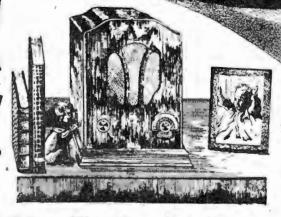
CATALOG NO14





SK VESEY ST. NEW YORK

# WITH THIS ISSUE

due to your patronage, for which we are extremely

The last few years have resulted in an increase in business necessitating a substantial increase in our force and quarters. We now occupy the entire sixstory building at 54-56 Vesey Street, a total floor area of 20,000 square feet, every bit of which is utilized. The basement of the building is used for stock. Our metropolitan sales division and offices are located on the street floor. Shipping and receiving departments occupy the next floor. These have been greatly enlarged to facilitate speedy handling of your orders. For the convenience of our large foreign trade, we have just organized a foreign department, where all export correspondence and orders are handled. Expert linguists will answer mail in any language, even Chinese. Executive and general offices are located on the second floor. On this floor is also the art department together with the test laboratories. The third floor is occupied by machine shop, assembly department and service laboratory. Only the very latest and best test equipment is used. The next floor is the stock room, and the overflow from this is placed on the next floor, where are also located spraying and finishing departments.

We have added to our staff either in advisory, consulting or active capacities, men who are known over the entire world as authorities in radio and electrical engineering. We have in addition full access to the facilities of the research laboratory in one of the largest technical schools in the East. In this issue of our catalog we want to introduce you to some of our staff. We will let you meet more in future issues. Your suggestions and comments are invited. Please address "Catalog Editor."

# Let Us Introduce M. B. Sleeper

Well-known author, sultant and engineer. Mr. Sleeper was in radio 'way Radio back when . . ." editor of Everyday Engineering, Radio Mechanics, Radio Engineering, Radio Design; President and Chief Engineer of General Apparatus Corp. and the M. B. Sleeper Radio Corp.; Chief Research Engineer for Pilot Radio and Tube Corp., and now President of the Sleeper Research Corp.



Mr. Sleeper is well known as the author of innumerable text books and pamphlets on radio. Many a radio man still remembers some of the famous circuits designed by him. The "RX-1," the "X-11," the famous "Pilot Wasp" which he engineered in conjunction with R. S. Kruse, the "Air-Hound," the "Air Scout" and

Mr. Sleeper is well versed in the needs and requirements of the serviceman and dealer. Wherever radio men congregate you will hear of "MB."

### Have You Met Bertram M. Freed? R.E., S.E., B.S.



Many years in the radio service field have gained for Bertram M. Freed an enviable, country-wide reputation a service authority. Thousands of service men have read and are familiar with his "Operating Notes for Service Men" for several years, a leading contribution to "Radio Craft," the service man's magazine. For a long time Mr. Freed managed the repair department of one of the largest radio retail organizations in the East. At present he is as-

sociated with this same company in an important capacity, and one that enables Mr. Freed to keep in close contact with all that pertains to radio service and repair. In an effort to aid servicing, he has designed many tools and devices to assist in the test and repair of receivers. We have induced Mr. Freed to manage our service and test departments which are at your disposal for servicing, test and repair of your receivers at a nominal fee. All this work is under the personal supervision of Mr. Freed. Write our Service Department for full details.

# Meet Alfred A. Ghirardi

Mr. Alfred A. Ghirardi is instructor in Radio and Electrical Engineering in one of the largest New York technical schools. He is author of the now famous "Radio Physics Course," a standard text in schools throughout the country. Mr. Ghirardi is now busily engaged in preparing a new and larger "Radio Physics Course" in response to many requests. He was formerly associate edi-tor of "Radio Engin-eering," "Radio Me-chanics" and "Radio Design." He was tech-



nical consultant for the Pilot Radio and Tube Corp. He is now the technical and chief engineer of the Radio Technical Service Bureau. Mr. Ghirardi can tell how a receiver or unit will operate and its characteristics, before it is even built. He is a member of the N. Y. Electrical Society. Mr. Ghirardi is that rare specimen, a practical research and development engineer. He is a frequent contributor to the pages of "Radio Engin-eering," "Radio Design" and "Radio News."

# Introducing Gerson Lewis B.S., A.L.M.E., I.R.E.

Gerson Lewis was formerly associate editor of "Radio Design" and was in charge of the Radio Design laboratory. He was also managing head of "Speed," the mail order division of Pilot Electric and Mfg. Corp.

Along with M. B. Sleeper he did radio work on the Pilot Airplane Radio Laboratory. Later he became engineer in charge of development at the Sleeper Research Labs., where remote control for radio was developed. He has been

actively associated in radio since his graduation from technical school in 100 contributes to "Radio Engineering," "Radio" other radio and electrical magazines.



# There's AReason!

I F you could walk into our place of business, we wouldn't have to write this. You would see a modern, efficient radio merchandising mart. As we took you through the various departments, over the floors occupying thousands of square feet, you would be thrilled at the size of this business machine and enthusiastic in voicing your admiration at the smooth-working efficiency of so vast an organization. But only a very few can call here, so in a few feeble words we try to tell you the story.

From our start in this business, we have had just one policy—VALUES AND SERVICE. Our entire organization, from the president down through the managers of departments to the errand boys, have this as their guiding beacon. "He profits most who serves best" is the best business motto. Modestly, yet with pardonable pride, we point to our present size and place in the radio industry as the best proof of it.

Located in New York, in the world's largest radio center, our experienced buyers are ever alert for quality merchandise at attractive prices. The main idea in this catalog is to offer all the wanted materials at the very lowest prices consistent with good quality and service. We will understate rather than overstate, and refrain from wild and extravagant claims which insult your common sense and intelligence.

As our experience grows, we are more and more convinced that you want honest, straightforward statements so you can pick the best value for the least money. We pledge an unbending adherence to these policies, which have been justified by the faith of the many customers whose satisfaction has caused the growth of this establishment to its present size.

### TRANSPORTATION

TRANSPORTATION

Please indicate on your order as to how shipment is to be made. If order is to be forwarded parcel post, include enough to pay for postage. We pay your parcel post insurance, when full remitance, including postage, accompanies your orders. Over remitances will be refunded. If not enough has been enclosed to pay for postage, we reserve right to ship C. O. D. or express collect for the balance. We reserve right to make shipment in manner we think best.

### 2% DISCOUNT

All prices quoted are net; a 2% cash discount has already been deducted.

### HOW TO ORDER

We pay postage on our convenient order blanks. If you are all out of these blanks a post card will bring a sur -y to you. Indicate catalog number, page number and full description of item.

# "SAME-DAY SHIPMENTS"

We can supply you with any item in radio, even though not listed in this catalog. Tell us what you want, and we will forward our lowest net prices to

#### NO MAIL ORDERS ACCEPTED UNDER \$3.00

Mail orders for less than \$3.00 cannot be accepted. If we were to ship such small orders, it would increase our operating exes and result in an increase rices.

# "If I Knew You and You Knew Me"

By W. E. COOPER

If I knew you and you knew me, 'Tis seldom we would disagree; But, never having yet clasped hand, Both often fail to understand That each intends to do what's right And treat each other "honor bright." How little to complain there'd be If I knew you and you knew me.

Whenever we ship you by mistake Or in your bill some error make, From irritation you'd be free If I knew you and you knew me. Or when some goods you "fire back,"
Or make a "kick" on this or that, We'll take it in good part you see, If I knew you and you knew me.

With customers ten thousand strong Occasionally things go wrong-Sometimes our fault, sometimes theirs-Forebearance would decrease all cares; Kind friend, how pleasant things would be; If I knew you and you knew me.

Then let no doubting thoughts abide Of firm good faith on either side; Confidence to each other give, Living ourselves, let others live; But any time you come this way, That you will call we hope and pray; Then face to face we each shall see And I'll know you and you'll know me.

# RETURN MERCHANDISE

In returning merchandise, please ask for authorization. All merchandise must be returned via parcel post or express, all charges prepaid.

We number among our thousands of customers the U.S. Bureau of Standards, Cornell University, Columbia College, Yale University, Hebrew Technical Institute, Tufts College, Sheffield Labs, and hosts of others. As we have satisfied these organizations, we feel confident we can please you. Our terms are strictly net cash. tions, we feel confident we can please you. Our terms are strictly net cash. Remarkable values and extreme discounts given by us make it profitable for you to buy for cash. All goods are shipped F. O. B. New York. We advise remittance with order. By remitting with order you save C. O. D. collection charges made by the Post Office, and express. This amounts to quite a saving in most cases.

#### C. O. D. SHIPMENTS

All C. O. D. orders must be accompanied by at least 20% deposit. No C. O. D. shipments made to foreign countries. We will ship documents against sight draft on any New York

#### METHOD OF PAYMENT

Make remittances by cashiers' check, postal money order, cash, express order, or personal check. Personal checks, unless certified will be held until payment is made. U. S. Postage Stamps in any denominations, in good condition, accepted in payment. Cash should be sent by registered mail.

# SANOTHER SMASHING TRIUMPHIS

# Reliable

The smallest and most complete radio receiver ever manufactured. Complete in every sense, containing features of the most expensive midget set on the market and many of its own. Housed in a beautiful cabinet of selected woods, the Reliable Junior produces enormous volume with distortion-free tone.

### Circuit Details

The circuit is newly developed and one of the most efficient ever designed, consisting of two tuned R.F. stages and two audio stages with Pentode output.

# Special R.F. Circuit

The double tuning condenser, which permits high gain per stage without the usual interference between stages, and the radio frequency transformers were specially designed to secure utmost sensitivity and the sharpest selectivity.

# New Special Design Power Detector

The detector uses a 224 as a power detector in the latest detector circuit design. The Reliable Junior has a power detector that will handle enormous volume without distortion and yet is far more sensitive than the old grid lear and condenser method of detection.



# Audio Amplifiers

The audio amplifier consists of a twostage compensated amplifier. The first stage is resistance coupled while the output stage which uses a Pentode is special transformer coupled. This amplifier gives tremendous gain and power. A phonograph pickup can be used, if desired, something which is not possible with receivers with a single audio stage.

### Full Range Dynamic

A dynamic speaker designed for use with a Pentode tube is the reproducer. It assures faithful, full-throated reproduction of all music and speech broadcasts.

# Filter Circuit

The filter circuit contains 7 mfd. of high grade linen-paper condensers. And 8 mfd electrolytic in a brute force filter. The most efficient filter yet designed. Absolutely no hum.

### Constant Voltages

The voltage divider system is so designed as to always furnish steady voltages to all tubes, due to the ingenious drop system employed.

# Over-Size Power Transformer

The power transformer employed is of a generous oversize type which delivers the full specified volages to all tubes. Built to a standard, not to a price, it gives long, unfailing service.

### Tuning Control

The tuning dial, of the latest type in design and artistic in appearance, is a full vision direct drive, with NO backlash or slip.

# Multi-Mu and Pentode Tubes Used

The use of a multi-mu tube increases the sensitivity and volume. Selectivity is brought up to a new degree by reducing cross talk modulation to a minimum. A Pentode tube in the output circuit handles the enormous power input and delivers it to the speaker in a new realism of tone,

# Handsomely Finished Cabinet

The cabinet is gracefully designed. It is made of hard-rubbed satin-finished walnut, and measures 18"x10\%"x7". The on and off switch is combined with the full range smooth volume control.

### Full Shielding

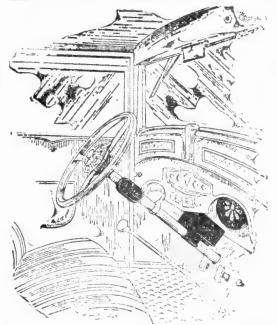
The chassis is cadmium plated and fully shielded. Every new feature is built into this receiver. Not a fob lot, but a carefully designed, well-planned, capably-built receiver.

Cat. No. 3928

# YOUR PRICE \$16.75

Complete with Tubes Ready to Operate

When sets are ordered in lots of or more deduct 5% addition-



# La Salle Modern Pentode Auto Radio

The La Salle Auto Radio represents the newest developments in auto radio. Uses the new radio tubes. specially designed for automobile radio, a Utah selfbaffling dynamic speaker, easiest installation of any automotive set, high sensitivity, quality comparable to the home receiver, and the latest and most efficient control system yet devised. Battery drain is kept down to a minimum and assures long battery life.

# Uses Newly Developed Automotive Tubes

The La Salle uses six of the new automotive tubes. Three of the 236 screen grid type, two of the 237 general purpose type and a 238 Power Pentode output tube. This combination gives it stability, sensitivity and freedom from tube trouble and burnout. The automotive tubes are of the heater type, non-micro-

phonic, sturdy construction, and designed to operate over a filament range of from 6 volts to 7.5 volts. This insures equal reception when the car is at rest or when running and the generator charging the car battery, increases the potential across the battery by 1 to 11/2

Full Range Utah Dynamic

A special automobile dynamic speaker, manufactured by Utah is standard equipment with each set. It is a speaker worthy of the finest motor car. Has adjustable brackets that will allow easy installation in any car in any position. The Utah Auto Speaker is acoustically correct and will give quality comparable to the finest receivers in the home.

The Utah Motor Car Control

The modern motor car radio deserves a remote control that is equal to the car and radio in mechanical perfection, appearance, and reliability. The control is at the fingertips of the driver and is not affected by road shock and requires no drilling or cutting to install. The Utah has no back lash, no lost motion, no clumsy rotating drive and does not require straight line installation. Cable up to 10 feet long will be supplied at no extra charge, when specified. If a longer drive is needed there will be an additional charge of 25c per foot.

Filtered Power Supply
"A" power is drawn from the car battery. "B" supply is taken from four large dry "B"
This batteries mounted in a steel case which fastens out of sight under the floor boards. case is standard equipment included with the receiver. Voltages from the "B" batteries are divided within the set. Each lead is filtered to prevent interstage coupling.

Easy Installation

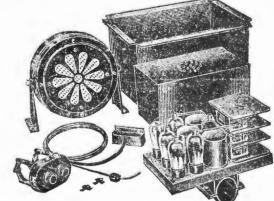
La Salle Pentode Auto Radio is the smallest ever designed for motor car use. It can be installed in a fraction of the time needed for other makes. A screw driver and pliers are the only tools necessary. No drilling, cutting or marring of the car necessary. A collar on the receiver provides for installation on steering column. Where installation against a flat surface is desired the collar can be removed. Complete receiver with Utah Auto Speaker, Utah Remote Control, Battery Box, Ignition Suppressors, (suppressors for six-cylinder cars), Generator

Cat. No. 3696

YOUR

Less Tubes and Batteries

Extra Suppressors 45c each



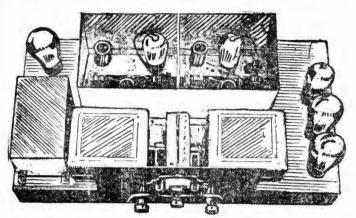


Cat. No. 8607

Cat. No. 3608

# PILOT RADIO PRODUCTS





# Pilot Universal Super Wasp Receiver Latest Model

The most advanced receiver ever offered the radio listener. Covers in seven steps the wave length range of 15 to 650 meters. One switch, controlled from the front panel controls all wave-length changes. This is as important an improvement to radio as the self-starter to automobiles. There are seven available overlapping ranges 15 to 23 meters, 22 to 41, 40 to 75, 70 to 147, 146 to 270, 240 to 500, and 470 to 650. Any one range may be instantly selected, a scale on the front panel indicating the range which is active.

The Universal uses a stage of tuned screen grid R. F. amphification, a screen grid detector using a new method of regeneration control which does not alter the tuning, an impedance coupled audio stage with 245 push-pull. Has provision for dynamic speaker field excitation, phonograph pickup and

earphone connections. A handsome walnut cabinet is supplied with all models. The receiver for A. C. uses two 224's, one 227, two 245's and a 280.

The Universal is also available in a battery operated model. The battery job uses two 236's, a 237 first audio and two 238 Pentodes. The receiver is identical in appearance with the A. C. model excepting that it has no provision for dynamic field.

Universal Kit for 110-115 volts, 60- cycle A C.

Your \$85.00

Price Universal for 110-115 volts, 60-cycle A C.

Cat. No. 3609

Cat. No. 3610

Factory assembled and wired. Your \$99.50 Price

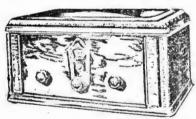
Universal Kit for battery operation.

Your \$79.00

Universal Battery Operated. Factory assembled and wired.

> Your \$93.00

# Pilot Television Receiver



Television has emerged from the "lab" and is ready for the public. Television reception is breathlessly thrilling and offers the set owner a huge amount of enter-tainment. Television is transmitted between 100 and 150 meters. The main requirement is that the receiver be free of regeneration. This rules out all standard short wave receivers depending on highly regenerative

wave receivers depending on highly regenerative detectors for their sensitivity. Pilot has brought out a special kit receiver for television work. It uses 2 stages of serren grid R.F. with 551 variable mu tubes, a 224 detector, a 227 first audio and 247 power pentode output and a 280 rectifier. The audio amplifier is resistance coupled. The set tunes from 100 to 500 meters with two sets of plus-in coils. No power supply is furnished, the receiver being designed for the standard K-112 Power Pack Television kit with front panel, less tubes and power pack.

Your Price.
Television receiver kit with cabinet, less tubes and power pack. Cat. No. 3612. Your Price.
Power Pack for television receiver. Cat. No. 3613. \$34.50

Your Price.

We recommend the Reliable Televisor with the above receiver. The televisor will be found listed in this catalog.

# Variable Shielded Condensers



The new Pilot shielded variable condensers are the heaviest and most rigid condensers ever offered. Designed originally to meet the specifications of the Pilot DeLuxe Super-Heterodyne receivers, they are built to very rigid standards. Made in single, double, triple and quadruple units, the maximum capacity per section being 000365 mfd. Minimum capacity is unusually low and permits full coverage of the broadcast band. Dimensions 44% by 3% on end. Depth 1%". 3". 4%" and 6". Shaft 4%".

Your \$1.14 Cat. No. 3390. Single Section

Your \$2.19 Cat. No. 3600. Double Section

Cat, No. 8601, Triple Section

Cat. No. 8602. Quadruple Section

Your \$3.33

Your \$4.47

### Midget Variable Condensers

Used for neutralizing R.F. amplifiers, autenua coupling, tuning verniers, regeneration control, short wave tuning, etc. Available in four capacities.

TO ILL OWN INC.	Uat. No.
	8603
	8604
	8605
THE PARTY	

Cat. No.	Max mid. 1	
8603	.000015	50c
8604	.000025 , ,	50c
8605	.00005	50c
8606	.0001	60c

# I. F. Transformers



For the intermediate stages of the super-het. These are accurately matched. Packed three to a box. In strong aluminum cans arranged for ease of mounting. Cane measure 2 13/16" in diameter and 234" in height.

Cat. No. 3934 List \$6.00

\$3.50 Per Kit of Three

### Super-Heterodyne Coils



This kit contains one band-pass coil, one oscillator coil and two special fixed con-densers. Packed in one box. Designed for a circuit com-prising a band-pass filter coupled to a screen grid R.F. stage ahead of first de-tector. Recommend the use of the Plut Shielded Vari-able Condensers with this kit. Cat. No. 3935 List \$3.70 Cat. No. 3935 List \$3.70

Complete

#### COMPLETE LINE PILOT RABIO

# Matchless Performance SUPER-HETERODYNES

Enduring Satisfaction

THE RESULT OF SINCERE WORKMANSHIP



# Pilot Midget Super-Heterodyne

The new seven-tube Midget Super-Heterodyne has instantaneous eye and ear appeal. It is a small set, but a big performer! Its modified Gothic cabinet is most distinctive in shape and decoration, and presents a truly beautiful appearance because of its combination of diamond walnut veneer and maple grill and overlay. It stands 18½ inches high, 16½ inches wide and 9% inches deep. beautiful inches deep.

This wonderful set has automatic volume control, full vision illuminated this wonderful set has automatic volume control, full vision infuminated station selector, tone control, phonograph connection and a full-voiced dynamic speaker. It uses the latest variable-mu and power Pentode tubes in a highly developed super-heterodyne circuit that gives clean-cut separation between stations, with clear rounded tones. The automatic volume control reduces fading, eliminates "blasting," and assures uniform signal strength. No other radio set at this price has this expensive feature.

The Midget Super-Heterodyne employs three 551 variable-mu tubes, two 227's, one 247 Pentode and one 280 rectifier. The circuit comprises one R.F. stage ahead of the first detector, local oscillator, I.F. stage, second detector and output lator, I. Pentode.

Cat. No. 8981.

YOUR PRICE

(Complete with Tubes)

110-volt D. C. Model available at same price. Models available for battery or 25-cycle operation.

# Pilot Standard Console Super-Heterodyne



The ten-tube Pilot Super-Heterodyne, in its full-size console, is both a technical achievein its full-size console, is both a technical achievement and an artistic accomplishment. The rigid chassis, solidly built for enduring performance and service, incorporates new and exclusive features performance and service, incorporates new and exclusive features developed by the developed by the Pilot engineering staff. A hitherto staff. A hitherto unrealized degree of a nativity and selectivity has been obtained with full retention of tone quality.
An altogether new
type of automatic
volume control
eliminates fading
and prevents
"blasting" In the tone quality. loud speaker when the set is tuned from one station to mother. Other features are full-vision station se-lector, tone con-trol, phonograph

trol, phonograph
connection, nineinch dynamic
speaker and vis
dal tuning meter.
The two-tone
walnut cabinet,
with its grace
fully rounded fancy legs, fancy grille and tasteful deco-

rations, is a beautiful piece of turniture that will grace any home. It stands 41½ inches high, 24½ inches wide and 15 inches deep, and is a fine example of the cabinet-makers art.

The Standard Super-fleterodyne uses four 551 variable mu tubes, three 227's, two 245's and one 250. The circuit is arranged with a pre-selector stage ahead of the initial P.F. stage, the combination working into the first detector, and followed by two I.F. stages, second detector, and pushpull power audio.

Cat. No. 3932. For 110-voit \$0-89 cycle A.C.

110-volt D.C. model available at same price. 25-cycle and battery models also available. (Complete with Tubes)

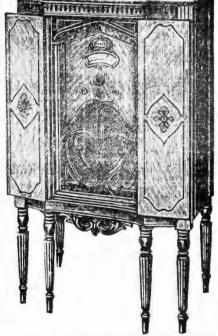
YOUR PRICE

# Pilot De Luxe Console Super-Heterodyne

The ten-tube De Luxe Super-Heterodyne is a set that lives up to its name. The walnut cabinet is walnut cabinet is truly magnificent in its well-pro-portioned con-tours, its fine matching of ven-eers, and its hand-some finish. The sers, and its hand-some finish. The six fluted legs create a pleasing effect of beauty and dignity that will distinguish this set from a dozen others on a display from display floor.

display floor.

The hinged doors fitted with antique metal handles, harmonize with the cabinet proper, whether they are open or closed. So many consoles look awkward and unbalanced with the doors swung open, that this new design will be greeted with open, new design wind be greeted with delight by merchants with a fastidious clientele. The De Luxe console is fitted with the same



console is fitted with the same ten-tube chassis as the Standard model, and like the latter, has a long length of baffle that brings out the deepest notes and reproduces every instrument in the targest symphony orchestra. The visual tuning meter shows when a station is fully tuned in, and is a valuable aid in realizing the selectivity and high tone quality of which the set is capable. Overall dimensions of the cabinet are: 41% inches high, 24% inches wide, and 15 inches deep.

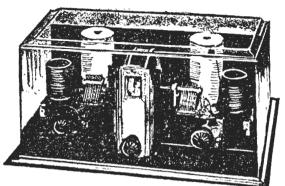
Ten tubes are required: Four \$51's, three \$35's, and two 245's and one 280.

Cat. No. 3933. For 110-volt, 50-60 cycle.

110-volt D.C. Model available at same price.

25-cycle and battery models also available. (Complete with Tubes)

# 



# The New National Thrill Box **Double Screen Grid**

Using New Variable Mu Tubes

The new National 5-tube short wave "Thrill-Box" receiver was designed in response to a continuous demand for a highly sensitive yet easily tuned short wave receiver. It is capable of giving consistent loud speaker reception from the numerous foreign short wave broadcast stations, as well as meeting the strongest requirement of amateur and commercial operators.

# High Gain Circuit Employed

The circuit comprises a stage of tuned screen grid R.F. and a screen grid detector. Type 205 or 551 variable mu tubes are used in the R.F. and detector stages. The two stage audio amplifier uses 227 tubes in both stages to eliminate all hum. The output stage is push-pull. A jack is provided after the first stage for headphone reception, if desired. Four sets of J.F. coils are included. They cover from 15 to 115 meters. Special coils are available for other ranges and blank forms for experimental purposes.

"Wide Band Spread" Operation

The straight line frequency tuning condenser is of a special construction and may be easily adjusted to provide for the "wide band spread" required for special amateur and commercial work.

All-Electric Operation

The power pack is a separate unit thoroughly shielded and mounted in an attractive metal case. It supplies all necessary power to the "Thrill-Box" receiver. It uses a 280 tube and comes complete with cable and plug. Model ACS W5—for use on 110-120 volts 50-60 cycle A.C. In kit form (with coils for 15 to 115 meters) uses 2-235's, 3-227's.

Cat. No. 3896.

YOUR \$46.75 Tubes

Model DC SW5—For 2-volt battery operation (with coils for 15 to 115 meters). In kit form. Uses 2-232's, 2-230's, and 1-231 tube. This receiver may also be used with six-volt rubes a positive form. Model DU Swo
15 to 115 meters). In kit ion...

15 to 115 meters). In kit ion...

16 to 115 meters). In kit ion...

17 tube. This receiver may also be used tubes as per instructions furnished.

18 YOUR PRICE S44.10 Tubes

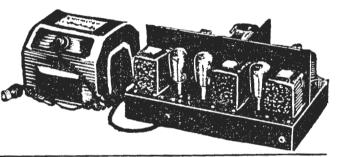
18 YOUR S20.30 Tubes

19 PRICE S20.30 Tubes

19 PRICE Per set of two

YOUR \$3.90

We can furnish either DC SW5 or AC SW5 model wired and ready to operate at an additional cost of \$5.88.



# SPECIAL SHORT WAVE TUNING CONDENSERS

Type SE 100





The new National Type SE 100 Variable Condenser has been designed especially for short-wave work and is not of the "cut down" broadcast variety. Among the outstanding features is the use of the 270° rotation equicycle plates, insulated front bearing, constant impedance pigtall, single hole panel mounting, as well as provision for baseboard mounting, 1. " shaft and R-39 low-loss insulation. Size 12. "X12." X2".

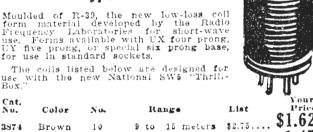
Rotor and stator plates readily removable to alter capacity

range to meet special circuit requirements.	
Cat. No. 3870—Type S E 100—100 mmf. List \$3.75. Your Price	\$2 21
List \$3.75. Your Price	ΨΔ.ΔΙ
Cat. No. 3871-Type S E 50-50 mmf.	¢2 06
Cat. No. 3871—Type S E 50—50 mmf. List \$3.50. Your Price	φ <u>4.</u> υυ
Type S T 100 same as above but eqitune plat	
rotation,	
Cat. No. 3872—Type S T 100—100 mmf. List \$3.75. Your Price	\$2 21
List \$3.75. Your Price	45.51
Cat. No. 3873—Type S T 50—50 mmf. List \$3.50. Your Price	\$2 NE
List \$3.50. Your Price	94.UU

# Special Short Wave Plugin Inductances

Type R-39

Moulded of R-39, the new low-loss coil form material developed by the Radio Frequency Laboratories for short-wave use. Forms available with UX four prong, use. Forms available with U. UY five prong, or special siz for use in standard sockets.



No.	Color	No.	16	ange	•	List	Price
3874	Brown	10	9 to	15	meters	\$2.75	\$1.62
	Black	11	14.5 to	25	**	2.50	1.47
	Red	12	23 to	41	**	2.50	1.47
	White	13	40 to	70	**	2 50	1.47
	Green	14	65 to	115	44	2.50	1.47
	Blue	15	115 to	200	Ħ	2.75	1.62
	Orange	16	200 to	360		2.75	1.62
	Yellow	17	350 to	550	**	2.75 per	1.62
	Special	18	540 to		LY	6.00 pair	3.53
Fo	ur prong	UX, ń	FORMS	E U	or six	prong Spe	ecial
Cat.	No. 3875.	List \$	1.50. Y	ur I	Price		89c
Cat.			FOR S			con	95c

# C>RADIO NATION A LPRODUCTS ON

# Luxe National

The latest development of the National Laboratories, incorporating the latest developments of Glenn H. Browning and James Millen. High selectivity, extreme sensitivity (approximately uniform sensitivity of one microvolt per meter over entire broadcast range). Four screen grid stages, Band pass stage. Totally shielded, Colored scale projection tuning dial. Absolute freedom from oscillation. Elimination of tube hiss and other background noises. Rugged construction. Thorough shielding. Easy to wire. Designed for people who want the best. Makes an ideal "radio pick-up" for theatres, hotels and public address systems. Especially designed for use with the Velvetone amplifiers, but can be used with any amplifier. During tests on a production set near Boston, three Californian stations were received with good regularity on an 8-foot antenna.

MB-30 Complete set of parts for 5-tube screen grid tuner.
Cat. No. 3878. List Price \$85.00.
YOUR PRICE

MB30 Tuner completely wired and ready to operate.

Cat. No. 3879. List Price \$95.00.

YOUR PRICE \$55.86





# **National Velvetone Amplifier-Speaker**

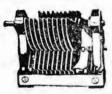
(Licensed Under R.C.A. Patenta)

This new Velvetone Amplifier Speaker unit is designed especially for use with the MB-30 tuner. A new type Jensen speaker is mounted on the amplifier chassis. Supplies plate and filament voltages for the tuner. It uses 1-227, 2-245's and a 280. Oversize power transformers and units insure long uninterrupted service. Comes completely wired and assembled with Jensen Speaker. List Price \$109.50 Cat. No. 3877

> Your Price

\$63.39

# National Equicycle Condenser



These condensors are of a straight line frequency type, 270° rotation, built into the National Girder frame. The spacing between plates has been doubled in the smaller sizes and a non-inductive pigtail added to insure positive and silent operation without detuning effect.

Cat. No.	Туре С	apacity I	No. Plates	List Price	Your Price
3881	EC-15	.000015	3	\$4.00	\$2.35
3882	EC-50	.00005	Ð	4.25	\$2.50
3883	EC-75	.000075	11	4.25	\$2.50
3884	EC-100	.0001	15	4.50	\$2.65
3885	EC-125	.000135	19	4.50	\$2.65
3886	EC-150	.00015	θ	4.00	\$2.35
3887	EC-250	.00025	17	4.50	\$2.65
3888	EC-350	,00035	23	4.75	\$2.80
3889	EC-500	.0003	31	<b>5</b> .00	\$2.94

# National Coupling Unit

This is a small insulated universal joint of the flexible disc type, for use in coupling the shafts of tuning condensers. Simplifies construction of single control receivers, prevents binding of shafts. For 14" shafts.

Cat. No. 3880 List Price 55c



Your Price 32c

### Laboratory Dials



The 4-inch solid German silver National Velvet Vernier Diai Type N has been developed for use in radio equipment re-Type N has been developed for use in radio equipment requiring the utmost precision of logging. It is equipped with a real Vernier, making accurate readings possible to 1/10 of a division. Uses the original and unexcelled National Velvet Vernier. Three-point mounting. mounting.

100-0 scale. 150-0 scale. Cat. No. 0896. Cat. No. 0891. Cat. No. 3892. List Price \$6.50. 200-0 scale.

Your \$3.82

### New National Auto Receiver

National Engineers have for the past year been engaged in designing a real automobile set, designed to overcome the faults and shortcomings of all preceding sets. Final details have not been released as we go to press, but we will be pleased to mail descriptive matter about this receiver to anybody asking for same. The highest design in automobile and radio engineering has been incorporated in this latest release from the National Laboratories.

# Service Dept.

Our service department is now available for service and repair of your receivers and powerpacks. It is under the direction and personal supervision of Bertram M. Freed, assuring you of service that is right in all respects. Write for prices and details. Address "Service Department."

### Velvet Vernier Dials



Velvet Vernier dials are synonymous with the nighest quality and precision operation of tuning dial.

Fig. 1—The original.

Type A—No backlash exists—none can develop.

develop.

Type
0-100, 180 \* \$2.50 |
100-100, 180 \* 2.50 |
200-0, 380 \* 2.50 |
150-0, 270 \* 2.50 |
Variable Vernier ratio of 6-1 to 20-1.

Your
Price No. 3893 3894 3895 3895 Fig. 2-Cat. No 3897 Type 200-U 360° 0-200 360° U-100-0 180° \$2.50 2.50 2.50 \$1.47 3898

Bial Illuminator and Bracket Extra, 30c
Fig. 3.—Similar to Fig. 2, but with a distinctive escutcheon
Cat. No. Type
Bial Illuminator Extra, 30c
O-100-1
Bial Illuminator Extra, 30c
Fig. 4.—The new National drum dial, Automatic spring take up.
Modern escutcheon
Cat. No. 3902 List \$4.50 Your Price \$2.35
Type 28. Illuminator extra, 30c
Fig. 5.—The latest projection television type dial. Choose your station by rainbow color.
A beautiful and novel dial.

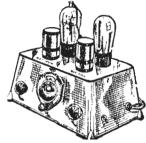
Your Price
Cat. No. List
Your Price

List Your Price
Drum Dial, \$5.50 . . . . \$3.23
Disc Dial, 3.75 . . . . 2.21 Your Price

# BUD EQUIPMENT—EVERYTHING IN RADIO

# **Bud Super Short Wave Converter**

A New Thrill in Radio With the Turn of a Knob



Makes Your Present Set a Short and Long Wave Receiver

The Bud Super short wave converter is a fully A.C. operated screen grid converter with self-contained filament supply and an adapter whereby plate current is taken from the broadcast receiver. Housed in a compact Die-Cast Aluminum case and finished in a beautiful crystaline brown. When operated in combination with any standard broadcast receiver either superheterodyne or tuned radio frequency type, the Bud super short wave converter will give loud speaker volume of short wave and broadcast programs of all the American and foreign short wave stations. A very sensitive and easy-to-operate unit, using one 224 and one 227 tubes. A new sensation to get radio messages from ocean liners, aeroplanes, direct without depending on rebroadcasting from local stations. Complete with 5 pairs of coils. Shpg. wt, 5 lbs.

Cat. No. 3568

Your Price Less Tubes

### BUD AERIAL FILTER



A very attractive compact unit that really enables you to out out interfering stations and bring in the station you desire.

Cat. No. 3587

List \$1.50

Your Price 88c

### COIL FORMS (Not wound)



Ideal for short wave converters and timers. Constructed of high grade low loss insulating ma-

Cat, No. 3590 Cist 35c

Cat. No. 3591 Cist 35c

Your

Price

# ANTENNA ELIMINATOR

A device that can be fastened into cabinet of set and takes place of an outside aerial.

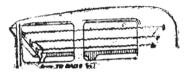
Your \$1.47

Cat. No. 3597

List \$2.50



# BUD AUTO RADIO AERIAL



istly installed and very practical. Plated here the shielding effect of Folio car has ist effect. Consists of these Phosphoi only Colled Springs.

Your \$1.47

# **AUTO RADIO SILENCER**

The ideal kit for autoraclio installations, Guaranteed to give perfect satisfaction, Consisting of specially constituted spark plus suppressors, distributor spark suppressor, and a generator sileneer of the finest type, with bracket statched for mounting on generator. Complete in attractive carton,

KITS



Cat. No. 3592, 4-cyl. Care. List Price \$4.50

Your \$2.65

Cat. No. 3593. 6-cyl. Cars. List Price \$5.80

Your \$3.41

Cat. No. 3594. 8-cyl. Cars. List Price \$7.10

Your \$4.18

Cat. No. 3595. Md. A Fords, List Price \$5.10

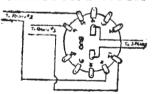
Your \$2.99

# Constant Impedence Volume Control



t this io. all purposes pedance is desired across nes reguidless of the adwhere the entire impedan-the chighl at all times re-justment 5000 chm2. (at, No. 3589)

# 5-POINT DOUBLE POLE SELECTOR SWITCH



A sturdy, compact selector switch that is ideal for use in installations, where one instrument as receiver, speaker or neters can be connected up to five circuits by merely turning the switch. Has no peer for set analyzer construction. List \$1.50

Your 88c

# PHONE TIPS

Heavily nickled (at. No. 3598

Your Price Per Dozen

Per Gross

KNOWN THE WORLD OVER



PRECISION RELIABILITY

# HAWK"-A Two-Tube Short Wave Receiver



Remarkable 2-tube distance getter. Consists of regenerative detector and one stage of audio. Designed for use with new 2-volt tubes. Designed for two type 230 tubes, but can be used with any tubes. For years, this standard reliable circuit has given consistent reception from all parts of the world. Designed for phone, but extra stage of amplifier can be added for loud speaker reception. Covers from 14 to 110 meters or a frequency range of about 20,000 K.C. to 27,000 K.C. A kit quickly and easily assembled. Uses parts of the highest quality. Comes complete with panel, baseboard, instructions, necessary hardwars and plus-in colls. ware and plug-in coils.

Cat. No. 3830.

# Your Price \$21.17

# Short Wave Condensers



Double spaced brass plates, Parmica insulation, smooth and easy tuning, double wiping contact, midline shaped plates, full floating rotor, shaft is removable. Panel or baseboard mounting. Tested at 1,000 volts.

