | 1,283 | 4 | 5 | 6 | 7 | 8 | U. S. Territories, Possessions and APO \&-FPO Addresses, 80 c per lb . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 st Lb . | 60 c | 65 c | 70 c | 75 c | 75 c | 80 c |  |
| For Each Extra tb. | Add $484$ | $\begin{aligned} & \text { Add } \\ & 504 \end{aligned}$ | Add 364 | Add 644 | $\begin{aligned} & \text { Add } \\ & 72 t \end{aligned}$ | $\begin{aligned} & \text { Add } \\ & 80 \end{aligned}$ |  |

## at ALLIED you get the most for your money

## IN THRILLING, TRUE STEREO HIGH-FIDELITY


only HIGH-FIDELITY COMPONENTS can bring you these advantages:

Better Sound for Your Money. Hi-fi components are designed and built by speciallzed manufacturers whose primary interest is the creation of fine audio instruments.
More Flexibility. Compact in size, hi-fl components can be placed anywhere . . . in any room, on shelves, in "built-ins", or your own choice of attractive hi-fi cabinetry.

Acoustically Designed Speaker Enclosures. You get genuine hi-fi speaker enclosures, acoustically designed to produce rich, natural sound-approved designs are always used. These include bass reflex, folded horn, infinite baffle and ducted port types, plus the popular high-compliance types. The sound you get is truly superior.


## COMPONENTS ARE EASY TO CONNECT-THEY JUST PLUG IN!



It's easy to assemble an Allied true stereo high-fidelity system in your own home. No technical knowledge is re-quired-no special tools are needed. You Just plug the record changer connectors into the receptacles on the amplifier-they are clearly identlfied for utmost convenience. Connect the speakers to the amplifier terminalstwo 15 -foot speaker cables are included with each system, each channel is identified so you can't make a mistake. Plug the amplifier into an AC outlet and you're ready to sit back and enjoy the magnificent sound from your Allied stereo high-fidelity system. And remember-with a component high-fidelity system you can add a tape deck or tuner any time you wish.

The ultimate in musical realism is stereo hi-fi. Stereo is actually 2-channel sound; that is, two microphones are used to make two simultaneous recordings-one from each side of the performing group. Each of these channels of sound is then applied to records, tapes or broadcasts. On records, a separate channel of sound
is put on each side of a $V$-shaped record groove. On tapes, each channel of sound is recorded on a separate portion of the tape width. And in stereo radio broadcasts, these iwo channels of sound are transmitted over the alr from a single FM statlon, to bring you our newest source of stereo music-stereo multiplex FM broadcasts.

## IT'S EASY TO ADD FM STEREO MULTIPLEX TO YOUR HI-FI SYSTEM

The "magic" of stereo FM multiplex has improved the quality of radio broadcasts to a ievel of realism that has to be heard to be believed. Stereo FM multiplex trans-
mission is in use by stations all over the country and no stereo high-fidelity music system is really complete until it includes provisions for reception of stereo FM.


## IF YOU NOW HAVE A STEREO PHONO SYSTEM

If you already have a high-fidelity stereo phono system, you can increase your listening enjoyment immensely by adding an FM Stereo Multiplex Tuner. Tuners are now available with built-in facilities for separating the composite two-channel (multiplex) signal broadcast by multiplex FM stations. These tuners have a dual output cable that simply plugs in to the receptacles labelled "Tuner" on the back of your stereo amplifier.

Stereo FM Multiplex Tuner


Stereo FM Multiplex Adapter

## if you now have a stereo PHONO SYSTEM WITH A MONAURAL FM TUNER

If your present system includes a stereo amplifier and a monaural FM tuner, you can convert to stereo FM multiplex by simply adding a multiplex adapter. Most late model FM tuners have a receptacle for plugging in an adapter. If your FM tuner does not, one can easily and economically be installed by our service technician. The dual output of the adapter plugs in to the "Tuner" receptacles on your stereo amplifier.

## SHOULD YOU REQUIRE ANY ASSISTANCE IN DETERMINING YOUR STEREO HI-FI NEEDS

Allied offers free, expert consulting service. Our audio specialists are glad to answer any questions on high fldelity. If you desire any assistance when choosing a complete music system or any indlvidual component to add to your present system, feel free to write to AlIfed's Audio Division. Why not take advantage of thls free, personal and friendly high-fidelity consulting service?


## ALLIED makes it easy for you to select

a stereo hi-fi system at greatest savings

## SELECT YOUR OWN SYSTEM-GET OUR SPECIAL PRICE

Study the pages on which individual hi-fi components are described -make a list of the units you prefer-then just write to our Audio Division asking for a special System Plan price quotation. Our audio consultants will review every customer-selected system for proper matching of components (speakers correctly matched to enclosures, etc.), to assure you of peak performance. You can count on a prompt reply to your quotation request-and with any system you select, you get these FREE extras-all connecting and speaker cables, instruction manuals, needle and record care booklet, and preset stylus pressure to match the cartridge you select.

