

1949

Catalog No. 491

RADIO
and ELECTRONIC
SETS·SUPPLIES·APPARATUS

For TRADE-INDUSTRY
COMMUNICATION-PUBLIC
UTILITY-VOCATIONAL
TRANSPORTATION
EXPERIMENTAL AND
HOBBY APPLICATIONS



YOU ARE DAYS CLOSER
to BzA in
THE HEART OF AMERICA



BURSTEIN-APPLEBEE
Company
1012-14 MCGEE ST., KANSAS CITY 6, MO.



RADIO



RECORDER



PHONOGRAPH



PUBLIC ADDRESS SYSTEM

RADIO-RECORDER-PHONOGRAPH

The New CASCADE

Here is truly a great Value. In addition to a high quality radio-phonograph combination, it also makes recordings and can be used as a Public address system. The operation of it is so simple that even a child can use it. Convenient for any room of the home or it is portable, and easy to carry.

Styled for attractiveness, Built to be Trouble Free . . . Extremely low priced for such quality . . . its features are:

- 6 tube (including rectifier) AC chassis. Tubes 6SA7, 6SJ7, 6SK7, 6SQ7, 6V6, 6X5.
- All Controls and Calibrations on attractive metal panel.
- Tone Control. Inverse Feed back. Built-in loop antenna. Built-in Alnico V PM speaker and separate out-put jack for extension speaker.
- Twin neon recording level indicators. Monitor speaker for recording.
- Adjustable crystal recording head with special shavings collector and high quality crystal playback tone arm.
- Heavy duty dual speed recording and playback motor 33 1/3 and 78 RPM. Separate motor switch.
- Specially designed midget crystal microphone, and built-in compartment in case to carry it.
- Attractive portable carrying case made of fir plywood and covered with a rich cocoa brown lizard grained Dupont fabricoid. Size 18 3/8" deep, 16 3/4" wide, 9 3/8" high.
- Records all types discs up to 10" and plays back records up to 12". Operates on 110-120 volt 60 cycle AC.

Stock No. 32A290. A Great Value ONLY.....

\$99⁹⁵



Olympic FM-AM RECEIVER and Tuner...

A beautiful large FM/AM table model for little more than the cost of a broadcast receiver. The owner of this model may listen to local FM broadcasts in addition to AM stations. Noise rejection is excellent on FM signals of good or moderate strength providing reception remarkably free from natural and man-made static.

As an FM Tuner . . . it converts any AM set to an FM receiver. Requires only a simple connection with ordinary cord and plug and can be connected close to or at a distance from the old set. The turn of a switch cuts off the audio on tuner and activates the audio of the other set to tune in FM stations. Ideal for those who want to keep that old set because of its tone and beautiful cabinet.

Cabinet is a sleek streamlined beauty in Modern manner in lustrous grained walnut plastic, size 14 3/4" long, 9" high, 7 3/8" deep.

Circuit: Combines Super-het and Super-regenerative principles, a very efficient circuit developed after 2 years of engineering research. A.V.C., full range tone control and Inverse audio



feed-back for elimination of distortion. Tubes: 12AT7, 12SA7, 12SK7, 12SQ7, 35Z5. Audio power output 1.5 to 2 watts.

Tuning Range. Standard AM broadcast 535-1720 kc., FM Broadcast 88-108 mc.

Speaker: Improved full response 6" PM with Alnico magnet gives full rich tone.

Antenna: Two separate built-in antennas provide excellent reception on either AM or FM in good average locations. For poor locations provision is made to connect additional as required.

Dial: Large, full vision slide rule type with clear easily read numerals. Controls consist of tuning, volume, AM-FM switch, On-Off and full range tone control. Operates on 105-125 V. AC or DC.

An Outstanding Value. NET EACH

\$34⁹⁵

Stock No. 31B12

Olympic PERSONAL "Gem"

FOR EVERYONE YOUNG OR OLD

Exquisite in its cabinet of beautiful lustrous Polystyrene plastic and when open a lovely gold face with exact tuning slide rule dial. Extra small, compact, only 8 1/4" x 4 1/4" x 4 1/4" (Coat pocket size) Light, weighs only 3 1/2 lbs. Plays anywhere from self contained batteries (1 #950 A and 1 #467 B) and built in "Hi-Q" loop antenna. A flip of the lid open turns it "on"; close the lid and it is automatically "off".

Sturdy with the watch like craftsmanship. A Super-het using high efficiency miniature battery tubes 1R5 converter, 1U4 IF Amplifier, 1U5 Detector, 1st AF and AVC, 354 Power output. Iron Core IF Coils and Iron Core Oscillator Coil. A 3 1/2" Alnico 5 PM speaker (unusual for a set so small and compact) is assurance of tone to please the most critical.

Yes, here is a masterpiece of design, style, quality and Value in a battery operated "Personal."

Stock No. 31A80—Maroon
Stock No. 31A79—Ivory

CHOICE, EACH, **\$19⁸⁸**
less batteries.....

3 lots, each...\$19.38

Battery Kit
(1 No. 950 and 1 No. 467)....\$1.92
No. 31A81 Carrying Case, Luggage
tan, simulated leather, adjustable
strap.....\$2.88



ON THE GO



FOR HER

FOR HIM

SPORTING EVENTS



BURSTEIN-APPLEBEE CO. - KANSAS CITY, MO.

OLYMPIC "HI-POWER" 3 Way Portable



Stock No. 31B11.
Less Batteries, Ea..... **\$24.95**

Works in areas and at distances from stations far beyond the capabilities of most portables. Super performance on either batteries or from AC/DC electric current—an ideal town or country set. Three gang condenser and tuned RF stage provides high sensitivity and selectivity. Handsome luggage type case in high quality striped Aero cloth and beautiful plastic diol bezel.

Circuit: 5 Tubes plus rectifier Superhet. Operates on either AC/DC electric current or self contained batteries. Three-gang tuning condenser with one stage of RF ahead of converter tube gives maximum sensitivity and selectivity.

Tubes: 1LN5-RF amp., 1LN5-IF amp., 1LA6-oscil. and converter; 1LH4-det., AVC, AF amp., 3Q5-output amp., Selenium rectifier. Power output 250 Milliwatts.

Tunes: 535 to 1700 kc. (175 to 550 meters)

Speaker: Powerful 5" PM with Alnico magnet, high sensitivity, gives fine clear natural tone.

Antenna: Built-in "Hyper Q" produces excellent reception even in difficult

Lots of 3, Each..... \$24.45

locations. No outside aerial required except under very poor conditions for which outside antenna connection is provided.

Batteries: Two 4½V. "A" and two 45 V. "B" (ER746-482 or equivalent) give about 300 hours life. Special construction prevents battery drain when set is operating on electric.

Dial: Spread-vision "slide-rule" type with large clear numerals.

Cabinet: Beautifully proportioned case covered with high grade striped Aero cloth and modern plastic bezel. Stitched leather handle.

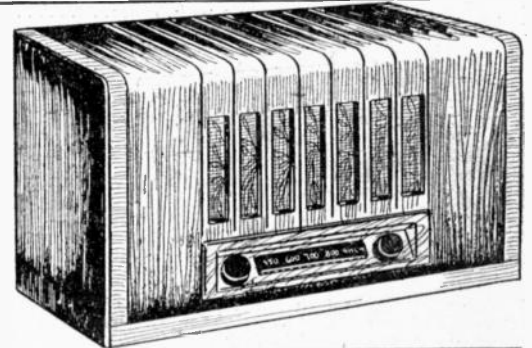
Size 13¾" long, 9¼" high, 6¼" deep, weighs 12 lbs. less batteries, 16 lbs. with.

Batteries Per Set..... \$4.36

BELMONT'S BATTERY MODEL — THE IDEAL SET FOR FARMS — CAMPS — BOATS or Anywhere where no Electricity is Available

Thousands of satisfied owners acclaim Belmont's battery-operated radios as the finest. Low-drain circuit assures maximum life for 1000-hour battery for which there is ample room in the handsome cabinet of carefully selected walnut veneers. Powerful rich tone from the 5-inch Alnico V. PM speaker. Full-vision slide-rule dial, automatic volume control, Permeability tuning, covers broadcast band 540-1600 kc. A sensitive Super-het with these most efficient tubes: 1A7GT, 1N5GT, 1H5GT and 3Q5GT. Overall size 18x10x10¼" For use with 1½-90 V. AB battery pack ER758 or equivalent.

No. 30A169 **\$24.95** 3 Lots
Less battery, Each..... **\$24.45** Each
No. 1A6. Type 758 Eveready 1000 hour AB battery, Each..... **\$5.51**



Tom Thumb Personal PORTABLE-BIKE RADIO

FOR BIKE, HOME OR HIKE
New! Hot! Versatile! A Personal Portable or Bike Radio. Provided with removable brackets to mount simply and quickly to handle bars of bikes, scooters, motor bikes, etc.... and quickly detachable for in the home or to carry about as a portable...has attached handle for ease in carrying.
Battery operated powerful Superhet. Tubes: 1R5, 1V4, 1S5, 3S4...Alnico No. 5 PM Speaker...detachable, telescopic, 4-section whip antenna collapses from 31 to 10 inches...Slide rule dial, vernier tuning. Uses 2 inexpensive flashlight cells and standard 67½-volt B battery.
Compact, only 7¼x4¼x3½"...Light, weighs only 3 lbs. 3 oz....Sturdy, attractive metal cabinet in Hammertone finish. Brackets are quickly removable and feature an anti-theft locking device. Supplied complete with whip antenna and brackets.
No. 37A75. Less Batteries. **\$19.56**
NET EACH..... \$19.56
Set of Batteries..... **\$2.00**

DeWald 3-Way Personal

SMART - COLORFUL
At home . . . For vacationing or traveling . . . anywhere. Operates from self-contained inexpensive batteries or AC/DC electric current; change over by the flip of a switch.
A model of compact efficiency, 8¾x7¼x4"—weighs 4½ lbs., less and 5¼ lbs., with batteries. The PM Alnico 5" speaker gives a brilliance of tone expected only in much larger sets.
Cabinet of shatter-proof Polystyrene plastic in modern dual-color styling with handy plastic handle. Clear vision "slide-rule" dial. Sturdily built chassis around a proven Super-het circuit-Iron core IF, 1R5, 1T4, 1U5, 3V4 tubes and Selenium rectifier. Tunes 535 to 1700 KC. Loop antenna built-in. Batteries-1-746 "A", 1-467 "B" or equivalent.
No. 36A66. Less **\$21.95** Lots of 3 **\$21.45**
Batteries. Each . . . \$21.95
DeWald Battery Portable
Identical to above operates with batteries only as above. (4 tubes no rectifier).
No. 36A52. Less **\$16.95** Lots of 3 **\$16.45**
Batteries. Each . . . \$16.95
SET OF BATTERIES FOR EITHER ABOVE... \$2.40