Cat.	No.	Capacity	Your Price
3831		150 mmf.	Tour Trice
3833		125 mmf.	00 04
3833		100 mmf, >	\$2.94
3834		000 mmf.	WH.UI

### Midline Condensers

The improved Midline Condenser utilizes the newly perfected Parmica low loss insulation. Four years of leadership attest to the remarkable engineering and leadership of Hammarlund Midlines. Special shaped brass plates, full floating rofor, removable shaft, ball and cone bearings, bronze pigtail; rib reinforced aluminum alloy frame. 1,000 volts AC.



1,000	volta AC.			
Cat. N	0.	Capa	clty	Your Price
8835		.0005	mfd.	\$3.24
8836		.00035	m <b>14.</b>	\$3.09
1837	re	.00095	mfd.	\$2.94
				94.34

# Short Wave Plug-ins



Built around the famous Hammarlund self-Built around the famous Hammarlund self-supporting space-wound core material develop-ed over five years ago, and still acknowledged as standard for low impedance at the high frequencies. New and greatly improved. For use with 125 mmf. condensers. Set consists of base with a variable antenna coll and 20, 30, 40, 80 meter hand plug-in colls. Cat, No. 3839

Your \$7.35 Additional coil for 105 to 205 meters.

Cat. No. 8838. Your Price \$1.77

# New Midget Short Wave Condensers



Soldered non - corrosive brass plates, sturdy frame and accurately fit-Parmica ted bearings. insulation. Four - point bronze wiping contact. No pigtail. Adjustment locking screw works in a groove. Cannot burr the shaft.

Vour

31---

	Cat,	Plates	Min. Cap.	Cap.	Price
	3840	43	12 mmf.	320 mmf.	\$2.06
	3841	34	10 mmf.	260 mmf.	1.77
	3842	27	10 mmf.	200 mmf.	1.65
l	3848	19	7 mmf.	140 mmf.	1.47
l	3844	14	6 mmf.	100 mmf.	1.35
Ì	3845	11	6 mmf.	80 mmf.	1.18
I	3846	7	5 mmf.	50 mmf.	1.06
ļ	3347	5	4 mmf.	35 mmf.	.88
	3848	8	3 mmf.	90 mmf.	.88

# Transmitting Condensers



The extremely low losses and high quality of Hammarlund Transmitting Condensers makes them ideal for high powered transmitters. Spacing between plates is .983". Breakdown voltage is 3500 volts at 500 K.C. using 500 cycle alternator.

Cat.	Ca	pacity	Your Price
3849	106	mmfd.	**************************************
3850	800	mmfd.	4.12
3851	890	mmid.	5.88

# Short Wave Plug-in Inductors



Constructed like the regular plug-in coils, but without the tickler or valuable primary. Designed for use in a receiver using a tuned radio frequency stage, using standard or screen grid tubes. Set consists of base and coils for 20, 30, 40, 80 meters. Cat, No. 3852

Your \$4.41

105 to 205 meter plug-in coils. Cat. No. 3853

Your \$1.18 Price \$1.18

# R.F. Choke Coils Polarized Type



The coil unit is thoroughly shielded in an aluminum shell. This construction results in a minimum external field and permits close compact receiver design. High impedance, low distributed capacity. The polarity is indicated. Cat. No. 3854

Your 88c

# High Impedance Type

Encased in bakelite. Ideally suited for use in detector plate circuits, "B" plus and grid re turn leads of R.F. tubes or wherever R.F. filtering is required. Both types will carry 60 m.a.



85 Millihenry inductance. Capacity, 8 mmf. D.C. resistance, 215 ohms, Cat. No. 3855

YOUR \$1.18

250 Millihenry inductance. Capacity, 2 mmf. D.C. resistance, 420 ohms. Oat, No. 8856
YOUR \$1.32

# MINGET SETS FOR ALL PURPOSES

# THE "I. C. A." ENVOY RECEI



Proving itself to be a most remarkable and powerful receiver, the Envoy is taking its place as the leading and best designed midget that has ever been released. Radio's latest developments have been so incorporated into the Envoy as to produce tremendous volume and selectivity WITHOUT DISTORTION. The introduction of the VARIABLE-MU SCREEN GRID TUBES absolutely prevents cross talk and interference between stations. A PENTODE POWER OUTPUT TUBE resistance coupled to the screen grid POWER DETECTOR assures life-like reproduction and outstanding tone quality. Equipped with famous "I. C. A." tone control, phonograph jack and sturdy, powerful hum-free dynamic speaker. WAVE-length range of 200-600 meters but MODELS ARE AVAILABLE RANGING FROM 200-2,000 METERS. Five tubes—two 551 variable-mu tubes, one 224 one Pentode and one 280 tube. Cabinet of dark American walnut, plano finish. Net wt. 28 lbs. Shpg. wt. 32 lbs. Proving itself to be a most remarkable and powerful receiver, the Envoy

Net wt. 28 lbs. Shpg. wt. 32 lbs.

Cat. No. 3308. 110 Volt A.C. or D.C. Models. \$29.50 Cat. No. 3309. 220 Volt A.C. or D.C. Models. \$29.50 List \$65.00. Your Price ...... Cat. No. 3310. Long Wave Model, 200-2,000 \$29.50 Meters. List \$72.00. Your Price....... \$29.50

110 Volt A.C. or D.C. Chassis of

Above Receiver ......



La Salle

A Double Pentode and Variable Mu Midget of Superlative and Outstanding Merit



Tubes required for A. O. models, 2-235, 2-247, 1-224, 1-280 FOR 110-VOLT 110-Volt D, O.

\$22.50 Your price 110-volt 60 cycle Your Price

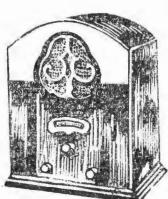
tanding Merit

Employing in a new and highly improved circuit, two new type 235 variable-mu screen grid tubes, one 224 screen grid power detector and TWO new 247 Power Pentodes and a 280 rectifier, PRODUCING SUCH TREMENDOUS DISTORTIONLESS VOLUME AND AMAZING SELECTIVITY AND SENSIBLE WITH ANY OTHER COMBINATION OF TUBES. The Utah or Rola dynamic speaker designed particularly for this set, easily handles the volume with sweetness of tone and without a trace of hum, Illumnated full vision dial and per manent phono-pickup tock. Housed in a heauinated full vision dial and permanent phono-pickup jeek. Housed in a beautiful cabinet of American wahut, itseteilip finished. Will fit into the most luxurious surroundings. 15°114°2°50°. Wt. 21 lbs. Sipg. wt. 25 lbs. Tubes required for D. O. models, 8-232, 1-230, 2-171A. FOR 220-VOLT

\$23.70 \$27.00 

HALSON RECEIVERS

A newly-developed product of the radio art, housed in a distinctly modern, two-toned, hand-rubbed walnut cabinet. Foremost engineers have contributed in designing this high-welective golden-toned midget, with its 3 tuned stages, variable-mu tubes, full-vision dial, 2-8 mfd. electrolytic condensers, tone control and phono-



full-vision dial, 2-8 mfd, electrolytic condensers, tone control and phonopickup jack. A Rola dynamic completes the picture of as fine a receiver as money can buy, A.C. models for either 110 or as money can buy, A.C. models for either 110 or 220 volt operation use two 235, one 224, one 247 and one 280 tubes. D.C. models for either 110 or 220 volt operation use three 233 and two 236 tubes. Shpg. Wt. 32 lbs.

A.C. MODELS Cat. No. 3312, List \$60.00

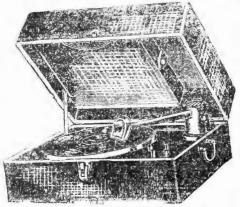
Your \$23.75

D.C. MODELS Cat. No. 8818. List \$62.50

Your

# Webster Pickup Hotrola

handsome and serviceable combination for reproducing phonograph records with minimum effort and maximum efficiency. Self-contained in a strong, attractive leatherette carrying case with the famous Hough electric motor. The Webster pickup, one of the most popular models, equipped with volume control is responsible for the excellent reproduction of which the outfit is capable. Extreme volume with minimum needle-scratch is made possible by the carefully engineered phono pickup. Two attractive leads emerge from one side of



the case, one connects to the A.C. and the other to the amplifier or radio set by means of the adapter supplied. Comes equipped with record case which is out of way, needle cups, adapter and turn-table which Strong fits any size record. artistic carrying handles. An ideal combination for every use. Shpg. wt. 23 lbs.

Cat. No. 3314. List \$42.50.

Your Price

# Midgets in Size-Giants in Performance

# THE UNIVERSAL **COMPANION**



Uses 1-236 and 6-237's

Uses 1-236 and 6-237's

A self-contained portable all-electric receiver with built-in speaker. So versatile that it may be plugged into any A.C. or D.C. socket or operated from a 6-volt storage battery and 135 volts of "B" battery. Single dial tuning utilizing a most modern circuit. One stage of tuned screen grid R.F. using a 235 sercen grid; a screen grid a Refusion as a screen grid power detector, employing a 237, a power output stage using two 237's in push pull; Rectifier is a 237. Plenty of Volume, Selectivity, and Sensitivity. Built in a handsome leatherette traveling case, measuring 113,"xl1\%" x8\%" and weighing only 14 lbs.

Cat. No. 3676 Cat. No. 3876 List \$39.50

Your Price

# MUSIC MASTER



The Smallest, 17"x13"x7 16" The Lightest, 181/2 lbs. Shpg. wt., 23 lbs.

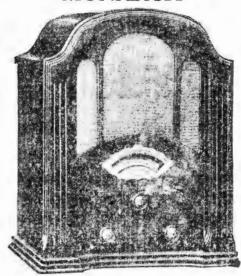
# Mighty in Performance

A nationally-famous Midget. Strong, compact construction, careful design. Loftin-White simplification uses 3-22 screen grid, 1-245 power and 1-280 type tubes. Electrolytic condensers, Jensen or Magnavox speaker, beautiful modernistic walnut veneer cabinet. Find for yourself the unusual value offered in these splendid sets

Cat. Nu 3674 List Price \$49.50, Less tubes Your Price

Complete With Tubes

# **AUDIOLA MONARCH**



RCA, GE, Westinghouse Licensed Multi-Mu-Pentode

Offering more advanced features in midget receiver design than any other midget on the market today. Three sharply tuned stages using 2-235, 1-224, 1-227, 1.247, and 1.280 tubes. Jensen dynamic speaker, designed for Pentode, Spothight tuning, smooth vol-ums control, 2 Mershon electrolytic condensers, 8 mid each. A perfect tone control that does not affect volume. Oversize power transformer, cadmiumplated fully shielded chassis. Housed in a graceful tastefully-finished cabinet of fine woods. Shipped from our Chicago, Ill., factory.

Cat. No. 3646

List Price \$79.50 Your Price

# THE ELGIN PENTODE 5-TUBE RECEIVER

A fine, outstanding receiver constructed of well-known standard parts of the highest quality. A handsome adjunct to any home. Cablinet of fine grain selected woods housing a sturdy, co in pact cadmium plated chassis. Ises 2:35 Variable Min. 1:24, 1:247 Power Pehtode and 1:280 tubes. Jensen high impedance dynamic to match Pentode tube, Full Vision Dial Local Distance switch 2:5 mid Electrolytic condensers. An tenna compensator Resulting in a powerful, selective sweet mellow-tone receiver of high ments in smart cablinet. emait cabinet.



Cat No. 3677

Your Price

Complete With Tubes

# Elgin 7-Tube Pentode Multi-Mu Receivers



A new and different compact radio set featuring a High Gain "Super-Mu" hum-less circuit, embodying four variable-mu tubes. 1-224 and Pentode output \$80 rectifier, 7 tubes in all.

- rectifier, 7 tubes in all.

  Every New Feature

  1. Four gang condenser.

  2. Hair breath selectivity.

  3. Weird sensitivity.

  4. Full-vision illuminated fiel.

  5. Four tuned stages.

  6. Complete shielding.

  7. Three Electrolytic condensers.

  8. Oversize Power Transformer.

  9. Cadmium-plated heavy gauge base.

  10. Powerful Dynamic Speaker.

  Beautiful hand-rubbed walnut cabinet of exclusive design.

  Cat. No. 3673

  List Price \$59.50, with tubes

  Your

Your \$34.95

110 Volt A.C. or D.C. Model Complete with Triad-R.C.A, Licensed tubes

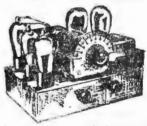
Elgin Chassis and Speaker Only List Price \$49.50

Cat. No. 3675

Your \$29.50 Less Price

Complete with set of Triad-R.C.A. Licensed tubes
List Price Your \$34.95

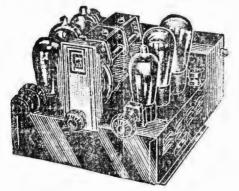
# Reliable Pentode Multi-Mu Chassis Triple Screen Grid



All the new features in Radio are part of this receiver. Variable-Mu tubes, Pentode Power tube, two Electrolytic condensers Full-Visioned Dial Sharply Tuned Stages, Power Detection, Standard Parts Here is an opportunity to cash in on one of the most wonderful midget of its size and accomplishments ever produced. Bedesigned and constructed as to fit into any style cabinet with little trouble and less effort. A heavy sauge, cadmium-plated chassis is the foundation for this remarkable value. Uses 2-235, 1-224, 1-247, and 1-280

Your \$26.75 Complete With Tubes and Dynamic Speaker

# Portables - The Companion - Battery Receivers



# National NJ-30 Compact Electric Receiver

A truly remarkable receiver. Small but powerful enough to compete with the larger sets. Made with precision by Compact, measuring only 12 National parts. inches long by 10 inches high and 10 inches wide. Modern in design. Equipped with phonograph plug-in jack. three screen grid tubes, one 227, one 245 and one 280 tubes. Can be operated with dynamic or magnetic type reproducer. Superb tonal quality. A special offer. Shipping weight 15 lbs.

Cat. No.

List \$77.50

# Portable Radio Receivers

# Vagabond Battery-Operated Portable

A single dial portable receiver with remarkable efficiency, tone quality and power. A large purchase enables us to offer this duality and power. bargain to you.

# **EQUIPMENT NEEDED**

Five TX199 tubes, 2-45 V.
"B" batteries (Burgess 5308 or similar), one 4/9 volt "C" battery (Burgess 5360 or similar), and 3 dry cell "A" batteries,

Cat. No. 3178

Your \$22.50 Price \$22.50

Less Equipment

# TOM THUMB PORTABLES

New Model B Screen Grid For Battery Operation The use of two screen grid 223 tubes plus the single drum dial and the beautiful lightweight cabinet make up a portable receiver that amazes all who hear its sensitivity, selectivity and clarity. Station after station come in. Real shock-proof construction.

### NECESSARY EQUIPMENT

Two UX222 tubes and three UX199 tubes, two Burge's 5308 (or similar) "B" batteries, one 4½ Burgess 5360 (or similar) "C" battery and three dry cells.

Cat. No. 3479

Your \$26.50 Price

Less Equipment



# Kodel Battery Receivers

#### ONE-TUBE RECEIVER



Extremely sensitive, using full 360° tuning condenser; small yet complete in every detail. Shpg. wt. 2 lbs.

Cat. No. 3480

Your \$3.25

### TWO-TUBE RECEIVER



Single dial control: individual filament control. Very sensitive and can be used to operate a loud speaker on powerful stations. Shpg. wt. 4 lbs.

Cat. No. 3481

Your \$3.75

### THREE-TUBE RECEIVER

ontrol, and i vidual fila-ment control.
Will operate a loud speaker.
Reflex type cir-cuit gives it greater sensitiv-ity and Two dial control, Individual filareater sensitivity and selectivity. Shpg. wt. 5 lbs.

Cat. No. 3482



EVERYONE'S COMPANION-

# All Electric Receiver



For Traveling Men, Hospital Patients and Shut-In Individuals

Wherever there is electric current, this self contained electric receiver is a fit companion for the radio enthusiast. No batteries are required, it being only necessary to plug into the 110 volt light live. The high gain of the receiver permits the use of aimost any sort of antenna or ground. Any antenna will be found satisfactory. Single dial control for tuning, another control acting as combined voluntand sensitivity control. Uses two 227 type tubes in A.C. model and in D.C. model one 112.A is used. Insuring quiet operation. Everyone's Companion will furnish head-phone reception that is both pleasant and entertaining. Range comparable to that of the average loud speaker set. Pair head phones included. Shps. wt. 12 lbs.

Cat. No. 3484. D.C. Model for 110 volts. \$14.50 Your Price

Cat. No. 3483. 110 V. 60 cycle \$14.50

# Automatic Radio Shut-off

a device which must really be used to be appreciated. When the receiver is lifted off the hook, the shutoff acts and quiets the radio. When you hang the receiver up, the radio is automatically turned on. No need waiting for the tubes to heat. The Shut-Off merely shuts down the speaker and not the radio. The program is on but you do



not hear it because it shuts off the speaker. Made in two styles, for desk phones or French phones. Shpg. wt. 3 lbs. Cat. No. 3947

Your \$1.56



# ALL TYPES ALWAYS IN STOCK

# Reliable Guaranteed Tubes

5% Discount on Orders for 50 or More Assorted Tubes

UX201A	 30c
UX2801	 35c
	 45c
247 Pentode UX236 UX281, UX237 UX250, UX238 UX210 UX551 Variable	95c

UN199 UN199 UN190 UN120 UN124	50c
WD11 WD12 UX230 UX231	65c
UX232	75c

GUARANTEE! All Reliable tubes are tested on a Jewell Standard tube tester before shipment. Any tubes found defective will be replaced in 15 days.



Arcturus Radio Tubes are noted for long life, and quick heating. Humless reception assured. Put a set in use now!

Deduct 5% discount on orders for 50 or more assorted tubes,

AC Type Tuker

			uc rabo	Lubes		
	Туре	List	Your Price	<b>Туре</b>	List	Your Price
124 551 126	Detector-Amplifier Screen Grid Variable Mu Amplifier Power Amplifier	2 70 2 70 1 75	1.18 1.59 1.03	PZ Pentode	\$2,40 6 00 1,40 5,00 2 25	3.53 ,83 2.94 1.33

DO DO			10 YOIL A	C lubes	lour
DC Type T	übes		T hs	List	Price
Туре	List	Your Price	26 Detector	***************************************	\$2.35 1.77
099 UX Detector Amplifier.	82 50	\$1.47	48 Amplifier	3.00	1 77
099 UV Detector Amplifier. 101A Detector Amplifier	1 '5	1 62	30 Power Amplifier	8 00	177
012A Detector Amplifier	22,	1.33	40 Power Amplifier	3.00	1.77
122 Screen Grid Amplifier.	4.50	2.65	3º High Mu	7.50	1.77 4.41

### Tungar Type Replacement Bulbs



for longar or other chargers using similar type. Your Price Type List 1800 6 10 Amp Trickle \$1.50 \$2.65 1801 2 Amp Pin Contact. 4.00 1801A 2 Amp Base Contact 4.00 2.35 **1802** в Апр. ... 8.00 Less 5% in lots of 6

R.C.A. UV877 PRO-



TECTIVE TUBE.

May be used on set analyzers, continuity tests, limits current drawn from "B Battery in case of short circuit. of short cir Standard dou contact automobile light base. In light iginal boxes.

Your Price 29c

# Television Tube and Photo Electric Cells

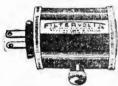


A television tube with a UX four prong bakelite base. Striking voltage 100; minimum current, 5 mils, maximum, 80 mils; internal resistance, 1,000 ohms; plate area. 1 ½ in. sq. No. 1896.

List, \$10,00. Your Price \$5.88 No. 1897. Photo-Electric cell, 1% in. bulb diameter. List. \$20.00. Your Price \$11.76 No. 1898. Photo-Electric cell, 3 in. bulb

Your Price \$22.05

# FILTERVOLT



Eliminates line noises from vacuum cleaners, sewing machines, electric fans, toasters, etc. Installed by plugging the unit into the wall socket between socket and receiver. Shpg. wt. 1 th. Cat. No. 730 List \$3.00

Your \$1.

### Reliable Voltage Regulator



An air cooled voltage regulator. Prevents line voltage rising above 115 volts as is required for best operation and long-est tube life. Ballasting est tube life. Ballasting type of resistor. Neces-sary for every A.C. receiver.

Cat. No. 3281 List \$1.25

Your Price 45c Lots of 6, \$2.55

### Universal Resistovolt



Prevents tubes from blowing out due to excessive line voltage, lengthens life of tubes and power packs. Heat automatically dissipated. Shpg. wt. 1 lb.

Cat. No. 722 List \$2.00

Your Price

# Type Rectifier



125 mils Replacement tube for all type "B" eliminators using Raytube for all type "B" eliminators using Ray-theon or gas filled tubes. Cat. No. 3280

Your \$1.19 Price Lots of 6, \$6.90

### Guaranteed B-H | Radiotron UX867 Photo Electric



UX The 867 is 867 is a highly sensitive gasfilled photo electric cell. Anode cell, Anode
s u p p l y
vol ta g e.
300 volts.
Anode current 20
microamperes. Sensitivity 1s
from 25
30 microStandard

amperes lumen. Stand. UX base. Cat. No. 3279. List \$35.00
Your \$17.50

# Short Wave Receivers, Converters, Parts

Short Wave Coils

Bakelite moulded UX (4-prong) socket bases. Range of 15:210 meters with a .0001 variable condenser. Ships wt., 1 lb.
No. 130. Set of 4 Colis.
LIST \$3.75
YOUR \$1.50

### Faort Wave Condenser

Jow loss variable turivariable tun-ing condenser. Single hole mount, Modi-fled straight line frequency curve. Rec-ommended for use with the type 130 or 131 short



be with the pe 120 or 31 short wave colls.

Cat. No. 3089. List \$2.00

PRICE 85c

#### Vernier Dial



R. E. L. Type No back-lash, friction movement. Translucent number plate. Easily installed. 4" diameter. Shpg. wt., 1 lb. No. 176

YOUR 40c

### Centralab Regeneration Controls

C.R.L. regenera-tion controls al-low the detector to slide in and out of oscillation 0asily and smoothly, Avail-able in 20,000 and 50,000 clm sizes.



Cat. No. 3090. YOUR 35c

Head Phones



Ideal for the DX and short-wave fun. Unusually sensitive, fan. Unusually sensitive, lly designed with alumiwave rank carefully designed with arometers bells and genuine moulded ears. Music and voice are remarkable fidelnum shells and genuine moulded ears. Music and voice are reproduced with remarkable fidelity of tone and absolute darty. Fit very comfortably, 2000 chms, resist Shps. wt, 2 lbs.

YOUR \$1.28

PRICE \$1.28

# Shielded R. F. Choke

Universal choke for all radio for an frequency on Mounted meld in a copper shield can, with tinned terminals for easy soldering.



Oat. No. 3091. List \$1.35 YOUR 45c

### I.C.A. "CONQUEROR" SHORT WAVE 5-TUBE SET



For either AC or DC op-eration, DC requiring 1-222. 1-201A, 2-112A, 1-171A tubes). NO BOOSTER REQUIRED! USES ONE SCREEN GRID R STAGE plus regenerative de-tector. Iceding into

receiver with case.

WAVE LENGTH RANGE

Eight PLUG-IN coils (same type as used on all commercial equipment) are included—cover range of 14 to 157 meters. Additional plug-in coils, covering 140 to 600 meters, are obtainable, permitting use of this receiver on regular BROADCAST wave-lengths, thereby making the "CONQUEROR" truly UNIVERSAL.

Battery model requires 180 volts "B," 40 volts "C," 6 volt storage battery. AC model requires special power pack listed below. Shpg. Wt., 25 lbs.

No. 1076-17. AC model, less pack and tubes. List \$65.00.

No. 1077-48. BATTERY model, less tubes. 

No. 1078. I.C.A. AC POWER PACK. \$18.25 NET.... No. 1079. 4 BROAD-CAST PLUG-IN COILS. 104-600 meters.

No. 1080. 8 PLUG-IN S. W. COILS. 14 to 175 meters. NET

\$11.25

### SUPERHETERODYNE SHORT WAVE CONVERTER



This unit makes a short wave super-heterodyne out of any receiver. Uses three 227 tubes and covers from 20 to 115 naties. No plugin coils. Switch is need to cover all wave lengths. Built-in filament transformer. All that is necessary is to obtain a positive B potential from your receiver of from 45 to 180 volts. This voltage is usual when not receiving short wave signals. Shipping weight, 10 lbs.

Cat. No. 3096. List \$25.00

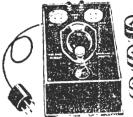
Cat. No. 3096, List \$25.00

Your \$12.95

# The Flewelling-Dayton Short Wave Adapter

Detector tube is removed from your regular receiver and is placed in the right-hand upper socket of the Adapter. The cable plug of the Adapter is then placed in this empty detector socket of the reenipty detector socket of the receiver. No rewiring of your present
set. Range 18 to 78 meters. European short wave reception highly
possible! Encased in a handsome
mahogany wood case. Measures
71½" by 51½" by 31½". Shipping
weight 5 lbs.

No. 726. For D.C. Sets. YOUR \$4.95



727. For A.C. YOUR \$4.95

# George W. Walker Flexi-Unit



Walker Flexi-Unit
The unit of a dozen uses at the price
of one. It can be used as a short wave
receiver, short wave adapter, regular
broadcast receiver radio, "experimental'
unit, oscillation, extra stage of R.F., a
ore-amplifier, a crystal receiver, and a
wave meter, and numerous other uses
which will suggest themselves to you.
Will use any type of tube, battery or
efectric. Small in size, measuring 5%"
by 8%" by 3". List, \$16.00.

Cut. No. 3948

FOUR \$9.35

All types Adapters, \$1.89

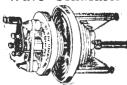
All types Adapters, \$1.89

# AIR-KING

PRECISION III

Squirrel cage type air-space wound coils. Note variable primary. Tuned with a .00014 condenser, covers 15 to 130 meters. Shps. wt. 2 lbs.
No. 131. COMPLETE SET.
List, \$12.50
YOUR \$5.10

### Furnell 360° Short Wave Condenser



Ideal for short waves, 360° rotation assures wide spread over entire band. Special construction insures low minimum capacity. Pigtail leads give quiet operation, Available in .00015 mfd. or .00035 mfd. capacity. Cat. No. 3092. .00015 mfd. YOUR \$1.25

Cat. No. 3093. .00035 mfd. YOUR \$1.15

# Short Wave R. F. Choke



Ideal choke for Short Wave receiv-ers. Low diswave recetyers. Low distributed capacity. This
choke allows
the detector
to oscillate
easily over
entire band,
No dead spots.

PRICE 45c

### Remler 360° Drum Dial

This drum dial is idealty suited for use with the Furnel. Condensers. Smooth verifier operation. Complete with escutcheon plate, lamp and holder.



Cat. No. 3095, List Price \$3.50 YOUR 95c

# Manhattan Reliable Telegraph Key



This Standard Telegraph Key is admirably admired to radio This Standard Telegraph Rey is admirably adapted to work. Adjustable arm movement with a Western Union type knob insures easy operation. Mounted on a hard wood base and supplied with mounting screws, Shpg. wt., 2 lbs.

YOUR PRICE 95c

# Short Wave Transmitters and Equipment

# Filament Transformers



10.000 volt insulation. Mounted in metal case with stand off insulators.

Type 866. 12 amps at 2½ V. for 2.866's.

Cat. No. 3232
List \$10.50
PRICE \$3.50 Type 872, 30 amps at 5 V, for 2-872's Cat, No. 3233 YOUR PRICE \$6.00

Type 250. 6 amps at 71 281's, 210 712 V. for 2-250's,

3234 YOUR **\$3.50** Cat. No. 323 List \$10.50 Type 852, 7½ amps at 10 V, for 203A's, Cat. No. 3235 YOUR PRICE \$4.00

Type 2250. 2 714 V. windings C.T. at 4 amps each.
Cat. No. 3236 YOUR \$4.00
List \$12.00 PRICE \$4.00

# Puradyne Power Transformer



Metal cased, equipped with stand-off insulators. Type PF-50 delivers 3000 volt high secondary at 300 m. a. This winding is center tapped. Rated at 500 watis.

Cat. No. 3237 List \$35.00

Your \$16.00

TYPE PF-250 delivers 1300 voit high secondary. This winding is center tapped. Also has 2 7½ volt winding. Rated 200 watts. Cat. No. 3238. List \$12,00

Your \$4.50

### High Frequency Buzzer



This type buzzer is the same as used on our wire-This type buzzer is the same as used on our wire-less practice set. It is adjustable. Has standard resistance of 2 chms. Black crystalized lacquer finish. Shipping weight 8 ozs.

No. 380-R. List \$1.25 Your 75c Price

### Puradyne Plate Blocking Condenser



Rated at 6000 volts. Equipped with stand-off insulators. Cat. No. 3239, .002 mfd.

Your Price 95c

Cat. No. 8240. .006 mfd.

Your Price 95c

### Ohmite Transmitting Grid Leaks



Unmounted. canonined. high current ratins. Wattage capacity 50 watts. Available in 5000, 10,-000, 11,000 and 16,000 and 17,000 ohns.

Cat. No. 3246

Your Price 75c

# Tuned Grid, Tuned Plate Circuit Transmitter



This transmitter employs a UX-210 Tube as Oscillator. The Output with normal plate voltage is 8 to 10 watts. Transmitters of this type are in common use amongst numerous amateurs and many of them have been heard around the world. This Unit can be used in conjunction with additional equipment for Radio Telephone Work. It is completely wired and tested and ready to hook up to antenna and power supply. Coils for 40 meters (the most common C.W. band) are supplied. A plate milliameter of 0 to 200 is also included. The Power Unit uses 2 281 Tubes in the rectler. Supplies 550 Volts D.C. and filament current for the 210 and 281 tube. Complete with power unit ready to operate but less tubes.
Cat. No. 3258. List \$150.00

Your \$77.35 Price \$77.35

# Ferranti 3-Stage, 250 Push Pull Power Amplifier



Forran realism of ampliflere Formati amplifiers are supreme in Lagri realism of reproduction. The input stage is a 227 which operates into 226 pushpull which fewls into 250 pushpull. Full wave rectification is obtained by use of 2-281's. Output and input leads are shielded. Wiring in the amplifier is in lead cable wherever necessary. The amplifier is portable, measuring 24"x12"x8'2", and is equipped with a full range gain control. The entire amplifier is in a metal case with only the tube sockets showing. The undistorted output is 18 watts. Input is for pickup or radio use, Microphone input at slight extra cost.

CAT. NO. 3241. LIST PRICE \$450.00 Wiring in the amplifier is in lead cable

CAT. NO. 3241. LIST PRICE \$450.00 Your \$80.00 Price

Ferranti Amplifier with Microphone Input

CAT. NO. 3242. LIST PRICE \$525.00

Your **\$94.85** Limited Quantity! Order Now!

# Puradyne 1000-Volt Condenser Block



Ideal for all 250 push-pull packs and amplifiers. Has 4, 4, 4, 2 mfd. sections, all 1000 volt working. Cat. No. 3245 List Price \$13.50

Your \$5.00



### Transmitting Condensers

metal cans with stand-off insulators. All condensers rated at continuous working voltage.

Cat. No. 8247

Capacity 1000 Volts 1500 Volts 2000 Volts

\$1.40 \$2.25 \$2,40 \$2.90\$6.75 8 mfd... \$3.75 \$5.75 \$9.50 4 mfd

Transmitting Chokes

Stand off insulators. Insulated for 3000 voits 20 henry, 110 ohms D.C. resistance, 250 mil. Cat. No. 3248

YOUR \$4.00

# General Electric Double Filter Chokes



D.G. resistance 500 churs per choke, 50 henry at 80 mülli-cmperes, Made by General Electric. Cat. No. 3255 Unshielded

Your \$1.95 Cat. No. 3256. Shielded

Your \$2.25

# 150-Watt Transmitting Socket

Heavy construction. 8nb-stantial contacts. Cat. No. 3357. List \$3.25

Your \$1.75



# Puradyne Transmitting Grid Leaks



200 watt, center tapped. Metal cased with stand off insulators. Your Price

8249 5.000 10.000 8250 \$2.50 15,000 . . . 3251 3252 20.000...

3254 50,000 \$3.00 \$4.00 30,000

# PURADYNE 866's, 872's



Guaranteed Half Wave mercury vapor rectifier tubes. Used in most amateur and low power broadcas:

866. Half Wave Mercury Vapor Rectifier. Max. peak inverse volts 5000: max. peak plate current .6 ampere. Tube voltage drop 15. Filament terminal voltage 2.5 volts st 5 ampere. (at. No. 3243

# YOU'R \$6.00

PRICE WO.00

872. Max. Peak Inverse Volts 5000. max.
peak plate current 2.5 amperes. Tube voltage drop 15. Filament terminal voltage 5 volts at 10 amperes.

Cat. No. 3244

YOUR \$6.00

# PUBLIC ADDRESS SYSTEMS Rand RUESSORIES

# DYNAMIC HORN UNITS



This was is excepted of handling and 100 to 100 to 300 with a first super in the Life and the Life in the state of the super in the sup to 1.1 angle of divid's D.C. The rivy be appled from a storage baryle of a confidence exenter listed on this pince. View confiding date is 10 obtained by eye of Mersick 5½°×5½°×5½° and weights 21 bs.

(at. No. 319). List Price \$120.00 VOLG \$52.50

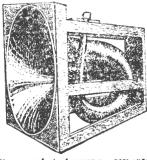
# GUTPUT TRANSFORMERS

D sign to be not with must be re-nsted for the amplifiers. Suppling weight, 4 Hs cot. No. 4195. Fist \$22,50 YOUR \$9.75

trates no. F : 171, 210. th Amplifics. No. 2196. List 815.00 Output to

Cat. No. 2196. List 81
YOUR \$5.95
PRICE \$5.95

# EXPONENTIAL HORN For Outdoor and Indoor Use



Gives perfect frequency response. Self supporting. Measures 34"x 36"x36". 32" diameter. Round bell permits even distribution of sound Complete with frame work. We recommend the Gight unit of seribed above for new with this

Cat. No. 3197. List \$80.00 PRICE \$39.50

Waterproof and Heatproof Model for Orthor Use Cat. No. 3198. Tist \$100.00 YOSR \$47.50

### TRUMPETS

For all proble address work. Use I used in electors. 222 feet trace Length 427. Bell 22. Cat. No. List Sour Price \$501 \$20.00 ... \$10.25

Heat and Waterproof Model for Outdoor Use

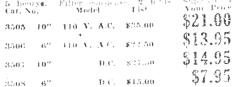
\$12.95 3502 525.00 . 60" Exponential Trumpet, Bell is 52"

\$22.50 8500 \$50.00... Heat and Waterproof Model for Outdoor Use

\$33.75 3504 \$62.00.

# Dynamic Cone Speakers for Public Address Systems

The 1989 speaker to public address work. Littliff rept of chair is assured particularly when used with the brittles described below Larra size have to cones. Small size have to rest. If the Vertex cones adjected to the cones of the cones will be the cones of the cones of the cones. ches lipt Veter ches liptor to re-en princes in definice 4 ness choices. The fit repestories in the first fit of f. Filter choices. 2 in cls Cat. No. World



# Exciter for Horn Units

For use with all horn units or any 6 voit D.C. dynamic. Operates from 110-115 voit. 60 cycle A.C. line. Will sundy from one to three units. Special type rectifier and filter in sures a quiet humilree supply. Fig. Shpr. wt., 10 lbs.

(at, No. 3512 YOUR \$16.95

# Microphone Accessories Cable and Springs

Microphone Suspension Springs Non-rusting and stations. Supplied to the springs only.

Out. No. 8513. List 75c FRICE 35c

Per Set of S Springs Shielded Microphone Cable

Three Conductor YOUR PRICE 9c

TOOL RES YOUR PRICE 7c PER TOOT

# Dynamic Hern Units Intermediate Size

to: theaters. 1-11-60 police, and Public views Installathe reserve beart of the unit er grey he kreshable. (Pat-Civ. Par., or, a paters found only in the second second, we will 15 lbs.



Intermediate Dynamic Horn Unit

**YOUR \$27.50** Car. No. 3514 Fish Price \$50,00

Junior Dynamic Horn Unit of a property of 6 volts. Will handle of the control of

Cat. Not 3545 List 855,00

# Exponential Horns



Fig.-foot Giant Schare Exponential Home, But size 42" 242" (world 50"x 26 v52") Press in-clude Frame Work.

Cat. No. 3516 List \$125.00 YOUR \$67.50

Model for Outdoor 1'90

Cat. No. 3517 List \$155.00 YOU'R \$78.50

# CONTRACTOR OF THE PARTY OF THE

### **CURVED** TRUMPET

Carred trumpets are recommended for use where space is limited. They give faithful reproduction of all frequencies. Five foot curved trumpet. Bell measures 20". Shipping weight, 5 lbs.