## SELECT AN ALLIED-RECOMMENDED MUSIC SYSTEM

You'll find many excellent systems listed in this catalog, made up of components that are carefully matched in quality and operating characteristics. Pay particular attention to the new Knight systems, and do-it-yourself Knight-Kit systems. They're selected to give you unprecedented quality in music reproduction at lowest cost.

## SELECT FROM THE WORLD'S LARGEST STOCKS

This catalog presents everything in high-fidelity-amplifiers, tuners, speakers, record changers, turntables, cartridges, tape recorders, etc. Biggest selections of famous standard-brand components, and hard-to-get accessories, too-all are included here in a wide range of prices, always in stock, ready for prompt shipment to you.

We Sell More Stereo Hi-Fi Than Anyone Else in the World . . . Because We Give You Every Buying Advantage


#### Abstract

Lowest, Money-Saving Prices ... on all hi-fi components; special savings on our matched music systems and on Knight and Knight-Kit products. World's Largest Selection . . . of everything in hi-fl, in stock ready for prompt shipment to you.


Expert Counseling Service. Our audio specialists will be glad to answer any question you may have on highfidelify. For assistance in choosing a hi-fi music system to fit your taste and budget, write to Allied's Audio Division. All inquiries promptly answered.

## HOME TRIAL PLAN For Your Complete Satisfaction

Buy any hl-fi component or system on cash terms or on our Credit Fund Plan. Then check performance in your own home. If you are not fully satisfied wlth your purchase for any reason, return the equipment to us. We will refund the full purchase price.

Complete Warranties. All hi-fl components soid by Allied are covered by standard manifacturers' warranties and Allied's own warranties on Knight and Knight-Kit products. In addition, you are protected by Allied's guarantee of complete satisfaction or your money back. We have expert servicing facilities for everything you buy.


> WORLD'S LARGEST SELECTION OF CRAFTSMAN-CREATED HI-FI CABINETRY AT LOWEST PRICES

An outstanding selection of line furniture in styles and finishes to match any decorative scheme-in price ranges to suit any budget. Make it a point to check Allied's superb array of hi-fi furniture. You'll find matching ensembles of unusual beauty and individual pleces In a complete range of furniture modes.

## KNIGHT

and

## knight-kit

STEREO HI-FI SYSTEMS
AND EQUIPMENT ARE YOUR BEST BUYS


Incorporating the best of the latest electronic developments, and custom-built of the finest quality components, Allied's own Knight components are renowned as the greatest hi-fi values anywhere. All Knight units carry an unconditional guarantee covering parts and labor for one full year. Allled brings you famous Knight-Kits too-an outstanding selection of superior hi-fi components in build-your-own form. See pages 2 and 3 in this catalog for the complete Knight-Kit story.

# NOW! GREATER BUYING POWER with your GLLIED CREDIT FUND PLAN 

you get even more for the same low monthly payment!

## Get These 7 Outstanding Advantages

New Lower TermsGreater Buying Power than ever with your<br>\section*{AIIIEL}<br>CRFDIT FUND PLAN NEW EXIRA BUYING POWER LIKE THIS: FOR ONIY \$5 MONTHLY YOU CAN BUY UP TO $\$ 100$

## Credit Fund Fayment Table

## Monthly Payment

Unpaid Balance
(Total amount less any payment)

| Only | Buys Up To |
| :---: | :---: |
| $\$ 5$ | $\$ 100$ |
| $\$ 6$ | $\$ 120$ |
| $\$ 7$ | $\$ 140$ |
| $\$ 8$ | $\$ 160$ |
| $\$ 9$ | $\$ 180$ |
| $\$ 10$ | $\$ 200$ |
| $\$ 11$ | $\$ 220$ |
| $\$ 12$ | $\$ 240$ |
| $\$ 13$ | $\$ 260$ |
| $\$ 14$ | $\$ 280$ |
| $\$ 15$ | $\$ 310$ |
| $\$ 16$ | $\$ 340$ |
| $\$ 17$ | $\$ 370$ |
| $\$ 18$ | $\$ 400$ |
| $\$ 19$ | $\$ 440$ |
| $\$ 20$ | $\$ 480$ |
| $\$ 21$ | $\$ 500$ |
| $\$ 22$ | $\$ 525$ |
| $\$ 23$ | $\$ 550$ |
| $\$ 24$ | $\$ 575$ |
| $\$ 25$ | $\$ 500$ |
| $\$ 26$ | $\$ 625$ |

Over $\$ 625$-Monthly payments will be in proportion to amounts on chart.

Small Service Charge. Only a small service charge of $11 / 2 \%$ is added to your monthly balance. There are no other charges. Your monthly statement shows exactly what you pay, what you owe and how much unused credit you have.