Meck 3-Way Portable

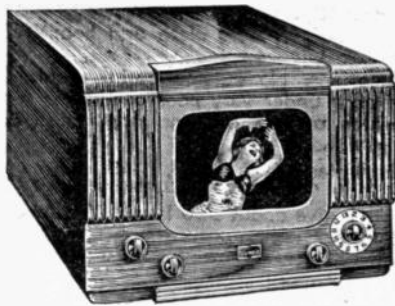
A BIG VALUE!
Sturdy Luggage style cabinet, covered in two tone simulated leather with molded plastic front, the tuning controls, dial and knobs countersunk and in contrasting colors—a very attractive effect.
Compact-light, 9½x7x5½" weight only 6½ lbs. with batteries. A "honey" as a personal radio in areas not too distant from broadcast stations.
Operates from self contained batteries, 5 standard flashlight cells for "A" and 2 ER type 455 or equivalent 45 V. "B" batteries or from AC/DC electric current. A Superhet with supersensitive 4-in. Alnico PM multi-function tubes—1R5, 1S5, 1U4, 3V4 and Selenium rectifier. "High Q" loop-antenna built in.
Stack No. 30A165. **\$19.95**
Less Batteries, Each.....
Lots of 3, Each..... **\$18.95**
BATTERIES, PER SET..... \$2.90

Many More Outstanding Radio Values..... See Inside Back Cover
Webster-Chicago and Astra-Sonic Wire Recorders..... See Back Cover
Philco Auto Radios..... See Page 130
Remington Shavers, Fluorescent Lights & Electrical Goods..... Pages 124-127
Hallcrafters and National Communication Receivers..... Pages 120-123
Sensational Values in Combination Radio, Inter-Communications, Record Changers..... Page 98
Detailed Index and How to Order Information..... Pages 128-129

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Television Receivers

ANTENNAS and ACCESSORIES



OLYMPIC
"STAR-BRITE"
 With 52 Square Inch
"Direct-View"
Screen
22 Tubes
 (Including Picture
 Tube)

A modern table model television receiver providing the latest developments in television engineering. Produces a brilliant sharp and clear picture, so bright its superb performance may be enjoyed in a normally lighted room, night and day. Picture area, 52 square inches. Olympic's frame-lock control circuit keeps the image steady and flicker-free, giving a wonderful relaxing performance. What's more, you don't have to sit squarely in front to see a distortion-less performance. A room full of people sitting at various angles can all enjoy an equally fine view. Single knob controls all 12 channels. Latest improved type tuning mechanism, simple to operate. Static-free FM sound with 4x6" elliptical speaker. Size of picture tube is 10". Simple to install and operate. Complete instructions included. Handsome mahogany cabinet size 20 1/4" wide, 13 1/4" high, 19 3/8" deep. Shipping weight, 85 lbs. Operates from 110-125 Volts AC. Underwriter Laboratory approved.
No. 32A53. Your Cost Complete with Tubes..... \$249.50



HALLCRAFTERS
MODEL T-54
AMAZINGLY
LOW PRICED
Simple to Operate
Push-Button Tuning
Easy to Install
with the Simple
Instructions Included

Produces 23 square inch picture. The 7" picture tube provides a brilliant picture 5 7/8" long x 4" high. Its brightness in combination with the specially designed escutcheon and light shield permit viewing even in a lighted room. The Push-Button tuning is factory pre-tuned to thirteen channels, it being only necessary to push the proper button for the station in your locality. Simple to operate, no technical skill is required. Easy to install—with the simple instructions included. 18 tubes, and 4x6" PM speaker. Handsome furniture steel cabinet of rich silver gray, chrome trimmed size 20x16x9 3/4". Operates from 105-120 Volt AC Current. Shipping wt., 45 lbs.
No. 3085. Your Cost Complete with Tubes..... \$169.50

HALLCRAFTERS MODEL T-61 10-Inch Direct-View Television Receiver



With push-button tuning for all 12 channels. Brings in sharp, stable pictures with plenty of contrast. Attractive speaker grill in top contributes to modern lines of metal cabinet. Features: 22 tubes plus 1 high voltage rectifier and selenium low voltage rectifiers, automatic gain control and automatic black level control—picture will not increase or decrease in intensity despite variation in signal strength. Improved synchronizing circuits keep picture in tune. Incorporates 1 RF amplifier, 3 IF amplifiers and 2 Video amplifiers, greatly increasing signal-to-noise ratio, sensitivity, picture definition and contrast. Sound is static-free FM. Size 17 1/2" high, 16 3/8" wide and 19 7/8" deep. Shipping weight, 105 lbs.
50A259. Your Cost, Each. \$279.50

HALLCRAFTERS MODEL T-67

Similar to Model T-61 above with 10" direct-view tube, 12-channel push-button tuning and advanced circuit, but in a smartly designed and handsomely finished mahogany veneer table Cabinet. Has 19 tubes plus picture tube and 3 rectifiers. Size 18 3/8" high, 15 1/2" wide, 20" deep. Shipping weight, 70 lbs.
No. 50A261. YOUR COST, EACH..... \$295.00

HALLCRAFTERS MODEL T-68 TELEVISION CONSOLE

Produces pictures that are big, flat, and easy to view without eye strain. Screen size 16x12". Uses the famous Phillips optical system and a 12-channel push-button chassis. Complete with 20 tubes, plus projection triode and 5 rectifiers. Cabinet is mahogany veneer with beautiful matched crotch grain on front hand rubbed to a rich satiny luster. Size overall 40" high, 26" wide, 22 1/2" deep. Shipping weight, 145 lbs.
No. 50A260. YOUR COST, EACH..... \$695.00

ELECTRO-TECH TELEVISION KITS

Top notch receiver kits with instructions so clear and simple that the most inexperienced beginner can assemble them! Expertly designed by outstanding TV engineers around high quality parts and backed by the manufacturer's guarantee of performance. Kits include new pre-assembled and adjusted 13-channel tuner, pre-tuned IF coils, new high voltage transformer, chassis and absolutely all parts and hardware. Sound is FM. For 110-volt, 60-cycle AC operation.



7" Telekit—Complete parts kit, and instructions, less tubes and cabinet. \$59.50
No. 34A163. YOUR COST..... \$59.50
17 Tubes for 7" Kit. Includes 7JP4 picture tube. \$45.93
No. 34A164. YOUR COST..... \$45.93
Cabinet for 7" Kit. Walnut finished wood. \$21.00
No. 34A165. YOUR COST..... \$21.00
10" Telekit. Complete parts kit and instructions, less tubes and cabinet. No. 31A234. Your Cost..... \$99.50
19 Tubes for 10" Kit. Includes 10BP4 Picture Tube. \$65.74
No. 31A235. Your Cost..... \$65.74
Cabinet for 10" Kit. Handsome appearance. Walnut finish. \$23.50
No. 31A236. Your Cost..... \$23.50

VISION ALL-CHANNEL TV BOOSTER

Covers both television bands. Tuning control allows peaking on any one channel. Improves receiver immunity to off-channel interference and will actually make difference between "flat" and very bright pictures on weak stations. Has self-contained 110-volt AC power supply. In wood walnut finish cabinet. Complete with tubes. List Price, \$28.75.
No. 37A60. Model TVA. YOUR COST... \$17.25
MODEL TVX All Channel Booster. Same as above except has 2 RF stages using 6AK5 tubes for still better high channel performance. Complete with tubes. List Price, \$37.50.
No. 37A61. YOUR COST..... \$22.50



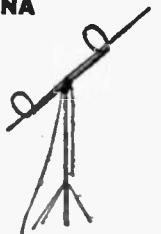
NEW! KOENIG TELEVISION ANTENNA ROTATOR

So simple and effective you will wonder why it has not been done before! Allows absolute orienting of antenna for each station while watching picture or listening. You can change or re-adjust antenna direction right from your radio to minimize ghosts, reflections, noise, etc., as often as you like. Mechanism consists of two induction motors and a carefully engineered brass and steel gear train to rotate antenna at 1 1/4 RPM through 360° forward or backward. Develops enough power to free itself in case of light icing. Automatic stops prevent fouling transmission line. Has 1/4" dia. shaft extending through bottom for addition of direction indicator potentiometer or selsyn unit. Case is tough aluminum alloy with joints weather-proofed for outdoor service. Unique design allows use on old or new installations. Rotator mounts high above guy wire ring or any size mast 5/8" to 1 1/2" round or square. A short mast section carrying antenna array weighing up to 25 lbs. is then mounted on top of rotator. Requires 3 wire cable to control switch at radio. Switch box contains indicator light to show when unit is operating. Powered from 110-volt, 60-cycle AC. Rotator and control are supplied complete with instructions for installation. Can also be used to rotate light 2-meter and 6-meter transmitting antennas.
No. 37A59. Koenig Television Antenna Rotator. \$17.61
YOUR COST..... \$17.61



TRICRAFT TELEVISION AND FM ANTENNA

Designed for easy installation. Anyone can erect it on flat or slanting roof, or wall, using only a screwdriver and pliers. Engineered for two direction pickup and good impedance match to transmission line throughout entire range. Helps reduce interfering noise pickup. Covers television range 44-88 MC and 174-216 MC plus FM range 88-108 MC. Complete with 65 feet of 300-ohm twin-lead transmission line, 8 feet aluminum mast, all mounting hardware and instructions.
No. 38B20. YOUR COST..... \$11.61



AMATEUR TRANSMITTER INTERFERENCE WAVE TRAP

Designed to eliminate interference caused by amateur radio transmissions received through the AC line. Works efficiently with Television, AM and FM receivers. Installation is made between power cord on set and AC socket and requires no tampering with set. Tunes to frequency of transmitter. Size 4 1/4 x 2 1/4 x 1 3/4".
No. 20B641. Wave trap for interfering stations on 10, 15 or 20 meter amateur bands. \$2.94
YOUR COST, EACH..... \$2.94
No. 20B642. Wave trap for interfering stations on 40 or 80 meter amateur bands. \$2.94
YOUR COST, EACH..... \$2.94



TELEVISION INTERFERENCE HANDBOOK

The first publication to help identify and eliminate many of the sources of television interference. A timely and invaluable aid to radio dealers, servicemen and amateurs where TV is on or about to go on the air.
No. 16B249. EACH..... 50c

A "ONE STOP" SOURCE FOR ANY RADIO AND ELECTRONIC NEED

As is reflected throughout the 132 pages of this new catalog . . . the top makes of most Any Radio and Electronic need are available at B-A . . . Everything . . . even the small items usually too troublesome for others to stock. B-A is, in the full sense of the term . . . a "One Stop" source of supply.



ALSO INCLUDED ARE MANY RARE AND UNBELIEVABLE VALUES.