(at. No. 3518. List \$35.00

YOUR \$17.95

e. (Was sproof Model for Outdoor Use Cat. No. 8519. Hist \$48.00 YOUR \$23.75

# Two-Way Horn Adapter

Makes " Newstag to use two talls of the life of the principal increases of the first of the without regularity of the life of

Cat No. 3539 15st \$17.50

THE \$9.75

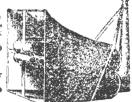


### REFLEX HORN

Newest type of exponential horn suitable for any unit. Last word in acoustical air columns. Saves space as overall size is 16 x13 x

Cat. No. 3199. List Price \$40.00 YOUR \$22.50

Heat and Waterproof for Outdoor Cat. No. 3500. List Price \$50.00 PRICE \$27.95



Acoustical Baffles for Cone Speakers Will change the one of a community apparation quality, square 1 also with a community to the will when the consideration of the will when the consideration of the constant of

\$12.00

PRICE \$6.95

Square Baffle with Round Bell Beal min. 1 (2000 11"). Code epening 7" or 10" 0 \$15.00 PRICE \$8.65

Square Baffle with Round Bell Bell 32". Length 25". Cone opening 7" or 10"

\* 3.00 PRICE \$16.95



# Microphone and Public Address Systems and Equipment

# Portable Address System



For use in autos. trucks. autos trucks, motorboats, air-planes, balls or wherever com-pactness is a facpactness is a fac-tor. Uses two 245's and two 201's. Batternes used are six heavy duty "B" haiternes and three 221's volt "C" batteries. The panel re-equipped with all necessary conequipped with all neccessary controls. Measures 31" x 14" x 14". The microphone can be placed in the battery compartment when not in use. not in use.
List \$145.00
Less Accessories

Cat. No. 8116

Your \$95.00

Junior Portable Public Address System

For use where extreme volume is not a necessity.

Cat. No.

List \$60.00 3117 Less Accessories

Your \$45.00

Adjustable Floor Stand For Two

stand. Shpg. wi..
20 lbs.
Cat. No. 3118
List Price, \$40.50

Your Price







Base diameter is 5", with a is 5", with a G-inch ring Stands 9 inches high and is fin-ished in highly polished nickel. Cat. No. 3131 List \$7.50

Your Price

\$5.75

# Single Button Hand Microphone

Suitable for use in airplane broadcasting or nome broadcasting. Made with the same precision as the other microphones usted here.

Cat. No. 3122 with switch

\$30.00

Your \$17.75

Cat. No. 3133

Your **\$14.50** 

In addition to the equipment listed here, we can meet any requirements for special apparatus. We can supply racks and panels with or without control equipment for any purpose. Write us for prices giving all specifications for talkie equipment, double channel amplifiers, remote control for amplifiers, etc. We also can supply C. W. code transmitters, airplane transmitters, crystal controlled transmitters, oscallating crystals with thermostatic heat control and ground to any specified frequency. We can furnish UKra Short Wave Oscillators for special Physiological Research Work. These can be supplied in two models. The first has a rance of from I to 5 meters with 20 wait output. The other is for general physicians and hospital use and operates at 5 meters with 150 wait output. Write for prices, giving all specifications.

### RELIABLE RECORDER HEAD

Enables you to make records of anything you would like to hear over the radio or direct recording. Can be used with any amplifier and interaphone. Complete with instructions but less merophone. We recommend the Amplion Hand Mike.

Cat. No. 3278 List \$33.50 plion Hand Mil Cat. No. 3278

Your \$16.95



Two-Button Microphone



Special allow diaphragm of the stretched type enables this narrophone to reproduce all frequencies between 30 and 7,500 cycles with practically flat amplification over this range. The buttons are carefully matched and balanced. Operates on 8 to 15 mils per button, 100 ohms resistance per button. Spig. wt., 5 lbs.

Cat. No. 3119 List Price, \$50.00

Your \$28.50 Price

Single Button Microphone

Resistance, 100 chais. Recaires up to 6 volts at 8-10 mills for operation. Special allow diaphram and unique construction of this microphone is responsible for its performance from 50 to 3,500 cycles with excellent volume. Shpg. wt. 2 lbs.

Cat. No. 3122 List Price, \$15.00

Your \$8.25



# Broadcast Concert Model Two-Button Microphone



The leader of these microphones. Standard broadcast model. Extra fine carbon polished special granules used. Uniform frequency response from 30 to 8,500 eyeles. An instrument of highest precision within ,001 of an inch in accuracy. Finished in combination saturacy. Finished in combination saturacy. Emished in combination saturacy. Finished in combination saturacy. Finished in combination saturacy. Short summetal or gold. Uses 5 to 8 to 18 t

Two-Button Microphone

Special alloy stretched diaphrasm. Unique assembly and high quality of materials used enables this merophone to reproduce evenly all frequencies between 50 and 5,000 cycles. Shpg. wt., 4 lbs. List Price, \$25.00 Cat. No. 3123

Your \$13.95



Modernistic type finished in satin silver. 10" high, 8" base, 6" ring with suspension hooks. Shpg. wt., 8 lbs. Cat. No. 3125 List Price, \$15.00

Amplion Transverse Current Microphone

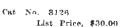


An ideal microphone to use for making records, home care. The patented construction reakes it possible to go mile through the microphone and the making parts. Carbon hiss is critically chaminated and they cannot pack.

Cat. No. 3121 List Price, \$15.00

Your \$5.75 Price \$5.75





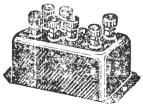
Your \$15.65

# Microphone Suspension Ring



Your \$3.75

Variable Input Microphone Transformer



Two input transformers in one case. Will match any standard one or two-button type microphone. Tapped for 100 and 200 ohms. Cat. No. 3128 List Price, \$15.00

Your \$7.95

Single button microphone transformer

Cat. No. 3129 List Price, \$7.50

Your \$2.95

Double button microphone transformer

Cat. No. 3130 List Price, \$14.50

Your \$3.95

# Amplifiers, Power Packs, Eliminators, Television, Amplifiers

Microphone Pre Amplifier A. C. Operated



Absolutely new. The first all A.C. electric operated microphone pre-amplifier. Absolutely self contained. Uses 2-27 tubes, one as a rectifier and the other as the audio amplifier stage. Suitable for microphone or phonograph pickup pre-amplification. Ideal for use with sets which have only one audio stage, and are normally incapable of operating with a phonograph pickup. All batteries are eliminated excepting the microphone battery. A smooth gain control and input matching transformer are built into units of the amplifier.

List Price \$45.00 Cat. No. 3300 Your \$22.50 Less Price \$22.50 Tubes

# Refiable Audio Oscillator



Audio oscillators of the better type have up till now been offered only at very high prices. We now offer through a special arrange-ment with a

ment with a manufacturing haboratory an improved oscillator at a very low figure. Numerous tests and measurements can be use of the audior testing fidelity in and frequency s. Used as an

oscillator. Useful for testing fidelity of audio circuits, gain and frequency response of amplifiers. Used as an audio source of capacity, resistance, and all high frequency measurements. Uses one tube of any general purpose type as a 201A, 199, 230, etc., and from 45 to 90 volts of "B" battery. List \$12.00

Cat. No. 3299 Your \$5.50 Less tube and batteries

> ACME "B" & "C" **ELIMINATOR**



tered hum f current. Has minus 40 V. minus 40 V. B.
minus, B plus
45, 90, 180. Will
operate a ninetuhe set using
171's in pushpull. Uses 280
full wave rectifier. Shps. wt. fior. 20 lbm,

Cat. No. 8286 List Price, \$35.00

Your \$6.65

### PENTODE ADAPTER



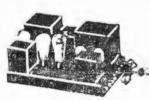
The Pentode, the new power output tube, can power output tube. can now be used in place of the 245 by use of the Adapter. No rewiring necessary, Just plug the Adapter into the 245 socket and the Pentode tube into the adapter to get the full benefit of the pentode tube. Gives greater volume and more power.

Oat. No. 8285 List Price, \$2.50

# AMPLIFIERS Designed and Built

To order or specifications. We are specialists in this field and can build or design amplifiers for any use. We can supply panel jobs, rack units up to any capacity and for any purpose. Specialists in the design of special amplifier equipment for mobile advertising purposes, and airplane All amplifiers constructed by us to specifications carry a full guarantee. order to enable us to give correct quotation, we must have all necessary details. Our amplifier experts will be glad to aid you in every way in solving your amplifier prob-lems. All inquiries should be addressed to "Public Address System Department."

# Three-Stage Webster R-250 Amplifier



a three-stage is a three-stage resistance coupled Amplifier.
The first two stages are 236 tubes. The output atage is a 250 tube. Two 281's are used as a full wave Rectifier. This amplifier gives the clarity and frequency response possible only with a resistance coupled amplifier. Operative from one to

List Price, \$110

\$29.50 Your

# KATO KONVERTERS



Kato converters are designed to allow operation of standard A. C. receivers from the 110 or 32 volt D. C. supply, Each unit comes complete with a filter system which successfully eliminates all interference which may originate at the converter. Machines are quiet running in every respect, and the bearings are of the self-oiling type requiring only occasional attention. For special models not listed, write, fixing full specifications. full specifications.

110-Volt D.C. to 110-Volt A.C. Output 117 watts, R. P. M. 3,600. Cat. No. 3

Your Price \$37.50

Cat. No. 3287

Output 800 watts, R. P. M. 3,600. Your \$75.00 Cat. No. 3288

Output 157 watte, R. P. M. 3,600. Cat. No. 3289

Your \$56.00 Price \$56.00 (Add 856 extra for conduit fittings)

### 32-Volt D.C. to 110-Volt A.C.

Output 117 watts, R. P. M. 3,600. Cat. No. 3290 Your \$37.50

Output 187 watts, R. P. M. 8,600. Your \$52.50 Cat. No. 3291

Output 850 watts, R. P. M. 3,600. Oat. No. 8298

Your \$79.00 Price B. P. M. 1.800

Output 90 watts. Cat. No. 3294 Your

Reliable Supply Field Unit for D. C. Speakers



This unit will supply pure, humless, perfectly filtered field current for any high resistance D.C. field epeaker requiring anywhere from 100 to 170 volts for energization. Uses two 280 tubes and supplies 170 volts of pure hum-free current at 110 milliamperes. Self contained in a black metal crystalline finished box.

Cat. No. 8297

List Price \$12.00

Your \$5.50 Less Tubes

### WESTINGHOUSE REXTOX ONE-AMP. TRICKLE CHARGER



Nationally known charger famous for the long life, careful construction and reliability. Used for trickle charging batteries. Variable charging rate 1/2 to 1 amp. Can also be used to excite 6 volt D. C. dynamic

speakers. Manufacturers' type. Rating A. C. 115 volt. 60 cycle; D. C. output, 6 volts, 1 amp.

Cat. No. 3295 List Price. \$12.50

Your \$3.95

### BRACH CONTROLIT



Connected with the trickle charger and B eliminator, makes B eliminator, makes the set completely light socket oper-ated. Set switch ated. Set switch controls everything. The Brach Controlit sutomatically turns "B" climinator

trickle charger Cat. No. 3298

List Price, \$2.78

Your 60c

# **TELEVISION AMPLIFIER**

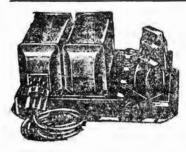


This is a feur-stage resistance coupled amplifier specially designed for television. Comes complete with all coupling condensers and resistors but less tubes. Gives a clear, undistorted

List Price, \$17.50

Your

### Custom-Built Amplifiers, Eliminators Reliable



# SAMSON PUSH-PULL 210 AMPLIFIER

pull with a 226 first stage audio. A 281 is used as rectifier. Equipped with the Samson variable line voltage plug. Employs Samson Audio Transformers, famous for their quality. Supplies its own A.B.C. power. Input designed for use with tuner, phonograph or can be adapted to microphone pickup. Will operate two dynamic speakers or 8 magnetic speakers. Each amplifier comes Cat. No. 3585 complete with fuse, 6 ft. high, quality rubber covered cable, attachment plug and the exclusive Samson line voltage compensating plug. This plug

The famous Samson Pam Amplifier, Uses 210 push permits the operation of this amplifier on line voltages carrying from 100 volts to 130 volts. The amplifier is rigidly constructed, is designed to give long service, high quality of reproduction and a minimum of trouble. Never before have Samson "Pams" been offered at these prices.

QUANTITY LIMITED

List \$187.50

Your **\$25.75** 

### RELIABLE DOUBLE PENTODE DUO SCREEN GRID AMPLIFIER

Cat. No. 3570. List \$65.00



Webster 3-Stage Push-Pull Power

Amplifier
With Supply for Field of Speaker

Designed for use with any radio tuner or phonograph. Uses 2-226 tubes followed by push pull 210. A 281 is used for rectification. Furnishes up to 300 volts at 40 M.A. of pure unfiltered supply for the speaker. Input is designed for standard pickup or output of radio tuner. The output is sufficient to drive 3 dynamic speakers. Output is direct to voice coil of dynamic speakers. This amplifier supplies pure "B" supply to any D.C. dynamic speaker. The ideal unit to use in reconverting a battery set to all electric operation. tion, Cat. No. 3578

Your **\$29.50** 

Your \$37.50

# Sterling 180-Volt B Eliminator



Type R-81 Operates 3- to 8-tube sets including sets using 171A power tubes. Supplies B plus 45, 67, 90, 135, 180. All voltages are variable from zero to maximum value, giving perfect power regulation. For this reason it is the ideal power unit for television work. Uses a BH Raytheon rectifier. Operates from 110-120 volt, 60 cycle A.C. power.

Cat. No. 3572

List\$28.50

Your \$6.95 Less Tubes B. H. Tube for Above Eliminator, \$1.10

Universal Power Packs



tube, Model 71. Supplies power for 4 to 5-226 fubes, 1-227, and 1-171A. YOUR \$5.75

Model 215. Supplies power for 4 to 5-227's or 224's, 2-245's.
YOUR PRICE \$8.95

Oat. No. 3576

Model PZ47. Supplies power for 4 to 5 227's or 224's, and for 2-217 pentode tubes.

YOUR \$9.25
PRICE \$9.25
Cat. No. 3575

Two leads are brought out to supply dynamic speaker field.

# Puradyne Line Noise Filter



Suppresses disturbing noises caused by various motor and electrical devires. Installed in a moment. Use at source of interference or at receiver. For all electric sets.

Lish \$5.00

Your \$2.70

# Reliable "A" Condenser

2000 mfd unit for use in any for use in any circuits not exceeding 12 volts D.C. Used in "A" eliminators or speakers to eliminate thum. Replacement for El-kon condensers.

cat. No.

\$1.85

### Filtervolt Line Noise Filter

# Heavy Duty Model

Heavy chokes, resistors and condensers are arranged in a special designed filter circuit to suppress and smooth out line surges and smooth out current so that noise free power is delivered to the receiver. For all electrical power operated

Cat. No. 8579

List \$15.00

Your \$7.95 Price



### New Type XB-16 Elkon Dry Disc Rectifier REPLACEMENT FOR

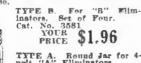


No. 3580 at \$7.59

Your \$4.25

# Replacement Jars for Philco and Balkite Eliminators

Guaranteed to give perfect service in units designed for their use.



TYPE A. Round Jar for 4-volt "A" Eliminators. Cat. No. 3582
YOUR \$1.47

TYPE AA. Square Jar for 8-volt "A" Filminators. Cat. No. 3588
YOUR PRICE \$1.96



# Westinghouse Rectox Unit

Genuine West inghouse Rectox inghouse rectar speakers, trickeliminatore. Input 8 to 15 volts A C. Output 6 volts D.C. at 1

Your \$2.25 Cat. No. 8584 Tast 25 50

# Power Amplifiers—Loftin—White Type—Pentode Amplifiers

# R. C. A. Victor 2 Stage Push Pull Amplifier

A product of R. C. A.-Victor, this amplifier is the same as used in Victor models R-32, R-42, RE-45, and RE-75. Uses a 226 in the first audio stage, with 245 in push-pull in the output. Provided with phonograph pickup transformer, hum adjuster and tone control. The amplifier in addition to supplying its own A. B. C. voltages, also supplies 11/2 and 21/2 volts for the filaments of the tuner and B voltages for the detector and R.F. tubes. Also supplies field supply for any D.C. dynamic. The output is designed to operate into the voice coil of the dynamic speaker. This is just the amplifier around which to



The R.C.A.-Victor Amplifier uses 1-226, 2-245, and 1-280 tubes.

build a new receiver or to use for phonograph or P. A. work. Shipping weight, 17 lbs.

> Cat. No. 3521 YOUR PRICE

SPECIAL! Famous R.C.A.-Victor Speaker

Matched for use with above \$2.35 amplifier. Your Price....

# Kolster 245 Push-Pull Amplifier and Matched Dynamic Speaker



Furnishes field supply for D. C. speaker. Cat. No. 3523

The ideal amplifier for radio, phonograph, public address systems, and small auditoriums. Reproduces with marvelous tone fidelity. Users 227 in the first stage, followed by push-pull 245. Undistorted output is 4.8 watts. Oversize power pack assures long continued service without power pack failure. Shipping weight, 12 lbs. Your \$15.00

# Matched Dynamic Speaker

Matched speaker specially designed to operate with above amplifier. Has a free suspension type moving coll giving it great sensitivity. Can handle tremendous volume. Field is emergized direct from Kolster Amplifier. Complete with output transformer. Shipping weight, 4 lbs.

Cat. No.

Your
Your
Your
Sald With Above Applifier.

When Sold With Above Amplifier

Speaker Separately, \$5.95

# PENTODE AMPLIFIER

Loftin-White Licensed



Utilizing the new Pentode tube, these amplifiers give greater volume and better tone than the 245 amplifier. Uses 1-224, 1-247 and a 280. Input is direct to grid and cathode of 224. Output is rrect from plate of 247. Undistorted output is 6.5 watts. Shipping weight, 12 lbs.

Cat. No. 3260. List \$37.50

Your \$17.95

# Acme Single Stage Power Amplifier A Power Amplifier for Any Set

No matter what set you have, its volume can be made greater and its quality better just by adding on Acme Power Amplifier with a power tube (171-A or 871-A). The amplifier consists of a stage of resistance coupled amplification with impedance leak, automatic "C" supply and a transformer to supply the power tube. All you have to do is connect the amplifier to the set, and your B supply, connect your speaker and you get radio as you have never yet heard it. Shipping weight, 5 lbs.

Cat. No. 8524. List \$12.50



Your Price 4

# Loftin-White Amplifiers **LICENSED**

Direct coupled Amplifiers of the latest design, these embody all features that will be asked for. A phonograph pickup tuner or microphone can be connected directly into the input without loss of energy. Model 250 uses 1-224, 1-250, and a 281. Input direct to 224 control grid. Output direct from 250 plate. Output 7.9 watts. Shipping weight, 12 lbs.

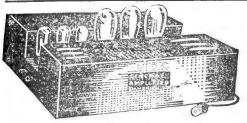
Cat. No. 8263

Your **\$22.00** 

Model 245 uses 1-224, 1-245 and a 280, trol grid. Output direct from 245 plate, ping weight, 12 lbs.

Cat. No.

Your \$13.95



# Three Stage Power Amplifier

250 Push-Pull

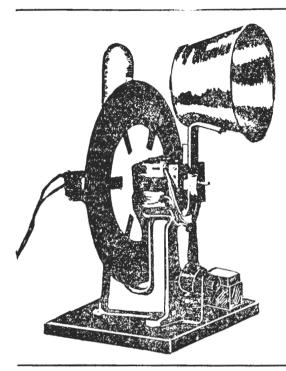
A Product of General Amplifier Corp. of Cambridge, Mass.

The ideal amplifier for Public Address systems. Uses a 227 first stage operating into 226 The ideal amplifier for Public Address systems. Uses a 227 first stage operating into 226 push-puil. Output stage is 250 push-puil. Two 281's are used in a full wave rectifying circuit. A line switch and a low-high voltage control switch to compensate for variations in line voltage is built in. The input circuit is adaptable for microphone, phonograph, or radio. The output will feed from 2 to 5 dynamic speakers. All parts are enclosed in a black finished metal case, with ample provision for ventilation. The amplifier is complete, supplying its own A. B. C. power. Ample oversize transformer and condenser bank. All parts are heavy duty. Will give long, satisfactory service. A typical General Amplifier product and one of the finest amplifiers ever offered at any price. Shipping weight 30 lbs.

Cat. No. 3525. List \$145.00

YOUR PRICE

# NEWEST TELEVISION APPARATUS



# RELIABLE TELEVISOR

With Television making such vast strides, it will only be a shotime before Television equipment and receivers will be sough after and much in demand. Likewise, those who know Television and its apparatus will be much in demand. With this in mind, on engineering staff, after long months of experimentation and trialiave constructed a Televisor of remarkable and pralseworth efficiency. All parts and materials of which the Television is constructed have been carefully designed and are of the highest grad-

Special Newly Developed Motor

The Reliable Televisor is equipped with a Synchronous and Edd-Current Motor precuring steady and constant rotation of the 80 hole Scanning Disc, so essential in the recution of Television signals and pictures. A speed control enables the operator to compensate for the slight voltage variations in different localities.

Special Filter

To filter out injurious line disturbances a highly improved filter system is used. The supporting bracket is made of strong but light cast aluminum. A sturdy socket and shield with 15" x 12" aperture for the Neon tube is provided. Also equipped with a shadow box and magnifying lens to greatly enlarge the image and permit reception by more than one person.

Accurate Square Hole Disc

The 60-hole scanning disc is made of aluminum and accurately punched with square holes .003" in size to permit the entrance of more light than the usual round hole. With the increasing use of the 60-hole disc by the leading Television broadcasting systems, this size was made standard with our equipment. Finished in beautiful oxidized broaze and complete with directions and prints.

Cat. No. 3634

In Kit Form

List Price, \$35.00

\$5.88

\$11.76

# Your Price \$17.15

We recommend the use of the Pilot Television receiver in conjunction with our Televisor for best results. Receiver described elsewhere in our catalog.

# I.C.A. Complete Essential Television Kit

### Model 52

television essential kit composing—I bakelite scanciz ais., 48 les: Universal motor, speed control; motor chuck; telescope with lenses; screws and lense bracket bakelite sub-base for motor, receptable cord and plux; sub-base with socket for television lamp; picture frame shield; bakelite nillars; four stage television amplifier tubes are not included.

No. 1890. List, \$52.50, \$30.87 Your Price

No. 1891. Same as Model 52 but includes torevision tube. List \$65.00, Your Price ...........

Model B-1

No. 1892. Special television kit, but without amplifube. List \$45.00.
Your Price \$26.46 392. Special television kit, but without amplifier or t List \$45.00.

### Scanning Discs and Essentials

The I.C. A. bakelite scanning discs have been designed and constructed in accordance with Bell Laboratory specifications. The holes are laid out mathematically correct to avoid distortion. For 115 "x115" pictures,

Your Price



No. 1893, 24 aperture disc. List \$10,00, Your Price... \$5.68 No. 1894, 48 aperture disc. List \$10,00. Your Price \$5.68

No. 1895. Universal disc of aluminum. Combination 24, 36, and 48 lines. List \$15.00.

o. 3635. 60 hole disc. \$8.50

Your \$8.82



# Television Tube and Photo Electric Cells

A trievision tube with a UX four-prong bridger base. Striking voltage 100; minimum current, 5 mils, maximum 80 mils, intrinal resistance, 100 onms; piate area 112 feq.

No. 1896. List \$10.00. Your Price ....... No. 1897. Photo-Electric cell.  $1\frac{\pi_4}{4}$  bulb diameter. List \$20.00. Your Price

No. 1898.

Photo-Electric cell, 3" bulb di-\$22.05 ameter, List. \$37.50. Your Price

### I.C.A. Universal Television Motors

Universal motor (A.C. or D.C.). Easily controlled by rheostat. With 32" shaft.
No. 7161. List. \$29.50.
Your Price. \$17.34



No. 1899. Special single Phase 1/15 H.P., 110 volts, 60 cycle motor. Resistance controlled—1800 R.P.M. Will operate 12" to 24" scanning discs. 4," shaft. List \$35.00. shaft. List \$35.00. Your Price.... \$20.58

No. 1900. Chuck to fit ¼" motor shaft. List \$5.00. Your Price.......

### Speed Control

For synchronization of picture and signals. No. 1921. List \$3.00. Your Price

\$1.89



Television Amplifier

The ICA four-stage amplifier, complete with all resistors and coupling continuers. Any power tube will serve, although two 245 or 250 in the output are recommended. Tubes not included.

No. 1901. List. \$17.50, Your Price ...

Television has this year taken its greatest forward stride since the inception of the art. Columbia and National Broadcast Corporations are daily transmitting television programs. Television today is even further advanced than radio was in 1921. Every experimenter and radio fan is delving into it. At the present stage it is possible for everyone to contribute improvements to the art. Be the first in your neighborhood to show television. We list television apparatus of nationally known, reputable manufacturers, and advocate its use for experimental purposes. Television material all of experimental nature and not subject to refund or exchange. In the event of damage to shipment we advise purchaser to file claim with carrier.

GET INTO TELEVISION NOW!

# Best B.B.L. DeLuxe Home and Theatre Pickup

The largest, heaviest and most powerful pick-up on the market. Yet so delicately counter-balanced that it lies like a feather on the record. Double tone arm with unique hinge for raising and lowering head, makes needle changing more convenient than ever. Volume control is a built-in feature of the pick-up conveniently located on the base. Ships. wt. 7 lbs.

List \$20.00

Your \$11.76 Price \$11.76

# Webster Phonograph Pickup



The Webster Electric Pick-up will faithfully reproduce all frequencies. Remarkable clearness and volume and freedom from any objectionable noises when playing any type record are features that prove scientifically correct design of this Webster Pick-up. A volume control is built into the base of the pick-up allowing a full range of volume control. Finished in antique bronze. Shpr. wt. 4 lbs. complete.

Cat. No. 3135.

Your \$5.95

# The New "Upco" Chromatic

Professional Pick-up with Built-in Volume Control As Used in Theatres and Public Address Systems



UPCO Engineers, backed by limitless skill and experience, have evolved this truly accentific, sensitive instrument capable of reproducing finest music with full justice to the consummate art of its creators. A good value at full list price of \$17.50.

Cat. No. 8136.

Your **\$7.95** 

# Multiple Speaker Extension Cord

or Speaker Output Adapter



Complete with Cord Connector

For sets using push-pull audio For sets using push-pull audio. This device enables one to connect additional speakers to any radio set, without rewiring or soldered connections. Simply place the adapter under the power tube or tubes and connect the additional speakers with the connector furnished.

Cat. No. 3142.

Your Price,

# Clarostat Tone Control



Tone control is the keynote of 1931 radio.
All the better types of sets are provided with tone control. A radio erts are provided with tone control. A radio set is obsolete without tone control. Table model beauti-fully finished in black and gold; felted base; long connecting cord and handy disc con-pectors.

List Price \$2.35

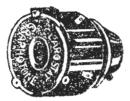
Your \$1.25

# Panel Mounting Type

Cat. No. 8138 List Price \$1.80

Your Price

\$1.03



# Columbia Presto Pickup

A Sure-Fire Combination

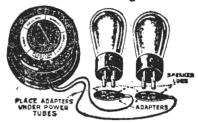


The deservedly popular "Columbia" Pick-up in combination with the "Presto" base—an in combination with the "Presto" base—an ideal combination. Will take records of any marketed size. Take advantage of this unusual value. Cat. No. 3130

List \$35.00 Without Volume Control

Your \$5.95 Price \$5.95 Volume Control \$1.45 Extra

# Power Tone Regulator



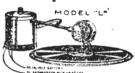
Not just another tone control but embodies features of design that make it a real control. Control is actuated on the grids of the power tubes instead of on the plates, giving a larger degree of tone regulation. Provision larger degree of tone regulation. Provision is made to allow the connection of extra speakers. This is a real convenience and a distinct Powertone feature. Available in table and panel mounting styles, and for push-pull output and single power stage.

Cat. No. 8143. FOR TABLE TYPE.

Your \$1.75 Price \$1.75

Oat. No. 8144. FOR PANEL MOUNTED. Your \$1.35

# Bristophone Phono Pickup



unit, capable of highest possible sensipossible tivity. Produces enor-mous volume perfectly clear and Iree from distortion. Shpg. wt. 8

Handsomely finished in gold. Cat. No. 3145. List \$17.50.

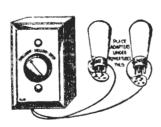
Your \$4.75 Price \$4.75

# Bristophone Phono Pickup

Model M
Employs carbon microphone principle.
Cat. No. 3154. List \$12.50.

Your \$2.75

# **Bud Tone Control**



Brilliant, bright, mellow or deep tone is at your command. Very easily attached to the radio set. Flace the adapters which are suspended from the bakelite box, under the two power tubes in your set. Should your set have only one power tube, place one adapter under the power tube and cut the adapter off of the other wire and attach the wire to the ground post of the radio Shpg. wt. 2 lbs.

set. 4.5% by 2.5% by 2.5% . Cat. No. 3140.

Your \$2.25

### Grebe Tone Control



One of the first and finest of all tone controls. Permits 6 degrees of tone color from low Bass to high Treble. Complete with bakelite knob and escutch-eon plate. Cat. No. 3773

Your 85c Price

# Kolster Electric Pickup

### For Home and Theatre Use



**Automatic** Type L

The Kolster Pick-up is hermetically sealed—thereby preventing attraction of foreign particles. In the Kolster Pick-up you will find nothing but the best Cobalt steel magnets, which assures the user of permanent satisfactory operation under any conditions. Nowhere and at no time has there ever been offered a more sensational value in radio electric pick-ups.

(at. No. 3141.

Your \$3.75

# Electric Phonograph Turntables





# **ELECTRIC MOTORS**

With 12" Turntables Manufactured by General Electric NEW MODEL

View with mounting board

Not to be confused with the older model. Available for A. C. or D. C. These new phonograph motors come to you fully assembled and mounted on ½" warpproof veneer panels measuring 15"x15" ready to install into your own cabinet.

These motors are absolutely noiseless and humless. Built as only motor manufacturers of long experience could know how, they are an epitome of phonograph manufacture. The ideal motors to use for recording. They have ample power to operate any recorder head. Completely equipped with speed regulator, cord and attachment plug and a 12" turn-table to take any size records. Measures over all 16"x16"x10 1/2". Shpg. wt., 25 lbs.

Specify whether A. C. or D. C. model is wanted. A. C. motor will be shipped unless otherwise specified.

Cat. No. 3371 Your A. C. or D. C. Price



# THE ALLEN A.C. MOTOR For 110 Volt 50-60 Cycle A. C.



One of the most efficient and simplest phonograph motors ever designed. Silent synchronous type motor, it starts and stops at the flick of a finger. Regardless of voltage fluctuations, they revolve

at exactly 80 revolutions per minute, eliminating the need of a speed control. Measures only 13," in depth, it is a marvel of compact and efficient design. Easy to mount. Complete with all hardware and a beautiful felt covered

Cat. No. 3749 List \$35.00

Your \$3.25

# THE PRIME GREEN GIANT MOTOR For 110 Volts 50-60 Cycle A. C.

A sturdy powerful compact heavy duty motor of the self-starting induction type. Will not set up disturbing noises in any receiver. Equipped with large bearing surfaces to provide adequate support and to insure long life. Quick starting, full speed is attained instantly. Comes ready to mount with turntable, mounting plate, on-off switch and speed control. on-off switch and speed control.



# THE BLUE FLYER ELECTRIC PHONO MOTOR AND TURNTABLE

For 100 Volt 50-60 Cycle A. C.

A self-starting induction mos-tor of the better type. They A self-starting induction motor of the better type. They have earned wide-spread praise and approval because of their perfect and uninterrupted service and uniform speed under severe voltage variations. Open type construction allowing complete ventilation. No heat or hum. Silent special-cut bakelite fabric gears. Long oversize sleeve bearings. Comes complete with mounting plate, turntable and speed regulator. bearings. Comes con and speed regulator.

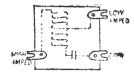
Cat. No. 8768



Your

### SCRATCH FILTER





A necessity for all phonograph pickups. The noise made by the needle as it rides in the record groove is amplified and appears in the speaker as a background scratch. This the filter eliminates. Mounted in a metal case \(\frac{8}{4}\)" aguare by 1\(\frac{4}{4}\)" high. Tapped to match the impedance of different pickups. Connects directly across pickup.

Cat. No. 3722

Your 35c

# THE RELIABLE HOME RECORDER

Senior Model

Enables you to record broadcasts over the radio, your own voice, that of your friends, etc. Uses the same picked up for recording and playback by means of an ingenious switching arrangement. No extra weights necessary. Also enables you to home broadcast using the same amplifier as is in your set. The home recorder is complete excepting for batteries, needles and records. The use of pregrooved records such as the Victor, is recommended. The batteries required are a No. 6 Dry cell and a three terminal C battery. The entire unit is housed in a beautiful walnut wood carrying case equipped with a snap lock. Enables you to record broadcasts over

rying case equipped with a snap lock.

Comes complete with the necessary pickup, recorder, microphone, selector switch and volume control. Batteries are housed in the carrying case. Full instructions enclosed. The Recorder can be used with any receiver or amplifier using 171, 245, 247, 210, or 250 output. Shpg. wt., 20 lbs.

Cat. No. 3766. List \$57.00. Your **\$33.85** 

# RELIABLE DUAL TURNTABLE

A dual electrical turntable intended for blending one record into another without lapse between. Uses two self - starting, speed regulating induction motors and two high grade pickups.

A specially calibrated fader control permits blending from one turntable to the other without change of volume. Comes mounted on a tastefully finished panel standing 6" high. Will accomodate large size records. Each motor is equipped with its own line switch. Measures 28"x14"x6". Shpg. wt.,

Cat. No. 3767

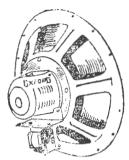
THE FINEST AND GREATEST RADIO **SPEAKER** 

### OXFORD SPEAKERS

THE MOST COMPLETE LINE Electro-Dynamic Speakers in the World

There Is an Oxford for Every Radio. Public Address and Theatre Purpose

# Midget Type Speakers



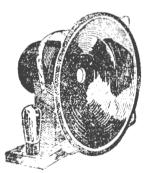
These are designed to be energized by the power pack of the radio set or amplifier to which they are connected. Ideal for midget sets. Available in 8 12", 10" or 10 12" size.

3658. 1834", 2530 ohm field \$3.45

8859 .10 f. 2000 Ohim Held \$3.95

3061 10147 FETT CT 6 56 5 6 4 . 95

# Oxford A. C. Speakers with 280 Tube



These dynamics are of the three point suspension balanced spring. They use a 280 tube as a full wave rectifier to supply the field; gives more powerful field with less hum than the usual A C speaker. Complete with output transformers.

366210"	cone	\$8.25
366812"	cone	\$8.95
366414"	cone	<b>\$12.95</b>

Cat No.

# Auditorium Speaker For 110-Volt A.C. with 280 Tube



The greatest speaker ever made by Oxford, 14" cone. Uthizes the patented Oxford suspending practice Takes a buffle with a 12" long non-Thop have oversize frames with each large wire in the field and the gives a higher field streen normal term its greater energia, the Thop was of the 25st relation to be supplyed arrange a possible in the form supply.

Cat. No. 3665

Your \$12.95

# OXFORD

Personifying the utnosi for dynamical teproduces on an arrow rized by the entire voltage path as the greatest moustail is simment in radio Oxto. These rebuilt to give the mass perfect recreation of sound possible, the finest radio music and volce reproduction known. Cost was no consideration in the manufacture and construction of these instruments, but only "Perfection in Performance." The most advanced dynamic design is incorporated into these units.

Three Point Suspension Balanced Spring Permanentized Controlled Diaphragm

Moisture-Proof Coil Mountings Inertia Counteracted Construction

A Speaker for Every Purpose

# D.C. AUDITORIUM SPEAKER

4000 Ohm Field



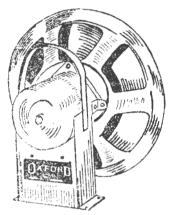
The ideal speaker to use for public address exatons where a life use for public addissing statems before a 100 separation field opin to a middle. These speak takes is baffle opening of 101s. These speak even but handle the out put of and simplifies will be a middle of the columns are all or importants.

311 פשחויייויי חו moisture-proof, end to be used outdoors enobling the speaker

Cat. No. 3086

Tome Price

# Oxford D. C. Speakers



spenders are all designed for ly neavy duty work, and have theid colls. They cover the the of low, intermediate and posers. Beed cols. They covar the temper of cov. Intermediate and the rates with practically no attenuation at my end of the scale. They have eversive field housing and the telds or wound with extra large wire in the first off, and normits greater not because energization.

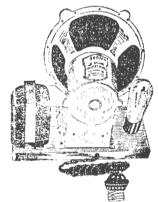
Your Price

3867 .10".. 2500 ohm field \$4.45

3863...11"...4000 ohm field \$4.95

3669...14"...4000 ohm field \$9.95

# Jensen Jr. Auditorium Speaker Uses 280 Rectifier Tube



Improved model D7 AC. Junior Auditirium Speaker. Uses a 256 rectifying tube. These speakers have push-pull transformers and reproduce with magnificant volume from any set or amplifier. An ideal speaker for all pur-List 856.50

Cat. No. 3670 10" Size

# Electro Dynamic and Magnetic Speakers

# JENSEN "CONCERT" D.C. Electro-Dynamic Speakers

Model D-7 DC 10" Diameter



Model D-7 DC 10" Diameter
2,500 ohm Fleld, 8 ohm voice coil. These
units contain suitable push-pull output transformers and are absolutely hum-free. Connect directly to the set—no outside wires.
As most standard manufactured AC sets are
engineered for DC speakers of this ohmage,
the possibilities for replacement with this
really good speaker are practically unlimited.
The wise merchant or repairman will take
advantage of this real "buy," Never before
offered at a cut price. The quantity available at this price is limited. Act quickly,
Original factory packing of 2 in a carton,
Shipping weight, 10 lbs.

Your \$9.50 Price

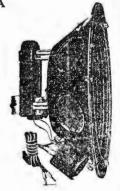
Cat. No. 8468

# R.C.A. 100B-103-100A Magnetic Speaker Chassis



Cat. No.

List Price



Your \$3.25

### R.C.A. 106 D.C. CHASSIS

This is the same speaker chassis as used in the 106 Console model job. It can be used as a replacement speaker wherever DC field supply is available. Field resistance is high enough to enable it to be used in place of both chokes in the filter circuit. Free suspension cone in-sures perfect tonal quality. Complete with output trans-

Shpg. wt. 12 lbs.