1. More buying power-your Allied CREDIT FUND PLAN gives you more than ever
2. Not a penny down required
3. Take up to 24 months to pay
4. A definite amount is set aside in a CREDIT FUND for your use
5. Make "add-on" purchases at any time
6. You always know where your account stands-you get a full statement each month
7. Your CREDIT FUND automatically increases every time you make a payment
Plus Benefits: A single low monthly payment brings you anything Allied sells. You save money, because all you pay is a small monthly service charge, which is automatically reduced every tlme you make a payment. No service charge at all if paid in 30 days.
Here's How the Allied CREDIT FUND Works: When you first open an Allied CREDIT FUND account, we set up a Credit Fund in your name. It allows you a definite amount which we set aside in a Fund for your use. Buy anything you want without a penny down-covers "add-ons," too.
You always know exactly how much more credit is available to you. Under the CREDIT FUND Plan, you can actually enjoy more buying power than ever before possible for the same low monthly payment. Example: For a monthly payment of only $\$ 20.00$ you can now buy in the amount of $\$ 480.00$ as compared to $\$ 400.00$ under the old regular terms.
To Open Your Account. To enjoy the advantages of an Allied CREDIT FUND, fill in the application on the back of our order blank, and send it in with your order.

## No Down Payment Required

No down payment is required on any purchase you make on your Allied Credit Fund Plan. You can use all or any portion of the amount in your Fund. Your monthly payments depend on the amount you use (see Table at left).

Each time you buy, you draw against your Fund, but each payment you make goes toward building up more and more credit. This means you can "add-on" new orders at any time.

## Only Your Signature on "Add-On" Orders.

You can "add-on" orders at any time for the unused amount in your fund with no money down. Just sign your order in the space provided. You may determine your monthly payment in the following way:

1. Combine amount of your "add-on" order whth your present - unpaid balance.

2 See Table at left to find proper monthly payment for new
2. unpald balance.
3. If the monthly payment is the same or less than the amount - you are currently paying, no change in your monthly payment will be required.
4 If monthly payment for your "add-on" order, plus your present unpaid balance is more than you currently pay, we will show the new monthly payment on your next statement.
Simplest, Easiest Plan. Because you get a detailed personal statement each month, you don't have to bother with bookkeeping. You can check accuracy in seconds. Because all shipping charges are prepaid and included in your account, there's nothing to figure. Your Credit Fund Plan is the last word in low-cost convenience.
> enjoy everything you need and want in electronics... today!

# Allied extra-SPECIAL values! 

## Bonus Buys for Old-Time Friends...

## Get-Acquainted Specials for New Customers

BE IN ON THE BIG SAVJNGSI Make it a point to check all of the extra-special values you'll find in this folder-it's our way of saying, "Welcome"! We want you to experience the satisfaction, service and savings you always get as an Allied customer. Choose from the amazing values described here-in addition to the thousands of money-saving ltems you'll see in your regular Alled Catalog. It's a terrific opportunity!

## ORDER NOW . . . AS AN ALLIED CUSTOMER YOU'LL GET A FULL YEAR OF EXCITING BARGAIN SALESBOOKS!


$8^{\prime \prime}$ PM Speaker Value

2.15-02. Magnet

Reg. \$2.30
Only
$\$ 198$

Enriches bass response of radio, phono, or your TV set. Imp., 3.2 ohms. Wt. $11 / 2 \mathrm{lbs}$. 39 A 458-J

ONLY 1.98
$1 / 4^{\prime \prime}$ Quality Phone Jack


3 or $30^{\circ}$
Popular $2 \cdot$ cond. type 6 oz .
39 A 495-J. Pkg. Of 3. ONLY 30C

Pickering Stereo Cartridge
SAVE MORE THAN HALFI


Famous Model 371C

$$
\begin{aligned}
& \text { Was } \$ 24.00 \\
& \text { Now Only }
\end{aligned}
$$

High performance - response, $\pm 2 \mathrm{db}$ from $18-22,000 \mathrm{cps}$. Diamond $.0007^{*}$ stylus. $20 z$. 73 RC 912-J..... ONLY 7.79

10-Piece Driver Set


$$
\begin{aligned}
& \text { Now } \$ 129 \\
& \text { Only }
\end{aligned}
$$

Multi-purpose tool set-6 nut driver, 3 screwdriver blades; handle, roll case. 1 lb .
46 N 463-J Was $\$ 1.69$. . 1.29

Save on Pocket-Size VOM

## - 20,000 Ohms/Volt. DC Sensitivity <br> - 10,000 Ohms/V., AC

Ranges (5): AC, 0-1000 v.; DC, 0.500 v.; Ohms, $0.5 \mathrm{~K} .500 \mathrm{~K} ; \mathrm{DC}, 0.50 \mathrm{ua}$, 0.250 ma. With battery, leads. $51 / 4 x$ $31 / \times 13 /{ }^{3}$. From Japan. 1 lb .
39 A 496-J
only 9.95


## ONLY AT ALLIED-AMAZING BUYS LIKE THESE!



## Assorted Slide Switches


$15 \operatorname{tor}^{11^{18}}$
SPECIAL PURCHASE
Quality switches at less than 9c apiecel Package includes SPST, SPDT, DPST and DPDT types rated to 3 amps. U.L. Approved 8 oz .
39 A 360 : J. Pkg. of 15. ONLY 1.29
Top-Quality Earphone Complete with Plug