Prompt Speedy Service

Located in Kansas City, a foremost transportation center . . . in the exact "Center of America" . . . days closer to Everywhere, combined with our adequate stocks, our long experience in mail order routine . . . these are the basic reasons why you get faster service from B-A

Lowest Prices Always

Volume sales permit volume buying at savings passed on to you. Net prices are shown in this catalog so you can see at a glance what each item costs you. Prices are necessarily subject to change without notice. Price reductions after this catalog is printed, will be automatically passed on to you even though you order at the higher price. You can count on it . . . the lowest prevailing prices always at B-A

Guarantee

We guarantee Everything in this or any B-A catalog or bulletin to be the quality and value that is represented . . . to conform exactly to the description and illustration and to the standards of the Radio Manufacturers' Association . . . to perform in the manner intended for such apparatus.

Saves You Time And Money

Your new B-A catalog will serve you as a handy reference . . . keep it handy to await your convenience for when, what and the quantities you wish to buy . . . no waiting for salesmen . . . no interruptions into your busy hours . . . no pressure to sell you more or other than your needs.

The B-A "Know-How" acquired through 21 years of constant leadership in the Radio-Electronics distribution field . . . the B-A reputation for honest, dependable and friendly dealings, protect your every purchase.

"How to Order" information, page 129
Detailed Index on page 128

 **BURSTEIN-APPLEBEE**
Company

HALLICRAFTERS

FM-AM SETS and CHASSIS

S-47 FM-AM and SHORT WAVE SUPER DE LUXE RECEIVER



- PUSH BUTTON TUNING.
- RANGE 535 KC TO 108 MC.
- 14 TUBES & RECTIFIER.
- 12 WATTS OUTPUT.

A high precision, fine quality receiver that has numerous applications where a good specialized installation is needed, schools, public institutions, etc. Lends itself perfectly to "Custom" combinations of your own choosing such as specially designed cabinets, etc. Here is a radio that is all radio.

Operation is simple—with separate controls for FM and AM tuning; wide, easy-to-read dial; push-buttons for instant selection of 5 FM stations and 5 AM stations; band spread tuning for foreign short wave broadcasts and automatic frequency control on FM. Freedom from drift is assured through use of a temperature compensated oscillator. Maximum gain and selectivity are obtained by dual AM and FM IF transformers. Panel controls include a 5-position Band Selector and Phono Switch, Volume Control for AM, FM and Phono, Treble Tone and AM Selectivity, Bass Tone and Power ON/OFF. Has connections at rear for a single wire or doublet AM antenna, FM antenna with 300 ohm transmission line, power outlet for phono motor, phono input and speaker.

AM response is essentially flat from 30 to 7500 cps.; FM response, from 30 to 15000 cps. For maximum over-all response, a good, wide range speaker system having 500 ohm input impedance is essential.

Tubes 6BA6 RF, 6J6 RF Osc. and Automatic Freq. Control, 6BE6 Mixer, 3-6SG7 IF's, 6SH7 IF and AM Det., 6AL5 FM Det., 6J5 Audio, 6J5 Bass Amp., 6SQ7 Audio, 6SQ7 Phase Inverter, 2-6V6GT Audio Output, and 5U4G Rect.

The cabinet is steel, finished in rich satin rubbed, with ventilated top cover opening on full length piano hinge. Overall size 20x17x10 1/4" high. Weight, approx. 60 lbs. With tubes, less speaker.

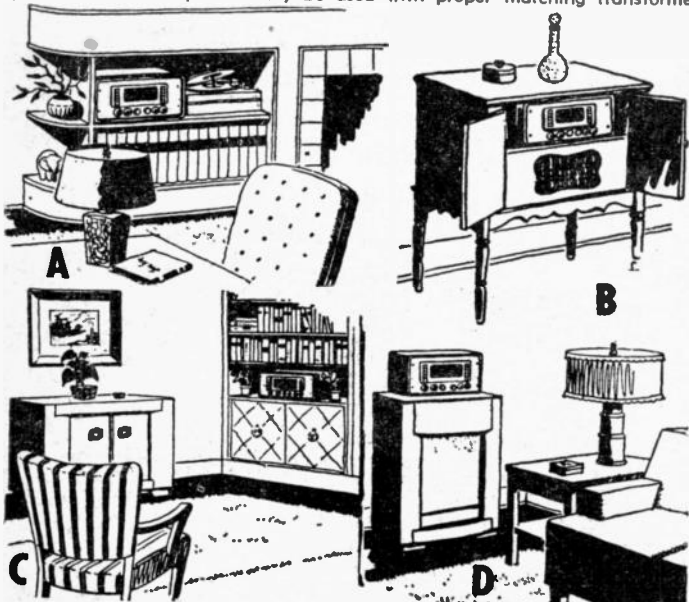
Stock No. 31A228. Your Cost **\$229.50**

S-47C Chassis only. As above except less Cabinet. With 19" wide, 8 3/4" high front panel, Chassis is 13 3/4" deep. **\$209.50**

Stock No. 34A21. With tubes, less speaker. EACH

The sketches shown below suggest a few of the almost unlimited installations of these sets—arrangements that cannot become out of date. Sketch A shows a book case installation in combination with a record changer and base. A large cabinet type speaker can be used out on the floor as in sketch C. The sets can also be installed behind sliding doors for a neat unobtrusive effect. Old favorite cabinets or other traditional pieces can be utilized as in Fig B. Sketch D shows the use of a bass reflex cabinet type speaker to form a really outstanding outfit. The chassis above are of course always popular for modernization of older sets that have fine cabinets and for built in installations of your choosing.

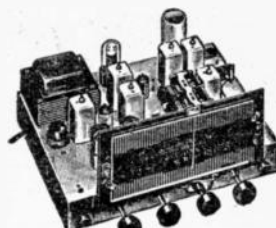
For speaker selections see pages 26-28. Can be used directly with 500 ohm speaker. 6-8 ohm speaker may be used with proper matching transformer.



DESIGNED FOR SPECIALIZED or MODERNIZING INSTALLATIONS



MODEL S-55



MODEL S-56

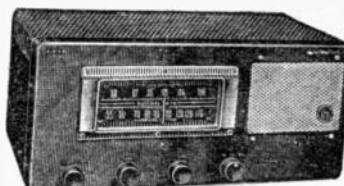
High quality AM-FM reception comparable to that found in most expensive sets. Attractive large slide rule dial, easy to read and with a minimum of controls for simplified operation. Mahogany plastic escutcheon with matching knobs. The S55 is housed in a beautiful metal cabinet, gray steel, satin finished size 18 1/2" wide, 8 1/2" high, 13" deep. Weight 32 lbs.

The S56 is the chassis, dial, escutcheon, etc. as in the S55, except less cabinet. Overall size 12 1/2" W, 11" D, 7 3/8" H. Both are ideal for custom, or as part of built in installations or as replacements for modernization of older sets that have fine cabinets. Wt. 25 lbs.

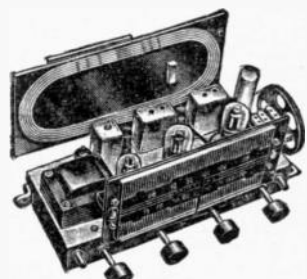
SPECIFICATIONS: 10 tubes plus rectifier: 6AU6 FM RF, 6BA6 Mixer, 6U6 osc-AFC, 6BA6 1st IF, 6SH7 2nd IF, 6SH7 limiter—2nd det., 6H6 disc., 6SK7 1st audio, 2-6K6 PP audio output, and 5Y3GT/G rectifier. Two bands: 540 kc. to 1700 kc. and 88 mc. to 108 mc. Automatic freq. control that locks in the FM signal—no drift. Freq. respons. covers entire range of live FM programs, 40 to 14000 cps-AM response 50-4000 cps. Speaker output 500 ohms. Push-Pull audio-7 1/2 watts. Edge-lighted dial with green coloration marks; on light brown background with white numerals. Record player input for conventional crystal pick-ups. Operates on 105-125 V., 50/60 cycles. 90 watts. **BOTH FURNISHED WITH TUBES, LESS SPEAKER.**

No. 30B118, S55 YOUR COST **\$129.50**
Cabinet Model EACH
No. 31A66, S56 **\$110.00**
Chassis Each

MODEL S-58 AN OUTSTANDING VALUE!



MODEL S-58



MODEL S-59

Provides AC-DC operation and AM-FM reception in one compact unit.

Slide rule type dial easily read, accurate calibrated. Built in Speaker.

SPECIFICATIONS: 6 tubes & rectifier—12BE6 oscil-mixer, 6B6 IF amp, 6B6 FM IF amp-AM det., 12AL5 FM det., 12SQ7 1st audio amp., 35L6 output audio amp., 35Z5 rectifier. AM coverage-540 to 1600 kc. FM coverage 88 to 108 mc. Freq. response—100 to 10,000 cycles plus or minus 3 db. Continuously variable tone control. AM sensitivity—50 micro-volts. FM sensitivity—100 micro-volts (30 db. signal to noise ratio). Phono Connection. Metal Cabinet 13 1/4" L., 6" D., 5 1/2" H.

Stock No. 34A20. With tubes. EACH **\$59.50**

MODEL S-59 AM-FM LOW COST CHASSIS

Moderately priced but built throughout to Hallicrafters standards of quality. Popular for custom installations or modernizing older receivers.

SPECIFICATIONS: 7 tubes & rectifier—6BE6 oscil-mixer, 6BA6 IF amp., 6BA6 FM IF amp-AM det., 6AL5 FM detector, 6SQ7 1st audio amp., 6K6GT output audio and phase inverter, 6K6GT output audio, 5Y3GT Rectifier. AM coverage 540 to 1600 kc. FM coverage 88 to 108 mc. Audio output-4 watts. Frequency response—60 to 14,000 cycles plus or minus 3 db. Continuously variable tone control. AM sensitivity—50 micro-volts. FM sensitivity—100 micro-volts (30 db. signal to noise ratio) 500 ohm output transformer. Phono connection. Slide rule type dial, escutcheon and knobs. Loop Antenna. Overall size 13 1/4" L., 6" D., 5 1/2" H. 105-125 V. 50/60 cycles AC, 60 watts.

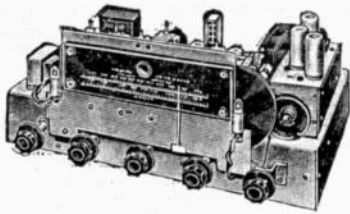
Stock No. 34A19. Model S-59 Chassis **\$49.50**
with tubes and Loop less Speaker

ESPEY FM-AM CHASSIS

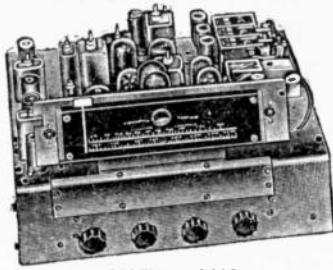
A well engineered and ruggedly constructed 11 tube (incl. rectifier) superhet using modern dual purpose tubes and latest circuits giving 15 tube performance. Highly recommended for custom-built, high fidelity installations. Has Phono input and 13-watt wide range audio system. Supplied with AM loop and FM folded dipole antennas, 10" Alnico V speaker, escutcheon and mtg. hdwe. Size 13 1/2" Wide, 9" high, 9" deep. For 105-120 V. 60 Cy AC.