Cat. No. 3565

Your \$6.50



# Type F-ROLA DYNAMICS-Type K

Equipped with output transformer. Standard field coil resistance 2.500 ohms. Excited by 40 to 80 milliamperes of direct current at 75 to 150 volts.

Voice coil impedance is one ohm.

Type K-9 Size 11" by 5½" Cat. No. 3467

Your \$5.75

Type K-7 Size 9%" by 532" Cat. No. 3168
Your \$5.15

Type K-6 Size 81/2" by 51/2" Cat. No. 3469 Your \$4.75

Type DC Field wound for 6 volt DC Cat. No. 3470
Your \$5.75

Type K for use with 245 Tubes
Type F for use with Pentode Tubes



The Farrand inductor dynamic speaker unit is one of the most recent types developed. The Unit uses two powerful U-shaped permanent magnets to supply the fixed magnetic field. The Inductor Dynamic is very sensitive and yet will handle over 12 watts without distortion or rattle. The armature moves over ½" when reproducing low notes. The action of the speaker is similar to an AC induction motor where a motor revolves under the influence of a changing magnetic field. The best speaker developed for auto or boat radio. State type power tube used when ordering. Shpg. wt. 7 lbs.

Cat. No. 8466 9" Diameter.

Your \$6.95

Cat. No. 8471 12" Diameter.

Your \$7.95





### CROSLEY DYNACONE TYPE F

Automobile Speaker Size

Will operate with any sot, easily installed in any car. The most powerful unit for its size. Oat. No. 8472

Your \$2.95



#### DYNACONE ADAPTER

to enable use of the above speaker with any radio. Complete instructions en-

Cat. No. 3473



Your 35c

# UTAH 12-IN. STADIUM DYNAMIC CHASSIS

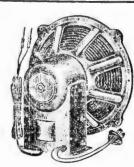
Model 66-B

110 Volt 60 Cycle AC

A superior heavy duty unit for home, theatre, large hall or outdoor use.

Uses 110 volt 60 cycle AC current light socket supply for field excitation, Individually packed. Shpg. wt. 24 lbs.

Your \$12.20



# R.C.A. PHOTOPHONE DYNAMIC SPEAKER

1,000 ohms, DC

DIAMETER OF DIAPHRAGM, 13 in. Overall diameter, 15 in. Wt. 40 lbs. Here is the genuine R.C.A. Photophone Dynamic Speaker chassis with output transformer used with Western Electric Sound Systems in theatres. Suitable for public address installations in dance halls, auditoriums, churches, schools, etc. Rim of speaker has holes for easy mounting to baffleboard.

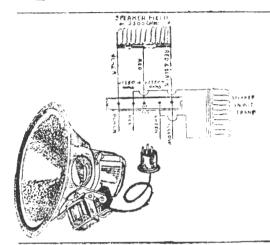
1,000 Ohm DC Field. Cat. No. 3475

Your **\$14.00** 

110-120 V. 50-60 Cycle AC. Uses Cat. No. 3176



# Speakers For Quality Reproduction



# Utah Little Giant Speaker

The Utah Little Giant is an extremely sensitive general purpose model with 8" diaphragm and can be used for single and pushpull as well as pentode audio stages. The field can be connected for 2,500 ohms resistance, 1,250 ohm field or a 625 ohm field. It can be used as the filter chokes of any circuit. When so used it provides two chokes of 1,250 ohms each. All terminals are brought out to a terminal strip and from there, they are cabled into a standard UX 4-prong plug. Using a special type of cone suspension, it is able to handle great volume without rattle, blast or distrotion. Easy mounting. Ideal for midget sets or for use as a general purpose speaker. Cat. No. 3731

YOUR PRICE

\$5.50

# UTAH 33A SPEAKER

For 110-Volt A C



A 9" dynamic meaker. Uses a Westinghouse Begiow regiifler. Special corrugated once turnies etrength and reliability under all conditions Makes an ideal speaker for any set er amplifier

1.fat \$50.00

Yeur \$6.75

### BALDWIN D.C. SPEAKER

Baidtin re ant. ere known for their តែយល់បាន qualify and performance Complete with ontput transform





### MUTER DYNAMIC SPEAKER

Volume without distortion or blasting. May be matched with any power amplifier. Hum tree operation, 280 tube restification

List \$88.50 Ont. No. 8729

Your \$6.35 Your Complete With Tube

### SPEAKER GRILL CLOTH

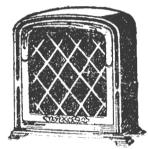
A beautiful ailk cloth that can be used to enhance the appearance of any speaker box. Finished in a soft brown and harmonizes with every wood.



Cat. No. 8728

Your \$1.00 Per Price \$1.00 Yard

# Kolster Magnetic Speaker



No effort was spared to make this at 32 regional speaker. No bissing ro distortion extellent reproduction of the full musical regions of the full musical regions (2) his bissing regions (3) his wide, 7 dec. Sicilary, 10 bissing regions (4) the \$26.00

France \$4.65

# BALDWIN RIVAL UNIT

Ideal for portship sots Versions produced and capable of in-produced to the common of in-produced to the Impact of the hart jot of them. Sould in-tonic order at one.

Your 40c Each



### Transformer Corp. of America Dynamic Speaker

This apeaker has a 2500 ohm field with hollt in ofitons transformer for sing's or pash put output Cat. No. 3734

Your \$6.50



# FAIRFAX MAGNETIC **SPEAKER**



Housed in a beautiful clock model wooden cabinet, selfhaffled. Handles great velume without disfortion.

Cat. No. 3732

Your Price 35.49

# R.C.A. Speaker Model 103



ser fine origine MAGNETIC SPRARER Frame is hand-tarried oak effect and is at-tracticely offect by the tasteful medallion rapeatry couch envering 15' high 1914" wide 6% does. Shop wit, R lbs.

Cat No. 8936

Tast. #22 59

1 Aug \$3.95

# NATHANIEL BALDWIN DYNAMIC SPEAKER

2500 Ohm Field Drnamie Speaker Chasts

Every audible frequen or is perfectly repro-duced at any column with brillian a and fi

2500 ohm 700, geld. without output trans former.

Oat. No. 8730

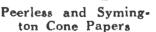


Special \$4.75

# REPLACEMENT CONES AND CONE PAPER

Replacement cone for any speaker chassis. Choice of 9" or 12" size. Complete with apex and hardware. Cat. No. 8725

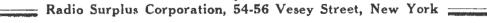
Your 85c Each



Cone papers for Peerless and Symington 9° and 10° dynamic speakers.

Cat. No. 3726

Per



#### Elechtheim Accurate Meters Readrite 25 EB 61

# PANEL MOUNT METERS

Require 2-5.'64" hole for mounting. Highly nickeled with silver face dials. Shpg. wt., 1 lb.



# D. C. **AMMETERS** . 0-10

14.6	~	110.	1	1-000	 
11/1/2	an st	No.	218	3-336	 0-3
		No.	213	101	 1 - () - 1
No.	220-30	3			 . 3-0-3
No.	221-60	6			 . 6-0-6
No.	222-11	0			 .10-0-10
No.	223-22	0			 .20-0-20

List \$1.00 Your 59c each

a 017 099

A. C., D. C. Voltn	neters
No. 301-314	()-4
No. 302-353	0-6
No. 303-352	0-10
No. 304-351	
List 2.50. Your Price, each	\$1.47
Your Price, each	ψχ. τι
No. 805-348; 0-150, List \$4.00. Your Price	\$2.36
No. 806-217; 0-800. Ust 86.00. Your Price	
No. 307 838; 0 10 140. Edst 84 00, Tone Price	\$2.36



# Readrite Pocket Meters AMMETER

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(Ar =	colisi	F.fet	75c.	17-
Louis	Lipe			43c
701	THET	FRS		

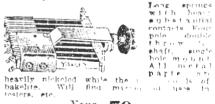
No. 121 50, 0 50 Tolta	
TARE #1 00	58c
Your Frice	30C
No. 122 42 0 150 colts	
14st \$1 80	77
Your Price	73c
No. 123.41, OR 0.180 rotts	
List \$2 00 C	1 1 6
Lour Trice	1.16

			4
	TOLIAM	METERS	
So 124	18, 09	colta, 0.40	2 177 77 2
[]st \$1.28			73
Iour Price			73c

No. 125.35, 0.50 volta, 0.40 amp Elst \$1.50 Your Price 87c

No. 126.28. Test 6 coll 'A' atorage batter. determines when to charge and stop charge same f.int \$1.00

Yaxley 4 Pole D.P.D " Switch



Long springs
with leavy
substantial
contacts Four
pole double

Your Price 79c

# Single Pole Double Throw Toggle



Toggle switch, will break 128 volts at 3 amperes. Heavy construction. For use in testers, phone switch, etc.

Cat. No. 3637 Your Price 22c



# Flechtheim High Resistance Voltmeters

Furnished in highly nickled finish meter cases, equipped with flexible cords having well-insulated metal tips, with which to make connections. Uses only 5 mils, currentresistance, 200 ohms per volt. 234" diameter. Shpg. wt., 3 lbs.

No. 132 AV 300 0 300 Volta D.C. List \$6.00 Your \$2.05

No. 143 BY 500 0 500 Volta D.C. List \$8.50 Your \$3.15

No. 121 CV 600, 0 600 Valts Dr. Fist \$12.80 Tour \$3.45

### Yaxley Phono Radio Switch

A single note double throw soon soutch for photo radio changoter Complete with

Cat Nour 43c

### Toggle Switch

Approved toggle switch Has oxidized fielsh





A Cutler Hammer ewitch. Long neck mounts on panels up to "a" thick. Approved trpe switch.

Cat. No. Your 24C Lenz Shaft Rotary Switch Cat. No. 3612L Your Price 35c



Milliammeters #	What was
No. 225-3250-25.	
No. 226-3500-50.	
No. 227-3900-100.	
No. 228-399	
No. 229-394	0-400.
List \$1.00. Your Price, each	59c
No. 291:311: 0:10 MA	£1 A2
No. 221311; 0-10 MA. List \$1.75. Your Price	\$1.02
No. 300-395; 0-20 MA. List \$1.75. Your Price	\$1.02
Jant \$1.75. Your Price	φ1.U4

# D. C. Voltmeters

No. 010 010
No. 310-310
No. 311-316
No. 312-333
No. 313-3370-50
List, \$1.00.
Your Price, Each
No. 315-839-0-100 volts
List \$1.25.
Your Price
No. 317-312-0 150 volts
List \$1.50 Your Price
Your Price
No. 319-340 0-8, 0-100 volts (approximate
ly 40 chais per volt resistance;
List \$1.75 Your Price \$1.02
Your Price \$1.04

\$1.18 Your Price No. 321 316 P 0 300 roles

Uet \$3.00 \$1.77List \$3 m. Four Price No. 322 347 F 0 800 volts List \$1.00 \$2.36

Your Price List \$1 00 \$2.36

CUTLER-HAMMER 3-POINT SWITCH

A double pole single throw switch with a neutral position. Positive action makes and break. Ideal for testers and general use. Positive type contacts to carry high currents

Cat. No. 3643

List \$1.50

Your 35c



### H. & H. Two-Circuit | Switch



tain if closing tone switch For Phono Radio and public address sistems. I ged in cathoga etc. out of radio for closing rhose graph priktip ellevit

Cat. No 3611 Price 32C

# G.E. Rotary Switch

Rotary sautch for 110 volt lines. Will break 3 amps ehaft.

Your Price 20c Cot. No. Best

# C. H. Lock Switch



This awident is formed on and off by a key. The time to look the receiver Formula use etc. Conjes con plete with ? Rets.

Cat. No.

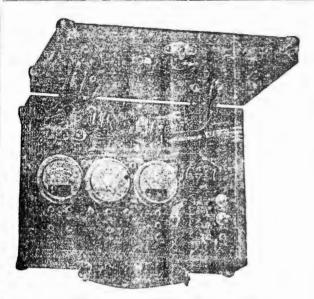
Your 35c

### Carter Switch



Long spring type. Neutral off position. Makes one con tact and breaks one on one side and makes one on the other side.

Cot. No. Your 19c



No. 2700. Shpg. wt. 7 lbs. List. \$35.00.

Your \$14.70

# Senior Set Analyzer

The Reliable Sinior Set Analyzer will make every test necessary on any receiver. It is a three meter job, built by one of the largest electrical instrument manufacturers in the industry. Built to a design furnished by men who know every engle of servicing, it is sure to satisfy every one using it.

TESTS ALL TUBES INCLUDING 280

The Senior Analyzer tests all tubes including the new two-volt tubes. Tests both plates of 280 rectifiers. It also makes the following tests: Line Voltage, Filament Voltage, Plate Current and Voltage, Screen Current and Voltage, and Grid Bias. The usual continuity test is also provided for. Also tests the new Pentode tubes,

METERS CAN BE USED INDIVIDUALLY

An added feature usually found only in the higher priced testers is provision for using the meters independently of the tester. When so used it provides an A. C. voltmeter with ranges of 0-10-140-700 volts. The D. C. voltmeter range is 180,000 ohms. The milliameter ranges are 0-20-100 mills.

CAPACITY AND RESISTANCE MEASUREMENTS

Charts and curves furnished with the tester make it possible to calibrate the analyzer to make the following measurements: Capacity measurements from .1 to 24 mfd; resistance measurements of 0 to 600 ohms, 0 to 1,000 ohms and 1,000 to 100,000 ohms. The analyzer comes complete with cables, adapters, test leads and C battery.

# RELIABLE TUBE TESTER

Tests Screen Grids-Pentodes-Rectifiers



for 110 volt 60 cycle A.C.

The Reliable Tube Tester provides a quick and accurate way to check all tubes. Engraved scale on face of the instrument shows what the correct value for each tube should be. Operates directly from 110 volt A.C. line. Wide swing on second reading to give mutual conductance value shows instantly whether tube is good or bad. At this low price, no service man or dealer can afford to be without one. Slpg. wt. 5 lbs.

Cat. No. 3001, Jist \$22.00.

\$10.95 Your Price

The Reliable Tube Tester

In an attractive carrying case,

Your **\$11.85** 

# Readrite Adapters





No. 128-54. Contains 5 prong Socket on a 4 prong Plug. Has all connections complete to plug. List \$1.00

Your 58c

No. 129-45. Contains 4 prong Socket on a 5 prong Plug. Has all connections complete to plug. List \$1.00

Your 58c

### Readrite Plug-in Line Voltmeter



By plugging into AC or DC socket with this instrument, the exact voltage at that socket is readily de-termined. Shpg. wt.,

No. 127-148, 0-150 Volts AC.— DC. List \$3.00

YOUR \$1.75

# **OHMMETER** MULTIPLIER



This resistor when used with a 22 ½ voit battery increases the range of the Readrice resistance meters to 50,000 ohms. A necessary adjunct for both resistance meters shown on this

Cat. No. 3002-503, List \$1.50,

Your 88c

### Test Leads

A pair of leads furnished with insulated polarity test prods. Five foot long. Indispensible for the foot long.



No. 1970.

Your 35c

### Readrite Ohmmeter



Direct reading. Tests resistance up to 10,000 ohms, also D.C. volts 0-4.5. Contains small 3-cell flashlight battery: current drain is negligible. Adjusts to zero by shorting the two jacks and turning rheostat knob. Supplied with two wire leads five feet long for use in continuity and resistance testing. A high grade instrument. Case is steel. 4" dla. Indispensable for service work. Shpg. wt. 2 lbs. No. 324-500. List \$6.00. Shpg. wt. 2 lb. No. 324-500.

Your \$3.50

### Readrite Resistance Meter

This is the same meter as used in Readrite No. 500, shown above without 3 small flashlight cells and circular metal case. Shpg. wt. 1 lb.



No. 325-501 List \$2.50 VOUR

> PRICE \$1.44

### Utility Test Cables



A 5-prong moulded bakelite plug with a 5-foot coded cable. For use in testers, or as speaker con-nectors, etc. Shpg. wt. ½ 1b. No. 2178. List \$1.50.

Your Price 45c

Socket for above plug.

Your 15c

# Readrite 3-Light Tube Short Tester



Used for testing "shorts" in tubes before the electrical tests are made. Plugs directly into socket on No. 400 tester or may be connected to any 4½ v, battery. Lights burn only when a short exists between two elements in tube. Speedy. Handy. Saves time and trouble. Complete with lamps and plug. Shpg. wt. 2 lbs.

No. 216-450. List \$3.50.

Your \$2.06

# Readrite Socket Testing Voltmeters



For reading plate or filamer voltages by plugging directly in tube socket. Shpg. wt. 1 lb. plate or filament

No. 213-146. Plate Voltmeter —0-300 volts. Resistance 54,000 ohms. List \$3.00.

Your \$1.77

No. 214-150. Grid Voltmeter-0-50 volts. Resistance 8.800 ohms. List \$3.00.

Your \$1.77

No. 215-152. Filament Voltmeter A.C.-D.C. 0-10 volts. List \$2.50.

Your \$1.47

### EQUIPMENT FOR THE LAB! HANDY TEST

# New!

# RADIO PHYSICS COURSE (Second Edition)

672 Pages... Over 750 Illustrations

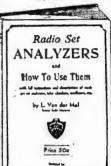


Finer and larger than ever, the new Radio Physics Course contains 672 pages and over 750 illustrations. Covers everything new ...Pentode, Multi-Mu, Public Address, Television, Recording, Movietone. Includes a complete electrical theory course. This book should be on every service-well known author, instructor and engineer. This is a standard text used throughout the country by hundreds of schools. Written in a clear, self-explanatory way.

Your \$3.00

# Radio Set Analyzers and How To Use Them

By L. VAN DER MEL



MEL
A most important and imely new publication. It fills a long recognized want. The first book that explains completely the operation of analyzers, tube Checkers, oscillators, etc. from a thoroughly practical siand-point. Complete in every sense. Easily understood.

sense Easily understood.
Cat. No. 3946
Your 50c

### PRACTICAL RADIO REPAIRING HINTS

REPAIRING HINTS

Another book that
will complete the
equipment of every
Radio man is the
new "Practical
Radio Repairing
Hints" by Rider.
Full of practical repairing bints and
kinks covering all
types of receivers
and radio parts. It
includes countless
emergency repairs,
temporary measures, rapid means
of locating trouble
and hundreds of
other aids. It is
a practical book
in every way, all
theory being omitted.

Cat. No. 3655



Your \$1.90 Price

1937

# JOHN F. RIDER'S TROUBLE-SHOOTER'S MANUAL



### Over 1,000 Pages of Service Information

Complete, comprehensive and up-to-date, this new manual covers the entire radio and public address field. It will supply you with the vital data concerning circuits, tube layouts, voltage charts, color codes, internal wiring diagrams. You will find the entire line of popular American and Canadian receiver manufacturers. Contains diagrams not available from any other source. Wiring diagrams of set analyzers, oscillators, public address and power amplifiers, short wave sets, etc. Loose-leaf, beautifully bound.

#### AN ABSOLUTE NECESSITY

Cat. No. 3657

Your \$4.50 Price



# FREE!

Your choice of either John F. Rider's Trouble Shooter's Manual or the New 1932. Official Ser-vice Manual with every order amounting to \$35.00 or more. This offer for limited period only.

> Get Your Copy Now



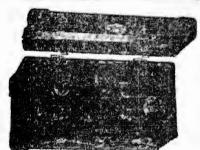
# 1932 Official Service Manual

The most complete and most valuable of all Service Manuals, containing 1.000 pages, crammed full of the most comprehensive information. All original and variety a comprehensive information. All original and new material, many chapters never before appearing in print. Over 2,000 diagrams. Over 1,500 diagrams over 1,500 diagrams and hookup of commercial receivers, including 1932 models. New data covering Pentode, Variable-Mu t u be s, midget receivers. Superheterodyne, test equipment of every description, color codes of wiring and resistors, short wave sets and converters, public address systems, talking notion picture equipment, and hundreds of practical service hints on commercial receivers.

Cat. No. 3945

Cat. No. 3945 Your \$4.00 Price \$4.00





### Reliable Service Oscillator

modulated oscillator for adjusting R.F. id I.F. circuits. Fully shielded with parate battery compartment. Covers of St. C. and from 120 to

from 550-lbuv a. 185 K.C. Used to align R.F. gang condensers, locate defective R.F. transformers, adjust I.F. transformers, check oscillator stages, and determine sensitivity and gain of receiver. Complete in leatherette carconnected with

Tying case.
Reliable Service Oscillator, complete with batteries, tubes, and output meter,

Cat. No. 3938 Your \$20.60

Same as above but less output meter. Cat. No. 3939 Your \$17.64

FREE With every Reliable Service Oscil-

# Reliable Output Meter

A copper oxide rectifier type meter with a range of 0.5 and 0.50 volts. A condenser is incorporated in the high range to prevent D. C. current from passing. Measures A. C. or D. C. Used to measure gain and lining up R. F. and I. F. stages. Needed by every serviceman. Complete with test leads. Mounted in a seamless metal case.

Cat. No. 3940

Cat. No. 8940 List Price \$6.00

Your \$3.53

### Reliable Exploring Coil



Designed for the aerviceman to use in localizing R.F. frou blc. The process of localizing tuner faults with exploring coil is simple, reducing time to a minimum. Both coil and connecting wire are completely shielded. Cat. No. 3941

Your \$2.06 Price \$2.06

### Reliable Capacity



Tester

Cat. No. 3942 List Price \$15.00 Your \$8.82

Same as above but in sizel case with cover and handle for outside service work.

Cat. No. 3943 List Price \$17.00 Your \$9.99

#### Capacity Meter Reliable



A double scale capacity meter. Double range lower range .008. 25 mfd. Upper range .1 to 10 mfd. Connects to 100-130 volts. 60 cycle line supply contains rheostat to set full scale of 100 volts. In nest steel case. Baked ename! In tab., Complete with test leads

Cat. No. 3944 List Price \$8.00

\$4.81 Your

# JEWELL PRECISION MEASURING METERS

# D.C. Instruments Patterns 53, 135



These 2-in, flush

These 2-in. flush type instruments are of matched size and appearance. The instruments are furnished in three styles of mountings: the front of board type with studs projecting through the board, the rim type in which to be necessary to drill a 2½-inch hole, mounting with a cup or clamp, and conventional flush or flange mounting with 3 holes for said oreceivers or for use in experimental work where the small instrument gives adequate accuracy.

No.	Range List	Net
	Range List Pattern 53 for D.C.	
	0-5, 8, 10, 15,	
1000	50 volts \$7.50	\$5.51
1987	0-100 volts 9.00	6.62
1988	0-150 volts 9.50	6.98
1989	0-300 volts 12.00	8.82
1990	0-500 volts 15.50	11.39
1991	1-1000 volts 22.50	16.54
1992	0-3000 volts 49.50	36.38
1993	0-3, 5, 10,	
	15 amp 7.50	5.51
1994	0-5, 10, 15, 25,	
	30, 50, 100 mill 7.50	5.51
1995	C-3 mill 9.00	6.62
1996	0-1.5 mill,, 9.00	6.62
	Pattern 135 for D.C.	
	0-5, 8, 10 volts 7.00	5.15
1998	0-100 or 1-150	
	volts 7.50	5.51
	Double Reading	
	0-8-200 v 8.50	6.24
2000	0-3, 0-5 double	
	scale 7.00	5.15
2001	0-10, 15, 25, 50,	
	80, 100, 300,	
	500 mill 7.00	5.15

# JEWELL PATTERN **574 VOLTOHMMETER**



The meter has a double scale, the upper reading being 0-100,000 ohms, the lower scale is 0 to 300 volts. The voltage and resistance range can be reduced to one-tenth their full scale readings. The voltage range can be increased to 600 volts. As a voltmeter, it has resistance of 1,000 ohms per volt. Shps. wt. 5 lbs., with battery and test leads, list Price \$35.00

\$25.73 Your Price

Pattern 209 Tube Checker



Pattern 210 Tube Checker

Was developed for dealers requiring an accurate and effective tube checker at a moderate price, operates on 50-60 cycle 110-120 volt A.C. Tests all tubes including heater type. Correct value of readings are given on chart on the face of the tube checker. A vitrified porcelain resistor is supplied in the circuit to prevent damage in the event of a chorted tube. Show we have to prevent damage in the event of a shorted tube. Shpg. wt., 7

List \$30.00.

Your \$22.05

# Patterns 190 A.C. Instruments



pattern 190 are similar in size and appearance to the pattern 53, and 135. Pattern 190 are regularly furnished in new

	me	ountin	g type	e but
	ca	n als	so he	sup-
plied in mounting		type	with	three
				Your

Range	List	Price
0-1.5, 3, 5, 8, 10, 15, 20 volts	\$7.50	\$5.51
0.150 volts	9.50	6.98
0-1, 3, 5, 10, 15 amperes	7.50	5.51
0-20, 30, 50, 100, 300, 500 Milliamp.	7.50	5.51
High Frequency The Type, Patters		Couple

Similar in shape and size to Pattern 190 but for use on H. F. circuits.

Range	List	Price
0-1	\$12.00	\$8.82
0-1.5	12.00	8.82
0.2	12.00	8.82
0-3	12.00	8.82
0-5	12.00	8.82
0-10	12.00	8.82
0-15	12.00	8.82

Gives direct readings Gives direct readings on all tubes from UX199 to UX250. In operation the net change in plate cur-rent is read directly rent is read directly from the instrument. The 210 contains an A.C. voltmeter, a di-rect current instru-ment and a trans-former for supplying

rheostat compensates for all line variations. Shpg. wt. 13 lbs. List \$63.00,

\$47.73 Your Price

### Pattern 135 Ohmmeter



ing in box or panel. Shpg. wt. 3 lbs. Available in three following ranges: Your Price List

1933 0-3 volts, 0-10, 000 ohms...\$7.00 1934 0-4.5 volts, 0-15.000 ohms 7 00 1935 0-4.5 volts, \$1.46

0-100,000 ohms ..... 10.00

MICROFARAD METERS
Pattern 78 and 75 microfarad meters are a great asset to any laboratory, shop or service man. They measure capacity directly. Double range afford easy and accurate reading. Ranges are 0-15 microfarads and 1.5 to 15 microfarads. Operate from 115 volt 60 cycle supply. Pattern 78 is a 2 %; size meter. Pattern 75 is a 4" size meter. Shpg. wt. 5 lbs.

Pattern. 78. Microfared Me List \$22.50. Your Price....\$16.53 Microfarad Meter Pattern 75: Microfarad Meter. List \$40.00.

Your Price ... \$29.40

# Popular Test Trio Pat. 88, 68, 78

The Jewell Trio of Radio instru-ments is popular ments is popular for building special test panels and service instruments; for use on experiuse on experi-mental laboratory apparatus, and amateur trans-

mitting. They come in flush type bakelite cases. Flange diameter is 3½". Approximate shpg. wt. 5 lbs.

Pal	ttern oo D.C.	Tuefini	i en ro
No.	Range	List	Net
2002	0-8-10-15-30		
	50 volts	\$7.50	\$5.51
2003	()-150 volts	9.50	6.98
2004	0-300 volts	12.00	8.82
2005	0-500 volts	15.50	11.40
2006	0-750 volts	19.00	13.97
2007	0-1000 volts	22.50	16.54
2008	0-1500 volts	28.50	20.94
2009	0-2000 volts	34.50	25.36
2010	0-2500 volts	42.50	31.24
2011	0-3000 voits	49.50	36.38
	Milliam	eters	
2012	0.5.10.15.25.5	0.0	

MOTT	0-0000 10110	10.00	00100
	Milliamete	rs	
2012	0-5-10-15-25-50		
	100-150-200		
	250-300-500	\$7.50	\$5.51
2013	0-1 mill.	9.00	6.62
2014	0-1.5 mill,	0.90	6.62
2015	0-2 mill.	9.00	6.62
2016	0-3 mill.	9.00	6.62
2017	0-200, 300 mi-		
	croampere4	17.50	12.86
2019	0.1, 1.5, 2, 3,		
	5, 10, 15 amp.	7.50	5.51
2020	50-0-50 galvano	9.00	6.62
	ttorn TO AC		

2020							
Pat	tern	78	A.	C.	Instri	ımen	ts
These					ents	of	the
movin							
2021		5, 1			0==		~

	20, 30 volts	\$7.50	\$5.51
2022	0-150 volts	9.50	6.98
2023	0-300 volts 0-3-15-150 tri-	12.00	8.83
2021	0-3-15-150 tri-		
	ple range	.13.50	9.92
2025	0-25, 50, 100,		
1	200, 300, 500		

200, 300, 500
milliampers 7.50 5.51
2026 0-1, 2, 3, 5, 10,
15 amperes 7.50 5.51
Pattern 68 Radio Frequency
Instruments
These are of the thermo-couple type, are very accurate and have a guaranteed overload capacity of 50 %.

131776.		* * *	**
No.	Range	List	
2027	0-10 mill.	\$40.00	\$29.40
2028	0-25 mill	37.50	27.56
2029	0-50 mill.	35.00	25.73
2030	0-100 mill.	32.50	23.88
2031	05, 1, 1.5, 2,	•	
	2.5, 3, 5, 10,		
	15 amperes	13.35	9.81
2032	0-100 galvano.	15.00	11.03

# Jewell Pattern 89 Voltmeter and Ohmmeter



Are mounted in cases of molded bakelite with suitable terminals as illustrated. A 1½ volt dry cell is mounted inside the case of the Pattern 80 ohnmeter making it independent of outside sources of supply. A magnetic shunt provides convenient adjustment to compensate for variations in cell voltage. Shpg. wt. 3 Ibs. Pattern 80 Ohnmeter with either 0-1,000, 0-3,000, 0-10,000, or 0-30,000 ohm ranges including battery and test leads. List Price \$16.50.

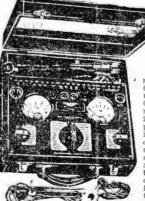
Your **\$12.12** 

# Voltmeter

The Voltmeter for radio service is a three range instrument with scales of 30, 300 and 600 volts; 1,000 ohms per volt. Pattern 80 Voltmeter with 0.30.300.600 scales and test leads.

Your \$18.38

# Jewell Pattern 444 Set Analyzer



Establishes an entirely new standard of usefulness and value in portable Radio Servicing equipment. Tests every circuit an any receiver, full-wave rectifiers, high-mu, Pentodes. Equipped with 2 shatter-proof glass precision meters, having 24 measuring ranges. A.C. meter provides 0-4-8 amperes, 0-20-100 milliamperes, 9-6-12-30-60-120-300-600 volt ranges, 3 resistance measurement ranges of 1.000-10.000, 100.000 and low, medium, high output moter ranges for measuring sensitivity and balancing receivers. An improved switching system is presented in the Pattern 444 analyzer entirely different than any previously existing method. Incorporating pin-jacks for easy connections, detachable plugs and cable. Complete with pair of test prods, pair of test leads with clips, line plug and cord and adapter for output measurements. Instructions, data book and pad of charts included.

Cat. No. 3678

List \$112.00

Your Price

# Miscellaneous ITEMS of INTEREST

# Kellogg 227 Tubes

An absolutely first tube. Not seconds. Quick heating, high meter reading. Manufactured by Kellogg Switchboard & Sunply Co., for use in their own sets.





### Carter Outlet Plates



Designed to be used for installation of extra speakers at remote points. Beautifully bronzed fluished es-cutcheon plus. Comes bronzed fluished es cutcheon plug. Comes complete with mount ing hardware and volume control.

List \$2.50 Cat. No. 3615 Your 49c

# R.C.A. .1 Mfd. By-Pass Condensers

Shielded condenser in metal case, Used for R.F. by-pass and litter, Working yoltage ter. 450 D.C



# C. Small, com-with flexible Cat. No. 3616 Your 12c

# Lincoln Electric Clock Churchill Model

Exquisite design. Enthralling beauty in its walnut finish bakelite ease, with dull nobbled panels. Dependable and accurate, Has 312" dial. Full! with dull hal. . hand. Si wt., 5 lbs. Shpg.



Cat. No. 3617 Your Price

List \$6.50

### Centralab 3 Ohm Power Rheostat

A real heavy duty unit made to carry heavy cur-rent. Metal jacket rint. Metal jacke with broad fire istance wire will carry to excess of two arms Cat. No. 3619
Your 15c



# Arcturus Sonora RA 1 Tubes (ARCTURES TYPE 28)



Genuine Arcturus tube made especially for Sonora Radio sets. Has a 15 wolt indirectly heated cathode. For all R.F. and A.F. amplification.

Cat. No. 8620

Your Your 45c Each In Lots of 10, 35c each

### John E. Fast 2 Mfd Filter Condenser

Mounted in a metal case with recenting Monocease with process feet and commented lugs. Rund at 150 Vets 100. 1 with column to mind. Cat. No. 3621





# Lincoln Gothic Clock



A dainty Gothic model electric clock, Finished in thing, case of walcut bakelite, Srivered dia, Full sweep, Becond hand, For the desk, mantle, table or bouder.

Cet. No. 3622

List \$8.25 Your Price \$3.75

# WESTINGHOUSE A. C. MOTORS

Horsepower motors for single phase, 60 cycle 220 volt supply. Rotates at speed of 1800 R.P.M. Self-starting. Attains full speed in-Self - starting. stantly. Long life bronze bearings. Has 32" shaft to take any standard pulley or attachment. Enclosed terminal plate. Does not require

special starting apparatus. En-closed in black steel frame, Will not set up inter-fering noises of foring noises cany kind to interfere with radireception Show wt., 35 lbs.
Cat. No. 3624 with radio



Genuine

Tist \$37.50

YOUR PRICE

LIMITED QUANTITY

# SIEMENS ACCURATE RESISTORS



These resistors are accurate to within 1% and rated at two watts. Can be used for meter multipliers, shunts or wherever a very accurate resistor is needed. Available in sizes ranging from 100 ohms to 10 megohms,

Your Frice 50c Each

In Lots of 10 or More, 45c each

# Lincoln Kitchen Clock |

Will dress up any kitchen. Positive necessity in the home. Decorated porcelain with. square dial. Full aweep second

hand. Colors: Blue, Green, Ivory.

Cat. No. 8626

Your \$2.95

# New Lincoln Electric Alarm Clock

An ideal bedroom clock in a futuristic de sign bakelite case. Alarm is set and shut off by a switch in side of case. Very effective pleasing tone

alarm. Cat. No. 8627 Your Your \$4



### PENTODE POWER TRANSFORMER

An unshielded transformer for pentode, 245 and Loftin White cir-cuits. Has a 23-volt winding at 3 amps, 212 3 amps, 212 volts at 912 amps, 800 volt center tapped secondary and 5 volt 2 amp winding for 280. The primary is tapped for operation on 100 110, 120 and 130 volt line. Makes an ideal Makes an ideal replacement transformer. All are out to terminal strip,

Cat. No. 3618 Your Price

marked for connection.

# RELIABLE PHONIC TELEVISION MOTOR

The latest television office to drive the or dram in a at exact speed of 100 R.P.M. regardless of voltage fluctuation.

For Baird or Jenkins systems. State type desired. For 110 volt 60 cycle A.C.

Cat. No. 3623

Your \$12.75

# PILOT LITES



Standard Pilot lite replacements. 6 volts, 3 1/2 volts, and 2 1/2 volt sizes.

List \$5.50

Cat. No. 3628

Your 55c Per box Price 55c of 10 \$5.25 Per 100

### **FUSES**

Standard Edison Screw fuses. Packed 5 to a box. 10, 20, 25, 30 amperc.

Cat. No. 3629

Your \$1

# 110-Volt Pilot Light Candelabra Base

Clear and Amber Cat. No. 3630 YOUR PRICE

\$1.97 box of 25 Singly 9c each



# Flashlight Lamps

Miniature Base. In clear and opal glass. 2 % and 3 % volt sizes.

Cat. No. 3631

Your 29c box of 10 \$2.45 carton of 100

# Remarkable Values In Battery Operated Sets

# GREBE SYNCHRO-PHASE RECEIVER



This receiver is one of the finest battery sets on the market today. Superior design and craftsmanship throughout. Uses famous Litz-wound binocular coils producing utmost sensitivity and selectivity. Single dial control with optional termer dual control for ach R.F. stage. Five point tone control switch. Few battery sets have this important feature. Termendous volume and fidelingments. Protective first lamp safeguards creuit. Shpz. wt., 49 lbs.

Cat. No. 3193

Your Price

\$12.75

# ATWATER KENT MODEL 20



Five 201A tubes are used in this constitue and scheetive found R.F. receiver. The panel is noted to dischere in flat brown. Switch permits local or long distance electron ramous for 18 to other of long distance stations due to its separately timed R.F. stages. One of the most pointler sets made by Atwater Kent. Ships, wit 20 lbs.

Cat. No. 3190

Your \$9.65

# SPECIAL ANNOUNCEMENT!

MARIE PROBLEM & THE STATE OF THE STATE OF THE STATE OF

We Have Made Arrangements with the

# Radio Technical Service Bureau

to furnish our customers with radio information of any kind. This includes answers to questions, circuit diagrams of commercial receivers diagrams of special receivers you may want to build from parts shown in this catalog, etc. Special attention will be given to our customers.

will be given to our customers.