Value.Plusl Comfortably fitting earpiece, supplied with $36^{*}$ cord, phone plug. Response, 50-500 cps. $500-3 \mathrm{~K}$ ohms impedance. Fits must transistor portable radios. From Japan. Wt., 5 oz
39 A 498-J
ONLY 59C

# Great 6-Transistor Pocket Radio Value Only ${ }^{5} \mathrm{~g}^{95}$ 

- 6 Transistors plus Diode and Thermistor Circuit
- Fits in Pocket or Purse
- With All Accessories

Enjoy up-to-the-minute $A M$ broadcasts. Features: crisp sounding $2^{*}$ speaker; rellable thumb wheel controls for volume/off-on and tuning. With leather case, earphone, battery. $31 / 2 \times 21 / 4 \times 13 / \operatorname{co}^{\circ}$. $11 / 4$ Ibs. 24 SC 046 J.
only 9.95

## 6x9" Oval PM Speaker Bu



> Reg. \$2.30
> $\$ 198$ Now Only

For unlversal replacement use or it new equipment. 1.47-oz. magnet separate whizzer for clear highs Imp., 3.2 ohms. $11 / 4 \mathrm{lbs}$.
58 A 441.J
only 1.9

## Filament Autotransformer <br>  <br> Only 98. <br> Great for the Hobbyist and Serviceman

## AT A LOW, LOW PRICE

Transformer with Primary for 117 VAC: Secondary: 6.3 v. (i) 1 amp , 12 v. (r) 5 amps, 18 v. (f) 3 amps . Size: $1^{13}{ }^{1+1} \times 2^{3} / \mathrm{m}^{\circ} \times 2^{4} . W^{4}, 1 \mathrm{lb}$.
39 A 295-J ONLY 98c

Tube Cooling Motor with Fan


Well known Thor Speedway motor and fan. Extends tube life and permits improved shielding. Great value for the Experimenter, too! Runs at 3210 rom , N.L. ${ }^{5} / \mathrm{O}^{2} \times{ }^{5} \mathrm{~m} \times 23 / \mathrm{m}^{\text {" }}$. For 115 v., 60 cycle AC. $11 / 4 \mathrm{lbs}$.
39 A 480-J
ONLY 1.98

Assorted Hook-Up Wire


Get all you need, now! High-effi ciency stranded copper wiretinned and untinned. Assortec colors, gauges and insulation. 1 lb 39 A 497-J. 6 Coils.. ONLY 49C

Assorted Controls Buy


## 6 tor $98 \circ$

Radio-TV sericemen, builders, and Hams-stock up nowl
A top-value- 6 wirewound controls at an amazingly low price. I each (ohms): 500, 750, 1000, plus 3 other popular types. Wt., 402.
39 A 493-J. Pkg. of 6 . ONLY 98C

# more $\boldsymbol{A} \boldsymbol{L} \boldsymbol{L} \boldsymbol{E} \boldsymbol{\square}$ extra-special values! 

Sensational Stereo Demonstration Record Package of Three 33-1/3-12" LP's Check-out your stereo music system with these carefully planned test records...and enjoy a thrilling demonstration of superb stereo music recordings!
Allied's own 3 -record package critically selected by our audio engineers to test every separate aspect and total performance of your stereo music system, easily and accurately. First record lets you make a complete check of equipment, and gives instructions for proper set-up. Second record demonstrates spectacular ability of stereo recordings to reproduce life-like sound: airplanes of all types, automobiles, etc. Third record contains musical passages to show the full-dimensional, breathtaking sound achievable by your system. Shpg. wt,, 2 lbs . Package of 3-12" LP's-at Special Bargain Priceorder Stock No.
26 RR 009-J. Mfr's. No. CSDT. . ONLY 3.29

Bargain Assortment of Most-Used Terminals


## 25 for 34

Bakelite strips, $3 / 8$ " wide. Lug and solder types. 58 A 580-J. Package of 25 . Wt., 3 oz....... ONLY 34C


Save on Rubber-Handle Plugs
2 Sturdy plugs made of unbreakable, soft rubber. Simple to connect. 60 z . 39 A 494-J. 3 for 19C


## 4" PM Replacement Speaker Value

Reg. \$1.13
Only 986
Features precision centered voice coil and $68-0 z$. magnet. 1 mp . 3.2 ohms. $1 / 2 \mathrm{lb}$.
58 A 419-J ONLY 98C

## 50-Piece Paper Capacitor Assortment



100-600 WVDC Tubulars in Popular Values

## 50 tor 980

All are U.S.-made, wax-impregnated capacitors. Wide variety of capacity values, sizes. 12 oz .
39 A 442-J. 50 for ONLY 98C

## 24-Drawer All-Steel Cabinet

UNION U-24 Only


Plastic
Drawers

Rugged, heavy-gauge welded "Stackmaster" cabinet. Has high-impact plastic, partitioned drawers, each $11 / 4 \times 23 / 4 \times 51 / 2^{\prime \prime}$. Cabinet is $11 \times 121 / 2 \times 6^{\prime \prime} .9$ lbs. 86 NX 783 -J. Was $\$ 5.50$