No. 31A229. Model 7B-1. **\$88.20**
Complete

FM - AM CHASSIS AND FM TUNERS



MODEL 9-1091



MODEL 9-1093

Meissner Model 9-1091 AM-FM Tuner Only FOR THOSE WHO LIKE EXCEPTIONAL HI-FIDELITY

Covers 527-1620 KC and 88-108 MC. Response is flat within plus or minus 2 db. from 30 to 15,000 cycles. Separate bass and treble controls. Sensitivity is less than 10 mv. Selectivity for AM may be made either "Broad" or "Sharp". Output is 8 volts at the high impedance terminals and .75 volts at the 500-ohm terminals. Phono input terminals are provided. Any antenna may be used for AM. The FM section is designed for balanced 300-ohm transmission line.

Tubes in AM Section: 9003-RF amp., 6BE6-oscillator-converter, 2 9003 I.F. amp. (456 KC), 6AL5-detector; **FM section** 6AG5-RF amp., 6C4-oscillator, 6AG5-converter, 3 6AG5-I.F. amp. (110.7 MC), 2 9001-limiters, 1 6AL5 armstrong detector, 2 6C4 audio amp., a 6U5-6C5 tuning indicator and 5Y3GT/G rectifier.

Chassis measures 16 5/8 x 10 1/4" (requires 1 1/4" additional between chassis and panel) with Slide Rule Dial (requires 2 x 7 1/2" opening). Calibrated in KC on AM and in channel numbers (200-300) on FM.

Supplied Complete with Tubes, dial and escutcheon plate. For 105-125 volts 50-60 cycle AC. No. 31A74. List Price, \$245.00. **YOUR COST..... \$147.00**

Incomparable in Tone . . . in Performance THE MEISSNER MODEL 9-1093 AM-FM TUNER AND AMPLIFIER

Here is listening joy supreme! Yours for glorious FM reception sensorially free from static, fading and station interference. There's never been finer musical quality, more complete entertainment. You'll marvel at the tonal fidelity of the Meissner 9-1093. Here truly is a high quality AM-FM tuner and amplifier. The power output is 18 watts at less than 2% harmonic distortion. The audio fidelity is flat within plus or minus 2 db. from 50 to 15,000 cps. Hum level is 65 db. below full output.

Slide rule dial is calibrated in kilocycles (535 to 1620 kc) on the AM band and in megacycles (88 to 108 mc) on the FM band. Sensitivity is less than 20 microvolts. The tuner has a two-position selectivity control on the AM band providing high selectivity for distant reception or expanded selectivity for high fidelity reception of local or clear channel stations.

A phonograph input jack controlled by a front switch is mounted in rear. The circuit is compensated for either magnetic or crystal pickup. A combination tone control provides bass boost up to 11 db. at 40 cps. and treble attenuation up to 13 db. at 10,000 cps. Provision is made for connecting indoor or outdoor AM and FM antennas.

The amplifier is designed for an 8 to 16 ohm speaker. Speaker is not included. Power supply: 105-125 volts, 50-60 cycles, consumption 190 watts.

Tube complement as follows: Three type 6SK7, one type 6SA7, one type 6H6, five type 6AG5, one type 6C4, two type 9001, one type 6AL5, two type 6J5, one type 6SN7GT, two type 6L6, one type 5Y3GT Rectifier, one type 5V4G Rectifier and a type 6U5/6C5 Tuning Eye.

Chassis Mounting Space: Tuner—14 1/8" wide by 12 1/4" deep by 8 3/8" high; Amplifier—7 1/8" wide by 16 1/4" deep by 7" high (allow clearance above amplifier for ventilation). Tuner weight is 18 lbs.; amplifier, 27 lbs.

Supplied complete with tubes, two antennas and all hardware required to mount chassis units in cabinet. Antennas consist of a low impedance, 12x16" noise reducing loop for AM broadcast and an indoor type folded dipole, 300-ohm, for FM broadcast. Cabinet and speaker not included.

No. 31A75. List Price, \$310.00. **NET EACH..... \$186.00**



The "Magistrate"

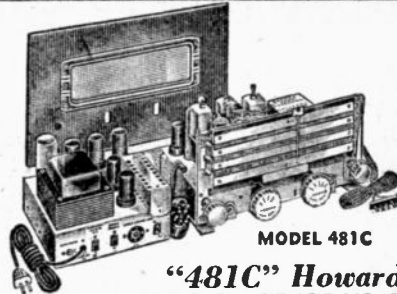
RADIO-PHONO COMBINATION
With 9-1093 Chassis and Amplifier (described above)

Meissner factory assembled, utilizing their 9-1093 Chassis and Amplifier described above in combination with Webster Model 156 Changer equipped with CE reluctance pickup and a special GE 10" heavy magnet Alnico 5 speaker. Antennas for both AM and FM are built-in with provision for connecting outside antennas when required. Mahogany finish veneer cabinet 35" wide, 34 1/2" high, 18" deep. Full closing hinged doors, swing back to side of cabinet, out of way when open. Pull out drawer houses the record changer. Record storage space below changer 15x15 1/2 x 13". Shipping weight (crated), 136 lbs. List Price, \$395.00.

No. 40A59. Complete Ready to Use. **NET EACH..... \$275.00**

MAGISTRATE DELUXE. Has dual speed record changer for playing BOTH 78 RPM standard and the NEW "LW" 33 1/3 RPM Microgroove records. Changer uses special reversible crystal cartridge with dual tipped stylus.

No. 40A61. **NET EACH..... \$298.50**



MODEL 481C



MODEL 482

"481C" Howard 14-Tube Chassis

FM, 88-108 MC; SW, 9.5-12.5 MC; Broadcast, 1650-540 KC
Ideally suited for custom or replacement installation in any cabinet—built-in for new home—special locations. Tuner and power pack being separate provide a shape factor and size especially suited to wall installations or close places—dimensions of both units, particularly front to rear, are very compact—install in most any position.

Many Outstanding Features

Famous Howard Acousticolor 5 position illuminated TREBLE and BASS CONTROL. FM performance is unusually fine. THE FM SYSTEM IS A COMPLETE UNIT INCLUDING ANT., R.F. AMPLIFIERS, OSCILLATOR, I.F. AMPLIFIER AND RATIO DETECTOR are separate electrically from the AM R.F. system. Large easy to read dial—ONLY THE BAND BEING USED IS ILLUMINATED. SPREAD-BAND SHORT WAVE BAND TUNES from 9.5 to 12.5 MC; Short wave performance is excellent and practically as easy as the broadcast band to tune. BROADCAST BAND PERFORMANCE IS OUTSTANDING . . . employs TUNED ANTENNA AND R.F. STAGE.

Antenna system included is as follows: Folded dipole—(cabinet mounting type)—for FM and large collapsible (28" square), low impedance loop (large enough to provide good signal pickup) for Broadcast and Short Wave-band. Five-position illuminated Master Selector controls the following functions: Phono, Broadcast, Short Wave, FM and Television.

Television Control Selector is standard equipment. When Television Set is used with this tuner, the Television audio output is used through the Audio System of "481C" tuner thus improving the tone quality of average Television set.

MULTIPLE IMPEDANCE OUTPUT TRANSFORMER provides proper impedance matches for 1.75-ohm (usually used on twin 3.4-ohm speakers), 3.4 ohms, 8 ohms, and 500 ohms, thus making it possible to couple to practically any speaker or 500-ohm line.

Tuning condensers: One SIX SECTION condenser used for Broadcast and Short Wave Bands and a special 3-GANG HIGH FREQUENCY condenser used for FM band. Highest quality materials throughout.

Tubes: AM Tuner, 6SK7 R.F. amp., 6SA7 Mixer-osc., 6SK7 I.F. amp., 6SQ7 Diode and Bass boost amp.; FM Tuner, 6BA6 R.F., 12AT7 Mixer-osc. (Dual Triode), 6BA6 I.F. amp., 6AL5 Ratio det.; Power Pack, 6SQ7 A.F. amp., 6J5 Phase inv., 2 6V6 Output, 5Z4 Rect.

Power Output—12 watts max.; Input Power—125 watts at 115-volt, 60 cycles. Phono Connection: Pin jack—connecting plug supplied with jack.

Easy to Install. Supplied with a Brown Mahogany blank front panel 10x16" with escutcheon mounted. Mounting hardware, knobs, a complete Cabinet Antenna System, connecting cables and instructions are included.

Sizes: Tuner, 7" front to back, 7" high by 13" long; Power Unit, 7 3/8" long (mounting space 9"), 7" front to back by 5 3/4" high. **\$117.11**

Stock No. 34A24. **YOUR COST..... \$117.11**

Howard "482" FM Converter

The result of outstanding high frequency engineering brings you this truly efficient unit for converting any radio to receive FM stations on the 88 to 108 MC band. Easy to connect and does not alter the operation of radio or phono in any way.

The Cabinet, modern . . . handsome, built of hardwoods in mahogany finish is small enough to eliminate that "Cluttered" appearance when used on top of set or can be installed inside of record compartment of consoles (bracket is included for this purpose). Connects to phono input of radio or amplifier.

Splendid FM reception is assured by the wonderful sensitivity—less than 5 mv—obtained by specially designed coils and tuning condenser. "Driftless tuning" eliminates the necessity of returning once the FM station is tuned in.

High fidelity audio booster stage. Reproduces the full audio range of FM broadcasts. Volume control provides convenient adjustment right at the converter. 7 tubes including rectifier and finest quality components available are used. Easy to read slide rule type dial. Mahogany cabinet, size 6 1/2 x 6 3/4 x 7 1/2" with built-in FM antenna. For 110-120 volt, 50-60 cycle AC. **\$33.30**

No. 32A287. List Price, \$49.95. **NET EACH, COMPLETE..... \$33.30**

Meissner FM Receptor

ADDS SUPERB FREQUENCY MODULATION TO ANY REGULAR AM SET

A precision built instrument, designed for simple connection to your present AM radio . . . instantly converting it to a thrilling new AM-FM set. Provides the supreme listening thrill that comes when you hear the music of your choice reproduced with full-scale fidelity, sensorially free from static, station-interference and fading.

Can also be used with obsolete AM-FM sets to provide full coverage of the new 88-108 Mc. FM band . . . or used with Phono Amplifiers . . . or with Public Address Systems . . . giving, in each case, the finest in FM reception.