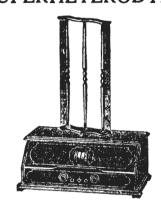
The Radio Technical Service Bureau is headed by Mr. Alfred A. Ghirardi. E.E., formerly Technical Consultant for the Pilot Radio & Tube Corp., and Associate Editor of Radio Deskign Magazine. Mr. Ghirardi is well known as consulting engineer, writer and feather. He is the author of the famous Radio Physics Course texthook on radio. Rates for information, diagrams, etc., will be furnished free of charge upon application to the

### RADIO TECHNICAL SERVICE BUREAU

36 R Sturvesant St. New York, N. Y.

The rates for this service are very resonable and vou will find it profitable to make use of it. The correct answer to come puzzling problem may come you many dollars and loss of time. Write now: 

# RADIOLA 25 SUPERHETERODYNE



The most sensitive and selective receiver of its kind today. A second harmonic super with 10 K.C. separation. Distant stations come in like locals. No outside aerial is necessary. The set is tuned by means of the two drine dials which can be operated as a single control. Stations can be logged acreetly on the scale of the dial. Small black either knob controls a novel multiple switch which brings into play either one or two stages of audio frequency. Headphones may be used by plugging into the nanel jacks. Cabinet of two-tone mahogany veneur completely houses the chassis and all dry hatteries. Loop operated with five UX199 and one UX190 power tube. Set supplied with loop actual. Overall dimensions are 28x19x12 inches high. Ships. wt. 55 lbs.

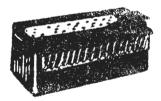
(at. No. 3402

Cat. No. 3402

Your Price

\$7.85

# SUPERHETERODYNE **CATACOMB** REPLACEMENTS



Have you a Radiola, Brunswick or Victor Super lying in some corner because of a defective "cat". No need at all for this, bring it out and dust it off, for here is a chance to get genuous replacement categories for your defective sets. Both 6 and 8 tube panels. Also ideal for use in an intermediate frequency amplifier in long and short wave superfict receivers. Ship, wt. 3 lbs.

AR 810, AR 812, 24, 26

Lat No. 3186

Your \$4.45

8. Tuhe Catacomb for use in Badiela 25

Your \$4.45

A. Tube Catacomb for use in Radiola 28

Your \$4.75

# STROMBERG-**CARLSON** TREASURE CHEST



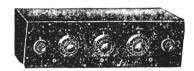
MODEL 601

The world-famous neutrodyne receiver offered at a fraction of the manufacturing cost. No expense was spared when these sets were built. Has three tuned R.F. stages and a tuned detector. Every stage is individually shielded. Develops tremendous gain due to the carefully desirned R.F. stages. Real Stromberg tone. Weston filament meter on front panel protects against excessive battery voltage. Antenna switch permits use of any length aerial without changing tuning. Straight-line tuning spreads stations over entre dials. So powerfully and substantially constructed that a loop aerial can be used in place of the usual aerial system. S.C. output filter protects the speaker against burnout and blasting. Uses five 201A tubes and a power tube, either 112A or 171A. Shps. wi 75 bs.

Cat. No. 3491

Your Price \$24.85

# FREED-EISEMANN N. R. 5 NEUTRODYNE



The most famous of all Freed Eisemann neutrodynes. Ideal for long distance reception. Each R.F. stage is under perfect control. Jacks on panel used to plug in phones for "DX" reception. Large audio transformers give fine reproduction. Uses five 2014's or four 201A's and a 112A or 171A power tube. A perfectly balanced receiver. Shog. wt. 30 lbs.

Cat. No. 8480

Your \$5.25

With every purchase of two or more radio sets featured on

# A Complete Set of Matched Tubes

will be given absolutely free of charge. This offer is made to carry out a policy of giving the most for every dollar spent for our merchandise. Take advantage of this generous offer now.

### WARE MODEL T



Your

The famous reflexed neutrodyne receiver. Operates a loud speaker on three UV199 tubes. Space for batteries in cabinet, Two-dial control. Original list price was \$65.00. Measures 14" long by 13" deep. The ideal set where space is an important factor. Shpg. wt. 16 lbs.

Cat. No. 3082

# FREED-EISEMAN Model 30



1

Your Price

This Model 80 Freed Eiseman receiver is licensed under Latour patents. Uses 6 tubes, 5 201A tubes and a 171A or 112A power tube. Two-dial control with antenna trimmer. Totally shielded with nonmicrophonic clips for detector tube. Extremely selective and sensitive. Shpg. wt. 25 lbs.

Cat. No. 3084

# RADIOLA 20 \*



Your Price

One of the finest battery receivers ever made. A General Electric product. Neutralized T.R.F. receiver with a regenerative detector. Uses 4 UX199's and a 120 power tube. Exceptionally fine for distance reception. Provision for long and Verniers on short antenna connection. both tuning and regeneration controls. Shpg. wt. 35 lbs.

Cat. No. 3083

# Freshman Masterpiece\* Type E

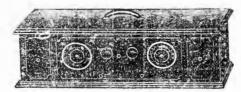


Your Price

 $11^{.75}$ 

One-dial control receiver. Has a control for distance reception and a combined onoff switch and volume control. Oversize audio frequency transformers insure faithful reproduction. The tube sub-panel is sponge rubber mounted to absorb vibrations from reaching the tubes. Has three R.F. tuned stages. Uses 5 201A's and a 112A or 171A power tube. Measures 20' by 10'' by 10''. Housed in a walnut cabinet, with metal front panel. Window type dial. Shpg. wt. 30 lbs.

# SEMI-PORTABLE SUPER-HETERODYNE AR-812



Price

This semi-portable super uses 6 UV199 tubes. No antenna is needed as it has a built-in loop. End compartments provide space for the batteries. The catacomb assembly makes a fine intermediate frequency amplifier for a short wave super-heterodyne receiver. Just the receiver to use for the car, camp or boat. Shog, wt. 36 lbs.

Cat. No. 3086

# BARGAINS

# **BATTERY SETS**

The sets described on these pages are battery sets which were used as floor and demonstration models in the large radio and department stores in New York City and the vicinity. Most of these sets can be easily electrified by any of the A and B combinations described in this catalog, while others can be easily adapted for the use of the new two-volt battery tubes. These sets offer great possibilities to the progressive dealers, as there is a large demand for battery receivers for use at bungalows, camps, automobiles, motor boats, etc.

We do not sell these sets as brand new, but every receiver is tested and put in perfect electrical condition before it leaves our plant. The prices quoted do not include tubes or accessories. On this special sale we cannot exchange or accept returned sets for credit.

### Atwater Kent Model 35\* In Metal Cabinet



Your Price

Perhaps the most popular A. K. receiver ever built. This is an ideal receiver for use in automobile installation. Small sized metal cabinet measuring only 17½" by 8" by 5½" allows it to be placed almost anywhere. Full visioned single-dial control. Uses a very sensitive high gain tuned R.F. circuit The input stage is autuned allowing for perfect results over the entire dial scale. Receiver uses 5 201A's and 1 112A or 171A power tube. A distinct buy. Shpg. wt. 16 lbs.

Cat. No. 3085

Cat. No. 3085

### SUPER-HETERODYNE RADIOLA 28



The Radiola 28 is a second harmonic "Super" using a tuned R.F. stage ahead of the first detector. A double drum dial control assures case of operation. Revolving loop gives maximum selectivity possible. The eight-tube catacomb assembly may be used as an intermediate amplifier for short wave superhets. All batteries are placed in compartment below the receiver specially built for them. Access to this is obtained by raising the receiver on its hinges. Uses 7 UX199's and 1 UX120 power tube. One of the most sensitive receivers ever built by R.C.A. Shpg. wt. 75 lbs.

# THE NEW SIX-VOLT TUBES

The latest type tubes announced are the types '36, '37, and '38. These tubes are designed to operate from a six volt storage battery. The 236 is a screen grid, the 237 is a general purpose and the 238, a power Pentode output tube. These tubes can be adapted to many of these battery sets by a small wiring job. Besides being more efficient, they will give increased volume and power. These tubes can be operated in series for operation from the 110 D.C. line. Below are the characteristics of the tubes.

The bases are of the UY type. They resemble the 224 and 227 excepting that the glass envelopes are smaller,

Type	36 Screen Grld	02 G 1 D	
		37 General Purpose	'38 Pentode
Heater Volts	6.3 volts	6.3	6.3
Heater Current		.3 amp	.3 amp
Flate Volts	135	135	135
Screen Volts	7.5		135
Grid Bias	1.5	9	-13.5
Plate Current	3.5 ma	4.5 ma	8ma
Plate Resistance	250,000 ohms	10.000 ohms	110,000 ohms
Amp Factor	275	Я	100
Mutual Cond	1,100	900	900
		74 mw	875 mw
Screen Current Not	over 1-3 of plate		2.5 ma

\*Note all sets marked \* can use the latest 2-volt tube without any wiring changes whatsoever.

# Superior Midget Condensers



These condensers are widely used as grid condensers, plate bypassing, for impedance and resistance coupling. Small in ecoupling. Small in size, measuring 1½" X1". Will withstand voltages to 500 D.C. Power factor and radio frequency loss very low.

Cat.		
No.		List
3108	.0001, .0002, .00025, .0005	40c
	PRICE 23c	
3106	.001, .002, .004	456
0100		400
	PRICE 26c	
3107	.905 mfd.	500
2101		900
	PRICE 29c	
3108	.006 mfd.	550
	YOUR 22	
	PRICE 32c	
3100	.01 mfd.	600
0.00		000
3110	.09 mfd.	65e
	PRICE 38c	
	PRICE JOC	
8111	.05 mfd,	750
	PRICE 43c	
	LVI(L) FOR	

# Superior Condenser Blocks



These blocks are unconditionalls guaranteed, and will give satisfactor service in power picks over exceptionally long pritchs of time. Cat, Used.

No. For Capacity. unconditionally

For Capacity 171 0/2-2-8-1-1 YOUR \$5.82 No. 3119 680 P.C

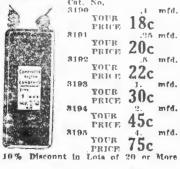
3118 945 0-2-2 2 0-1-1-1 4 gog D.C. YOUR YOU'R \$9.26

3114 210 0 2-2-2 4 1-1 650 D.C. YOUR \$8.73

3115 950 0244 1000 P.C. TOUR \$13.23

# R.C.A. Faradon Condenser Sections

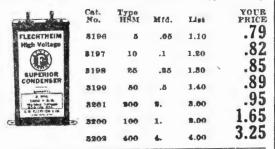
These unmounted condenser units were made by the Faradon Condenser Corp. for R.C.A.-Victor Co. All are rated at 650 volts D.C., working voltage. Flash fested at 2700 volts. Cat. No. 3190 volts Company voltage.



# FLECHTHFIM SUPERIOR CONDENSERS

# 1,000-volt Type HSM Filter Condenser

The very latest in high voltage condensers. Rated at 1,000 volts D. C. 660 volts rms R.A.C. Special construction makes them light in weight and small in size. Mounted in metal container with fork type terminals for easy connection. Non-inductive type winding.



# Non-Inductive By-Pass and Filter Condensers-Metal Cased

These condensers are mounted in nest metal cases with tinned lurs for easy soldering. The filter con densers are raded for continuous nee on 400 volt D. C. and 220 A C Ideal for midgets. rma



Cat. No. 8208. GF 10 il mfd. List Frica 50c FRICE 26c

Cat. No. 3204. GF-25 25 mfd List Price Bac YOUR 28c

Cet. No. 3205. GF-50 ,5 mfd. List Price 45c FRICE 35c

Cat. No. 3206, GF 100 t, mfd. List Frice 95c FRICE 49c

Cat No. 8207, GF 200 mtd. List Price \$1.45

Cat. No. 3208, GF-400 4, mfd. List Price \$2.70 YOU'R \$1.45

The bypase condensers are nated for continuous use at 200 rolts D.C. or 120 rms.

A.C. Cat, No. 8200, GB-10 1 mfd List Frice 400 YOUR 19C

Cat. No. 3210, GB-25 25 mfd. List Price 45c YOUR 25c mfd. List Price 50c YOUR PRICE 27c

Cat, No. 3212, GB-190
1. mfd. List Frice 70c
10UR
TRICE 33c

Cat. No. 3213, GB-200 mfd. List Price \$1.20 VOUR 63C

Cat. No. 3214, GB 400 mfd. List Price \$2.10 YOUR \$1.05

# Non-Inductive Filter Condensers Uncased

This condenser is recommended for use in all circuits employing type 45 tubes. Rated at 600 volts D. C. (440 rms A. C.). Designed to withstand extreme temperature changes and heavy duty service.



PRICE	List	Mfd.	Type	Cat.	
.27	.50	.1	19	8215	
.30	.55	.25	25	8216	
.33	.65	.5	50	8217	
.51	.95	1.	100	8218	
.75	1.40	3.	200	8219	
1.35	2.50	4.	400	8220	

### A Filter Condensers

High capacity, low voltage the dry type, can in all "A" eliminstore or speaker filters. YOUR Mfd. V.D.C. Lint PRICE 3.38 1,000 12 5.75 3.678222 2,000 6.25

8228

4,000

# High Tension Transmitting Condensers

8.75

5.14



More Flechtheim condensers are used in transmitters throughout the world than any other type.

TYPE TO for use on 1,009 volts
D. C. (750 rms. R. A. C.).

	CLOR E	ma. re.	F (1)	
Cat.		Mfd.	List	FRICE
R224	TC100	1.	8.75	2.21
				3.83
3225	<u> </u>	2.	6 59	6.47
822A	TC400	4.	11 00	
TYPF D. C. Cat.	T for (1,000		In 1.50	C.).
No.		MfA.	T.Anh	PRICE
8997	Ting	1.	4 80	2.64
8228	Tenn	9.	8.50	5.00
3320	T400	4.	14.50	8.52
Write 8,00			n 8,000	3.000,

### Faradon Condenser Blocks



These blocks were made by Faradon. Equipped with mounting brackets. The 12 mfd. size is for use with 245 packs. Rated at 600 volts D. C.; 300 volts A. C. Flash test 1,200 volts D. C. Measures 5"x5"x3", Has taps at 5, and 2 mfds. Cat. No. 3230 YOUR \$1.95

The 7 mfd. unit is similar in appearance to the 12 mfd. Measures 5"x3%,"x1". Equipped with mounting brackets. Rated at 300 volt D. C., 150 volts A. C. Flash te 600 V. For 171 packs. Tapped 3, 3, 1 mfd. sections. Cat. No.

YOUR 7



# AEROVOX

# AEROVOX DRY ELECTROLYTICS

SELF HEALING 500 VOLTS D.C. PEAK

# ABSOLUTELY DRY



.

The Aerovox Hi-Farad electrolytic condensers are the latest development in Radio. They can be used wherever any high-grade paper condenser or block is used. Can be mounted in any position without any likelihood of spilling or leakage, with the resultant saving of much space due to their high capacity. They are constructed for all practical purposes and can be handled in the same manner and with more safety than paper filter condensers, due to the self-healing and high D.C. operating voltage characteristics. The 500 VOLTS D.C. PEAK permits their use in nost of the standard high power supply units, receivers, transmitters, power amplifiers and replacements in "B" eliminators. The ideal high-capacity, high-voltage, self-healing condenser that is absolutely dry. Equipped with mounting brackets and available in any type or combination.

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		ir eritia	rabe or	Communation,						-
				Total Mfds.	 Price		No.	Type		Your Price
				1		8111		E5-88 .	16	\$2.23
				8						\$3.15
				4		9718	••••	105-8888.	88	\$3.68
1	1710		E5-8	8	\$ 1.18	9714		E6-248 .	14	\$2.65

# COMPACT TYPE CONDENSERS



These condensers are non-inductively wound and are thoroughly inpregnated. They are provided with
tinned soldering leads. They are
ideal for use in all radio and audio
frequency by-passing circuits, as
coupling condensers, isolating condensers or for any purpose where
a compact high insulation resistance
condenser is required. Type 480
are rated at 400 volts D.C. Four
Cat.

Cat.	Cap.	Ттре	Fric
2179	min min.	480.400 t.	150
2180	·01 mfd	480-400 F.	150
2181	.02 mfd	180.100 T	150
218?	.05 mfd.	480.400 т	170
2183	4 mfd	420.400 r	190
2184	.28 mfd	280.200 г	200

# AEROVOX HIGH VOLTAGE SOCKET POWER FILTER CONDENSERS



All condensors are non-inductively wound, thoroughly impregnated, scaled in metal cans and provided with convenient terminals for wiring. They are very conservatively rated and have a high factor of safety for safe operation at much more than their rated voltages (with terminal leads).

Ттре	Mfd.	D.C.	Lint	Frice
602	1	ROO	\$2.75	\$1.63
603	2	600	4 60	2.36
602	4	ROO	7 25	4 2
802	1	800	3 50	2 04
802	2	800	5 25	8 09
802	4	200	9.75	5.77
1002	1	1000	4 25	2.50
1003	2	1000	# 05	4 41
1002	4	1000	14.00	8 2 4

High Voltage Transmitting Condensers with (Porcelain Terminals)

	OZ S DIMIN	W SAN SECTEDARY	
Mid	D.C Volt	List	Your Price
1		\$4.50	\$2.65
3			4 70
1			4 41
1			7 35
1			8 82
î			11.17
	0000	, , , ,	62.00
	Mfd 1 3 1 1 1 1	Mfd D.C Volt	\( \begin{array}{cccccccccccccccccccccccccccccccccccc

#### LAVITE RESISTORS



High current carrying resistors, Will fit any standard grid leak mounting. Besistances. 1,000 to 500,000 Cat. No. 8728

Your 58c

#### EDISON BASE RESISTORS



60 Watt From 8 ohms to 1 000 ohms. Cat. No. 3724 List 81 50

Your 88c

# MOULDED BAKELITE CONDENSERS



Cap. Four Frice .002 .0025 .0026 .0026 .0026 .0026 .0026 .0027 .00	.001	0.3		\$1.20
.0004 .0025 .22c .0025 .	0000		.02	72c
Price   00025   22c   00025	.00025	100	046	45c
0004 Price 00025 ZZC 00065 0003 00035 0003 0005 0005 00035 0005 00	.06015	180	000	JUC
0004 00025 22c 00025 00000000			000	20.
Price .0025 22c	.99007		0035	27c
	,0004		.0025	22c

## 

#### IGRAD MIDGET CONDENSERS



Small Tight-Impregnated-Tinned luga. Factory tested at 1500 volts.—Can be used for continuous operation at 1000 volts. All brand new and perfect.

	Cap.		0	9710	0.1		120
2110	.00026	nr.	06	9119	.01	.00	160
2716	.003	,40	9c	8720	025	.75	15c
3717	,002	,85	10c	8721	.05	.85	15c
3718	.004	.45	10c	8722	.1	1.00	20c

# RELIABLE HIGH VOLTAGE UNCASED

## SURGE PROOF CONDENSERS

An excellent surge-proof high voltage condenser for all repair or construction. Dipped and coated with impregnating compound of high quality making for good inculating and moisture-proof qualities. Long leads, 600 VOLTS D.C. WORKING VOLTAGE. Keep several in your kit for handy use.

Cat.	No.	3697	1/4	mfd.	Your	Price	15c
Cat.	No.	3698	1/2	mfd.	Your	Price	20c
Cat.	No.	3699	1	mfd.	Your	Price	27c
Cat.	No.	3700	2	mfd.	Your	Price	35c
Cat.	No.	3701 In lote		mfd.	Your		65c

#### HIGH VOLTAGE CASED CONDENSERS

Here is a very high grade filter condenser for all general or special purposes. A 650 VOLT CONDENSER, carefully wound, fully impregnated in a heat care-board case. Will stand up under the most extrustronidations and give perfect satisfaction. Once installed you can forget about these wonderful conden. s.

			-
Cat. No. 3702	1/4 mfd.	Your Price	30c
Cat. No. 3703	½ mfd.	Your Price	39c
Cat. No. 3704	1 mfd.	Your Price	52c
Cat. No. 3705	2 mfd.	Your Price	69c
Cat. No. 3706	4 mfd.		
In Lots of	12 or More-1	10% Discour	t Off

Above Prices



# All Replacements For All Receivers

We can supply replacements for almost every receiver made, whether it be power transformer, audio transformer, condenser, and blocks, resistors or volume controls. All we need know is the type set, serial number, model number, part needed, whether it is shielded or fits into a can. Just give us sufficient information and you will receive the replacement part identical to the one that is to be replaced as to size, capacity, voltage, and resistance. Once installed, our replacement parts do not have to be replaced. They are built to last and give entire perfect satisfaction. If you are in need of

FRESHMAN

POLIOT Hommarium

PRESHMAN

any part for some special purpose, send us detailed information of electric and mechanical characteristics.

We are equipped to furnish you with that part, without delay. All our replacement parts are sold far below the manufacturer's net price, enabling you to obtain a good price, and good profit. Our parts are guaranteed. Just tell us what you need and for what purpose, we will do the rest.

Our staff of radio engineers stand feady to aid and assist you in any confront you in your daily endeavors.

Name of Set and Model	Price Con- denser	Price Trans- former	Name of Set and Model	Price Con- denser	Price Trans- former	Name of Set and Model	Price Con- denser	Price Trans- former	Name of Set and Model	Price Con- denser	Price Trans- former
.C. Dayton Co.	\$7.00		Columbia-	100		G 608, 25 cycle	6.25	4.80	20	6.75	
A. C. 63 cme Elec. Co.	5.25	\$4.50	Kolster C1-C3	4.00 3.50	4.50	K & K605 Equaphase-	5.00	4.50	Sentinal B & C	4.50	
ACT		4.50	C2-C4	3.25	4.50	Arcturus	5.50	6.75	Silver-Marshall	6.25	
ll-American Mohawk A-10	8.00	8.75	930 C-5	6.00	4.50 7.00	Garod EA EA	5.00	6.75	A B C 850	8.00	
		8.00	C-6	4.50		General Motor		4.50		5.00	1
F Type	5.00		901 950	7.50		85077 5080 Model A		6.75		9.75	1
nator	4.60		S G 8	5.50	]	Gould-Uni PWR				8.00	
96 Trans- former		6.75		6.25		ABC 135 Grebe A C 6	7.50	4,50	83A-84A-85A	4.00	6.75
D (Lyric)		6.75 4.50		5.30 6.25		Green-Brown A. High Power B	3.75 4.00		Sonora B30-81 Sparton A C 5	3.15 5.00	6.75
mrad AC7		6.75		5,50	li.	B Super			AC 7-62-63	4.75	4.50
pex	4.75		Crosley	6.25 2.50		Power	4.25	6.75	930 109	4.00 8.00	9.00
36, 25 cycle 36, 60 cycle	4.50	6.75		1.25		Howard S G A 8 Green		0.10	301	6.00	6.23
37, 60 cycle	4.50 5.00	6.75	805-335- 845-825	2.75	6.75	Diamond Free Free	1	6.75	931 69-79A	2.75	6.23
41, 60 cycle 46, 60 cycle	4.50	6.75	815-405-		1	Kellog 523-526 Kennedy-	1	0.70	60 cycle	4.75	5.25
rhorphone 45	5.00	4.50	Buddy & Chum	2.75	6.75	Colin B	2.00	1	69-79A 25 cycle	5.50	1)
55 rgus Elec.,		2:00	610-609-704A-				5.00	1	Splitdorf-Abbey	0.50	11
191-210, con-	6.25		41-42A 706-708	2.10 2.10	5.00 4.50		5.80	) )	171-7 tube	4.50 7.50	9.00
tains choke Ltwater Kent 36	6.00	4.50	704B	2.75	4.50	20	6,00 2.75	6.75	Steinite 50 40 1-45-60	5.00	5.00
37-38 Inc.	4.00	8.00	AC7-AC7C	6.00		10		5.00	701	4.75	6.20
chokes 40-42-52 Pack	10.00	8.00	Day-Fan Earl 21-22	4.75	4.50	King Model J	4.70	6.75 6.75	991-992-993 261	4.50 3.00	5.00 4.50
40-42-43-44-52		4.50	31-32	4.75 5.00	6.75	Kodel B-114	4.60		40C	5.50	7.00
55-55C 46	8.00	6.75	41-42 78	5.00	6.75	A-single A-2 in 1 Comb	1.50 2.50		12 88	6.00 6.75	1
37 Cond only	2.00	0	21-22, 25 cycle	5.00		A-3-in 1 Comb	3.50		Sterling A Cond	4,00	
40 Cond only By Pass	2.00 .85		Edison R4-R5-C4	6.00	7.50	Kolster 611 6J-6K-6R	3.50	6.25 4.50	Stewart A Cond Stewart-Warner	4.50	1
By Pass	.75		Elkon A Cond.	1.75	0.55	K20-21-42	3.00	4.50	Maj. Pack	4.25	
41 DC Comp Pack	6.00		Eveready 50 Exide Willard	5.50	6.75	K21-K23 K43	3.00	4.50 6.75	530 Sterliug 950-900	5.00	6.7
udiola	5.50		Elim., 60 cycle			24	6.00	6.25	Stromberg-		
laikeit Eliminators			25 cycle Fada ABC	6.75		K45 K44	3.75	7.50 6.50	Carlson 641-652-654	5.00	6.7
D	5.00	1	A Cond	1.50		Majestic A	3.25	5.00	Temple		
W C	4.50 4.00	6.75	ABC B Cond 10-11-16-17-	5.00	7.50	Master B	2.90	8.50	860-880-890 761	4.50	6.7 7.0
F	6.00	6.75	20-31-32	6.00	7.00	Super B	2.00	0.00	Tube A	2.00	
losch Little 6	7.50 5.00	4.50	K 25	4.25	6.75	Special Manter B		8.50	Victor 32-45-75	5.50 5.25	7.0
28 Cond-Choke	4.50	7.50	35	5.00	7.00	70-71-72	4.00	6.50	Willord B Elim		
29-825 Pack 501-502-503	5.00 4.25	10.00 3.75	E420-50-70- 71-75-77	5.50		80-180 90-91-92	4.00		25 ey. 60 cy.	6.50	11
48	4.50	0.10	E180	5.50	8.00	Ine Chk	4.50	7.00		6.00	11
rach A Eliminator	3.50		Farrand B Eliminator	4.00	3.75	90B 70-71-72, 25 cy	4.00 6.25	7.00	Zenith ZE9-	6.00	
randes B-10	4.00		Federal		4.10	Melrose	0.20		11E-14E	3.50	6.7
B-15, 16 remer-Tully	3.50 5.00	().	D-E-F-G	2.50 2.50	4.50	(see Apex) Mohawk AC27-			50-51-52-60 By Pass	1.75	
8-20A, 8-21A	5.50		К	2.00	5.00	to 28 226 type			50-51-52-60	2.75	7.0
6-40	5.50	6.00	Buffer-2 Freed-Eiseman	1.50	1	Pack Peerless 65	3.50 3.75	6,25 7.00	ZE 10-13 ZE 3	4.00 3.75	5.0
7-70, 7-71 rowning-		4.50	NR 60	4.00	4.50	Phileo 77	4.85	6.25	ZE 4	6.00	5.0
Drake MB30		6.75	NR 57-457 NR 67	4.00 5.00	4.50 4.50	511-12-1 <b>8-14</b> 65	3.80	4.50	ZE 6 ZE 18	6.00	0.5
69-70-71 Frunswick		6.75	NR 70-470	6.00	7.50	ABC B Cond	4.50	6.75	ZE 11-12-14-	0.00	6.5
5 K R O		4.50	NR 80 DC NR 60-	2.50		95 Powerlzer		6.75	15-16	7.00	10.0
3-KRO, R1, 5KR6, 5-KR		4.50	FE4-DC	2.50		210 Pack	5.00	5.00	ZE 17 ZE 8	7.00	12.0
81-82 (Pann-			NR 80 AC	4.00		R C A 17	4.75	4.50	ZE S	4.75	
trope) \$31 5, 14, 821,		6.75	NR 95 AC		6.75	18-31-51 Inc chokes	2.00	4.50	Z 70 (uses 2) Z 70 (uses 1)	1.25 2.10	7.0
B.T.S., 818,82		6.75	Freed 55-56	4.75		41	3.75	5.00			
15-22 uckingham	5.00	6.75	78 41	5.00		60 Cont. choke 30 A	4.30	4.50			
lectrolytic	2.10		Freshman	1		30 A	6.00	)	O D	.L. A	
lush & Lane		9 77	Polydyne QD15-16-16	5.00	7.00	104 (Speaker) 64-4mfd	2.50		Our Par	TS A	re
Colonial 12 SG	10.00	6.75	N11-2N12-			Repair Unit	3.90	45.51			-
31	2.25	4.50	Poly. 250 M12-M60S-171	6.00 4.50	7.00	64 30 (3 used)	16.00	12.00	Guarai	ntee	D S
32 33-34-35	2.25 2.15	6.75	G 60S, 60 cycle		4.50	30 (2 used)	4.40		11		



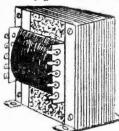
# RELIABLE POWER TRANSFORMER FOR UNIVERSAL REPLACEMENT PURPOSES

**FULLY GUARANTEED** 

The transformers listed below will replace the transformers in 99% of the receivers in use today. They are absolutely brand new—made of the finest quality merchandise and guaranteed to give uninterrupted service for one year from date of sale. Conservatively rated. Universal mounting brackets allow them to be mounted with little trouble. Long timed soldering lugs permit easy installation. Electrostatic shields which are grounded makes it possible to mount them close to the other parts in the receiver. A wiring diagram is furnished with each transformer. Dealers and Service Men should all a stell go as to be prepared for future service calls, and to avoid delay on repair and service jobs.

We Will Allow a 5% Extra Discount on Orders for Six or More Assorted Transformers

# Type 245 Power Transformers



For replacement in sets or power packs using up to 6 or 7 227's, 231's, 251's or 224's, 1 or 2 245's, or 247's and a 280. Rating 350-07-550 volt 125 mils, 5 volts 2 amps, 252 volt 13 amps C.T. Can be used for replacement in the following or in any radio using the above, the combinations. Measures above tube combinations. 4 1/2 "x3 4" x3".

Your \$3.95

All American Mohawk Model 98, D. I yrle
American Bosch. Model 48, 58, 60
American Bosch. Model 48, 58, 60
American Bosch. Model 48, 58, 60
American Bosch. Model 81, 81
Balkite Model 55, 55C
Browning Drake Model MB30, 69, 70, 71
Brunswick Medl 81, 82, 8-31, 81-8, 82, 15, 22
Bush and Lane Model 1286
Colonial Model 32AC
Colonial Model 86, 83 
 Bush and Lane
 Model 1286

 Colontal
 Model 324C

 Columbia Phono. Co
 Model 30°, 318, 338, 348, 408, 418, 428, 82

 Crosley
 Model 30°, 318, 338, 348, 408, 418, 323, 82

 Fada.
 Model 25, 25%, 35, 35%, 40

 Freesh Eisemann
 Model 908AC, NR95, AC

 Freshman
 Model 41, 318, 328, 338AC, 31AC, 32AC, 41AC

 General Motors
 Model 40

 Gilfillian
 Model 100

 Grebe
 Model 100

 Grigsby Grunow
 Model 100, 90B, 100B, 139A, 230A

 Mellogs
 Model 5CA

 Kellogs
 Model 5CA

 Konnedy
 Model 20

 Kolster
 Model 930, K43

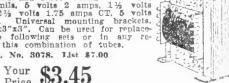
 Montgomery Ward
 Model 930, K43
 

# Type 171 Power Transformers

Zenith Model 60, 61, 62, 602, 612, 622, 64, 67, 642, 572, 54, 52, 53, 70

For use with receivers using 4 to 5 228's, 1-227, 2-171A's and 1-280 Voltages 300 CT, 300 at 85 mils, 5 volts 2 amps, 1½ volts 5.25 amps, 2½ volts 1.75 amps CT. 5 volts 2 amps CT. Universal mounting brackets, Measures 4"x3"x3". Can be used for replacement in the following sets or in any receiver using this combination of tubes.

Cat. No. 3078. Idst \$7.00



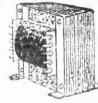
Price DO.TO	
AC Davion	Model AC-63
Acme Electric Co	Model AU-4
Amrad Corp	Model AC-
Arhornhone	Model 45 and 55
Atwater Kent	10, 42, 43, 44, 52
Bremer Tully Model B	r. 6-10, 7-70, 7-71
Brunswick	RO, 3KRO, 6M, R-1
Columbia Phono Co Model Cl	, C2, C3, C4, 939
Crosley Model 608, 704B, 706, 610,	609AC, 41A, 41AC
Charles Freshman Co	Model G
General Motors	Model 5077, 5080
Grebe	Model 100
Howard Model	8 Green Diamond
King	Model J. H.
Kolster Y	lodel 6K-AC, 7-AC
Kolster	22, 25, 27, 37, 42
Pilot	Moriel K-198
RCA Victor	Model 17, 18, 28
Radiola	17, 18, 33, 50, 51
Splitdorf	. Model Ahher 171
Standard Radio	Model 29
Steinite	Model 291, 262
U. S. Radio & Television	Model 80
Zemith	. Model IIE, 13E

# Midget Set Power Transformer Replacement

This is one of the most popular of replacement transformers as it is the replacement for all index t and manual convivers on the market, acutes 4" 3'x3'. Universal mounting bracket Voltages 335 C.T.335, at 55 mils, 2' volts at 8 ampres, 2' volts at 1' amps, b volts at 1' amps, b volts at 1' amps, can be used for replacement in the following receivers or any using same tube combinations, Cat. No. 30'B. 1'st \$7.00'

Your \$325

Advance Electic Co.



Price Colonia
Advance Electric Co Falk Model 17-78
Atchison Radio Co Tom Thumb Model
Nathablel Baldwin, inc
Brown and Manhart
Cardinal Radio Co Model 70 go
Carteret Radio Lab Model AC-7 AC-M DC-TW
Unampien Kaulo Model 89
Crosley Radio Co
Echophone Radio Mfg. Co Echrophone Model
Elmore Lambing Co Singer Model Federated Purchaser Melorad Cathedral-Tone Mode
Federated Purchaser Melorad Cathedral-Tone Mode
Flint Radio (o Midget
Ford Radio Co Model A
J. French & Sons Plano Co Junior Model
Gilbert, R. W Model 69
Gray Danielson Remier Cames Model
Griffin-Smith Mrg. Co Royale Model
Hyatt Electric Corp Model AC-7
Jackson Bell Co Model 62
Jewell Mfg, Co Model M
Keller-Fuller Redietta Model 14.9
Kemper Radio Co Kompak Model 80
Master Radio Co Master Model 424
McCormick
Mission Bell Radio Mantle Model
National Transformer (o Balkeit Model
Patterson Radio Corp
Pierce Airo, Inc Dewald Model 524
Plymouth Radio Corp Model 3
Powell Mfg, Co Cathedral Model
Premier Electric Co
Premier Radio Co
Remler Division-Gray and Dan elson, Cameo Model 14
Republic Radio Co Model 31-M, 31-J
Seeley Electric Co Model 5, 6
Simplex Radio Co
Fred Stein
Steinite Mfg. (o Model 410
Sterling Mfg. Co
Transformer Corp of America Clarlon Jr. Model
Trav-ler Mfg. Co
U. S. Radio & Television Apex Model 27
Waltham Radlo CorpModel 31
Wholesale Radio Service Co Lafayette Midget Model
Theorems Mante Strates Co Manyette Mudget Model

# Type 250 Power Transformers



The 250 power transformers will supply receivers using up to 8 or 9 227's or 224's, 2.250's and 2.281's. Voltages 1300 volts center tapped at 160 mils, 7½ volts 2½ amps C.T., 7½ volts 2½ amps C.T. and 2½ volts at 14 amps C.T. Universal mounting.

Measures 5"x5"x4". Can be used for replacement in the following or similar receivers. ccivers.

# ATWATER KENT REPLACEMENTS

# A.K. 37 CONDENSER-

CHOKE BLOCK (With 3 Chokes)



For replacement

Oak No. 8406

Your \$2.40

# A.K. 37-38 FILTER ASSEMBLY

Composed of 4 high voltage filter condensers, pitch-dipped, forming a compact single unit. To replace defective condenser in A. K. choke block after "shot" condensers have been melted out. Makes an ideal filter assembly for any A.C. set. Cont



for any A.C. set. Contains 1-1 mfd.-450 V., 1-1 mfd.-300 V., 2-1 mfd.-

Cat. No. 3409

Your \$1.45

# A.K. REPLACEMENT **AUDIO TRANSFORMERS**



For universal replacement in all A. K. receivers as well as any other set, especially midgets and portables. Provides tramendous distortionfree amplification. All stage ratio.

Cat. No. 8416

Your Price 60c

# PHOSPHOR-BRONZE FOR A.K. DIAL BELTS

Strong flexible phosphor bronze belting for all A. K. sets. Comes ¼ inch wide. Have several feet on hand and "Roll Your Own."

Cat. No. 3411

Your 7c per Price 7c ft.

# ATWATER KENT POWER PACK

For 40-41, 42, 44, 52 Models



A complete replacement power-pack for use in the above models of A. K. Safe, reliable and mgnly emclent construction. The proper POWER TRANSFORMER AND FILTER The CHOKE BLOCK impregnated in a heavy, pressed steel case. Soldering the flexible leads to the resistance and terminal strip, and to the 280 rectifier is the only work to be done in replacement. A guaranteed unit supplying all filament plate and bias voltages.

Cat. No. 3407

Your \$5.45

# POWER PACK FOR A. C. CONVERSIONS



A complete power-pack which supplies filament and plate current for 4-226, 1-227, 1-171A,1-280 type tubes and will change any Atwater Kent battery receiver into a modern electric set. Pack contains power transformer, filter chokes, filter condensors, and all necessary resistances for bias, etc. All high grade parts. Although designed for A.K. sets, can very handily be used for any other battery set. Makes a battery set modern and up-to-date at a very low price. Cat. No. 3414

Your \$7.50

# REPLACEMENT BY-PASS CONDENSERS

For A.K. Sets



For R. F. flament and plate circuit by-pass. Slightly different in construction than the original, but nevertheless a perfect replacement. Available in .1, .25, .5, 1 and 2 mfd. units.