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9-Volt Transistor Radio Batteries

Top Quality • Longer Life 3 or 59 c

An outstanding bargainl Fit most portable transistor radios. Replace Burgess 2U6. RCA VS323, Eveready 216, Zenith Z216, Neda and RayO.Vac 1604, others. From Japan. Pkg. of 3, 6 oz. 55J147-J. 3 FORONLY 59C

## Unbeatable 5" PM Speaker Value



SAVE OVER ONE-FOURTH Reg. $\$ 1.30$
Now Only ${ }^{\circ}$
$5^{\prime \prime}$ speaker ruggedly built to EIA dimensions; rigid frame. Fully dust-proofed. Magnet, .68-oz. Imp., 3.2 ohms. 12 oz . 39 A 438-J ...... ONLY 98C

## Audio Cable at Special Bargain Price



No hi-fi system owner ever has enough of thesel Shielded cable assembly has molded phono pin plug at each end. No soldering, no wiring-just plug in and use Here's your chance to load up nowl Shpg. wt. $36^{\prime \prime}$ cable, 8 oz.: $18^{\prime \prime}$ cable, $40 z$.
39A484-J. $36^{\circ}$ Cable. ONLY 39C 39 A 483-J. 18" Cable. ONLY 29c

Famous Knight-Kit Crystal Set Kit
 - Amazingly Clear Reception

Let some beginner get their start in electronicsl Kit includes: all parts, pre-set crystal, wire, solder. baseboard. Less headphone, antenna.
83 Y 261-J. Shpg. wt., 1 lb.
ONLY 2.95
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ONLY 1.03

## Popular Accessories for Crystal Sets



High-Fidelity Stereo Headphones



Maximum comfort-aircushioned headband, rubber earpieces. $30-15,000$ cps. 8 -ohms/phone. With cables, 3 -cond. plug. 2 lbs. 59 D 064.J
9.95

What a buy-25 precision-made disc ceramicsl Capacities from 5 to 1000 mmf ; WVDC from $600-5000 \mathrm{v} .4 \mathrm{oz}$.
39 A 001-J. Package of 25
onty 98c
Centralab PC-91 Printed Circuits

## 3 for 39 c

Reg. \$2.70
Ceramic Disc Capacitors

## 25 tor $98 \circ$

A complete pentode couplate PC-with resistors, capaci tors and inductors bound to ceramic base. Wt., $60 z$. 39 A 566-J. Package of 3
landy Tube and Continuity Checker

## Only $\$ 169$

Amazingly low priced! You can use this compact tester to quickly check radio-TV tubes; test continuity of coils, appliances, etc. With leads. For $110-120$ v., 50.60 cycle AC. Shpg. wt.. 1 lb. 39 A 499-J. List. $\$ 4.95$

ONLY 1.69

## 2-LB. Box Hardware Assortment



A bargain box of screws, rivets, nuts, rubber grommets, eyelets, etc. Wt., $21 / 4 \mathrm{lbs}$. 39 A 328-J. 2-lb. Box

ONLY 88c

## 2-LB. Bargain Box of Washers

## Wide Assortment of Tubular Capacitors



Plastic-molded, ceramic cased. Popular values. i9 A 386-J. Pkg. of 20. Wt., 1002.

ONLY 98c

Famous-Name Brand Recording Special t

A.s Low
'15
12-Lot
Stock up nowEvery 7 " real of fi. "Mylar" tapes anteed splice. and uniformiy se tive. Shpo.vet., $1 \%$ 80 R 8.9-J. 1-11, EACH 1.78 1: More, EACH 1
"Phone-Talk" Telephone Amplifier
 watt; 10 K -ohm, 4 - wati; plus 7 others. ilt. 39 A 488-J. Package of 12 ONLY 98c


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## knight-kits

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Specially designed to make you a kit-building expert even with no previous experience-each Knight-Kit comes to you in perfect order, and there's nothing else to buy, not even solderl Save money, have fun and enjoy professional performance with KnightKits. Save by doing the easy assembly yourself. Have fun as you learn about electronics. Enjoy professional performance from equipment expertly engineered. A favorite among hi-fi enthusiasts, radio Amateurs, technicians, and hobbyists-you, too, can always look to Knight-Kit for the newest and bestl

USE THESE COUPONS TO SAVE EVEN MORE!

##  <br> FAMOUS WEN SOLDERING GUN REGULAR $\$ 4.66 \mathrm{VALUE}$ ! Rated at 100 watts. Perfect for general soldering applications. Just check box below and specify Stock No. 83 Y 055-J on your order blank. <br> $\square$ Include BONUS BUY Wen Soldering Gun.