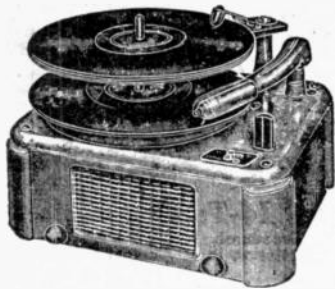
Specifications: Frequency range, 88 to 108 MC; Sensitivity, 40 microvolts; Audio output, 3 volts RMS at minimum usable signal input, at maximum signal 15 volts RMS; Antenna input, 300 ohms; Dial, slide rule type, 5 1/2 x 1 3/8"; Cabinet, Walnut veneer. Size, 12 3/4 x 8 x 6 3/4" high. Tubes: 2 6AG5, 2 6BA6, 2 6C4, 1 6AL5, 1 6X5GT. Operates on 105-125 volt, 50 or 60 cycle AC. Supplied with tubes.

No. 36A23. List Price, \$57.50. **YOUR COST..... \$38.33**



TOP VALUES from TOP MAKERS

PHONOGRAPHS WITH BUILT IN SPEAKERS AND AMPLIFIERS



Automatic Types

Beautiful tone . . . the closest approach to high fidelity reproduction obtainable from table and portable models.

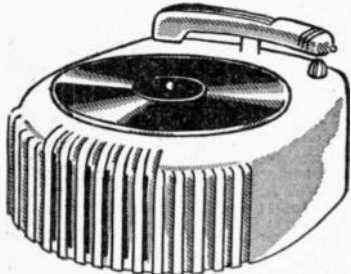
The Record Changer—foolproof, fast, quiet is of latest design. Plays twelve 10" or ten 12" records automatically. A single lever controls OFF-ON, record rejection or manual operation. The light weight crystal pick-up may be used with either permanent or steel needles. Speaker and Amplifier of sufficient size and design to permit full volume without distortion or overloading. Available in "Table" or "Portable" models as illustrated—both for operation from 110 V. 60 cycle AC current, no other connection needed—play from their own built-in amplifiers.

TABLE MODEL: Sturdy metal case finished to blend with any surroundings. Compact, easy to move about.

No. 30A85. Your Cost Each..... **\$29.85** Lots of 3, Each..... **\$28.95**

PORTABLE MODEL: Compact, luggage type case, sturdy plywood covered with durable two-tone fabricoid.

No. 30A114. Size 16 3/4 x 14 1/2 x 8 1/2". Your Cost Each..... **\$39.95**



Single Record Types

78 RPM. constant speed heavy duty motor and quality crystal pick-up to play 10 or 12 inch records. "Table" or "Portable" as illustrated—both from 110 V. 60 cycle AC current, no other connection needed—play from their own built-in amplifiers.

Table Model: A little beauty in its tastily styled ivory plastic cabinet. A well engineered amplifier and 4" electro dynamic speaker provide unusually good tone quality. Overall size 11" wide, 4" high and 15" deep—handy for any nook or room for someone to enjoy the records of their choice.

No. 30A168. Your Cost, Each..... **\$17.45** Lots of 3, Each..... **\$16.95**

Portable Model: Portable in the full sense of the term . . . only 9x10x5 1/2" —weighs only 7 1/2 lbs. No bigger than a woman's make up box, yet it contains a full size phonograph to play both 10 and 12 inch records with a superb tone-quality, made possible with its balanced amplifier and Alnico No. 5 speaker. Cabinet of sturdy wood covered with an attractive leatherette for pleasing appearance and long life.

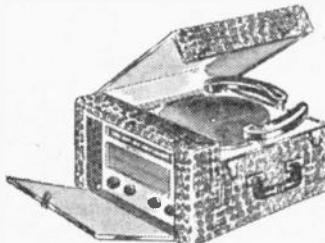
No. 31A233. Your Cost, Each..... **\$17.45** Lots of 3, Each..... **\$16.95**

DE WALD DUAL-SPEED

Radio-Phono Combination

Plays both Standard and the New long playing Micro-groove records. 33 1/2 and 78 RPM. Dual arms, self starting motor with a 5-tube plus rectifier Superhet radio in a handsome luggage type case. Size 17x8 1/4 x 14".

No. 31A248. NET EACH..... **\$49.95**



PHONOGRAPH AMPLIFIER

Uses 3 Tubes—output 2 watts. Size only 5 1/2" long, 2" high, 3" wide. Has tone control and volume control with switch. Very nicely constructed of all new standard parts throughout. Makes an ideal small phono amplifier. Will work as a carbon mike amplifier with addition of mike transformer and battery. Requires 1-12SF5, 1-50Y6, and 1-50L6 tubes. Operates on 110-Volt AC or DC. Less Tubes.

No. 5A150. Your Cost..... **\$4.95**



G.C. RECORD CLEANING PAD

Will not harm records. Specially treated for removing dust and accumulation. Size 6x6".

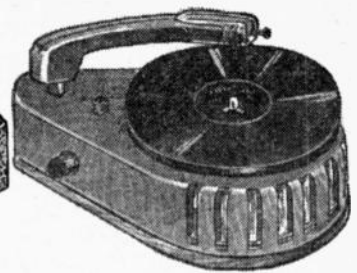
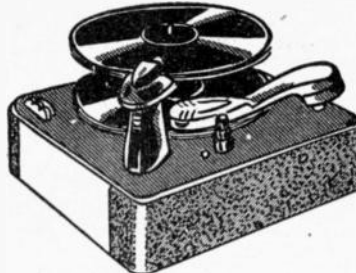
No. 16A561. Each..... **27c**

G.C. TURNTABLE LUBRICANT

The proper oil for turntables. Made with graphite, clings to surface of parts.

18A320. 2 oz. bottle..... **29c**

RECORD PLAYERS TO PLAY THRU ANY RADIO



Wired or Wireless Automatic and Single Record Types Make ANY RADIO a COMBINATION

With a simple connection of the wired types and no connection at all on the wireless types, Any Radio is easily converted to play records either manually or automatically.

Wired Automatic Player: Consists of a top quality changer that automatically plays twelve 10" or ten 12" records. Mounted on a matching base, it is a complete unit readily moved about, for use with any radio in any location. It is only necessary to plug it in to any 110 V. 60 cycle AC outlet and attach with a single wire (furnished) to radio. Tone and volume are controlled by the usual controls on radio set.

No. 30B100. YOUR COST, EACH..... **\$21.95** Lots of 3, EACH..... **\$21.45**

Wireless Automatic Player: Consists of above unit with distortion-free 2-tube oscillator built into the base. Plays through radio without any direct connection to set, which may even be located some distance away. You merely "tune in" the wireless player. Operates from 110 V. 60 cycle AC.

No. 30B47. YOUR COST, EACH..... **\$26.88** Lots of 3, EACH..... **\$25.95**

Wired single-record Player: Self starting constant speed motor with crystal pick-up for all sizes and kinds of records up to 12". Cabinet in modern tear drop design of jewel-like Polystyrene plastic, size 12 1/4 x 8 1/2 x 3 1/2". Requires only single wire connection to radio and 110 V. 60 cycle AC outlet.

No. 31B223. YOUR COST, EACH..... **\$10.88** Lots of 3, EACH..... **\$10.38**

Wireless single-record Player: Plays through any radio set without any connection by means of oscillator built in base—otherwise like above.

No. 31B218. YOUR COST, EACH..... **\$13.97** Lots of 3, EACH..... **\$13.47**

DUO-SPEED Automatic Player

For Regular or Micro-groove Records

33 1/3 or 78 RPM.

- TWO SPEED MOTOR
- DUAL NEEDLE—
- REVERSIBLE CARTRIDGE
- SIMPLE ADJUSTMENT,
- CONVERTS TO EITHER TYPE RECORD.
- SINGLE TONE ARM



Automatically plays twelve-10" or ten-12", EITHER the new 33 1/3 RPM. or the standard 78 RPM. recordings. Simple to operate—a knob on the base plate of the changer provides for selection of motor speed desired; a lever on the tone arm rotates the proper cartridge and needle for either the 33 1/3 or 78 RPM. records. Attractive walnut and maple base size 13 1/2 x 14". Complete ready to plug in any 110 V. AC 60 cycle outlet. Requires only a single wire connection (furnished) to radio. TWO semi-permanent osmium tipped needles, one for 33 1/3 RPM and one for 78 RPM records are included.

No. 31B222. YOUR COST, EACH..... **\$28.95** Lots of 3, EACH..... **\$28.45**

PUT IN A NU-HOLE!

THE AMAZING, EASY WAY TO INSERT NEW SPINDLE HOLES IN WORN PHONOGRAPH RECORDS

Kit includes NU-HOLE cutting tool and centering base for removing the damaged or enlarged spindle hole area of record. 3 fibre NU-HOLE inserts, 6 NU-HOLE labels and instruction sheet.

No. 16A562. YOUR COST..... **\$1.40**

Additional NU-HOLE inserts. Packet of 5 inserts and 10 labels. **35c**

No. 16A563. YOUR COST..... **35c**



HI-POWER PHONO OSCILLATOR

Special LOOP, fed by 2-TUBE AMPLIFIER, supplies plenty of power for ANY phono pick-up! Record player can be as far as 100 FEET from radio (impossible with other phono oscillators); wide frequency range of 1000 to 1700 KC allows tuning radio set out of broadcast band for clear record music. Compact size, 4x2 3/4 x 4"; requires 50L6 and 35Z5 tubes; 110 volt A.C.-D.C.; Less Tubes.

No. 17A409. "Loop Caster." Each . . . **\$5.83**

WALSCO RECORDENE

For improving and preserving records. Leaves clear plastic film that reduces noise and increases record life. With applicator.

No. 16A560. 2 oz. bottle..... **29c**

New! UNIVERSAL RECORD CHANGERS FOR "LP" AND STANDARD RECORDS



FAMOUS "WEBSTER-CHICAGO" RECORD CHANGERS ARE NOW AVAILABLE FOR THE NEW "LP" (long playing) RECORDS — MODELS 246 and 256—new Dual Speed 33 1/3 and 78 RPM Changers with REVERSIBLE CRYSTAL CARTRIDGES—one for "standard," 78 RPM records and the other for the new "Microgroove" 33 1/3 RPM LP Records!

MODEL 256 DUAL SPEED-DUAL PURPOSE CHANGER

New, dual speed version of the popular Model 256. Model 256 provides means for properly handling and playing, automatically, BOTH the new 33 1/3 RPM "LP" Microgroove, long playing records, and the standard 10" and 12" 78 RPM discs! Powered by new four-pole, constant speed motor with velocity trip mechanism to assure smooth handling and changing of delicate Microgroove "LP" Records. Model 256 Pickup Arm has NEW "Tilt-O-Matic" Cartridge equipped with replaceable "Tandem-Tip" Nylon needle—two needle tips on a single shank—each CORRECT in tip diameter and pressure for record it is intended to play! Tone arm entirely eliminates lateral pressure, inertia, or friction—will play records EITHER Outside-In OR Inside-Out. Automatically returns to "rest" position—off the record—after last record of stack has been played. Turntable continues to revolve after last record of stack has been played. Turning motor switch to "Neutral" position shuts off motor and disengages drive wheels from turntable, eliminates "flats". Changer will handle ten 12" or twelve 10" of either Standard or "LP" Microgroove records, does not intermix types or sizes of records. Entire changer assembly is cushion mounted on heavy steel base, size 14" square; 9" overall height, 6 1/2" above and 2 1/2" below motor plate. Finished in brown Hammered enamel. Weight, 18 lbs. For 115-volt, 60-cycle AC. No. 34A177. "Webster-Chicago" Model 256 DeLux Dual Speed-Dual Purpose Record Changer. YOUR COST **\$33.91**



Model 156-1 Standard 78 RPM AUTOMATIC RECORD CHANGER
Famous "Floating Spindle" single post quick-change record changer with automatic shut-off after last record of stack has been played! Has four-pole heavy duty motor, cushion mounted for freedom from rumble and "wow"; handy push-button changer control. Plays 10 12" or 12 10" records—does not play inter-mixed stacks. Size, 14" square mounting plate, requires 6 1/2" above and 2 1/2" below motor board. Weight, 18 lbs. For 115-volt, 60-cycle AC. Complete with AC cord and mounting template. Modern featherweight pickup arm with choice of Astatic Crystal cartridge or G.E. Variable Reluctance cartridge, as listed and priced below.