Cat. No. 8113

Your 25c each

A.K. 37

#### POWER TRANSFORMER

A well - constructed power transformer for Atwater Kent 37-38 model receivers. An exact duplicate an exact duplicate of the original as to size, voltages and colored leads. Fits right into place without any changes whatever. A replacement block that can be universally used



ment block that can be universally used in any receiver using 4 or 5-226, 1-227, 1-171A and 1-280 type tubes. High voltage secondary 500 volts A.C. center-tapped. In a compact pressed steel attractive shield

Cat. No. 8408

Your \$2.25

## A.K. 37 3-SECTION BY-PASS



A high grade replacement condenser for by-passing the R. F. filament and plate circuit of the following Atwater Kent models: 37, 38, 40, 42, 44, and

Oak. No. 8415

Your Price 95c

# A.K. SPEAKER FILTER BY-PASS



Constructed and designed to take the place of the odd-mounted output filter condenser as used in models 87, 88, 40, 44, 46. Especially well made.

Cat. No. 8410

Your 75c

## FLEXIBLE GRID SUPPRESSORS

These excellent guaranteed flexible resistors are the perfect replacement for all A. K. grid suppressors. Rounded, they are easily handled and installed. Cat. No. 3419

Your \$1.00

Per

# CROSLEY REPLACEMENTS FOR ALL MODELS

Crosley Model 706 Transformer

Part No. W-5115



Genuine Crosley power transformer for replacement in model 706 receiver or any set using 4.226, 1.227, 2.171-A and 1.280 type tubes. Especially well constructed. Large, tight heavy cores for hum-free, noiseless operation. Supplies 1½ volts at 6 amps, 2½ volts at 3 amps, 5 volts at ½ amp, 5 volts at ½ amps for 280, and 500 volts high voltage center-tapped secondary. Primary tapped for high and low A.C. input voltage. An excellent transformer at this very low price, Shpg. wt., 7 lbs.

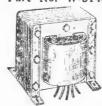
Cat. No. 3383

Your \$1.35

# Power Transformers

Crosley Model 608 Transformer

Part No. W-5145



Here is another Crosley product for replacement in the 608 model receiver. This set makes use of half-wave rectification with a 280 type tube. Used in conjunction with an Electrolytic condenser and good choke, this transformer wil deliver up to 220 volts at ½ amp. Also 5 volts at 2 amps for the 280. High voltage seemdary delivers 250 volts A.C. For 3 or 4-226 tubes. I or 2 277. 1 or 2 171-A tubes. Shpg. wt., 7 lbs.

Cat. No. 3384

Your \$1.10

Half-Wave 280 Circuit Furnished On Request

Crosley Model 609-610 Transformer



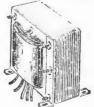
For 110 Volt, 60 Cycle A.C. For 110 Volt, 60 Cycle A.C. Similar in construction to all Crosley power transformers. Rugged, well built, noiseless and humless. Five secondary windings supplying 1½ volts at 3 amps, 2½ volts at 3 amps, 5 volts at ½ amp, 5 volts at ½ amps and high voltage winding delivering 500 volts A.C. For 4 or 5-226 type tubes, 1 or 2 227's, 1 or 2 171-A's and 1-280 tube. Primary for 110 volts A.C. operation. Shpg. Wt., 7 lbs.

Cat. No. 3386

Your **\$1.15** 

Crosley Model 609-610 Transformer

Part No. W-5026



For 220 Volt 60 Cycle A.C.

For 220 Volt 60 Cycle A.C.
For replacement in Crosley models 609 and 610. "Gemehest"
and "Gembox." Oversize transformer. Silicon steel core laminations, strongly bolted forether for noiseless operation. For use also with any set using 4-226 1-227. 1-171A, and 1-280 type tubes. Delivers 1½ volts at 6 amps. 2½ volts at 3 amps. 65 volts at 2 amp for 171-A. 5 volts at 2 amp for 280, and high voltage secondary of 500 volts. center tapped. Primary wound for 220 volt 60 cycle A.C. operation. Shep. wt., 7 bs.

Cat. No. 3385

Your Price 95c

#### **CROSLEY POWER PACK** CHOKE



all, compact units black shielded cases.

in black shielded cases. Ideal for replacements and use in portable and midget receivers. Excellent tone. Two Ratios — 4:1, 9:1. Shpg. wt. 1 lb.

Cat. No. 8890

Original Crosley chokes, 30 henry, 85 mils. For replacement purposes or use in any power pack or receiver. Fully shielded. Comes in neat black shield can with long flexible leads. Shpg. wt., 3 lbs.

Cat. No. 3387

Your 65c Price

Crosley Audio Transformers

Your Price 33c

CROSLEY TRANSFORMER

For Model A.C. 7 Receiver

Power Pack

# CROSLEY DOUBLE CHOKES



A series wound double choke totalling 60 henries. Will pass 85 mils. Dieal for use in a brute force filter, and all Crosley receivers. Fully shielded in a brown metal case, with long connecting leads. Shpg. wt. 3 lbs.

Cat. No. 3388

Your 75c Price

#### Crosley By-Pass Condensers

Excellent metal cased, long lasting condensers for by-massing plate creuts, bias resistance, etc. Accurate capacities. Handy lugs for easy soldering. Mounting tabs. Your Price

Cat. No. Capacity 3397..... 2 mfd...... 45c 3892..... 1 mfd...... 25c 3393... .. 1/4 mfd......

3394..... ½ mfd...... 22c ...1 mfd...... 18c

7 . . . 1. . 1. . 5 mfd . 4 Less 10% in Lots of 12 MICA TYPE

Capacity Your Price. Cat. No. 85c 3100..... .006 Per Doz. .004

For use in model A.C. 7 pack. Two secondary windings. High voltage center-tapped winding and 5 volt winding. Primary tapped for 100 to 120 volt operation. Can be used for D.C. dynamic speakers to convert to A.C. with 280 tube. Shpg. wt., 8 lbs.

Cat. No. 3391

Your \$1.50

# CROSLEY CHOKE



An 85 mil, 30 henry choke for Crosley receivers or any power pack. In an attrac-tive rounded brown case, Fully shielded. Long leads, Mounting screws already fastened to base. Shpg. wt., 3 lbs.

Cat. No. 3389

Your 60c Price

## CROSLEY RESISTORS

Great current carrying capacity. Especially suitable for D.C. receivers. Wire wound and baked champel, 47.7 ohms tapped at 15

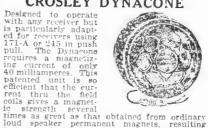
Cat. No. 8404

Your Price 35c

140 ohms for power pack replacement. Cat. No. 3103

Your Price 25c

## CROSLEY DYNACONE



loud speaker permanent magnets, resulting in a reproducer that is the most powerful on the market for its size. Reproduces the en-tire musical sound range. Shpg. wt., 6 lbs.

Cat. No. 3405

Your \$1.95

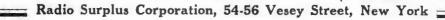
IDEAL FOR AUTO RECEIVERS

## CROSLEY DYNACONE **ADAPTER**

Adapts any set to use the famous Dynacone speaker. Remove power tube, place adapter on tube and insert both into socket. Instructions attached to adapter.

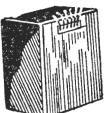
Cat. No. 3402

Your Price 50c



# Freshman-Freed-Earl-Freed-Eiseman Condensers

## Freed-Eisemann Filter Block For NR80 Model



Original and genuine replacement block for NR-80 A.C. model receiver. Highly efficient. In sealed metal can. Total capacity 9.6 mfd. Consists of 1-4 mfd., 400 V., 2-1 mfd., 400 V., 1-2 mfd., 200 V., 1-1 mfd., 250 V., 1-1 mfd., 400 V.

Cat. No. 3357

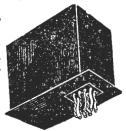
Your \$1.50

### Freed-Eisemann Filter Block For NR85 Model

Genuine F. E. replacement unit, factory No. 2441. Total capacity 10.1 mfd. Composed of longlasting, high-working voltage condensers. An original block for all NR-85 F. E. receivers.

Cat. No. 3358

Your \$3.10 Price



#### Freshman G-60-S Condenser



Original blocks. Factory No. 3078. Correct size and capacity. Only difference is in higher working voltages, resulting in longer life and greater satisfaction.

Cat. No. 8359

Your \$2.40

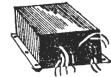
Freshman Q Condenser Block Factory No. 4453



Manufactured by Freshman for replacement in all "Q" model receivers. Best quality and highest grade manufacture. Total capacity 815

Cat. No. 3360 Your Price 95c

Freshman Q D Condenser Block



Factory No. 4999. A later designed, genuine condenser block made by Freshman for all QD receivers. Utmost satisfaction. Total capacity 7½ mfds.

Cat. No. 8362

Your \$2.75 Price

#### Freshman N-60-S Condenser Blocks



Original manufacturer's filter unit. Factory No. 4528. Composed of the correct capacities totalling 111/2 mfd. Later design and more satisfaction.

Cat. No. 3361

Your \$3.75

Earl Model 41

Condenser Block

#### Earl Model 31-31S-32-32S-33-33s Condenser Blocks



For use in all above models. Original and genuine factory units. Blocks for 60 cycle models total 7.1 mfd. 1, 4. 1, 1, 1/10 mfd. sections.

Cat. No. 3363. 60 Cycle Your \$5.40 Price \$5.40 Cat. No. 3364. 25 Crele Your \$5.75

#### Earl Model 21, 22 Condenser



Genuine replacement blocks for Earl 21-22 models. 60 cycle unit. Factory No. 36.443-E. Totals 8.6 mfds.

25 Cycle unit, factory No. 36.479-E. 9 % mfd.

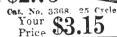
Oat. No. 3365. 60 Cycle Your \$4.75 Price \$4.75 Cat. No. 3366. 25 Crole Your \$5.15

Manufacturer's blocks for both 60 cycle and 25 cycle model 41 receivers. 60 cycle totals 8.1 mid. with 1.4-1-1-1/10 mid. sections, factory No. 36.387.E. 25 cycles totals 9.1 mfd. Factory No. 38.394.E.

Cat. No. 3367. 60 Cycle

Your \$2.75

Freed Model 95 Block



#### Freed Model 55-56 Condenser

Genuine replacement blooks for Freed 55-56 models.

60 eyele unit, factory No. 86.379-F totals 8.6 mfds.

25 cycle unit, factory No. 86.379-F totals 9% mfd.



Oak, No. 3369, 60 Cycle

Cat. No. 8370. 25 Cycle

Your \$3.15

# Freed Model 78-78S-79-79S 90-905-65-36-395-396

For use in all above models. Original and genuine factory units.

Blocks for 60 cycle mod-els total 7.1 mfd, 1-4-1-1-1-1/10 mfd sections. Blocks for 25 cycle mod-els total 8.1 mfd, 1-4-2.1-1/10 mfd, sections.

Cat. No. 8371. 60 Cycle
Your \$2.75
Cat. No. 8372. 25 Cycle
Your \$3.15

Condenser Blocks



25 cycle totals 9.1 mid. with 1-4-9-1-1-1-1/10 sections, factory No. 36 394-F. Cat. No. 8373, 60 Cycle

Your \$2.75 Your \$3.15 Price \$3.15

# Manufacturers block for both 60 cycle and 25 cycle model 85 receivers. 60 cycle totals 8.1 mfd, with 1.4-1-1-1-1/10 mfd, sections, factory No, 86.887-F.

# Freshman Q and QD Volume Controls

Original 8000 ohm tapered rhecatats for all Q and QD Freshman receivers.

Cat. No. 3377

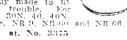
Your Price 25c

Your \$2.75

# Phosphor Bronze Belts

For Earl, Freed, Freshman, Freed-Eisemann

Replacement belts for all above receivers using belt drives for tuning. Strong, flexible; already made to fit without any trouble. For Models 60, 20, 20%, 40, 40%, 18, 48%, NR-8, NR-9, NR-60 and NR-66.



Your Price 15c

#### Freed and Earl Knobs



Beautiful wooden knobs. Brown in color, with good engraved emier. It outside diameter. For "i" shaft.

Cat. No. 3376

Your Price 8c

# FREED, EARL, FRESHMAN, Power Transformers

#### Freshman O Transformers



Standard replacement for Freshman and Polydyne receivers. Supplies 222, 226, 227, 171A and 280 tubes

Cat. No. 3316

Your \$3.85 25-Cycle Model, \$4.25

#### Earl and Kolster Transformer With Brackets



Replacement for Earl and Kolster receivers, but can be used for any set using 5-226's. 2-227's, 2-171A's and a 280. Comes complete with brackets ready to mount.

Cat. No. 8317

Your \$1.75

#### Earl A B C Replacement Transformers



Same transformer as above but less brackets. Wiring No.: 1 and 11-2½ volts for 227 the No. 4 center tap for 227. No. 2 and 5, 110 volt line; No. 3 and 15 1½ volts for 226 those; No. 6 and 9, 5 volts for 171A; No. 10 and 16, 5 volts for 280, and No. 12, 13. 14, are high voltage.

Cat. No. 3318 Same transformer

Cat. No. 3318

Your \$1.35

#### Freed Eisemann NR 85 Power Transformer



Replacement for F.E. NR85 receiver supplies 5-226, 1-227; and 1-250 with a 281 rectifier. The first audio 2:26, is on a separate filament winding.

Your \$4.50

#### F. E. NR-11 Replacement Transformer

Supplies 5-201's and 171A in conjunction with B. A. Raytheon rectifier. For all 2012, series filament receivers.

Cat. No. 8319

Your \$5.35

#### Freed and Earl Transformer Coil and Terminal Strip



Assemble with the laminations of the old core. For Earl Models 31, 32, 325 and 41, Freed Mod-els 78, 79, 79S, 65, 90, 95.

Your \$2.25 Cat. No. 3320

We carry the largest stock of Freshman, Freed Eisemann, and Earl Replacement Parts. can supply replacements for any part of any of these sets. Send in the part to be replaced.

#### Freed 78, 79, 95 Power Transformers



Replacement for Freed Models 78 79, 79S, 65, 90, 95. Supplies 5 or 6-227's or 224's, 245's and 1 280. Complete with brackets and terminal strip,

Your \$4.50

#### Earl 31-32 Power Transformer

Replacement for Earl Models 81, 318, 32, 328, 33, 338, 24, 41, Complete ready to mount.
Cat. No. 3322

Your
Price \$4.50





#### Freed 55, 56 Power Transformer

Replacement for Freed Models 55 and 56. Supplies 226's, 227's, 171A and 280.

Cat. No. 3323

Your \$3.10

#### Earl Power Transformers

Models 21, 22, 55, 58, Supplies 226's 227's, 171A and 280.
Cat. No. 3324
Your
Price
\$1.95



#### Freshman M60S Transformer



Replacement for M series regivers Supplies 4-226's, 1-227 and 1-171 with a 280 rectifier. The filter chokes are built into the same casing as the trans-former. This unit has two 1½ well windings, the first audio being on a separate winding.

Cat. No. 3325

Your \$4.50 Price

#### Freshman N Power Transformer

Replacement for N series receivers. Supplies 4-226, 1-227, and 1-250 and 281 rectifier. Filter chokes are in the same case with the transformer, Has two 114-volt windings, the first audio being on a separate filament winding.

Cat. No. 8326



#### Freshman Audio Transformer



Replacement for models, Q. QD, N and M. Cat. No. 3327 Your

Price

#### Freed Eisemann Audio Transformer

Replacem en t for all Freed receivers, 3 1/2 to 1 ratio. Excellent tone and quality.



Cat. No. 3328 Your Price 45C

#### Freshman Q D Transformer



Replacement for QD receivers. Supplies 222, 226, 227, 171, and 280. Self contained filter choke and supplies power for dynamic speaker

Cat. No. 3329

Your \$4.50

#### Freshman G-60-S Plate Transformer



Supplies 114 V for 226's, 21/2 V for 229 or 224's or 5 volts for 171A. 5 volt and 21/2 volt windings center tapped. Replacement for Fresh-

Cat. No. 3330

Your \$1.65

#### Freed Eisemann NR80 Power Transformer



Replacement for F. E. NR80 receivers. Supplies 5-220's, 1-227, and 1-171 and 1-280. Has 2½ volt windings; the first andio stage being on a separate winding.

Cat. No. 3331

Your \$4.75

#### Freshman G-60-S Filament Transformers

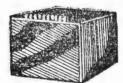
Supplies high voltage and filament for 281 for Freshman G-60-S receivers.

Cat. No. 3332

Your \$2.25



#### Freshman Plate Transformer for Power Amplifier



Supplies high voltage and 7½ volt winding for the rectifier. Supplies 210 or 250.

Cat. No. 2333

Your \$1.95 Price



# Replacement Parts





# We carry the most complete stock of R.C.A. replacement parts in the country. Every item is guaranteed. We can supply in addition to the units listed here, any R.C.A. or Victor part. On units not listed, to avoid delay, send us the part to be replaced. Our net quotation will go to you in the return mail. The service man will find that many of these Radiola replacements can also be used for other receivers. Complete technical data on any unit will be furnished on request.

#### R.C.A. 64-67 Power Transformer



For replacement use in the R. C. A. Models 184 and 67. The 64 uses 8-227, 2-250 and 2-281. The 67 uses 7-227, 1 1 250 and 2-281. This is also an ideal transformer to use in building up a 250 push pull amplifier. Sings. Wi. 12 lbs. List \$25.00

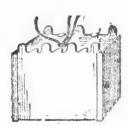
No. 6467 Your

Your \$7.95











ment	<b>6</b> -						Your
No.	Part Description	Used	20	Madiole		List	Price
8476	Filter Condenser Block or all grows at a	44,	46	#'0 #44 #66 #me mits #	MD 05 ·	\$12.00	\$3.95
8382	Filter Condenser Block	62		* * 5.0 *** \$20 650 650 810 6	K0 0/1	12.00	5,25
8483	Power Transformer	66				12.90	3.95
	Power Transformer	66-2	25 (	cycle as as me or.		18.75	5.25
8301	Power Transformer.	17-	25 (	cycle		18.75	5.25
8340	Power Transformer	18-3	33-5	1-25 cvcle		18.75	6.25
6021	Condenser Block and Audio Trans	66				18.75	6.95
8373	Power Transformer.	64-2	$220^{\circ}$	V-50-60 cycle		40.00	8.75
8287	Power Transformer	17-	50-	-60 cycle	1:0 0 5	12,90	3.20
8350	Power Transformer	60-1	25 (	cycle		18.75	5.25
5667	Two Stage Audio Pack	16,	17,	18, 33, 41, 50, 5	1	6.75	1.45
8335	Power Transformer	17,	18,	33, 51		12.90	2.95
5807	Neutralizing Condenser	33,	60,	62, 64.	LO D'E	1.20	.19
8336	Double Filter Choke	18,	33,	51		10.05	.65
2242	Voltage Divider	18,	33,	51	20 0 0	.80	.15
8333	Condenser Block and Choke	18,	33,	51		7.40	1.35
	Volume Control	33	A.C	. & D.C		1.95	.25
6037	Audio Transformer	33	D.C			6.00	.60
8344	Power Transformer						4.75
8472	Power Transformer	44,	46		* * *	12.90	3.25
5996	By-Pass Condenser	18,	33				.19
8554	Push Pull Audio Pack	80					1.09
	Filter Choke			*** * * * * * * * * * * * * * * * * * *			.75
7058	By-Pass Condenser Block			*** * * *** *** * * * * * * *			.19
7059	By-Pass Condenser (1 mfd.)	80		* * *** *** *** *** ** *			.19
	Filter Condenser Block			81# 810 978 818 819 0 0 4 # 0			2.50
	Filter Condenser			WTH N'S WID WITH BUY BAN WITH W		a de o	3.95
	By-Pass Cond. (.111)			eco eza ele eta erejajo a e e			.19
7107	By-Pass Cond. (.11)			and and the time the fall the tries			.19
7106	By-Pass Cond. (.7525)			674 FTB 678 FTB 644 F F F F 6			.19
	Filter Condenser			E'0 E'0 0'0 0'0 E'0 0 0 0 0 0 0			3.25
	R.F. Coil Assembly			619 619 619 816 616 619 6E9 6			1.10
	Power Switch			610 020 010 0Z# 0F0 0 0 0 0 0			.15
	Filter Condenser			C Charles			2.95
5899	Output Trans. and Cond			C. Speaker			1.45
	R.C.A. Power Transformer			86			7.95
	R.C.A. Power Transformer	٥٥,	04,	00		11.00	4.95

#### R.C.A. Double Choke for Models 18, 33, 51



Consists of two 30 henry 80 milliampers chokes. When connected in parallel they are rated at 15 henry at 180 milliamperes. Series connection will give an inductance of 60 henry at 80 milliamperes. D.C. resistance 475 ohms. Shpg. wt. 5 lbs.

Cat. No. 8336

List \$10.05

Your Price 65c

R.C.A. Power Transformer for



This unit supplies 4-224's. 2-227's, 2-245's and 1-280. This is the transformer used in the superhetrodyne series. This receiver was made up in similar models under General Electric. Westinghouse and Graybar trade marks Shpg. wt. 7 bs. Cat. No. 8286 List \$17.50

Models 80, 82, 84

Your \$4.95 Price \$4.95

#### R.C.A. Filter Condenser



Used In Model 17

Total capacity 14 mfds. Has two 3.5 mfd. sections, one 3 mfd., one 2 mfd. and two 1 mfd. sections. Working voltage, 450 D.C. Shyg. wt. 4 lbs.

Oat. No. 8289

List \$19.20

Your \$2.95

#### R.C.A. Bypass Condensers



Park No. 5996

Four section unit with three I mfd. and
a 5 mfd. section. Rated at 450 volte
D.C. Ideal for all R.F. and A.F. Cy-passing.

Used In Models 18, 88, 51

at. No. 5

List \$3.00

Your Price 19c

We can supply Majestic Replacement Parts for all types and model receivers. To save time and facilitate replacement send in the defective part which you want replaced. All our replacement parts are fully guaranteed.

#### Majestic Power Transformer For 90, 91, 92, 100



,

Efficiently designed and built to give perfect sat-isfaction. Incomparable for replacement in above model receivers. Supplies nodel replacement in above model receivers. Supplies filament for 5.227, 2-245, and 1.280 type tubes, all separate sec-oudaries and high volt-age for plates of recti-fier; 245 and high volt-center tapped. In strong

windings are No. 8681

\$5.25 Your Price

# Majestic Condenser Blocks

Designed to fit the needs of the individual replacement. Each block composed of highest quality condensers. High densers. High working voltages and proper capa-eities. In strong metal can; pitch impreg-



3683 171A Power tubes 3684 245 Power tubes 3685 250 Power tubes Price \$2.65

#### Filament Transformer For Model 180 TYPE 8P6



A very valuable replacement transformer not only for the 180 model, but for any power amplifer, using push pull 250 power tubes. Three secondary windings: 2½ volts for up to 6 tubes and two 7½ volt center tapped windings, one for each 250.

Cat. No. 3690

Your \$3.20

#### Plate Transformer for Model 180 TYPE 8P6



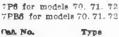
A high voltage power transformer supplying the plates and filaments of two 281 rectifying tubes. Unusually well constructed to withstand heavy loads placed upon it. This transformer was designed for model 180 Majestic receivers, but in combination with the filament transformer, a perfect are obtained for a powerful unpilifier.

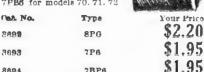
Cat. No. 3601

Your \$4.80

#### **Power Pack Chokes** For Majestic Receivers

All in shielded cases, im pregnated. Excellent iltering purposes. 8PG for model 180





#### Majestic "B" Eliminator Transformer

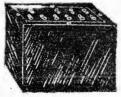


For all Majestic Eliminators. An exact duplicate of the original but better; correct size and voltages. Primary has extra tap for "hi-lo" adjustment. Secondary is center tapped. The transformer for any Raytheon Eliminator, Cat. No. 3682

Your \$2.10

#### "B" Eliminator Condenser Blocks

A replacement block that has long been await-ed. The conden-sers that comprise sers that comprise the unit were selected with extreme care, so that the trouble, common with the original, will not proport here. An occur here. excellent value. An



FOR SUPER "B" AND MASTER "B" Your Cat. No. 8688

FOR SPECIAL MASTER "B"

Cat. No. 8689

\$2.00 Price Your \$2.05

# Majestic "A" Condenser



rugged replacement "A" condenser for the Majestic "A" power unit.

Cas. No. 3685

Your \$2.10 Price

#### Resistors for All Majestic Sets and Packs



Cat. No.	Ohme	Size	Your Price
8680	8600	3"	25c
3681	1000	1 "	30c
2482	2170	1 14 "	25c
8668	9170	1 14 *	30c
8R84	. 80	center fan	10c

#### Majestic Push-Pull Input



For Models 70, 72, 71, 90, 91, 92, 100, 180 Capable of tremendous volume, free from distortion. In shielded metal case ... Impervious. to moisture,

Oat. No. 8690

\$1.50

#### Majestic Power Transformer Plate and Filament

For Models 70, 71, 72

TYPE 206



Simplies all filamen and A.C. high voltages. Sealed in durable black metal can. 110 V primary.

Cat. No. 8686

Your \$5.25 Price

TYPE 7BP6

Same in size and appearance as 7P6 unit but supplies slightly higher plate voltage. Fully shielded and sealed.

Cat. No. 3687

\$5.35 Your Price

#### By-Pass Condenser Units for Majestic Sets

No. 714-For model 90 meries con-tains 1/2 mfd, condeuser. Used to by-pass cathode and plate circuits.



No. 715—Same for models 70, 71, 73 used throughout for by-passing filament and plate circuits.

No. 717-For model 90 series 130A chassis 4 mfd condenser for detector cathode by-pass.

No. 714—Cat. No. 3686. Your No. 714—Cat. No. 3687. Price \$1.35

#### Push-Pull Output Transformers

As Used in Models 70, 71, 72, 90, 91, 92, 100, 180



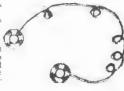
An ideal replacement output transformer for the above models. Printary matches the impedance of the power tubes used. Secondary right to voice coil of dynamic speaker. Thoroughly impregnated. Fully shielded.

Cat. No. 3689

Your \$1.75

#### Majestic Set Dial Cables A Boon to the Serviceman

Cables already made up to size with eyelete sold ered to the ends for easy replacement Especially strong and very flexible. Several of these cables should be carried in your service kits for ready replacement.



Cat. No. 3695. Your Price, each 18c In lots of 6. Your Price, each 15c

# Filter Chokes for All Power Units

COLONIAL "B" CHOKE



Genuine Colonial filter choke as used in model 32 A.C. receiver. Cau be used in any set because of high cur-rent carrying capacity. Will pass 125 nulliamperes at 20 herries D.C. re-sistance, 75 ohms. Shpg. wt., 2 lbs. Cat. No. 3735

Your 69c Price

#### Freshman, Freed and Earl Chokes

These chokes are original factory-made units and will give complete satisfaction occause brand new.

Cat. No. Model Your Price

40c 3736 C. A. EARL, 22, 24, 31, 32, 42 Double.. 45c 3737 FREED EISEMANN, NR 57..... 27c 3738 FREED EISEMANN, NR 70 Single ... FREED EISEMANN, NR 80 Double..... 3739 27c FREED EISEMANN, NR 85 Single..... 3740 45c FREED 55, 56, 78, 79, 95 Double..... 3741

#### EARL DOUBLE CHOKES

A carefully wound and constructed double choke coil. Will serve admirably in any power pack. Has separate leads, so can be used in any hookup. Each 30 henries, will pass 85 mils.



Cat. No. 3742

Your \$1.02

#### Crosley Power Pack Choke

Original Crosley chokes. Henry, 85 mils. For replacement purposes or use in any power pack or receiver. Fully shielded. Comes in neat black shield can with long flexible

Cat. No. 3387

Your 65c

## CROSLEY DOUBLE CHOKES

1 series connected double choke totalling 60 henries. Will pass 85 mils. Ideal for use in a brute force filter, and all Crosley receivers. Fully shielded in a brown metal case, with long connecting leads.

Cat. No. 3388

Your 75c



#### CROSLEY CHOKE

An 85 mi, 30 Henry choks for Crosley receivers or any power pack. In an attractive rounded brown case. Fully shielded. Long leads. Mounting screws already fastened to base,

Cat. No. 3389

Your Price 60c

#### General Electric Chokes



Constructed with G.E. accuracy and precision. A double choke that will pass 80 mils, at 50 henries, D.C. resistance, 500 ohms.

Cat. No.

Your Price

3255

Enshielded

R.C.A. Filter Chokes

These chokes are rated at 15 heavy at 40 milliampers. Two connected in series will make a 30 heavy, 40 milliamper echoke. Ideal for the choke. Ideal for use as plate impedances as well.

\$1.95

3256

Cat. No. 3746

Shielded

\$2.25

#### Thordarson Choke

A sturdy 30 henry choke, 120 mils,

Cat. No. 3743



Your

# Westinghouse Filter Choke



Mounted in containers and impregnated in rosin-beeswax compound. They are rated at 15 henry at 35 milliamperes. Two can be used in series and you will have a 30 henry

choke at 35 milliamperes. They are splendid for use in "B" climinators or as plate impedances. D.C. resistance 500 ohm.

Your Cat. No. 3747 Price

#### Reliable Double Choke



Cat. No. 3744

Your Price

#### T.C.A. Filter Choke



This choke is made by Trans-former Corporation of America. specialists f n power equipment.

Rated at 30 henry at 120 mil amperes D.C. resistance, 425 ohms. Ideal for 245 power packs. Equipped with flexible leads and mounting legs. Can also be used as an output choke. Shpg. wt., 5 lbs.

Cat. No. 3748

Tisk \$2.50

Your Price

#### Victor Tapped Chokes



A 400 ohm choke, tapped at 15 For use in tuned-filter circuits to eliminate hum. Will pass up to 125 mils.

Cat. No. 3745

Your Price 95c

#### R.C.A.-Brunswick Choke

Used in R.P.A. 3-3A-6-7-7A. Genuine R.C.A. replacement pa s No. Y1098. Bru wick No. P-269, 30 henrys, 50 mils. Mounted.



Cat. No. 3749

Your Price 65c

## VICTOR FILTER CHOKE

Your Brice 35c

A fully shielded, impregnated improved design choke. An original replacement part for Victor models 32, 45, 52, 75 and all packs where a high grade choke is necessary. 30 henrys, 125 mils.



Cat. No. 3751 Your Price 95c

#### Reliable Shielded Power Choke

A heavy duty choke incorporating finest workmanship and materials. Laminations securely bolted and shielded. Terminal lug connections. For all power packs employing high voltage, this choke will stand the gaff. Capacity 125 mils at 30 henrys. Cat. No. 3752

Your \$1.35

#### Reliable Pentode 245 Choke

A thoroughly impregnated filter choke designed especially for power packs supplying 245. Pentode amplifying tubes. 30 henry at 125 mils.



Cat. No. 3750

Your

# REPLACEMENT CONDENSER BLOCKS

# Reliable Condenser Blocks for Pentode, Multi-Mu, and 245 Receivers



A scientifically designed product guaranteed to give perfect satisfaction in every respect. The highest quality foil and paper were used in their manufacture, fully impregnated to include moisture and assure long life. new, fresh and perfect to the last detail. Neat and compact, attractively housed in a sturdy black metal can with long leads. Screws for mounting. Excellent for midget receiver manufacture. Safely rated and tested at voltage.

		Cat.	No.	343
1	mfd-	-200	$V_{\bullet L}$	*** }
2	mfd-		V	07.0
1	mfd-	-200	V.,	878
	mfd-	-400	V	B=0
1	mfd-	-500	V	]
thre	e time	s the	wor	king
	cuent			

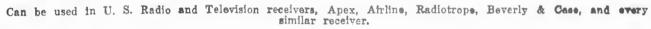
Your

Capacity 6 1/2 mfd. 1 mfd-200 V ... 57 57

Capacity 6 mfd.

Cat. No. 8433

Your 70c





# Brunswick-Bremer-Tully Condenser Blocks

Recommended for their easy application to any radio receiver on the market today. The condenser capacities were purposely made low so that any capacity combination can be obtained by connecting condensers in parallel. An excellently constructed bank, the appearance of which will greatly enhance any receiver in which it is used. High working voltages safely rated. Contains:

2-1.75 mfd-600 V 1-1 mfd-600 V

1-1.5 mfd-300 V mfd-300 V 1---1

1-1. mfd-200 V

Used in all Brunswick 14, 21, 81 SPU and equivalent Bremer Tully receivers.

Cat. No. 3431

Your Price



#### Acme Parvolt 8.7 mfd. Block



Highly suitable for replacement in all 245 power packs, B eliminators and all type receivers. Tapped at ped at

2.3 mfds. 600 V. 1.8 mfds. 600 V. 2.3 mids. 1.8 mids. 800 V. .5 mids. 300 V.

A high grade replacement block

for all Peerless and Kylectron recetvers, or any similar

leads.

Orange

Yellow Black.

set.

Cat. No. Your

Peerless 7 mfd. Block

\$1.15

3 mfd ...600 V. 1 mfd ...400 V. ...common for above 1 mfd ...300 V. 1 mfd ...300 V. 1 mfd ...300 V. 4 mfd ...300 V. 4 mfd ...200 V. ...common for above

.. common for above

## Bosch 48 Condenser Block



An excellent replace ment for Bosch models 48, 16. 17. 4 leads.

Red				3				200	1	đ		1	ь			. 600 W.
Black			4	4				<b>20</b> )	Í	d						600 V.
Yellow		,			d	04	3	m	1	d	,	,		,	·	600 V.
Blue .		,						٠								common

Your Price

#### Kolster-Dubilier



Original as used in Kolster sets. Total capacity 7.1 mfds. Conservatively rated at 400 volts.

Cat. No. 3439

Your Price 95c

#### Kolster 6J---6K Condenser



# mfd .. 400 V 2 mfd., 400 V. # mfd .400 V. 1 mfd.,400 V. 2 mfd 100 V Capacity 9 mfd

Cat. No. 8484

Your

Potter 101/4 mfd. for Zenith



For Zenith models ZE-11, 12, 14, 18. Makes an ideal replacement block for any make 245, 210 or Pentode set 600 D.C. volts. Contains 2-4 mid., 1-2 mid., 1-4 mid., 1-4

Cat. No. 3435

Your \$1.15

#### Victor 10% mfd. Block



Genuine Victor replacement for Models R-82, R-45, RE-75, all 245 sets, 800 voite DC working voltage, Taps: DC working voltage. Taps: 5 mid., 8 mid., 25 mid and Taps: 125 mid.

Cas. No. 8481

Your Price

Potter 93/4 mfd. Block



Used in Metrodyne Receivers and as replacement for any 171-A receivers. Safely rated at 300 volts. Sections 2-4 mfd., 1 mfd., 4-14 mfd. In metal case with convenient mounting screws.

Oat. No. 3436

Your \$1.50

# CONDENSER REPLACEMENTS

#### R.C.A. Brunswick 4.5 Mfd. Block

4.5 Mfd. Block



A 400 Volt working volt-age condenser block for re-placement in R. C. A. and Bruns wick sets. Contains 2-2 mid. sec-tions and 1-1/2 mfd. section.

Oak. No. 3350

Your 85c

Bremer-Tully-Dubilier Block

7 mfd.

A standard replace men model 8-17: 7

mfd., 5 leads. strong metal

> our \$1.75 Your Price

Dubilier-Brunswick 6 Mfd. Filter



Used in 6-tube receivers. mfds. at 600 volts D.C. working volt-

Cat. No. 8852

Your \$1.40

#### Faradon 5.1 Mfd. Block

For Kolster and Brandes Sets

Contains 1-2 mfd., 2-1 mfd. and 1-.1 m f d. condensers. 450 volts D.C. working voltage and 2-.5 mfd. condensers, 200 volts D.C. working volt-



Cat. No. 8853

Your 75c

#### Philoo-Dubilier 16 Mfd. Block



For replacement in all kntton 25 cycle sets, and any set requiring large capacities at high working voltage.

Cat. No. 3854

Your \$1.50

# Fada Condenser Block



For Fada Model 25 Red Red Green Yellow own to Brown For Fada Models

35, 352, 40 2 mfd.... 2 mfd.... 1 mfd.... Brown ....1 mfd. ....2 mfd. ....1 mfd. .400 V. Green Slate

Cat. No. 3356 Fada 35 etc. Your \$1.50

Cat. No. 8855 Fada 25 Your \$1.50

#### Dubilier Condensers

Type P. L. 1073



mid. Total Capacity 2 mfd. 400 D.C. Volts 1 mid. 400 D.C. Volts 5 mfd. 400 D.C. Volts 5 % Total 400 D.C. Volta .5 mfd. 200 D.C. Volta .25 mfd. 200 D.C. Volta

Cat. No. 8348

Your Price 95c

# 450-V. D.C.



High working voltage condenser block. Contains 2-3 mfd. 2-1 mfd. 1-15 mfd. condensers, Ideal for replacement purposes.

Cat. No. 3349 Your \$1.05

# Thomas 8.5 Mfd. Block | Faradon 6 Mfd. Block



Composed of three condensers 1 3 and 3 mfd. D.C. working volters 450 volts, Cat. No. 3315

Your Price 65c

Polymet 41/2 Mfd. Blocks

400 Volts D.C.



1-3 mfd. 21 mfd., 2-1/4 mfd. Cat. No. 3316

Your 55c

#### R.C.A. 41 Condenser



A highly improved block identi-cal in size and capacity with the A highly improved blook identical in size and capacity with the original. Containing 2-2 mid., 4-2 mid., contensors.