## "A"AUTOMATIC TURNTABLE AND CARTRIDGE

 Finest of the Garrard changers! Combines professional turntable performance with 4 -speed automatic record-Changer PLUS Any One Cartridge for Just if More


Purchased Separately
(A) EMPIRE 880. .0007 ${ }^{\circ}$ diamond stylus. Wt., 3 oz.
73 RC 902.........NET 42.50
(B) SHURE M3D. .0007* diamond stylus. Shpg. wt., 3 oz. 73 RC 900 .......NET 44.10
(C) PICKERING U38AT. .0007* diamond stylus. Wt., 3 oz.
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(D) KNIGHT KN-505X. .0006" diamond stylus.Wt., 3 oz.
95 RC 806.
NET 39.95
changer convenience. Dynamically balanced, 6-lb. cast turntable; manual-automatic switch; laboratory balanced motor; smooth pusher-type changer mechanism; precision pickup arm with built-in stylus pressure gauge, $16 \times 131 / 4$ "; requires $25 / 8^{\prime \prime}$ below, $6^{\prime \prime}$ above motor board. Less base. For $100-130$ v., 60 cycle AC. Wt., 19 lbs. $\$ 5$ Monthly. 20 RX 362-2. Type " $A$ " and Choice of Cartridge
79.51

Type " $A$ " and CARTRIDGE
'7951
Type "A" 73 RX 052. Type "A" Only

NET 79.50


AT6 AUTOMATICTURNTABLE,CARTRIDGE
Designed in the spirit of the Type "A," the 4 -speed AT6 offers protessional performance in a somewhat smaller unit. Tubular pickup arm has adjustable counterweight for perfect balance with any cartridge, plus built-in gram scale. Also: oversize turntable for precise speed; switch for manual or full automatic operation. $14 \frac{1}{2} \times 12 \frac{1}{2}$ "; requires $23 / 8$ " below, $41 / 2^{\prime \prime}$ above motor board. Less base. For 100.130 v ., 60 cycle AC. Wt., 12 lbs. $\$ 5$ Monthly.
20 RX 363-2. AT'6 and Choice of Cartridge
54.51

73 RX 053. AT6 Only
NET 54.50

## AUTOSLIM/P CHANGER AND CARTRIDGE

Offering even better performance for '63, the improved Autoslim sports a new, turntable-type tubular pickup arm with plug-in head. Changer intermixes all records of the same speed regardless of size or sequence. $61 / 4 \times 131 / 8 \times 121 / 2^{\prime \prime}$; requires $23 / 8$ below, $41 / 2^{\prime \prime}$ above motor board. Less base. For $110-130$ v., 60 cycle AC. 9 lbs. $\$ 5$ Monthly. 20 RX 364-2. Autoslim/P and Choice of Cartridge. 39.51 73 RX 054. Autoslim/P Only

NET 39.50


# Knight-kiE ${ }^{\oplus}$ Presents the KU-45 "Audio Center" Kit in a Complete Stereo Phono, Stereo Multiplex FM, AM Hi-Fi System 

SAVE $\$ 58.67$ on the complete system

> Only $\$ 20995$ 205

\$15 Monthly

- Knight-Kit KU-45 32-Watt Stereo MX FM-AM Receiver
- Garrard AT6 Changer and Base Plus Plastic Cover
- Two Knight KN-820 12" Speakers and Two Knight KN-1286 Walnut Speaker Enclosures
- Knight KN-505X Cartridge


## For More on the KU-45

 Turn to page 4 of this catalog for specifications.A compact, distinctively styled, money-saving stereo hi-fi system that brings you a full 32 watts of audio power . . the brilliant artistry of stereo records... the dazzling beauty and versatility of both stereo and conventional FM ... plus the music, news and sports you enjoy on AM. What's more, it's complete with everything included. There's nothing else to buy.
Assembly of the KU-45 is fun, even if you have no kit-building experience. Point-to-point wiring is simplicity itself-and as a further convenience, we have pre-wired and aligned the FM "front end". KU-45 highlights: 32-watt stereo amplifier, wideband FM, and sensitive AM sections; built-in multiplex circuit; AFC for "lock-in" FM tuning; tape head inputs; recording outputs; and Dynamic Sideband Regulation that reduces the effects of FM overmodulation. You also receive an oiled walnut case for the KU-45.
AT6 record changer (with oiled walnut base and plastic cover) offers professional features to match the breathtaking $15-30,000 \mathrm{cps}$ response of Knight's newest cartridge. the KN-505X. Expertly crafted KN- 1286 shelftype enclosures with oiled walnut veneer are a fine furniture addition to your home. Their vented-port design enhances the solid bass response of the Knight KN-820 dual-cone 12" speakers. Shpg. wt. 134 lbs.
22 HF 001 -J. $\$ 15$ Monthly.
ONLY 289.95
22 HF 002-J. Stereo FM-AM System Only. As above, but less changer, base and cartridge. $118 \mathrm{lbs} . \$ 12$ Monthly

ONLY 229.95
KU-45 32-WATT STEREO RECEIVER KIT ONLY. Distinctively styled in anodized Satin Gold and Mocha. With all parts, pre-cut wire, solder, and easy step-by-step instructions. Less case. $43 / 4 \times 16^{7 / 16 \times 13^{\prime \prime}}$ deep. For $110-125$ volts, 60 cycle AC. Shpg. wt., 39 lbs.
83 YU 993-J. $\$ 7$ Monthly.
ONLY 139.95


[^0]:    SPECIFICATIONS. Recelver: Sensitivity, $1 \mu \mathrm{~V}$ for $10 \mathrm{db} \mathrm{s} / \mathrm{n}$ ratio; Selectivity, -6 db @ 6.5 kc ; Adjacent Channels, 25 db down; Audio Output, $21 / 2$ watts. Transmitter: RF Output, 3 watts; $54-\mathrm{mc}$ harmonic trap; adjustable pi-net output. Controls: On-Off/Vol.; Squelch; Crystal-Tune/Channel Selector; Tuning; Noise Limiter.