No. 30A41. "Webster-Chicago" Model 156-1 Record Changer. With Astatic Crystal Cartridge. NET EACH **\$26.66**

No. 30B143. "Webster-Chicago" Model 156-27 Record Changer. With G.E. Variable Reluctance Pickup Cartridge. NET EACH **\$27.83**

"WEBSTER-CHICAGO" MODERNIZATION PICKUP ARMS

Permit installation of G.E. Variable Reluctance pickup cartridge—replacement for existing arms on Models 70 or 56 Changers. Less G.E. Cartridges.
No. 14A699. Modernization Arm for Model 56 Changers. Choice, **\$1.18**
No. 14A698. Modernization Arm for Model 70 Changers. Each **.... \$1.18**

No. 14A590. "C.E." Variable Reluctance Cartridge Only. Net Each **.... \$4.68**
No. 14A591. "C.E." Pre-Amplifier for V.R. Cartridge. Net Each **.... 6.82**

MODEL 246 DUAL SPEED-DUAL PURPOSE CHANGER

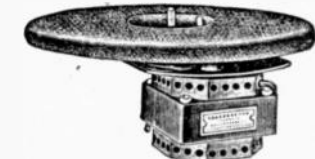
Plays and automatically changes BOTH standard 78 RPM and the NEW 33 1/3 RPM Microgroove "LP" records. Plays 10 12" or 12 10" records of EITHER standard or "LP" types, does not intermix. Dual speed heavy duty four-pole motor has speeds of 78 and 33 1/3 RPM controlled by 3-position switch having "Neutral" position to stop motor and disengage drive wheels to eliminate "flats"! Pickup arm has NEW "Tilt-O-Matic" cartridge with "Tandem-Tip" Nylon Needle—simple "tilt" of cartridge changes to correct tip and pressure for record being played. Pickup arm returns to "Rest" position after playing last record of stack. Velocity trip mechanism; no chipping or breakage of records of EITHER type; will play records from Inside-Out or Outside-In as desired! Cushioned, heavy steel mounting plate is 12x13 5/8", requires space of 6 1/2" above and 2 1/2" below motor board. With instructions and template. For 115-volt, 60-cycle AC. Weight, 17 lbs. No. 34A176. Model 246 Dual Speed-Dual Purpose Changer. Net **\$29.25**



MODEL 146 STANDARD 78 RPM RECORD CHANGER

The BEST low cost, dependable, easily installed record changer! Cushion mounted, heavy duty four-pole motor, 4-second changer cycle, featherweight pickup arm, single knob control for automatic playing of either 10 12" or 12 10" records; plays home recordings on "Manual" position, plays "Inside-Out" recordings! Steel motor board is 12x12 7/8", requires 6 1/2" above and 2 1/2" below mounting plate. With template and instructions. For 115-volt, 60-cycle AC. Weight, 16 lbs. No. 30C39. Model 146 Standard 78 RPM Record Changer. Net **.... \$22.25**

"Webster-Chicago" Nylon Needles for "Microgroove" Records
Micro-Nyl. Nylon shank with .001 Osmium tip for "LP" records recorded at 300 grooves per inch. **\$3.00** for **10** for **\$15.00**
No. 20A787. Type NE-44. Each **.... \$3.00**



No. 34A178. RM-4, 78 RPM. Net Each **.... \$ 9.90**
No. 34A179. RM-4-3, 33 1/3 RPM. Net Each **.... 10.80**

"GI" Recording-Playback Motors
Extra quiet operation at even speeds by means of four-pole, rim drive, heavy duty motor. 10" weighted turntable with retractable record drive pin. Entire assembly rubber cushion insulated on mounting plate 3 3/8" square, requires 3" below mounting plate. For 115-volt AC. Weight complete, 9 lbs. Available in 78 or 33 1/3 RPM types as listed.

V-M DUO-SPEED UNIVERSAL RECORD CHANGERS



MODEL 400-C DUO-SPEED INTERMIX RECORD CHANGER

(Illus. at left above.) Plays 10" and 12" records in stacks of 10 records INTERMIXED—or will play 12 10" or 10 12" records—of "standard" records at 78 RPM, or the NEW MICROGROOVE "LP" at 33 1/3 RPM! Tone arm plays both types of records by merely switching the Dual-Needle Reversible Cartridge to the .001" tipped osmium needle for "LP" records, or the .003" needle for standard 78 RPM records. Two-speed heavy duty, quiet motor is controlled by speed selector switch with 78 RPM, 33 1/3 RPM and "Off" positions. Automatic control shuts motor off and returns pickup arm to "rest" position, off the record, after last record of stack has been played—quick and quiet changer mechanism gently lowers records on turntable—no chance of damage to costly and delicate "LP" records! Provides FOUR HOURS of continuous entertainment when loaded with a stack of 10 12" Microgroove records! Requires mounting space of 13 7/8" wide, 12 1/4" long, 7 3/4" high overall. For 115-volt, 60-cycle AC. No. 30C44. Model 400-C Duo-Speed DeLux. Net Each **.... \$33.90**

MODEL 800-A DUO-SPEED ECONOMY RECORD CHANGER

(Illus. at right above.) Plays BOTH the new 33 1/3 RPM "LP" Microgroove and standard 78 RPM records—automatically! Tone arm, correctly balanced for proper needle pressure for either type of record has TWO semi-permanent, osmium tipped needles—either quickly placed in playing position by the flip of a small lever on tone arm! Plays stacks of 10 12" or 12 10" records of either "LP" or standard types—does not intermix sizes of same type of record. Heavy duty motor has speeds of 78 and 33 1/3 RPM, selected by handy switch on changer base. Size is 13 1/2" wide, 14" long, 7 3/4" high overall. For 115-volt, 60-cycle AC. No. 30B43. V-M Duo-Speed Model 800-A. Ea. **\$24.95** 3 at **\$23.90** Each



QUALITY REPLACEMENT SPEAKERS



For 21 years—outstanding for fidelity of tone, rugged construction, satisfaction! EVERY "UTAH" SPEAKER is fully guaranteed and has built-in quality features of Dustproof Construction—RMA standard mounting holes—precision aligned Voice Coils—non-warping cones!

"UTAH" STANDARD REPLACEMENT PM DYNAMIC SPEAKERS

All "Utah" PM Speakers Have Alnico-V Magnets and 3-4 Ohm Voice Coils.

Our No.	Utah No.	Size	Watts	V.C. Dia.	Frame	Speaker Wt.	Net Ea.
14B627	SP-2A	2"	1.0	9/16"	Square	3/4 lb.	\$2.14
14B628	SP-3A	3"	1.5	9/16"	Square	3/4 lb.	2.14
14C617	SP-4A	4"	2.0	9/16"	Square	3/4 lb.	2.29
14C618	SP-4C	4"	2.5	9/16"	Square	3/4 lb.	2.69
14C641	SP-5A	5"	2.0	9/16"	Round	3/4 lb.	2.46
14C620	SP-5C	5"	3.0	9/16"	Round	1 lb.	2.85
14B642	SP-6C	6"	3.0	9/16"	Round	1 1/8 lb.	3.10
14C613	SP-6D	6"	5.0	3/4"	Round	1 1/2 lb.	3.34
14B643	SP-6D	6"	5.0	3/4"	Square	1 1/2 lb.	4.36
34B139	SP-8E	8"	6.0	3/4"	Square	4 lbs.	6.14
34B140	SP-10G	10"	8.0	1"	Round	4 3/4 lbs.	6.91
34B141	SP-12G	12"	9.0	1"	Round	4 3/4 lbs.	6.91
34B145	SP-12K	12"	12.0	1 1/4"/8-Ohm	Round	5 1/2 lbs.	10.29

"UTAH" OVAL FRAME "PM" & ELECTRO-DYNAMIC SPEAKERS

Voice Coils on All Oval Frame Speakers Are 3-4 Ohms.

Our No.	Utah No.	Size	Watts	V.C. Dia.	Field Res.	Speaker Wt.	Net Ea.
14C618	SP46B	4x6"	2.0	9/16"	"PM" Type	1 1/4 lbs.	\$2.79
21A1014	SP57C	5x7"	3.0	9/16"	"PM" Type	1 1/4 lbs.	3.65
21A1015	SP69D	6x9"	5.0	3/4"	"PM" Type	1 3/4 lbs.	4.65
14C614	SE4645	4x6"	2.0	9/16"	450-Ohm	1 1/2 lbs.	3.20
21A1016	SE5745	5x7"	3.0	3/4"	450-Ohm	2 lbs.	3.67
21A1017	SE6945	6x9"	5.0	3/4"	450-Ohm	2 lbs.	4.26

"UTAH" AUTO-RADIO REPLACEMENT SPEAKERS

Square and Oval frame speakers in "PM" and Electro-Dynamics. The "PM" and 4-ohm/6-volt speakers listed below all have 3-4 Ohm Voice Coils.

Our No.	Utah No.	Size	Watts	V.C. Dia.	Field Res.	Weight	Net Ea.
21A1018	SP5DA	5 1/2"	3.0	3/4"	"PM" Type	1 1/2 lbs.	\$3.32
21A1015	SP69D	6x9"	5.0	3/4"	"PM" Type	1 3/4 lbs.	4.65
21A1019	SP7EA	7"	6.0	3/4"	"PM" Type	1 3/4 lbs.	4.67
14C615	SE556	5 1/2"	3.0	3/4"	4 Ohms	2 lbs.	3.20
21A1020	SE7Y6	7"	6.0	3/4"	4 Ohms	2 lbs.	4.36
21A1021*	SE7Y6A*	7"	6.0	3/4"	4 Ohms	2 lbs.	4.36
21A1022	SE69Y6	6x9"	5.0	3/4"	4 Ohms	2 lbs.	4.67

(*This speaker has pot turned 90° for limited space use.)