Cat. No. 3347

Your \$4.25

#### Eveready-Bosch Condenser Block

For all 1925-1929 model Pe enivers. 600 Y. D.C.

voltage.

working Cat. No. 3344

Your Price

#### Stromberg-Carlson 23 mfd.



For models 635, 636, or any set requiring requiring maximum infilter capacities. Contains 4-3 mfd. 1-9 mfd. 1-2

Your \$2.45

# Radiola Condenser Blocks

Designed and built especially for Radiola sets. Contains high voltage-surge-proof condensers in neat shielded case.

> Cat. No. Model 3335....R.C.A. 17

> > Your \$3.75

3336....R.C.A. 18, 33, 51

Your Price 90c

3337....R.C.A. 60, 62

Your \$3.75

3338....R.C.A. 66

Your \$1.85

#### Sparton Blocks For Models A0-7, 62, 63, 930, 68, 79



A thoroughly reliable preduct built to last. Designed for simple replacement in Sparton sets.

Cat. No.	Model	Your Pric
8339 A.O.	7, 68, 68	\$4.35
8340930	**********	\$4.35
884169,	79, 89	\$4.35

#### Temple Condensers



For models 8-60, 8-80, 8-90, 12 1/2 mids., 500 For models 7-50, 7-80, 19 mfds., 600 V.

Cat. No. 3342

Your \$1.19 Either Model

# POWER TRANSFORMERS

#### Genuine Kolster Power Transformer

Replacement for model K-24 sets using 210 or 250 tubes



This transformer has a 1100 volt secondary, center tapped, 1½, 2½, 7½ and 15 volt filament windings. Shpg. wt. 7 lbs.

Cat. No. 8269

Your \$5.75

#### Stromberg-Carlson Power Transformer

Replacement for models 635, 686



For 5-327, 1-171A and 1-980. A high grade conservatively rated transformer. Shpg. wt. 10 lbs.

Oat. No. 2270

Your \$4.50

# Stromberg-Carlson Power Transformer

Replacement for 641 and 642 Series Receivers

For \$45, \$97 and \$80 type subes. Conservatively rated. Color code furnished with each transformer.



Oat. No. 8971

Your \$4.75

#### Victor ABC Power Transformer



This power block is a replacement for Victor receivers. Conservatively rated, they will supply a 245 push pull amplifier and also 227's, 244's, 280's and 226's,

For 56-60 CYCLE No. 1929

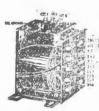
Your \$2.50

For 25-35 CYCLE No. 1923

Your \$3.25

# UNIVERSAL REPLACE-MENT TRANSFORMER

For 227, 245, 247, 224, 551, and 280 Tubes



Can be used as replacement for most receivers in use today. Supplies filament voltages for 227, 224, 245, and 280 tubes. All taps are mounted on a bakelite panel. Variable primary voltage. Measures 4½ "x3½"x

able primary voltage.

Measures 4½"x3½"x

5¾" high. Will take care of 6 to 7-227's
or 224's, 2-245's, and a 280. Shipping
weight, 5 lbs.

Cat. No. 3272 YOUR PRICE

\$3.15

# GENERAL REPLACE-MENT TRANSFORMER



Unmounted transformer for replacement purposes in receivers using 224's, 227's and 245's and a 280. All connections made to soldering lugs on side. Shipping weight, 4 lbs.

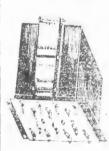
Cat. No. 3273

YOUR PRICE

\$2.25

# COLONIAL POWER TRANSFORMER

For Model 32 A.C.



Mount d in electrostatically shielded can. Special open type construction allows vertical ventilation preventing any over-heating. Can be used with any 245 power unit, amplifier or receiver. Will supply 2 245's, 5 to 22'7's or 224's, 1-280 high voltage winding delivers 750 volts.

Primary tapped to allow operation on any line voltage between 95 and 130 volts.

Cat. No. 3274 YOUR PRICE

\$2.95

#### Freshman Filament Supply Transformer



Supplies filament current to 226, 224, 227 and 171-A tubes. The 2½ and 5 volt windings are center tapped.

Your 90c

#### Amrad Power Transformer

Replacement in Bel Canto series for the Serenata, Aria, Symphony and Duet. Supplies 4-224's, 9-245's and a 280. Shipping weight, 5 lbs.



Your \$3.45

Earl Transformer Coil and Terminal Strip



Replaces the power transformer coil in Earl Models 31, 32, 32-9, 41. Freed models 78, 79, 70-9, 65, 90, 95. Reassemble with the laminations of the old transformer, Shpg. wt. 8 lbs.

Cat. No. 8277

Your \$2.25

#### Earl and Freed Power Transformer



This transformer supplies 5-227 or 224, 2-245 and a 280. It is a replacement for 15 Freed and Earl receivers. Replacement for the following Freed sets: Models 78, 78-S, 79, 79-S, 65, 78-S, 95, 90, 90-S; and Earl Models 31, 32, 31-S, 32-S, and \$1, 24, 33, 33-S.

Your \$4.50 Price \$4.50

For Models No. 21, 22, 55, 56 Cat. No. 3301 Your \$3.00

#### 250 or 210 Transformer



Delivers 750 volts output high voltage secondary. Half wave rectifier. Has 1½ volt winding for 5-226's, 1 or 2-227's, 1-250 or 210 and 1-281.

Cat. No. 3302

Your \$3.25

# POWER TRANSFORMERS for all SETS and PACKS

#### Radiart Step-Down Transformer



#### Peerless Power Transformers



A renuine replacement transformer for all purposes, amply pro-portioned with large oversize laminations and heavier windings, For models 651, 652, 653. Using 21, 22,

653. Using 21, 22, 653. Supplies 8-224, 2-227, N-245 and 1-280 tubes. Primary is tapped for 105 and 120 volt operation. An excellent transformer for any set using these tubes.

Com. No. 8455

Com. No. 8455

#### 12-Volt Step-Down Transformer

For replacement in all A.C. dynamic speakers and 6 volt "A" eliminators. 2 % ampera capacity car ever be deed as a Toy or Beil finging transformer For 110 volt 50.60 cycle A.C. Shys wt 4 lbs.



Cat. No. 8488

Your 65c

#### Reliable Filiment Transformer



A fully 2½ volt ully shielded. 2 ½ voît flamens transformer, containing two 2½ volt secondaries. One will secondaries one will secondaries of amps for eight 224. 227 or 235 and 651 tubes and the two Pentode tubes. Both windings center tapped. Mounts casily. 4½ long by 2½ x3½ ". Shps. wt. 6 lbs.

Cat. No. 3449

3,37

Your \$2.15

#### General Use Filament Transformer



Transformer

A rugged transformer that can be employed in a number of different circuits. Heavy laminations and oversize wire prevent break down and over-heating. Easily supplies 2.5 volts at 4 amps; 1.5 volts at 4 amps; 1.5 volts at 3.25 amps, and 7.5 volts at 1.25 amps. By connecting each leg of the 7.5 volt winding, it will supply 5 volts at 5.3 amps for 171's or 2.5 volts at 1.75 amps for 171's or 2.5 volts at 1.75 amps for a 246. Shops, wt. 5 lbs.

Cat. No. 3448

Your \$1.75

# UNIVERSAL POWER TRANSFORMER

For Pentode Multi-Mu



FPRI -

C ==

D thou

Here is an opportunity for every live radio man to obtain a power transformer that will fill his every requirement. Designed to withstand the severest overloads without breaking down or over-heating.

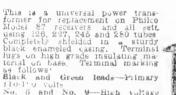
without breaking down or over-heating.

Not just another transformer but THE
TRANSFORMER, flight voltage center
tapped secondary supplies 800 volts A.C.
at 125 mils sufficient current for two
Protode or 245 type tubes and the field
of a D.C. dynamic speaker. 5 volt, 2
amp. secondary for a 280 rectifier. Two
215 volt secondary windings to
25 type tubes and two Pentude or 245
type tubes. All windings center
tapped. Primary tapped for 100.
The secondary for a 200 rectifier. The tubes and two Pentude or 245
type tubes. All windings center
tapped. Primary tapped for 100.
The secondary for the secondary windings to the tubes and two Pentude or 245
type tubes. All windings center
tapped. Primary tapped for 100.
The secondary for the secondary with neat, lettered
terminal surip for easy connection.

For 50-60 cycle 100-130 volts
secondary to the secondary with the

Cut. No. 3442. List \$12.50. Your Price \$2.95

# PHILCO POWER TRANSFORMER



3000

S VOYS

N\_

No. 9-High voltage No. 5 and

becomility

1 If h voltage center tap.
6 and No. 10-5 volts at 2 amps for 280.
2 and No. 4-2½ volts at 3 amps for 227.
low lead -tenter tap for No.
2 and No. 4.
11 and No. 12-1½ volts at 8 amps for 22d.
7 and No. 8-2½ volts at 8 amps for 245.
3 Center tap for 245, No. 7 and No. 8. X ello iv

No. 11

No. A Thordarson Product-Safely rated.

Cat No. 3445

\$2.95 Your Price



#### Stromberg-Carlson 846 Power Transformer

A well designed and carefully constructed power trans-farmer for re-placement in placement in Strumberg Carl-son Models 846, 12, 14 and



Strumbery Carlson Models 846.

12. 11 and there sets. Has three 2½ volt windings, on e 4 amp winding for one or two type 227 tubes and one 12 amp center tapped winding for five or six screen grid and 227 type tubes. A 5 volt. 2 amp winding is provided for the 280 rectifier. The high voltage secondary delivers about 375 volt A.C. each side of the center tap at about 100 mils. Primary has electrostatic shield to prevent line noises from reaching filament secondaries. Also Hi-Lo primary taps for 105-125 volt operation. A great deal of satisfaction and usefulness is built into these transformers.

Cat. No. Your \$4.75

#### Raytheon Transformer

An ideal universal replacement transformer for all Raytheon or real type recaffer "B" eliminators. Delivers 275 A.C. volts sach side of the center tapped high voltage secondary. Shops. wt. 3 lbs.

Cat. No. 3450
Your \$1.25



#### Kolster Power Transformer



For replacement in models K20, K22, K25, K27 receivers, Supplies filament for up to 5-226 or 2-227, 1 or 2 171A, and 1-280, aiso-center tapped high voltage winding. Compactly designed,

Your \$4.25

#### Steinite Power Transformers

Sturdy replacement unit for models using 4-226, 1-227, 1-171, 1-280 type tubes. May also be used for any set employing same tubes.





# RELIABLE POWER TRANSFORMERS

Not Surplus Stock. But the Best Obtainable

Ideal for new power units or for replacement purposes. Fully guaranteed against burnouts and break downs.

250 Push Pull A.C. Power Transformer

For any power plant and amplifier using push pull 250 tubes. Has 4 center tapped secondary windings; 235 volt at 14 amps; 725 volts at 12 amps; 725 volts at 13 volt A.C. primary. Rated low for safety. For 2250: 2251 and 8.224 or 227 tubes or combination. Rating—200 watts; 512"x43" x 434". Fully shielded. Shpg. wt. 20 lbs. Gat. No. 3451

Price \$5.25

245 A.C. Power Transformer

For 5-224, 3-227, 2-245, 1-280 tubes or any combinations of 2½ volt tubes. Four center tapped secondary A.C. windings; 600 volts; 2½ volt 14 anns, 2½ volts, 3 anns; 5 volt, 2 anns, and 110 volt primary 175 watt capacity. Conservatively rated, 5½ "x4½" x3½". Shpg. wt. 14 lbs. Fully guaranteed.

Your \$4.65

171 A.C. Power Transformer

For sets using up to 6-226, 2-227, 1 or 2 171A and 1-280 tubes. Five A.C. secondary windings; 600 volts center tapped—1½ volts, 8 amps; 5½ volts, 3½ amps; 5 volts, 3½ amp; 5 volts and 110 volt A.C. primary, Fully shielded, 5½ "x 4½ "x3½". Shpg. wt. 13 lbs.

Cat. No. 8454

Your \$3.95

# Volume Controls, Potentiometers, Rheastats

#### Frost Double Volume Control

ume control with the moving arms electrically insulat-



ed but mechanically couple I. The front section has a value of 3,000 ohms and the rear section is 3,800 ohms. Standard for Vieter replacement. Can be used in numerous circuits as a dual volume control. Shpg. wt. 1 lb.

No. 1981. List Price \$2.00.

 $_{\rm Price}^{\rm Your}~45c$ 

#### **CENTRALAB**



Air-Cooled Volume Control. 2,000 Ohm.

Cat. No. 3168

Your Price 30c

#### Carter Volume Controls

With A.C. Switch

These volume controls are wire wound and will not become noisy after long periods of use. Equipped with A.C. toggle switch, which is automatically operated when volume is at zero. Avai is at zero. Avai ed when volume is at zero. Available in 2,000, 3,000 and 10,000 ohm siz



Cat. No. 3266. List \$1.75.

Your Price 60c

#### Frost Volume Controls

Frost volume controls are noted for noise-less operation. Employ "Famous Frost Roller Contact." Bakelite case. Long shaft. Available in 10.000, 25.000, 50,000 and 100,000 ohm sizes.



Cat. No. 3268. List \$1.25.

Your 35c

#### Frost 200,000 Ohm Volume Control

With Switch



Wire Wound.

Cat. No. 3168

Your Price 20c

# Freshman, Freed-Eisemann and Earl Volume Controls

Set	Description	No.	Price
Freshman	Q, 2Q, 3Q	3170	35c
Freshman	3, QD		
Freshman		3172	45c
Freshman	N, 60, S	3173	\$1,35
Freshman	M, 60, S	3174	\$1.35
Freed Eisemann	NR80	3175	. 27c
	NR85		
C. A. Earl	22, 24 (10,000-25,000)		
C. A. Earl	31, 32, 41 (50,000)		
C. A. Earl	32S (100,00-50,000)		

#### Eddiestat O-1 Meg. Control



Heavy duty, variable voltage reducer—for "B" eliminators, Dissipates 4 watts, One bole mounting. Shpg. wt.

Your 35c

#### R.C.A. Brunswick 60 Ohm Power Amplifier Potentiometer

Cat. No. 3181 Your Price 25c



#### Freed and Earl 20 Ohm Hum Potentiometer



Cat. No. 3182 Your Price 15c

#### Pacent 20 Ohm Potentiometer

Cat. No. 3183

Your Price 20c



#### E-5 Bradleyohm



Heavy duty, variable voltage reducer-for "B" eliminators. Dissipates 4 watts. One hole mounting. Shpg. wt. 1 lb.

No. 682-E5. List \$2.25.

Your Price 30c

#### Freshman Models "M" and "N" Volume Control



Cat. No. 3180 \$1.35 Your Price

#### Carter 3,000 or 10,000 Ohm Volume Control



Your Price 25c

\$2.75 DOZEN

#### Carter 200,000 Ohm Potentiometer

Wire wound. Air cooled. Cat. No. 3185

Your 25c

\$2.40 PER DOZEN

#### General Electric 200-Ohm Potentiometer Complete with Knob



Heavy duty wire wound unit on porcelain base. Contact arm is of wide wiping type giving a perfect contact at all times. Complete with brown bakelite knob.

Cat. No. 3267. List 85c. . . . .

Your 25c Price

#### Bradleyometer



A 400 ohm potention meter rated at 35 watts. The resistance unit is composed of carbon disks placed alternately, between metal disks. The moving arm makes contact with the metal disks. Smooth metal disks. Smooth metal disks. Smooth act with the resistance variation. Noise-less operation, Made by the Allen-Bradley Co.

less operation. Allen-Bradley Co. Cat. No. 3265. List \$3.25.

Your Price 69c 5000 Ohm Size, 79e

#### Centralab Twin Potentiometer 10,000 and 250,000 ohms



An ideal volume control for all sets. Will not burn out. Operates quietly and uniformly always. Cat. No. 3186.

Your 35c \$3.60 DOZEN

#### Carter Midget Air-Cooled Potentiometer 6 OHMS

Can be used to adjust filament voltages on all tubes.



Cat. No. 3187

Your Price 20c

#### Pacent 20 Ohm Hum Control



Cai, No. 8188

Your Price \$2.00 DOZEN

#### Hum Potentiometer



Used in all Brunswick and Bremer-Tully sets. Cat. No. 3189.

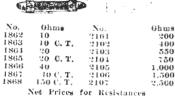
Your Price 25c

#### RESISTANCES

The question of choosing the correct resistor has become more and more confusing to the average Service Man, since the advent of new circuits and new electric tubes. To calculate the value of a resistor needed, to provide a grid bias, we find value in volts of bias needed, the current drawn at the plate voltage used and this will give the biasing

To find the biasing resistor needed the plate current (in amperes) of the tube or tubes to be biased is divided into the value of the bias in volts. For example, to find the biasing resistor for two 245 tubes, the plate current is 68 mils at 250 volts plate. The biasing voltage is 50 volts. Then, the plate current .068 amps, divided into 50 will give 745 ohms, flowever, any value from 500 to 800 ohms will give good results.

#### Wire-Wound Resistances



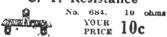
Per dozen, \$1.50 assorted ....

#### Flexible Wire-Wound Grid Suppressors



each \$1.00 10c

# C. T. Resistance



10c No. 685. 29 ohma... 15c No. 686. 40 ohme. .

#### Variable Grid Leak



Micrometer adjustment. Fits any grid leak mount. Range. 1 meg to 10 megohms, shpg. wt., 4 oss. No. 3671

Price 48c

#### Wire-Wound Grid Suppressors



2300 Ohm Kolster Grid Suppressor No. 1889 \$1.50

dozen

1000 Onm kouter und Suppleme No. 1883

\$1.50duzen

#### Carbon Resistors



True of 130 − 250 − 350 − 375 − 400 − 500 − 750 − 1000 − 1200 − 1500 − 1000 − 500,000—2 meg —8 ш-ь

#### RELIABLE VITREOUS ENAMELED RESISTANCE UNITS

These highest standard resistors are not to be confused with the surplus stocks of resistors now flooding the market—Reliable Vitreous as sold by us, ARE GUARANTEED ONE YEAR!

	35	Watt	Rating				OUR PRICE
No.	Ohms	Mills		No.		46	
1739	250	315 )		1753	10,000		റാവ
1740	500	220	OUR	1754	12,000	41	000
1741	750	180	PRICE	1755	15.000	34)	Each
1742	800	177	PRICE	1756	20,000	26	$\sim$
1743	1,000	155		1757	25,000	23)	XIIC
1744	1,500	125 (	250	1758	30,000	21	OUL
1745	2,000	110		1759	33,000	16	Each
1746	2,500	100		1760	40,000	15	
1747	3,000	90	Each	1761	45.000	147	050
1748	3,500	84 )		1762	50,000	13	<b>JOC</b>
		-		1763	60,000	9	Each
1749	4.000	78	150	1764	70,000	8	
1750	5,000	70	45c	1765	80.000	8	1 95
1751	6,000	64	Each	1766	90,000	7	1.4U
1752	7,500	57)	Lach	1767	100,000	7)	Each

60 Watt Rating-4 in. Long

		Ou	r Price			0 w	Price
No.	Ohma	Milla	Each	No.	Ohma	Milla	Each
1768	250	438	\$0.55	1782	12,000	61	.90
1769	500	310	.55	1783	15,000	54	.90
1770	750	253	.55	1784	20,000	43	1.15
1771	800	237	.55	1785	25,000	38	1.15
1772	1,000	210	,55	1786	35,000	29	1.15
1773	1,500	170	,55	1787	50,000	25	1.15
1774	2,000	150	.55	1788	75,000	18	1.30
1775	2,500	133	.55	1789	100,000	13	1.30
1776	3.000	120	.80	1790	125,000	11	1.65
1777	4,000	105	.80	1791	150,000	9	1.65
1778	5,000	95	.80	1792	175,000	7	1.90
1779	7,500	77	.80	1793	200,000	7	1,90
1780	8.000	75	.80	1794	225,000	6	1.90
1781	10,000	67	.80	1795	250,000	6	1.00

#### Brand-New, Fully Guaranteed Enameled Wire Resistors

Enameled Wire Resistors

2-Inch Size

Rated at 20 Watte

The resistors listed below are absolutely brand new and in perfect condition. Each resistor is individually and correctly labeled. They are wire wound and insulated with a heavy enamel. For use in all service work where drain does not exceed 40 watts. Our prices represent exceptional value for resistances of this quality. Order an assortment today.

Cat. No. 3147. Shpg. Wt., 8 ca.

	Cat.	No. 8147.	Maps. Wa.	S of	
Ohma 5	Your Price \$0.24	0hma	rour Price	Ohma	Your Price
10	.24	750	\$0.28	8000	₹0.3ŏ
95	.24	800	.27	3250	.85
50	.94	1000	,80	8500	.85
75	.84	1100	.30	8750	.85
106	.24	1200	.80	4000	-35
150	,24	1250	.30	4500	.85
200	. 24	1500	.30	<b>5000</b>	.85
250	.24	1730	,8 <b>0</b>	6000	.40
300	.25	1850	.30	7000	.40
850	22	2000	,30	7300	45
±00	50	3590	.30	8000	.45
ŏ90	25	Ø#90 00₩8	,30	10000	12
630	.25	3500	35	12500	.45

#### RL LACEMENT RESISTORS FOR ALL R.C.A.-VICTOR RECEIVERS

For R82, R82, R46 Replacement Resistors for 1929-80 Victor receivers



replacement Resistors for 1929-30 Victor receivers. This resistor is manufactured by Aerovox and is standard replacement for 1929-30 receivers. Total resistance is 2520 ohms tapped sections of 2000, Resistor state is 6 % by % Equipped with immed soldering lugs.

Your Price

No can furnish replacement resistors for all type Radio-

We can furnish replacement registers for all type Radio-ias and Victors. Give type iscenses and register, or, better yet, send in the old resistor.

## Colonial Dividers

For Models 32-33-34

Voltage Divider for above models, 121,000 ohms tapped at 50.000, 10,000, 11,000 ohms. .000 ohms. Cat. No. 8148 Your Price 65c

Bias Divider

For Models 82-33-34 4,200 ohms tapped at 1800 ohms. Your 50c Cat. No. 8148A

## R.C.A. Voltage Divider



For Radiolas 18, 33 and 51

Total 8940 chms, tapped at 440 and 1900 with a separate 1600 chm section, R.C.A. part No. 2242,
Cat. No. 3149

41/2" Long-100 Watts Your Price, 30c each.....

#### Freshman Fixed Resistances



Wire Wound-Baked on Lava Tubes Note Noting State and Lava Index N Models. Tapped 1500, 4500, 3300, 6500 and 2200 ohms. Cat. No. 3150

Your Price,

**75c** Divider for Model M. Your Price 75c

Temple Resistances and Voltage Dividers (OHMITE)



0,850 ohms Tapped at 1,000, 5,000, 850 21,600 ohms Tapped at 8,000, 1,600, 8,000 Can be need as voltage divider in any set.

Cua. No. 8151 25c each \$2.00 dozen

#### Earl-Freed Resistance



\*Majo võv. Ena võõ k la beqqaT 750 Ohms

Cat. No. 3154 \$3.00 dozen 35c

each Bremer Tully 510 Resistor



4,500 Ohma Oat. No. 3153 Special 60c

#### RESISTORS + PIGTAILS + RHEOSTATS WIREWOUND

# Metalized Pigtail or Carbon Resistors

A necessity for the Dealer and Service Man. All sizes carried in stock. rating of 1 watt is not exceeded.

		These	resistors	are	accurate	to	plua	or	minus	5 %	if	current
<b>A</b>	Ohms		Ohma	1	Ohmi	В		•	Dhms	- 1		Ohms
R 36	25		200		850			2	2,500			25,000
	35		250	- 1	875			2	8,000	i		30,000
I All	40	1	300		900			3	,500	- 1		35,000
	50	1	400		1,000	)		4	,000			40,000
	6.5		500	- 1	1,100	}		4	007,1			50,000
	75		600		1,125	,		- 5	5,000			000,08
N.	700		700	ļ	1,200	)		1	0,000			75,000
C. Section 1	125		750		1,500	)		.3	5,000		1	000,000
	150		800		9,000	)		2	0,000		1	80,000

Your 81 Ceach

Lots SC each

Lots of 100 7C each Cat. No. 3569



#### Amsco Resistors



A standard grid leak mount resistor for use in power packs, "B" eliminators, etc. Has large power handling capacity. Non-inductive type resistor. Available in following popular sizes: 25.000 chms, 15.000 chms, 100.000 chms, 250,000 chms, 500,000 chms, i megohm. 2.5 watt rating.

Your Price 20c \$2.00 Per Dozen Cat. No. 8429

# "20" Resistor Kit



This kit consists of 20 of the most commonly used sizes in present day receivers. They are rated at 1 watt and are accurate to about 5% on the small sizes and 10% on the rarger sizes. Their small size and long tinned leads permit easy replacement and soldering. Odd-size values can be obtained by connecting two or more resistors in series or parallel. A compact kit and easy to carry. The Service Man cannot be without them. Color code furnished with cath kit. Shps. wt. 1 b. (wt. No. 3430. List \$6.00. Your \$1.85

#### Carter Wire Wound 3 Watt Resistors



An accurate wire wound resistor capable of dissipating 3 watts. Grid leak mounting type. Supplied in the following sizes: 800 ohms, 1,000 ohms; 1,500 ohms, 1,700 ohms, 2,000 ohms, 5,000 ohms, 10,000 ohms.

Your Price 45c

Cat. No. 8427

#### Rheostats



Perfect contact arm rheostats. Frames made of moulded bakelite. Very sturdy and will not heat up unduly. Complete with bakelite moulded knobs. Will sarvy mahr issa. Shu wt. 60 s.

44.17	T BOT. A G	memb n	acs, a	uπhR' A	Y L. O U2
Typ				Your	Price
6	ohm		80c	· ·	4
6	ohm w			(1.4	.00
3.0	vernier		75c	$\mathbf{D}\mathbf{I}$	·W
10	ohm		000	-	
30	ohm		000	Per	Dozen
30	ohm	Clea. N	(a. 84	0.0	
		Amile V.			

#### Variable Voltage Divider Variable Slides





Ohma

200.000 250,000

500,000 1 meg 11/8 meg 9 meg

4, K. 6, 8, 9, 10 mega

This variable wire wound resistor was designed for heavy duty use in "B" eliminators, power packs, amplifiers, etc., where a strong variable resistance is required. The special high grade resistance wire is wound on a thoroughly baked, moisture-proof form. The sliders are set for the desired voltage and fastened into place. Keststance will not vary due to impure chemical properties in the wire. A low priced resistance and perfect in performance Will take the place of 2 to 7 resistances. Furnished with mounting brackets. Especially adapted for replacement in Freshman and Earl receivers. All rated from 75 to 100 watts. Your 65c

Cat, No. 3424, 10,000 ohm. 8 sliders.

Cat. No. 3425. 25,000 ohm. 4 sliders.

Cat. No. 3126. 50,000 ohm. 8 sliders.

# R.C.A. Voltage Control

#### MAINTAINS CONSTANT VOLTAGE



Originally made for voltage control in Brunswick R. P. A. 1A and R. P A. 4, with Panatrope receivers, but can be used with any power pack to maintain voltage by connecting from B minus to 90 volts plus. Connect P plus of base to B numus and Grid to 90 volts Takes place of Radiotron 874,

Your Price 65c

Cat. No. 8417

#### Carter Resistors 900 ohms 1.000 ohms



A special wire wound resistance coated with baked enamel to exclude moisture. 1½" long 1½" diagneter Two sizes, 5000 ohms.

diameter Two sizes, Sci 1 000 ohms. Cas. No. 3\*448
Your Price 25C

Carter Voltage Divider

It i green poor because the

Wire wound baked enamel divider Total resistance, 19,500; tapped at 2,000, 8,000, 8,000, 1,500

Your 29c Price 29c

# C.R.L. Volume Controls



Non-inductive, carbon type for different set teblacements. Long Woarlag, holseless operation. 8,000 and 6000 and 80,000 ohm. 80,000 ohm and 75,000 ohm sizes

Your 25c

Ons. No. 8420

#### **Durham Metalized** Resistors

Your 85c

Your 95c



Mechanically perfect metalized resistor. Accurate, Will not Var) because of very low temperature Co-efficient, Extremely quiet in opelalion even after years of A tested and proven séi vice product for manufacture Bervice and repair. Pigiall and grid leak styles.

875 ohma 1 000 ohms 2 000 ahma

Your \$1.00

Oat No. 8421

#### Splitdorf 12,500 ohm Resistor



Baked channel wife wound resistance Will stand heaviest loads without breaking down. A there was a price Price

Cat. No. 3422

Electrad 100,000 ohm Resistor



An 'Electrad' product, whe wound. Impervious to moisture Handles considerable current. Baked enamel 8" long.

Your 49c
Oat, No. 8423

## Wire-Wound Insulated Resistors 60-WATT RATING



These are Wire Wound Resistors. Never have they been offered at our low prices. They are all new and perfect, and each one is marked as These resistances are 4 in. long and are soldering lugs are furnished with each

Cat. No. 2003. Shipping weight: 12 os. each.

Ohme	Your Price	Ohms	Your Price
20		8,000}	40c
50 100 250	32c	7,000 7,500 8,000 9,000	<b>50c</b>
700	34c	15,000}	
1,000		25,000 }	55c
1,150	40c	70,000 }	60c
2,250	100	100,000	65c

#### K-2673067 Resistor



407 Ohms Tapped at 270 and 310 Used in RPA5. Part No. R67. List, \$1.50 Cat. No. 3008

Your 60c

#### K-2673090 Resistor

2,450 Ohms



in RPA 4 and 4A. Part Used No. R90. Cat. No. 3009 List, \$1.50

Your 60c

#### K-2673091 Resistor



8,400 Ohms Tapped at 1,400 Ohms Used in RPA 4 and 4A. Part No. R91.

Cat. No. 3010 Your List, \$1.50 Your Price 60c

#### K-2673047 Resistor 6.000 Ohms



Used in 7 and 7A. Part No. R47. Cat. No. 3011 List, \$1.50 Your 60c

K-2670325 Resistor

4.000 Ohms Untapped



Used in RPA 1A and 4. Part No. R25. List \$1.50

Cat. No. 3004 Your Price 60c

#### K-2673092 Resistor



Ohms Tapped at 300 No. R92. Used in RPA

Cat. No. 3005 Your List \$1,50 Price 60c

#### K-2673031 Resistor



Part No. R31, 1,100 ohms tapped at 300 and 400.

#### K-633822 Resistor

30 ohms tapped at 10, 10, 10, 10, Part No. 2043. Used in RPA 3, 3A and 3B. Your Price 60c List, \$1.50

#### K-2673044 Resistor



1.100 ohms tapped at 200. Used in RPA 7 and 7A. Part No. R44. Cat. No. 3007 List, \$1.50

Your Price 60c

# REPLACEMENT **RESISTORS**



We can supply replacement resistors	
for all receivers. Write for prices.	Cat. Your
EARL, All-1,000 ohm grid bias	No. Price
EARL, Model 31, 32, 328, 41; 4.000-750 o	3010200
FREED Model 65 77 70 05, 4,000 750 0	nms3017856
FREED, Model 65, 78, 79, 95; 4,000-750 c	nms3018356
FREED EISEMANN, Model 78, 79, 95; 5.000 divider	onm voltage
FREED EISEMANN, Model 16, 1,000 ohms.	
FREED EISEMANN, Model 16, 540 ohms.	Per doz3020\$1.50
FREED EISEMANN, Model 411, 1.750 ohm	Per doz3021\$1.50
	s
FREED EIGENANN Model 411, 4,000 onm	8302320e
FREED EISEMANN, Model 411, 550 ohms. FREED EISEMANN, Model 411, 10 ohms.	
	s
	ns302820e
	ms
	ms303120c
	ohms3032206
	nms303325e
	00.350 ohms3035256
	0 ohms303635e
	ohms3037356
	2000 ohms303840e
FRESHMAN, Model GGOS Voltage Divider	3040 600
FRESHMAN, Model N12-1500 ohm Bias Re	neistance 3041 15e
FRESHMAN, All Models-1800 chm Voltage	Divider 3042 75e
FRESHMAN, G60S-10,950 ohm voltage divi	der 3043 75e
FRESHMAN, K60S-6560 ohm tapped at 110	0. 1500 1460
1500. 1000	2044 98-
GENERAL MOTORS, No. 16005-9372 ohma	tanned at 800.
59, 1863, 2000, 4500	
SPLITDORF, 12500 ohns	3046 356
STROMBERG-CARLSON, 10 and 11	
TEMPLE 8-60, 8-80, 8-90-6850 ohm volta	ge divider 3048 30c
TEMPLE D.C 33 ohm voltage divider	
TEMPLE 7-60 and 7-80-21-600 ohm volts	ge divider 3050 60c
TEMPLE, All 6850 ohm voltage dividers	305130a
TEMPLE, All 1500 bias	

# Wire-Wound Voltage Dividers on Baked Lava Tubes



				Your
Cat. No.	Ohms	Tupped At		Watte Price
3053	2350	1000 350		25 250
3054	510	360, 90, 90		510e
		0, 10, 10		
3056	3350	2000, 1000, 350		2525c
3057		185, 950		
3058		200, 900, 7500		
		5000, 1000, 850,		
		00, 695, 6205		
3061	7835	3400, 3800, 55, 80,	40. 360	50750
		5500, 3200, 750		
		00		
		5000		
		sliders (variable)		
		3000, 4300		
		9000, 3200, 600		
		2100, 10000, 10000,		
3069	25000 4	sliders (variable)		100900
3070	21600	8000, 1600, 8000, 4	.000	10060c
3071	50000	B sliders (variable).		100\$1,10

#### Kolster Wire Wound Resistance



Kolster No. 3983. 7,835 ohms tapped at 3,400, 3,800, 55, 80, 40, 360.

Cat. No. 3012

Your Price 30c Kolster No. 4919. 5,700 ohms.

Cat. No. 3013

Your 30c Price

#### Stromberg-Carlson



3,100 ohm tapped at 1,100 ohm.

Cat. No. 3014

Your 75c Price

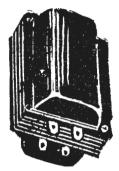
6,000 ohm tapped at 3,000 ohm.

Cat. No. 3015

Your 75c

# Audio Frequency Transformers and Impedances

# Automobile and Portable Set Audio Transformers



Oat. No. 8764

,

For an audio transformer as small and compact as these, the amount of volume and pure tone derived has agreeably surprised the many manufacturers and set builders who have made their acquain-tance. Totally shielded, black in color, these transformers make a very neat and attractive appearance. Four threaded holes in base allow for easy mounting. Supplied in two ratios, 4:1 and 9:1. When the 4:1 is used in a let stage audio and 9:1 used in 2d stage, an audio amplifier is obtained that will both delight and please you.

Kithar Halle

# General Motors Push-Pull Input Split-Secondary

A high grade transformer originally made for General Motors sets. Capable of handling tremendous volume with the betonal reproduction.

Split - Secondary makes possible the location of the exact electrical center for minimum hum.

Unly the most expensive and best transformers have this feature. Totally shielded, sealed in a strong can. An unusual value offered at an unusually low price.

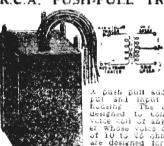
Cat. No. 2105

Your \$1.45



R.C.A. PUSH-PULL TRANSFORMER

Your 35c



PART NO 6115 For use 15 Radiola Sú

pith audio unit with the output and input transformers in one housing. The output transformer is uesigned to connect directly to the voice corl or any dynamic loud speaker whose voice corl has an impedance of 10 to 25 ohms. The transformers are designed for use with \$45 tubes but will give equally fine results with 101 s. 246 s. 216's and 250's. The primary of the imput transformer is of sufficiently high impedance to operate cut of sliceta fill or Power detector.

Your \$1.09

#### GÉNERAL RADIO AUDIÓ TRANSFORMER



The esscritial Icaline of these transformers is in the input impedance belug several times higher than the lube limpedame at the Lawest Inspirers, ) is salling in the most talitaful reproduction Type 285-D has a 3 1 ratio type vet-H has & O I fallo Supe Wi

No 386-H

No 385-D

\$1.45

#### Dynamic Speaker Output Transformer



Frise 850

#### Sangamo Type BX Push Pull Input Transformer



With work tibe

Cat No 310.

Your 75c

#### Colonial Push-Pull Input

T.C.A. Push-Pull Output

With 15 ohm Output Core of permaloy steel lam-mations. Entire register re-produced, convenient leads. A splendid replacement or unit for any set. Cat. No. 3762

Your 85c



For Models 31-32-33-34 Genuine Colonial made trans-tormets. Open frame type. Cut. No. 3761

Your Price 95c

#### REPLACEMENT TRANSFORMER COILS



Excellent output chokes and output transformer colls ready to ship on your core, secondary of transformer is 15 ohms. Primaries not be late impedance of 171

Cat. No. 8753 Your Price 20c

OUTPUT (HOKE or replacement in Peerless or Push pull for Symington speakers.

Cat. No. 3754

Your 15c

# Thordarson Plate Impedance



Fully shoulded in compact black metal case. Attlac-tive and efficient, for all high grade power amplifiers, too in series with plate, to parallel plate load creents.

Your Price 79c

#### Federal Shielded 65A Audio Transformer



An old standby still in popular demand. Unusually well made. Fully shirlded. All stage ratio. Shpg. wt., 3 lbs. Cat. No. 3756
Your C1

\$1.00 Price

#### **FADA AUDIO** TRANSFORMER



A high grade transformer for replacement in all Fada receivers. Can also be used in any receiver where a compact unit is needed. Ratio 31/4":1".

Cat. No. 8755

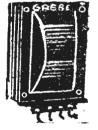
Your Price 45c

#### GREBE AUDIO TRANSFORMER

A mighty audio transformer for replacement in high-priced sets and for use in power ampli-fiers and Public Address Systems. Contains 4 & Silicon-steel laminations. Straight line frequency response Straight line response.