[^1]:    Power Output: 40 -watts continuous sine wave. Response: $\pm 1 \mathrm{db}, 25-28,000 \mathrm{cps}$ at full rated output. Distortion: Harmonic, less than $0.75 \%$ at full rated output; IM, less than $1.0 \%$. Hum and Noise: Tuner input, -77 db ; Magnetic Phono Input, - 55 db. Inputs ( 5 pairs): Tape Head (NAB), Magnetic Phono, Ceramic Phono, Tuner and Aux. Sensitivity: Tape Head (NAB) and Magnetic Phono (RIAA), 2.2 mv ; Ceramic Phono, 300 mv ; Tuner, 300 mv ; Aux., 700 mv . Feedback: 38 db negative each channel. Impedances: 4, 8, and 16 ohms each channel; 8 and 16 ohms center channel. Tubes: 2-6EU7; 2-12AX7; 2-6CM8; 4-6973; GZ34 rectlfier.

[^2]:    Output: 70 -watts sine wave. Response: $+0.5 \mathrm{db}, 20-30,000 \mathrm{cps}$ @ 70 watts. Distortion: Harmonic, 0.5\% @ 70 watts; IM, below 1.0\%@ 70 watts. Hum \& Noise: High Level inputs, 85 db below 70 watts; Mag. Phono Input, 55 db below 70 watts. Inputs: ( 6 pairs) Tape Head; Mag. Phono; Cer. Phono; Tuner; Aux.; Tape. Outputs: 4, 8, 16 ohms; 8, 16 ohms center. Tubes: 2 each-12AY7, 7025, EF86, ECC83, GZ34 rec.; $4-E L 34$.

[^3]:    Power Output: 32 watts continuous sine wave. Frequency Response: $\pm 1 \mathrm{db}$ from 30 to $16,000 \mathrm{cps}$ each channel at full rated power. Harmonic Distortion: less than $1 \%$ at full rated power. Hum and Nolse: better than 75 db per channel below full output at high level invuts; 52 db per channel below full oulout at magnetic phono input with 10 mv input reference signal; better than 45 db per channel below full output at tape head input with 10 mv signal.

[^4]:    IHFM Sensitivity: $4 \mu \mathrm{~V}$ for 30 db quieting. IF Bandwidth: 200 kc at $50 \%$ on curve. Image Rejection: 40 db with 10 microvalt signal. Hum Level: -45 db below 1 volt. Frequency Response: $20-20,000 \mathrm{cps}_{0} \pm 1 / 2 \mathrm{db}$. Output Impedance: 3000 ohms (cathode-follower), Distortion: $0.6 \%$.

[^5]:    Response (Independent of transport): $\pm 2 \mathrm{db}, 18-22,000 \mathrm{cps}$. Harmonic Distortion: Recording sections, less than $0.3 \%$ at max. recording level; playback sections, less than $0.3 \%$ at $2 v$. output. Input Sensitivity (for max. record level); 0.5 mv at mike inputs; 80 mv at aux inputs. Equalization: NAB at $71 / 2 \mathrm{ips}$ (play. back). Internal adjustment permits matching any recording head to produce NAB equalized tapes. Separate equalization for $33 / 4-\mathrm{ips}$ recordings. Bias Oscillator: 65 kc (voltage or current internally adjustable to match any head). Record Head Current: Adjustable to match any head

[^6]:    VERTICAL BANDWIDTH ON DC: DC to $5 \mathrm{mc}, 3$ db down. Relerence to i he, with vertical dieplay helght of $6 \mathrm{~cm},(.05 \mathrm{v} / \mathrm{cm}$ to $20 \mathrm{v} / \mathrm{cm})$.
    VERTICAL BANDWIDTH ON AC: WIth AC Preamp in , 005, .01 and $.02 \mathrm{v} / \mathrm{cm}$ ranges, 5 cps to $1.5 \mathrm{mc}, 3 \mathrm{db}$ down. Relerence to 1 kc , with vertleal display helght of 6 cm . On ranges from . 05 to $20 \mathrm{v} / \mathrm{cm}$, AC frequency responte to 5 cps to $5 \mathrm{mc}, 3$ db down.
    RISE TIME: 85 nitec, vertical dieplay height of 6 cm or leas.
    SENSITIVITY: DC coupled, .O5 v P-P/Cm. AC coupled, . 005 v P-P/cm. INPUT IMPEDANCE: 1 megohm shunted by $40 \mathrm{~mm} /$,
    CALIERATION VOLTAGE: , $1 \times$ P.P. $\pm 5 \%$ at front panel.
    LOW-VOLTAGE POWER SUPPLY: Regulated, $-150,+165,+365$ volte. HIGH-VOLTAGE SUPPLY: -1900 volts, regulated.
    POWER REQUIREMENTS: $105-126$ volts, 50 to 60 cycl AC.
    POWER CONSUMPTION: 175 watts.
    NUMBER OF TUBES: 21, excluding CRT, plus 7 diodes. Cathode Ray Tube with llat lace and P2 phomphor.