"UTAH" WIDE RANGE PUBLIC ADDRESS "PM" SPEAKERS

Deluxe, hi-fidelity speakers of special design and ruggedly built, ideal for "FM", Monitoring, all types of Recordings and Auditorium Public Address. All are round frame, conform to RMA codes, dustproofed, with pot cover. All speakers below have 8-ohm voice coils. Finish is Gold Hammer-tone.

Our No.	Utah No.	Size	Watts	V.C. Dia.	Alnico-V	Weight	Net Ea.
34B153	SP8JW	8"	10.0	1"	6.80 oz.	3 lbs.	\$ 8.88
34B146	SP12LW	12"	14.0	1 1/4"	10.00 oz.	6 1/4 lbs.	14.26
34A180	SP12P	12"	20.0	1 1/2"	21.50 oz.	7 1/2 lbs.	23.22
34A181	SP15P	15"	25.0	1 1/2"	21.50 oz.	10 lbs.	27.93

Recording and Playing Needles & Accessories

WALCO "400" Series LONG PLAY PHONO-NEEDLES



PACKAGED Individually in a BEAUTIFUL PLASTIC CASE
12 needles in plastic cases to an attractive display box.
Every "Walco" needle is scientifically designed to reproduce with the highest fidelity, screening out distortion, hiss and scratch noise—and float, feather-light, along the groove—treating records gently.

WALCO WS-400 Floating Jewel Sapphire Rating: Up to 10,000 Plays Retail for \$2.50

Each one packaged in individual plastic case with jeweler's screw-driver for easy user installation in the new pick-ups.
No. 18A329, Net Each ... \$1.50
No. 18A330, Display of 12 ... \$15.00

WALCO WR-400 RUBY JEWEL Rating: Up to 6000 Plays Retail for \$2.00

made of Ruby, slightly less durable than sapphire. The Ruby is precision ground and highly polished ... provides perfect tracking.
No. 18A496, Net Each ... \$1.20
No. 18A497, Display of 12 ... \$12.00

WALCO WA-400 Precious Metal Needle Long Lasting to 4000 Plays Retail for \$1.50

For those preferring a less expensive needle, the Precious Metal offers all the Walco features.
No. 18A498, Net Each ... 90c
No. 18A499, Display of 12 ... \$9.00

WALCO "Groove Master" A newly developed high-fidelity needle, tipped with precious metal alloy rated at 1,000 record plays.

Filter type shank screens out surface noise and scratch. Hand polished micro-inspected point rides lightly in the groove. A fine needle for all-purpose use.
No. 18B335, Each ... 35c
No. 16A495, Card of 24 ... \$6.37

WALCO "Encore" Up to 4,000 plays. Retail at only \$1.00.

Precious metal rounded point with the usual Walco shank bend—resulting in needles that track exactly with negligible friction ... does not fight the groove, reduces needle talk and scratch.
No. 16A491, Net Each ... 70c
No. 16A492, Card of 12 \$5.88

FOR COIN MACHINES Walco Sapphire Model WS-900

AT LAST—A sapphire designed especially for use in the new coin phonographs. Tested and approved by leading coin machine makers, this needle provides the ultimate in tone fidelity and record treatment. Rated at 5,000 plays when used in the new light weight tone arms.
No. 16A489, Pkg. of 5 ... \$2.95
100 Lots, Each ... 53c

Precious Metal Tipped WA700

A superior all-purpose, long-life, high fidelity coin needle. Has exceptional wearing quality with a minimum of wear on records. Priced to give operators substantial savings on their needle costs.
No. 16A490, Pkg. of 5 ... \$1.50
100 Lots Etc. ... 28c

Jensen Royal Jewel Sapphire

Shank is flat to insure correct position and vibrationless grip. Shock absorber spring action minimizes scratch, assures longer record life. Flat construction creates less air agitation, reduces needle talk to minimum. Natural Sapphire Tip gives permanence, extra smoothness, protects records. Retail at \$2.50 Each.

18A327, Net Ea. \$1.50 \$15.00
18A328, Card of 12 ... \$15.00

Precious Metal JENSEN 5000 Play

Retail for only \$1.00.
18A331, Net Ea. ... 70c
18A332, 12 for ... \$6.00

Flat shank to insure correct position and vibration-less grip. Shock Absorber spring action design absorbs vibration and shock, minimizes scratch, assures longer life for records. Flat construction creates less air agitation, reduces needle talk to a minimum. Precious Metal Tip of special alloy gives long life, full tonal range, yet protects records.

JENSEN "SWEET" Precious Metal

5,000 play retails 75c.
No. 16A493, Net Each ... 50c
No. 16A494, Card of 24 ... \$8.82
Quality at low price. Beryllium alloy shank with an extremely long life precious metal tip.

Service Men's Packet

Contains 6 JENSEN needles, 3 each of the \$1.00 and \$2.50, in a handy folder for pocket or kit. Handy to carry along on service calls. \$10.50 Retail Value.
No. 18A364, Per Kit ... \$5.25

Presto Sapphire

A semi-permanent playback needle for recordings and vinylite pressings. Average life 500 hours.
No. 18A337, Net Each ... \$1.25
6 Lots, Each75

Gerett Miracle Point

Especially recommended for coin operated changers. Long wearing precious metal point, accurately tapered, ground and polished to fit record groove. Life, 2,000 or more plays.
18A334, Ea. ... 40c 12 Lots ... 38c

Shadograph Steel Needles

Straight Shank for light pick-ups. 18A338, Pkg. of 100 ... 75c

"WALCO" Straight Shank

Sapphire Playing Needles
The popular type WN55 for use with light weight pickups (1 1/2 oz. or less). Plays up to 2,000 records.
List Price \$1.50.
18A323, Net Ea. 90c.
18A324, Per Display of 12 \$8.72

WALCO WD-90 DIAMOND PLAYING NEEDLE

The first professional broadcast-type diamond needle at this low price. Once installed in today's pickup, the needle problem is ended. May be removed and replaced as often as desired without fear of injuring record surfaces. Full frequency range reproduction is obtainable while surface noise and scratch are held to a minimum. Packaged in deluxe lucite container with outer gold-stamped gift box. RETAILS FOR \$12.50.
No. 14A666, Net Each ... \$8.45



SOUNDCRAFT DISCS

Aluminum bases of mirror-like quality specially processed for flatness and uniformly coated with as near perfect recording lacquer as the state of the art provides. Sold only in case lots.

"BROADCASTER" DOUBLE FACE
Selected for absolute physical perfection. Packed 20 to case.

Stock No.	Size Dia.	Thickness	Net Price Each
487	16"	.040	\$2.37

"BROADCASTER" SINGLE FACE
Packed 20 to case.

Stock No.	Size Dia.	Thickness	Net Price Each
488	16"	.040	\$1.85

"PLAYBACK" DOUBLE FACE
For average broadcasting standards.
Packed 20 to case.

Stock No.	Size Dia.	Thickness	Net Price Each
15A2038	8"	.025	\$0.48
15A2039	10"	.025	.69
15A2040	12"	.032	1.14
489	16"	.040	2.07

"AUDITION" DOUBLE FACE
Packing, 8" and 10" size 10 to case; 12" and 16", 20 to case.

Stock No.	Size Dia.	Thickness	Net Price Each
15A2041	8"	.025	\$0.42
15A2042	10"	.025	.60
15A2043	12"	.032	.93
4810	16"	.040	1.59

PRESTO "ORANGE LABEL"
Aluminum base (thickness .040"). Ideal for schools, musicians, artists, and those for whom smaller size discs are ample. Packed 10 to pkg.

Stock No.	Size Dia.	Per Pkg. Of 10	5 Pkg. Lots at
16A318	8"	\$3.75	\$3.00
16A319	10"	5.63	4.50
16A320	12"	7.50	6.00

PRESTO Recording Needles

18A344, Sapphire, short dural shank. Net Each ... \$4.80
18A345, Sapphire, long dural shank. Net Each ... \$4.80
18A346, Sapphire, short brass shank. Net Each ... \$3.60
18A347, Sapphire, long brass shank. Net Each ... \$3.60
18A351, Stellite, short shank. Net Each ... \$1.20
18A354, Steel, short shank. Pkg. of 3 ... \$1.00
12 Pkgs. for ... \$7.20

Wilcox-Gay "Recordio"

Popular Home Recording Disc
RECORDIO PAPER DISCS

Give excellent reproduction. Light and flexible so they can be mailed without damage. Record on both sides.
18A307, 6 1/2" disc. Pkg. of 6 ... 60c
18A309, 8" disc. Pkg. of 6 ... \$1.00
Quantity Users Write for Prices.

RECORDIO LIGHT WEIGHT ALUMINUM BASE DISCS

The tops in metal base discs for home recording. Record on both sides. Come packed six to handy paper album.
18A313, 8" disc. Album of 6 ... \$1.75
18A315, 10" disc. Album of 6 ... \$2.50
Quantity Users Write for Prices.

POPULAR PRICED Recording Needles

No. 18B357, Wilcox Gay steel recording needle. Pkg. of 2 ... 35c
No. 18A356, Walco steel recording needle. Pkg. of 5 ... 65c
No. 18A350, Walco Sapphire semi-professional short shank. Net Each ... \$3.38
Book on How to Make Good Recordings. New revised edition. Contains 140 pages. Illustrated. No. 18A318, Each ... \$1.20

Famous Makes Recording Discs For Professional, Home, or Commercial Needs

AUDIO DISCS

Highest quality aluminum base recording blanks, smooth, mirror-like surface, uniform coating. Brilliant frequency response. Easy cutting characteristics. Sold only in case lots.

"RED LABEL" DOUBLE FACE
Smooth coating both sides. Packed 25 to case.

Stock No.	Size Dia.	Thickness	Net Price Each
18A301	8"	.040"	\$0.48
18A302	10"	.040"	.69
4A1	12"	.050"	1.11
4A2	16"	.050"	2.04

"RED LABEL" SINGLE FACE
Both sides coated, recordable side identified by label. Packed 25 to case.

Stock No.	Size Dia.	Thickness	Net Price Each
4A11	10"	.040"	\$0.51
4A12	12"	.050"	.84
4A13	16"	.050"	1.41

MASTER DISCS DOUBLE FACED

The choice where quality pressings are desired. .065" thickness. Packed 25 to the case.

Stock No.	Size Dia.	Thickness	Net Price Each
4A3	13 1/4"	.065"	\$1.83
4A4	17 1/4"	.065"	\$3.06

"YELLOW LABEL" DOUBLE FACE
Both sides smoothly coated. A quality disc for school or studio. Packed 25 to case.