Cat. No. 3757

Your Price 95c



# NA-ALD OUTPUT UNIT

Essential for the pro-tection of the windings of Magnetic or the Output Transformer of A.C. Dynamic Speakers against excessive volt-

Cat. No. 3763

Your Price 45c



#### SELECTUNER STATION SELECTOR AND STATIC REDUCER



Separates stations over the entire wave band on any type of receiver and effectively cuts through the locals and enhances the quality of reception. Inenhances the quality of reception. Insert between the aerial lead-in and the set. Shog, wt. 1 b. No. 638. List \$1.50.

Your 75c

#### **FILTERVOLT**



For most types of common interference about the home, arising from vacuum cleaners, sewing machines, electric fans, toasters, etc. Installed by plugging the unit into the wall socket between current and receiver, Shpg. wt. 1 lb.
No. 730. List \$3.00.

\$1.71 Your Price

#### POWERTENNA



COMBINATION SOCKET ANTENNA AND CURRENT OUTLET Shpg. wt. 1 lb. No. 637. List \$1.00.

Your Price 59c

#### BELDEN FUSED CABLE



seven wire battery capie manne and B circuits fused to protect the these. For all battery sets. wire battery cable having the No. 1972.

Your Price 39c

#### HAMILTON VOLTAGE REGULATOR



An air cooled voltage regulator. Prevents line voltage rising

above 115 volts as is required for best tube life. Ballasting type of resistor. No. 1983. List Price \$1.50.

Your Price 55c

#### FRESHMAN MIDGET CONDENSER



A seven-plate midget originally used on Freshman receivers as tuning verniers. Can be used in short wave receivers as neutralizers, regeneration controls, etc.

Cat. No. 3646

Your 45c

#### FREED-EISEMANN NR80 VOLUME CONTROL STRIP



Used to replace the volume control strip in the model  $80\,$  receivers. Tapered type, resistance value 1.000 olums.

Cat. No. 3647

Your Price 23c

#### I.C.A. ACCURATUNER

Utilizing the Band Pass principle the Accuratuner by a simple adjustment allows you to cut out interfering stations. Eliminates cross talk and allows reception of distant stations through the locals.

Cat. No. 3648

Your \$1.47

#### MULTI-SPEAKER RELAY

Allows the comparison of up to four speakers or the operation of two simultaneously. A turn of the knob switches from one speaker to another. Sturdily built; does not affect the operation of the set. Cat. No. 3649 List \$2.75

> Your \$1.61 Price



#### ILLUMINATED DRUM DIAL

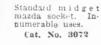


This is an artistically designed This is an artistically designed drum dial, An a tomatic spring take up insures positive drive at all times. The drum carrying the condensers is driven by a specially treated cord which is wound around the drum and connects with a small pulley on the shaft turned by the conrol knob. Turns smoothly and easily without back hash and will drive any multiple gang easily without back high and will drive any multiple gang condenser. Mounts on subpanel, baseboard or to the front panel. The scale is of black material with clear white litters and the state of the scale is of black material with clear white litters and the scale is of black material with clear white litters and litters and the scale of the illuminated. En Shpg. wt. 3 lbs. Engraved 0-100

No. 1974. List \$3.25.

Your \$1.56

## Dial Light



Your Price

75c per doz.

#### Bronze Escutcheon Plate



Beautifies the radio.

Cat. No. 3073

\$1 doz. Price

#### AMRAD VARIOMETER



Use as an antenna trimmer, regeneration control, inductance trimmer, in short wave sets. Quantity limited, so order now.

Cat. No. 3074 Your Price 39c

#### SUB PANEL SOCKETS



Particularly adapted for use on metal sub-panels. Tinned panels, Tinned lugs project through bottom Socket terminals

for easy connection. Socket terminals are marked on the base to facilitate wiring. Heavy nickled phosphor bronze springs insure perfect contact. Shell of socket is one piece moulded bake lite. Supplied in 4 prong for UX type tubes and in 5 prong for UX type tubes. Shpg. wt. ½ lb.

No. 1982. List Price 35c.

Your Price 15c

#### EBY BINDING POSTS



Non - removable top. hole through shanks. Bakelite, Shpg. wt., 4 ozs.

No. 365

Your Price 49c doz.

#### NA-ALD BAKELITE SOCKETS

4 and 5 Prong (at. No. 361



Your Price

10c

# I.C.A. INSULTENNA

COMPLETE AERIAL AND GROUND INSTALLATION BUILT IN AND CONCEALED

Complete: mount-Complete; mounted on brown bakelite plate which fits all standard boxes. Jiffy ground clump and 25 ft. of connection to steam or water steam or water pipe. Shpg. wt. 4 lbs.

Cat. No. 3075. List \$3.75.

Your \$1.95

#### I.C.A. SUPER VOLTAGE CONTROL



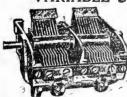
Universal, operates on A.C. or D.C. radios, including 32volt farm systems. Constructed of brass and bakelite; approved by Board of Fire Underwriters. Capacity, 350 watts. Shpg. wt. 2 lbs.

Cat. No. 3076. List \$3.50.

Your \$1.75

# Radio Frequency Tuning Coils and Condensers

#### DE-JUR TWO GANG VARIABLE CONDENSER



A sturdy, die-cast con-denser, bath tub type.
Two gang with each section .0005 mid. capacity. Shart is removable. Provided with heavy spring contacts on rotors and compensators for each section. Condenser section as shielded from one another.

Your 75c

#### ZENITH 4 GANG DIE CAST CONDENSER



A heavily built variable condenser that will always keep its adjustment, due to superior design in construction. Condenser plates are 1/16" thick as against .034 in most condensers. Die cast for rigidity and strength. Capacity of each section is .00035 mfd., permitting its use in any rectiver and for any purpose. Large spacing between plates and electrostatic shield between each condenser section. Equipped with pilot lamp bracket. Three hole base mounting. Shpg. wt., 8 lbs.

Cat. No. 3775

Your \$1.25 Price \$1.25

Above condenser equipped with toggle switch, automatically operated when condenser at minimum capacity, 25c extra. at minimum capacity,

# Bruno .0005 R.F. Coil



finest low loss today. Wound on open frame form. Quartzite insulation. Re-quires a .0005 mfd tuning condenser to cover range of 200-575 meters. Shpg. wt., 1 lb. Cat. No. 3791

Your Price 65c

#### Super Het l.F. Transformers



Splendid units, complete with coils, stil is and tuning condensers. Designed for simple peaking at 175 KD. Scientifically engineered for high grin and easy adaptability. Attractive aluminum shield cans. In matched sets of three.

Cat. No. 3777 Your \$3.25

#### R.C.A. I.F. Tuning Condensers



tuning nounted dounted on Isol. Capacity from 14 120 MMF. For base. 140 MMF superhet I.F. transformer.

Cat. Your 75c

#### Bank Pass and Oscillator Coils



65c Price set

#### Matched R.F. Multi-Mu Screen Grid



Accurately designed for uso with ,000375 mfd contensers. Contest sers.

Coils

of 4 cols, 1 antenna coil and 3 R.F. multi-mu.
colls matched for efficiency.
Your 95c per set
Price 96 of 4 Cat. No. 8784



(with vernier adjustment)

#### Special 2 Gang Condenser





for use in receivers where isolation of R.F. circuits is necessary.

Your \$1.35

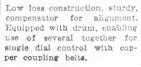
#### Colonial Condenser



As used in Colonial model 32. Brass plates, ow loss porcelain insulation .0005 mfd capacity. Straight line frequency. Cat. No. 3783

Your 45c

#### General Motors Single .00035 Mfd Condenser

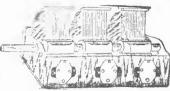


Cat. No. 8778



Your 45c Price

#### 3 GANG CONDENSER



bath tub condenser, of spring Sections ac-Strong type Plates brass. Sections accurately matched; 0005 mfd capacity. Can be used in the highest grade tuners and receivers with maximum efficiency at low cost. brass.

Your \$1.95

#### Day Fan-General Motors Untuned R.F. Transformer



The ideal untuned unit for use in all untuned input and R.F. stages. Carefully constructed. Primary and secondary wound on the same form. An excellent the same form coupling device.

Cat. No. 3786

Your 35c

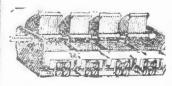
#### Colonial R.F. Coils



As used in Colonial model 32 racelvers but wound only with secondary. Primary may be high impedance choke inserted within the 2"x1" coil form. With long mounting lug. Make fine screen grid coils.

Your Price 15c

#### Day Fan G.M. 4 Gang Condenser



4 gang .000375 mid bathtub condenser, die cast for dur-ability. Each section accurately matched by means of signal generator, at the fac-

Cat. No. 3781

Cat. No. 3785

Your Price 95c

#### R.C.A. Super Het I.F. Trans. Coils



Intermediate Frequency transformers peaked at 175 KC. Designed for use with 220 MMF capacity tuning condensers.

Cat. No. Your 19c

#### Shield-Base-Cap

For 221-222-227 Tubes Astounding value! Base fits around any socket. Cap fits around grid terminal. Shps. wt., 1 lb,

SET OF 8 PIECES

Cat. No. 3787

Your Price 10c



Componsates condenser sections, also used in neutralizing circuits.

Price 15c



#### Aluminum Shields



For all purposes. Heavy polished aluminum. 2%"x2%", or 2%"x 8 8/16". State size desired in your order. Cat. No. 8798

Your 73c per Price 73c doz. SINGLY, 100 EACH

# MATCHED R. F. COIL SETS

#### FREED COILS



As used in Freed 95 and Earl 42 receivers. Impregnated form with mounting brack-ets. Long solder-ing lugs. For .0005 mid. con-denser.

Oat. No. 8793

Your 39c ea.

#### Screen Grid Multi-Mu Coils



A high gain screen grid coil designed for multi-mu rubes, with high impe-dance primary. Used with .00035 con-densers. Mounting bracket. bracket. Cat. No. 3794

Your 35c each

#### Hammerlund .0005 Condenser



line frequency .0005 mfd. condenser with soldered plates.

Cat. No. Your 95c 8705 Price

#### Grebe Binocular Coils



The famous Grebe Litz-wound hi-mu coils as used in A.C. 6 and A.C. 7. For use with 00025 condenser. Tremendous gain possible with this coil.

Cat. No. 3796

Your 35c



#### THREE-COIL ASSEMBLY

B.F. and Detector coll assembly used in B.C.A. 33. Mounted on metal strip with 2 balancing condensers. Cas. No. 2797

Your \$1.10

#### R.F. and OSCILLATOR COILS



For Brunswick P138 and P148 and R.C.A. 28. Well wound and carefully designed ooils.

Cat. No. 2798

Your \$1.25

#### MATCHED MULTI-MU COILS



Comes in sets of three or four matched coils, complete with alumination shield cans with removable covers for use with 00035 condensers. Excellent for construction and conversion of variable-mu screen grid receivers.

Your \$1.25 Your \$1

#### GREBE CONDENSERS



A .00025 condenser complete with bakelite tuning knob and 8:1 ratio vernier. Compensating condenser. Ideal for use in oscillators. Covers entire broadcast range with proper coil.

Your Price 45c

#### KELLOGG R.F. COILS



Four matched coils to the set. One antenna and three R.F. screen grid coils. Used in Kellogg receivers. For use with .0005 condensers.

Cut. No. 3803

Your 75c Price

#### R.C.A. Neutralizing Condensers



Bakelite condenser with mounting holes. Used as R.F. compensator detector trimmer and plate coupling condenser. Cat. No. 3803

Your Price 12c

#### R.F. CHOKE



Bakelite case, 80 millihenry choke. Stagger wound to minimize distributed capacity. Cat. No. 2804

Your 35c

#### NUMBERED KNOBS



Beau itul bal elito (s knobs numbered 1 to 10. For multi ange meters, etc. Set screw shaft fastening. Cat. No. 3806

Your AC each

#### FULL VISION DIAL



An attractive universal Full Vision vernier dial; will accommodate both 14" and %" tuning "and "5" tuning gang shafts. Removable illuminated dial light bracket. Never slip friction drive. Shaft takes 4," knob. Beautifully colored celluloid scale.

Complete with exquisitely designed escutcheon plate.

Cat. No. 3808

Your Price

#### Freshman Basket Weave Coils



Set of 3 For .00035 mfd. con denser.

Cat. No. 3805

Your 30c Per Set Price 30c of 3

#### FREED DIAL SCALE



A translucent dial scale for Freed & Earl receivers. Numbered 0-100 and 550-

Numbered 1500KC, Cat. No. 3807 Your Price Price Der doz.

#### Microphone Button



With this nilero-With this niferophone button, a
great many exbernments an be
made. A well designed and sensitive device that
an be used as a
dictaphone to his
ten in secretly on
c on wer sations
amplify phono
spaceb etc. Di-

graph music, speech, etc. Directions furnished to make some twenty-five experiments.

Cat. No. 3809

Your Price 65c

#### Microphone Button Transformer

'1 ex elieft interophone hansioiner for use with or any introphone button. A courately matched to give splendid reproduction and ease in connecting to the proper connecting to the proper cucuits in your amplifier.

Cat No. 3810

Your 75c



Amplex Lavite

Amplex Lavite
Resistors (3 Watts)
A very accurate resistor
with plus or minus 3%
accuracy Comes complete
with heavy shap mounting
lips. 48,000 ohm size.
Ised wherever a very securate resistor capable of
arrying heavy current
without change of resistance value is needed. Lavite resistors are non-inductive, compact and easily
mounted. The special
mounting clips provide
good contact at all times.
Vour 150

Your 25c ea.

#### HONEYCOMB COILS



Duo-lateral wound, var-nished and unmounted coils.

Cat. No. Turns Your Price 25 50 75 100 \$0.85 .46 .50 .59

Cat. No.	Turns	Your Price
3820	800	\$1.80
3821	600	1.50
3822	1000	1.75
3823	1500	8.50
3824	2000	2.95



lispensable and home. Can be dicators, circuit testi pa" indicators, or as "h.
horns, consuming less t.
horns, Available in two ty.
with mushroom type electricise with tubular electrodes.

Mo. SSEC. Larre Noon Lamp.

Your Price

Small Neon Lamp.

Your Price

#### Microphone Adapter



This handy little device enables you to use a microphone with any radio set. Ideal for testing. Cat. No. 3558. List \$1.00.

Your 59c

# Jones Mui



The cable of many purposes. Used by years. For making instantaneous conn. bother and langer of tangled wires. Elin. plug fits into socket only one way. Comple, ridiculously low.

Cat. No. 3538

\$1.25 co. Your Price

#### Trouble Finder and Adapter



and Adapter

A valuable
addition to
every service
man's testing
e quipment.
In stan ity
adaptable in
trouble shooting and making connections to a 4socket where no wires are exposed. Grid, plate, cathode and
heater circuits can be opened for
ready insertion of meters or cest
equipment by only removing
proper circuit link. May be
used for connecting phonograph
plekups or meters to radio sets
or amplifiers. Shpg. wt. 4 ozs.
Indicate type wanted—4- or 5prong.

Cat. No. 3540

Your Price 95c

#### Solderless Tips and Jacks



The perfect solderless tip plugs. Will fit any tip jack. Nickled. Cas No. 8544

Per Dozen

45c Per Dosen

#### Battery Clips



Finest battery clips
sver made. Lead
coated to prevent
corrosion. Special
springs will last
lifetime. Convenient
screw-terminal connection. Small size
ideal for test lead
clips and for hasty
hook-ups.

Oat. No. 3531
15 amps
Your 20 for 70c Cat. No. 3532

Your 10 for 90c

#### Connector Plugs 4 and 5 PRONG



These pluss readily suggest themselves for many uses. Perfect for making external connection of dynamic speaker to receiver. For use in set analyzers to supply voltages to an external tuner from an amplifier. A strong, durable plus furnished either in 4 or 5 prongs.

Cat. No. 3539

Your 25C Price 25C Sockets for either above plugs.

#### Servicemen's Impregnating Compound



The long-awaited addition to shop equipment. It is now possible to use original transformer and condenser cans by melting out the defective unite and replace a good, new part with this excellent impregnating compound. Simple to use: just heat the handy pail containing the compound and pour off the required quantity. A real buy. 9 lbs to the pail.

Cat No. 3638
Your

Your 75c Price

#### Pentode Tube Adapter



Enjoy the great volume and clarity of the new Pentode power tubes without rewiring your present set. No external connections necessary with this handy little saapter. Insert Pentode into the adapter and then both into your present 245 your present constructed unit. Cat. No. S285

Your \$1.20 Price

#### Pickup A



Simple to use. Easy to conne Phono pickups hooked up in juffy. Several styles. Grid te, filanient or cathode; or breaking into plate circuit. Has other uses, like tone control adapter.

Cat. No. 3541. List 75c. Your Price 29c

# Pocket Pen-lite



The perfect flashlight for radio service men, because of its size. Small and compact, it clips into the pocket as a fountain pen. Safety switch, an added feature, permits steady or intermittent lighting. Complete with battery and bulb. Shpg. wt. 1 lb. Cat. No. 3534. List \$1.00.

Your 29c

#### 17-Wire Cable

A splendid silk-covered cable for many purposes. Made up of 17 stranded rubber and silk covered wires, all differently colored, Can be used for remote control devices, multi-speaker installations, etc. At this price you should keep a supply on hand. Cats, No. 3580

Your 12c per foot

#### Bus Bar

Round hard-drawn No. 14 copper busbar. Well tinned for easy soldering. 18" lengths. Cat. No. 3527

2 lengths Your 5c Price

60 lengths Your Price



#### Detecto-lite



Tests any current from 110 to 550 volts and will indicate voltage and polarity, whether A.C. or D.C. It will show how many cycles and indicate line and ground wires. Strailly constructed from bakelite. Slips into the pocket. An absolute necessity for radio service men, electricians, building superintendents, etc. Fool-proof. Shog. wt. 1 lb. Cat. No. 3529

Cat. No. 8529 Your 99c

#### Rubber Sleeving

Strong, flexible, rubber tubing which can be made to serve different purposes. Ideal in automobile radio installations for covering cables and wiring to make them waterproof. Also as added insulation precaution. Comes %" inside diameter.

Cat. No. 3528

Your 5c per Price 5c foot

#### Junior Test Leads



A pair of genuine R.C.A. leads colored for polarity. Equipped with phone tips at one end and the other solder-dipped. Hundreds of uses will suggest themselves when you see these leads. Get several dozen pair at this special price. 5 feet long.

Your 23c per Price 23c pair

# SPEAKER

utauto ker as ful and Measures nting lugs
the unit are
tree tungsten
ds. Complete

UR \$4.50RICE

on YOUR

Carlson YOUR PRICE \$1.90



# JLYTIC SERS

k) electrolytic condensers.
 Will mount in very little
 because of higher capacity.

	No.	Cap.	Peak Volts	Anodes		
•	3915	18	500	2	<b>\$1.65</b>	
.60	3916	24	500	2 3	1.95	
.60	3917	32	500	4	2.35	
.90	3918	36	500	3	2.65	
.85	3919	52	500	4	8.85	
.50	3920	54	500	4	8.85	

For By-Pa. .ng Blas Registors in Pentode Amplifiers

Cap. Mfd. 5 mfd. 10 mfd.

Peak Volts

# General Electric Phonograph Motor



Leenthe

A quick starting heavy duty phonograph motor. Product of General Electric Equipped with a 12-inch turnable and automatic speed control. Powerful torque. Measures 4½x 7½ inches. For 110 volt, 50 to 60 cycle A.C. operation only.

Cat. No. 3908

Your \$9.50 Price

# Zenith A. C. Power Transformer

16

Replacement for Zenith 33, 33-X, 34, 35, 35-Z Delivers 300 voits each side of center tap. Also supplies 5 volts at ½ ampere for two 171-A's, 5 volts at 2 amperes for 280, and 2½ volts winding for seven 224's or 227 tubes.



Cat. No. 8923

Your \$1.95

# Peerless Courier No. 22 Voltage Divider



Contains two separate sections of 100.000 and 2,500 ohms. Also following sections in series 3,000, 150,000, 100,000 and 500,000 ohms.

Cat. No. 8924

Your 65c

## Peerless Audio Transformers



A high-grade moisture proof transformer. Special fron core. Tinned lugs for easy solder-ing. Flat amplification curve. All stage ratio.

Cat. No. 8985

Your 65c

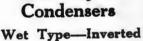
# 2,500-Ohm Filter Choke



This choke is designed to be used in place of the dynamic speaker field. By inserting this choke you can use any speaker with your receiver without impairing the efficiency of the power supply unit. Cat. No. 3926

Your \$1.85

# Flechtheim Superior Electrolytic



An 8 mfd. unit having the finest electrical characteristics to be used in standard filter circuits where peak voltage is not over 500 volts D.C. For use in 45 and Pentode circuits which employs a plate transformer delivering up to 875 volte BMS A.C.

Ca4, No. 8987

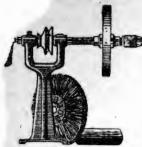
Your 95c

# **Important Notice**

Future issues of our catalog will only be mailed to those who are interested in receiving future bulletins of this type. New catalogs and flyers and notes of special interest will be mailed regularly to you if your name is on our 1932 mailing list. Write and ask to be placed on it now. Address Department 32.

DV.

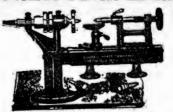
NG HEAD



thine will find many a use in the boratory. Precision built throughrings and all steel parts are highly A two step pulley is provided for A two step pulley is provided for ug. It is provided with a carefully taper screw on one end. The other s an arbor having a %" capacity work. The polishing head comes with wheel, a Carborundum grinding stone, wire cleaning wheel and a piece of rouge. This polishing head can be a grinder or as a polisher, to clean if small metal parts. It can also be a horizontal drill press. The polishit is finished in red enamel and polished Comes complete with buffer wheel, grindstone, wire brush wheel and bufuge. Shpg. wt. 6 lbs.

Your \$2.25

#### GOODELL PRATT UTILITY BENCH LATHE



No. 1919. Complete with all Attachments. The Lathe is perhaps the most versatile tool to be found in the experimenters "shop." This size, we have selected as the most convenient for radio work. The Lathe is a product of Goodell-Pratt Co., an assurance of good workmanship. It is substantially constructed throughout. The bed is 12" long and is milled its entire length. The head stock has a spindle with a taper hole in both ends. in which the regular equipment, consisting of a taper thread spindle, saw arbor, 0 to 5/32" capacity check and slotted face plate. Ift. The tail stock is adjustable for position and is equipped with serew feed and clamp lock. The rest is adjustable for position and height.

Extreme distance between centers is 3\(\frac{1}{2}\), Cxirge 5". The pulley steps are 1" and 1\(\frac{1}{2}\) in diameter with \(\frac{1}{2}\)" face. Large step is grooved, so round belt can be used if desired. Frame, tail stock and 'tee rest finished in red and black enamel. Steel parts are polished. Shpg. wt. 16 lbs.

Your \(\frac{1}{2}\) \(\frac{1}{2}\) \(\frac{1}{2}\). Your

Your \$9.85 Price

#### **AUTOMA** BENCH .

a fine bench drill for general use in the radio shop. It take all round shank drills up to it". All the working parts of thi machine are clamped to a 10" steel rod of %" diameter, which sets into a black enameled base that takes a bench space of only 4" by 3". The automatic feed is operated by the hand wheel and thumb screw at the top of the steel feed screw. The auto-matic feed will lower matic feed will lower the drill and raise it at a rate determined by the cutting speed. The drive shaft is constructed with %" thrust ball bearing. Gears and pinions are machine cut from solid blanks. The table proper is 2%" square. All iron parts are finished in red and black enactive square parts are polished. A clamp is vided to hold the drill to the table where drilling. Shpg. We, 1980.

Your \$2.45 Price

#### Lenk Automatic Blow Torches



Develops a blast of 1,700° Fahrenheit, and will operate for about three hours on one filing. Uses denatured and commercial alcohol. A detachable shield is provided to protect blast from all drafts on outdoor work. Blows itself. Starts in twenty seconds. 7° long by Highly nickel plated. No. 305-30. List \$3.00.

Your \$2.06



#### Blow Torch

64"x2%". Flame heat 1400". Leak proof.
Uses denatured alcohol.
Nozzle cap. Blows itself. Shpg. wt. 1 lb.
No. 606-66. Liss \$1.78
Price \$1.20

#### Radio Tool Chest



The most necessary and ever needful radio tools are in this kit—should be in every custom set builder's or service man's tool box. And just as useful in your laboratory or workshop. Here are the contents: 3 and 5 in. screw driver, scriber, reamer, countersink, pilers, center-punch, socket wrench set for hexagon and knurled nuts; and 3 wrenches for hexagon nuts, ranging from 4 to 4. Attractive cardboard case. Shps. wt 3 lbs. Your \$1.95

## Aluminum Solder



No. 609. Per 2 oz. strip 21c (17"x3/16") .....

# Diagonal Cutting Pliers



Snips wires off in pleasing man-ner. Shpg. wt. 8 ozs.

Your 43c No. 587 6" long. 587-486. No. 588 588-486. Your 49c

# Klein Pattern Pliers



Shpg. wt. 1 to 2 lbs.

No. 589-498. 6" long. No. 590 8" long. 590-498.

Your 55c Your 70c

# Combination Pliers



INSULATED HANDLES! TEST-ED TO 5.000 VOLTS! Com-bines side cutter, wire cutter, flat nose, and gas piler, screw driver and reamer. Correctly hardened and tempered jaws and cutters, First quality. Shps. wt, 1 to 8 lbs.

No. 584-492. 6" long.

Your 55c Your 65c

No. 585-492. 7" long. No. 586-498. 8" long.

Your 75c

#### Telephone Pliers



Long nose, with side cutter. 5½ long. First quality hard-ened and tempered steel. Shpg. wt. 8 ozs. 39c No. 583-484 Price

#### Wrench Set



Adjusts nuts impossible to reach Adjusts nuss impossible to reach with other larger tools. Fits 3/4", 4", 5", 5", 1s' and 5". An alligator jaw tool included on the odd sizes. Shps. wt 8 ozs. Note 23c. No. 602-2034.

#### Reamer



ENLARGES bakelite and drilled 8 ozs. No. 578.

Your 21c

# Socket Wrench Set 08888

The 5 sockets (¼", ¼", ¾", %", 1, ", ", ", ", ", ") snap on to metal shank—grip hex. nuts firmly. An old favorite. Shpg. wt. 1 lb. No. 579.

Your 55c

#### Scriber

Cat. No. 604. Your Price 23c

#### Electric Soldering Iron



Maximum performance at a mini-mum cost! Long life nichrome wire heating element. Best ma-terials throughout. Shop. wt. 1

lb. No. 610. List \$2.50.

Your 87c Extra Tip, 15c each

# Rosin-Core Solder

Simplifies soldering — assures perfect electrical and mechanical joint. No. 607. 4 oz. can.

Your 17c Price No. 608. One Pound Spool.

Your Price 63c

#### Perfect Grinders Oat. No. 3378.



Your 99c Cat. No. 3370. Your \$1.47 Cat. No. 3380. Your \$2.98

#### Bench Vises

Carefully machin-ed and polished jaws. Unusually sturdy. Opens wide, and clamps on any place. Steel screw, two steel guilding rods.



Oat. No. 3382. \$2\%" No. Your Price \$1.35

Oat. No. 8381. 3½" wide jaw. Your Price \$2.25

Jawset



keyhole blade, rectly hardened, iled. Shpg. wt.

3554 9c

on Square



rule, try-square or 45°. Divided into on both sides, ed. Shpg. wt. machined.

Cat. No. 3946 Your 78c Price

vry-Use Electric lotor Attachment

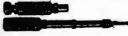


Holds grindstone, buffs, saws, drills, wire scratch brushes, etc., for srinding tools and cutlery, polishing and buffing of all kinds, drilling holes, preparing metals for welding. Simply fastens with set screws directly to shaft of your small motor in a jiffy. Made of highest grade cold rolled steel, with machined flanges, and fitted with three jaw 0 to 9/32" drill chuck. Comes in five sizes to fit 14". 15". 15" 3" 3" and 5" motor shafts. Be sure to state size of your motor shaft when ordering.

Cat. No. 3558

Your Price 98c

# Automatic Push-Drill



Nickel plated, fully hardened steel. Extra heavy spring, released by knob at top of handle by simple turn. Handle contains 8 drill points from 1/16" to 11/64", each in separate compartment. Shpg. wt. 3 lbs.

Cat. No. 3559

Your \$1.56

#### Carbon Steel Twist Drill Sets



Consists of one of each drill: 1/16".
5/64" 3/32", 7/64".
1/8", 9/64", 5/32",
11/64", 3/16".
Cat. No. 3561
Your Price

35c

Consists of one drill each size from No. 1 to No. 60. Wire sauge. 60 drills in all. Shpg. wt. 1 lb. Cat. No. 3562 Your \$1.95

Both of the above drill sets are put up in conveniently folded paper

ay rool Kit



Just the kit for those installation jobs. Contains 7 pieces. Natural jobs. Contains 7 pieces. Natural finish. Drop forged tools. Contains: 5" Screw Driver, 6" Combiner, 9" Wrench, 10 oz. B.P. Hammer, 3\" Cold Chisel, 25 D.E. Wrench, 3\" Punch. Shps. Wt. 7 lbs. List \$5.00

Your \$1.50

In Lots of Six, \$8.35

#### Handrill



Solid disc wheel, 8 jaw chuck opens to ¼". Very carefully machined. 11½" long. Shpg. wt.

Your Price 89c

#### Angle Wrenches



Drop forged steel, correctly hardened and tempered. Note bolt adjusting jaw mechanism. Shpg. wt. 2 to 5 lbs.

6" long. Your Cat. No. Price 41c 3563 8" long.

Your Cat. No. 3564 Price 10" long.

Your Cat. No. 79c 3565 Price

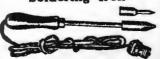
#### Countersink



Fits all hand and breast drills. Size %". Shpg. wt. 4 ozs.

Your Price 19c Cat. No. 3560

#### Heavy Duty Electric Soldering Iron



Uses famous long life nichrome heating element. Perfectly bal-anced. Cool handle. Long copper up. Qat. No. 3566 List \$2.50

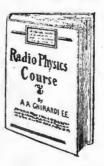
Your \$1.15 Price Extra Tips, 15c each

SERI SET L TECH STUDE. EXPERIME.

Can Afford to Be Without the

# "RADIO PHYSICS COURSE"

ALFRED A. GHIRARDI, B.S.E.E.



Associate Editor "Radio Magazine. In charge of ment of Radio Comm and Applied Electricity in York Technical Prep School. Formerly Associtor "Radio Engineering," Mechanics." Former Te Consultant, Pilot Radio and Corp.

# FREE!

This \$2.50 book, one of the best ever writt one of the finest texts on radio. Used as book in the R.C.A. Institutes, and many throughout the country. We are giving this away free to our customers with every order merchandise amounting to \$15,00 or more. is your opportunity to get this \$2.50 book lutely free, the first time an offer like this has been made.

# Rauland Ultra Violet Lamp

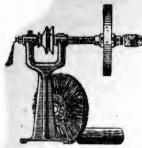


This lamp is designed for home use. The perfected Arc control consists of a single exposed lever. Tt. will operate on A.C. or D.C. Special safety con-D.C. struction prevents any chance of burning. Costs no more to operate than average electrical appliance. Neat, trim, well-proportioned. Finished in hard baked enamel of crackle design-silver and grey in color. The Rauland health lamp will relieve colds and

iamp will relieve colds and respiratory disorders; kills infections and every known bacteria; enriches the blood with calcium, iron and phosphorus, prevents rickets, and is a good tonic for nervous disorders. The Health lamp comes complete with special protective goggles, six type A (sunshine) carbons, handy tongs for removing carbons, wire screen for reflector, instruction book and treatment book. Shog. wt., 30 lbs. Cat. No. 2557 Shpg. wt., 30 lbs. Cat. No. 3567.

Table Model. Shpg. wt. 15 lbs. List Price \$29.50. Your Price......

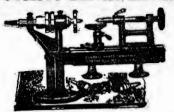
Extra Sun Ray Carbons, per doz. Your Price.....



thine will find many a use in the boratory. Precision built throughrings and all steel parts are highly A two step pulley is provided for A two step pulley is provided for ng. 1t is provided with a carefully taper screw on one end. The other s an arbor having a %" capacity nuck. The polishing head comes with wheel, a Carborundum grinding stone, wire cleaning wheel and a piece of rouge. This polishing head can be a grinder or as a polisher, to clean ff small metal parts. It can also be a horizontal drill press. The polishis finished in red enamel and polished Comes complete with buffer wheel, grindstone, wire brush wheel and bufuge. Shpg. wt. 6 lbs.

Complete with all Attachments Your \$2.25 Price

#### GOODELL PRATT UTILITY BENCH LATHE



No. 1919. Complete with all Attachments. The Lathe is perhaps the most versatile tool to be found in the experimenters "shop." This size, we have selected as the most convenient for radio work. The Lathe is a product of Goodell-Pratt Co., an assurance of good workmanship. It is substantially constructed throughout. The bed is 12" long and is milled its entire length. The head stock has a spindle with a taper hole in both ends. in which the regular equipment, consisting of a taper thread spindle, saw arbor, 0 to 5/32" capacity check and slotted face plate, fit. The tail stock is adjustable for position and is equipped with screw feed and clamp lock. The rest is adjustable for position and height.

Extreme distance between centers is 3\fmu'. Swing 5". The pulley steps are 1" and 11\fmu' in diameter with \fmu'' face. Large step is grooved, so round belt can be used if desired. Frame, tail stock and tee rest finished in red and black enamel. Steel parts are pollshed. Shpg. wt. 16 lbs.

Your \$9.85 Price

#### **AUTOMAT** BENCH .

This is a fine beach drill for general use in the radio shop. It take all round shank drills up to w". All the working parts of thi machine are clamped to a 10" steel rod of 1/4" diameter, which sets into a black enameled base that takes a beach space of only 4" by 8". The automatic feed is operated by the hand wheel and thumb screw at the top of the steel feed screw. The automatic feed will lower matic feed will lower the drill and raise it at a rate determined by the cutting speed. The drive shaft is constructed with %" thrust ball bearing. Gears and pinions are machine cut from solid blanks. The table proper is 2%" square. All iron parts are finished in red and black enall steel parts are polished. A clamp is vided to hold the drill to the table wh drilling. Shpg. wt. 6 lbs.

Your \$2.45 Price

#### Lenk Automatic Blow Torches





#### Blow Torch

64"x2%". Flame heat 1400°. Leak-proof. Uses denatured alcohol. Nozzle cap. Blows it-self. Shps. wt. 1 lb. No. 606-66. List \$1.78 Your \$1.20

#### Radio Tool Chest



The most necessary and ever needful radio tools are in this kit—should be in every custom set builder's or service man's tool box. And just as useful in your laboratory or workshop. Here are the contents: 3 and 6 in. screw driver, scriber, reamer, countersink, pliers, center-punch, socket wrench set for hexagon and knurled nuts; and 3 wrenches for hexagon nuts, ranging from % to % Attractive cardboard case. Shps. wt 3 lbs. No. 800. Price \$11.95 No. 600.

#### Aluminum Solder



No. 609. Per 2 oz. strip 21c (17"x3/16") .....

## Diagonal Cutting Pliers



Snips wires off in pleasing man-ner, Shpg. wt. 8- ozs.

No. 587-486. 6" long. Your 43c No. 588 588-486. Your 49c

# Klein Pattern Pliers



Shpg. wt. 1 to 2 lbs.

589-498. 590-498. No. 590 8" long.

Your 55c Your 70c

# Combination Pliers



INSULATED HANDLES! TESTED TO 5,000 VOLTS! Combines side cutter, wire cutter, flat nose, and gas piler, screw driver and reamer. Correctly hardened and tempered laws and cutters. First quality. Shpg. wt. 1 to 3 lbs.

No. 584-493, 6" long. No. 580-585-493.

Your 55c Your 65c

Your 75c

#### Telephone Pliers



nose, with side cutter. long. First quality hard-Long nose, with 5 ½ long. First ened and tempered wt. 8 ozs. gteel. Your 39c No. 583-484.

#### Wrench Set



Adjusts nuts impossible to reach Adjusts nuts impossible to reach with other larger tools. Fits 1/4", 4", 4" and 1/3". An alligator law tool included fits odd sizes. Shps. wt 8 ozs. Note case. No. 602-2034. Price 23c

#### Reamer



holes in Shpg. Wt. ENLARGES bakelite and 8 ozs. No. 578.

Your Price 21c

# Socket Wrench Set

#### BORRO

Your 55c

#### Scriber

23c

#### Electric Soldering Iron



Maximum performance at a mini-mum cost! Long life nichrome wire heating element. Best ma-terials throughout. Shpg. wt. 1

No. 610. List \$2.50.

Your 87c Price 87c Extra Tip, 15c each

#### Rosin-Core Solder

Simplifies soldering — assures perfect electrical and mechanical joint. No. 607. 4 oz. can.

Your. 17c Price One Pound Spool.

63c Your Price

#### Perfect Grinders Cat. No. 3378.



Your 99c Cat. No. 8379. Your \$1.47 Cat. No. 3380. Your \$2.98

#### Bench Vises

Carefully machin-ed and polished jaws. Unusually sturdy. Open s wide, and clamps on any place. Steel screw, two steel guilding rods.



Cat. No. 3382. 21/2" Nour Price \$1.35 wide faw.

Oat. No. 8381. 8½" wide few. Your Price \$2.25

No. 586-492. 8" long. Radio Surplus Corporation, 54-56 Vesey Street, New York