[^7]:    AC, DC, and Output Volts: 0-1-5-10-50-100-500.5000 volts; 7 ranges each.
    Resistance: $0.1000 \cdot 100,000$ ohms; 0-1 megohm (center scale at 60,150 and 1500 ohms ); 3 ranges.
    Current: $0.1-10-100$ ma; $0-1 \mathrm{amp} A C$ or $\mathrm{DC}_{4} 4$ ranges ea. Decibels: -20 to $+69 ; 6$ ranges.
    Meter Sensitlvity: $400 \mu \mathrm{a}$ full scale.
    Accuracy: $2 \%$ of full scale.

[^8]:    Resistance Ranges: $\mathrm{R} \times 1-100$ to 50,000 ohms; $\mathrm{R} \times 100-$ 10 K to 5 megohms.
    Capacity Ranges: $\mathrm{C} 1-.00001$ to $.005 \mathrm{mid} ; \mathrm{C} 2-.001$ to .5 mid; C3-. 1 to 50 mid ; C4 -20 to 1000 mid
    Leakage Test Voltages: $50,150,250,350,450$ volts $D C$.
    Power Supply: Transformer operated half-wave rectifler.

[^9]:    Frequency Ranges: Band A, $160-550 \mathrm{kc}$; Band B, 550-1850 kc ; Band C, $1850 \mathrm{kc}-7 \mathrm{mc}$; Band D. $7-27 \mathrm{mc}$; Band E, 27-112 mc , all fundamentals; harmonics to 224 mc .
    Modulation: 400 cycles.
    Audio Output: in excess of 10 volts.
    RF Output: In excess of 400,000 microvalts.

[^10]:    IHFM Music Power: 40 watts; 20 watts per channel.
    Response: $\pm 1 \mathrm{db}, 20-20,000 \mathrm{cps}$ at rated power.
    Hum: Tuner, -90 db ; Phono, -60 db .
    Inputs (5 Pairs): Mag Phono; Tape Head; Tuner; Aux 1 ; Aux 2.
    Outputs: 4 ohms (operates with 8 or $\mathbf{1 6 - o h m}$ speakers); 2 hi-Z for recording.

[^11]:    Electronically "moves" speakers closer together or farther apart for the best stereophonic effect.

[^12]:    Output: 7.5 millivolts per channel. Compllance (Vert. and Hor.): $15 \times 10^{-6} \mathrm{~cm} /$ dyne. Response: 15 to $30,000 \mathrm{cDs}$. Channel Separation: Exceeds 25 db
    Tracking Force: $3 / 4$ to 5 grams.
    Load Impedance: 47,000 ohms.

[^13]:
    #### Abstract

    $$
    4
    $$


[^14]:    $\qquad$

[^15]:    Sloch No. Type Descrip. Use With Models |NET 46 N 6257325 Tio nutl $0.440 .5 \cdot 40.8100$.
    
    
    

[^16]:     | NET |
    | :---: |
    | EACH |
    | ( | 9.87

[^17]:    Less shaft (listed below). NET EACH

[^18]:    B Monolythic Type．Solid homosenous

[^19]:    ALLIED CAN SUPPLY THE COMPLETE POTTER \&
    page? If not
    page? If not, remember that Allied stocks many other types of


    #### Abstract

    Potter \& Brumfield relays-only the most widely used ones are hown here. Contact us for prices and other product informa tion on any types not listed-you will receive prompt reply


[^20]:    77 PP 154, CA Serles. All speeds in table above available
    ェАСн 9.25

[^21]:    Alled maintains the world's largest, most comprehensive
    stocks of transformers and other electronic componente.
    If the transiformer yol require isnt listed here, contack
    us for price and otherinper reply.

[^22]:    Comblnallon Offer: Radlo and TV Receiver Circultry and Operation plus ing and Ropalr at a savings. $37 \times 762$.
    17.00

[^23]:    (F)
    Type 8285. Low-loss 300 ohm UliF-VIIF Fauke (7x30) reopperweld conductors. Polykauke ( $7 \times 30$ copperweld conductors, Polla-
    ethylene Insulation and webling. Cellular ethylene Insulation and selyethylene outer facket. Size outside diam-
    
    

[^24]:    Rectifiers
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    Instrument. . .... 401
    Selenium....... 318
    Silicon. 315, 317,318
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    Sockets
    Resistors
    Adjustable..321, 322
    Assortments. 321-324.
    Calculator . . 325, 415