Stock No.	Size Dia.	Thickness	Net Price Each
18A304	8"	.040"	\$0.42
18A305	10"	.040"	.54
4A5	12"	.050"	.90
4A6	16"	.050"	1.62

Audio Recording Needles

18A348, Sapphire type 14-87", short dural shank. 3 Lots. \$3.63
Net Each ... \$4.35 Each ... \$3.63
18A349, Sapphire type 14-87", long dural shank. 3 Lots. \$3.63
Net Each ... \$4.35 Each ... \$3.63
20B46, Sapphire type 202, short brass shank. 3 Lots. \$2.63
Net Each ... \$3.15 Each ... \$2.63
18A352, Stellite type 34, short dural shank. 12 Lots. 88c
Net Each ... \$1.05 Each ... 88c
18A376, Stellite type 34, long dural shank. 12 Lots. 88c
Net Each ... \$1.05 Each ... 88c
18A355, Steel type 50. 12 Pkg. 50c
Net Pkg. of 3 ... 60c Lots. Ea. 50c

Audio Playback Needles

18A336, Sapphire type 113, dural shank. For original recordings and transcriptions. 2 Lots. \$3.25
EACH ... \$3.90 Each ... \$3.25
20B44, Red Circle Sapphire type 103, straight dural shank. All purpose. 12 Lots. \$1.00
EACH ... \$1.20 Each ... \$1.00
20B45, Red Circle Sapphire type 303, bent dural shank. Useful in heavy pickups. 12 Lots. \$1.00
EACH ... \$1.20 Each ... \$1.00

Record Quality Home Recording Disc.

Coated with cellulose nitrate—proven best for high fidelity, life-like reproduction, long wearing qualities, to withstand age and playback without cracking or peeling. All types listed record both sides.

Orange Label—Bond Base

For home and practice use where low price is required. Thick compo base. 6 to Pkg.

Size Disc	Stock No.	Per Pkg.	10 Pkg. Lots @
6 1/2"	18A308	\$.62	\$ 5.3
8"	18A310	1.03	.88
10"	18A311	1.44	1.23

Red Label—Aluminum Base

Made on heavy .021 aluminum, the last word for recording and compare with those used by broadcasting stations and studios.

All Sizes Packed 5 to Package

Size Disc	Stock No.	Per Pkg.	10 Pkg. Lots @
6 1/2"	18A359	\$1.03	\$ 8.88
8"	18A360	1.37	1.18
10"	18A361	2.06	1.76

RECORD PLAYING and RECORDING ACCESSORIES—MIKES

PICKERING CARTRIDGE REPRODUCER



For the finest possible reproduction of ordinary phonograph records and transcriptions with minimum record wear. Not affected by temperature and humidity. Mounts in practically any pickup arm with keystone clip as illustrated Fig. A above and requires only 1/2 oz. needle pressure. Higher arm pressure will not impair quality. Permanent jewel stylus is semi-protected against accidental damage. Stylus radius .0027".

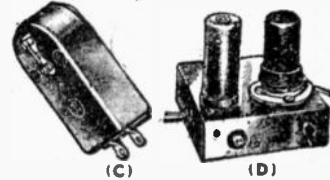
Frequency response is flat with plus or minus 2 db. between 40 and 10,000 cps., with substantial output above 10,000 cps. Output approximately 70 millivolts across 27,000 ohms.

Model S-120M Cartridge with sapphire stylus.
No. 14B527. Net Each..... **\$9.90**

Model D-120M Cartridge with diamond stylus. Wears approx. ten times as long as sapphire.
No. 20B22. Net Each..... **\$24.90**

Fig. B Equalizer-Amplifier. Expressly designed for use with Pickering Cartridges. Compensates for over recording characteristics. Output approx. 2.5 V. for direct connection to phono input of amplifier or radio with which it operates. Requires 200 to 300 V. DC at 4 ma. and 6.3 V. AC or DC at 0.3 A. Normal response flat to 20,000 cps. Has low-pass filter for use when playing noisy records. Supplied with 6L7GT tube. Stock No. 14B608.
Model 125-H Net Ea..... **\$19.50**

GE Variable Reluctance Pickup Cartridge



Accepted by engineers and listeners as a standard of pickup comparison. Operation is unaffected by normal variations of temperature and humidity. Can be installed in most pickup arms. Mounts on 1/2" centers, illus. (C) above. Requires needle pressure of 3/4 to 1 1/4 oz. Features permanent jewel stylus, full lateral needle compliance, with zero vertical response, low needle talk and record wear.

Model DL1RM6C Cartridge with sapphire stylus.
No. 14A590. Net Each..... **\$4.68**

Model DL1RM8C Cartridge with diamond stylus. To fill exacting requirements of professional playback equipment. Designed for constant use. Stylus radius .0025".
No. 20B34. Net Each..... **\$29.04**

Fig. D. GE Standard Phono-Pre-Amplifier Matches the variable reluctance pickup to ordinary radio or phono amplifier and compensates to provide the most desirable tone. Takes power from radio or amplifier. With tube..... **\$5.82**

Model DL1RM6C Cartridge with sapphire stylus.
No. 14A591. Net Each..... **\$5.82**

Fig. D. GE AC Powered Phono-Pre-Amplifier Serves some purpose as standard model above and incorporates a transformer and dry disc rectifier for 117V. 60 cy AC operation. Size 3 3/8 x 3 5/8 x 3 3/4" H. Complete with 6SC7 Tube.
No. 20B35. Net Each..... **\$9.38**

UTC UNIVERSAL INTERSTAGE EQUALIZER

For use in amplifiers requiring frequency response correction. Designed for connection between two audio stages or will match 10,000 ohms to tube grid. Features independent drop or boost of highs and lows without affecting mid frequencies. Has adequate hum shielding. Amount of equalization is continuously variable 15 db. up to 15 db. down. Circuit insertion loss, 6 db. plus combined low and high frequency settings. With 2 3/4 x 4" etched panel.
No. 20A610. Type CGE-1. Net..... **\$14.70**

Phono Needle Cup
Nickel-plated with snap spring cover. Hole in center of base for bolting down to motor board.
Dia. 1 1/2", can be set into 1 1/2" hole.
No. 18A375. Net Each..... **10c**

Phono Set Screws
No. 18A343
10 Ass't. **89c**

Assortment of 10 most popular sizes.

Phono Needle Cup
Nickel-plated with snap spring cover. Hole in center of base for bolting down to motor board.
Dia. 1 1/2", can be set into 1 1/2" hole.
No. 18A375. Net Each..... **10c**



Model 77
CARDIOMODEL 77. Recommended for recording studios, commercial broadcasting and high quality public address systems. Features wide-range pickup at front (70 to 10,000 cps. plus or minus 5 db.) with minimum rear pick (15 db. attenuation). Has built-in switch for instant selection of 50, 200, 500 ohms or high impedance and quick disconnect cable plug. Output level, —62 db. Impressively styled and finished in gun-metal gray and chrome. Fits standard 5/8-27 stand mounting.
No. 20A615. NET EACH **\$45.28**

Model 87
VELOCITY MODEL 87. For exciting studio work. Has bi-directional pickup pattern and very smooth response within plus or minus 5 db. from 80 to 10,000 cps. Engineered with single element ribbon and Alnico V magnet, and a well shielded output transformer. Built-in switch permit use with any 50, 200, 500 ohm, or high impedance input. Output level —62db. Universal swivel mtg. fits 5/8-27 stand. Finished in gun-metal gray with polished chrome screen. With attached 20-ft. balanced line cable.
No. 20A614. NET EACH **\$27.93**

SELECTED CONTACT MICROPHONES

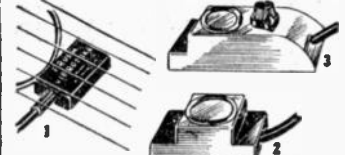


Fig. 1 BRUSH VM-1 VIBROMIKE. Highly sensitive, high impedance, miniature, contact type crystal pickup for musical instruments and industrial applications requiring detection and faithful reproduction of any type of mechanical vibration within 30 to 6000 cps. Output voltage from .05 to .1 volt or higher. Hermetically sealed in black rubber case. Size 7/8 x 3/4 x 3/8". With mtg. clamp and 25 ft. cable. Wt. 6 oz.
No. 14B529. NET EACH..... **\$10.29**

Fig. 2 MUSICAL INSTRUMENT PICK-UP. Operates with special music amplifier or public address types. Brilliant tone, range 80-5000 cps. Easy to install without defacing instrument. Up to 12 may be connected to one high impedance amplifier input. Size 2 1/2 x 3/4". With 8 ft. cable. Less volume control. List \$10.50.
No. 20A617. Special Net Each..... **\$5.14**

Fig. 3 MUSICAL INSTRUMENT PICK-UP WITH VOLUME CONTROL. Up to 5 may be connected to one high impedance amplifier input. Size 3 1/16 x 1 x 3/4". Otherwise same as above. With 8-ft. cable. List \$13.75.
20A616. Special Net Each **\$6.71**

Phono Set Screws
No. 18A343
10 Ass't. **89c**

Assortment of 10 most popular sizes.

Phono Needle Cup
Nickel-plated with snap spring cover. Hole in center of base for bolting down to motor board.
Dia. 1 1/2", can be set into 1 1/2" hole.
No. 18A375. Net Each..... **10c**

Phono Set Screws
No. 18A343
10 Ass't. **89c**

Assortment of 10 most popular sizes.

Phono Needle Cup
Nickel-plated with snap spring cover. Hole in center of base for bolting down to motor board.
Dia. 1 1/2", can be set into 1 1/2" hole.
No. 18A375. Net Each..... **10c**

Assortment of 10 most popular sizes.

Phono Needle Cup
Nickel-plated with snap spring cover. Hole in center of base for bolting down to motor board.
Dia. 1 1/2", can be set into 1 1/2" hole.
No. 18A375. Net Each..... **10c**

Assortment of 10 most popular sizes.

Phono Needle Cup
Nickel-plated with snap spring cover. Hole in center of base for bolting down to motor board.
Dia. 1 1/2", can be set into 1 1/2" hole.
No. 18A375. Net Each..... **10c**

Assortment of 10 most popular sizes.

Phono Needle Cup
Nickel-plated with snap spring cover. Hole in center of base for bolting down to motor board.
Dia. 1 1/2", can be set into 1 1/2" hole.
No. 18A375. Net Each..... **10c**

Assortment of 10 most popular sizes.

CLASSOPHONE POCKETS STORE-PROTECT-CLASSIFY

10" or 12" phonograph records for INSTANT use! For large as well as small collections. Radio stations, record libraries, colleges find them ideal with which to make up racks for their specific needs. Book shelves or cases; outmoded radio cabinets or an upright desk easily converts to a most convenient record cabinet with snug individual compartments, each holding one phono record (10" or 12") in perfectly upright position—forever prevents warping. A flip of the finger brings the record out or replaces it. Furnished in sets of 25 pockets. The pigeon hole space required for a set of 25 (when filled with records) is 6" wide, 14" deep, and 1 1/4" high. You can use two, three, four or more sets in a row . . . or arrange them to suit your own needs. (1,000 records can be contained in a cabinet.) Classophone pockets are hinged at the base and anchored in cabinet or rack by the simple use of a dowel. At the tip of each is a clearly visible index number. Gummed labels are supplied to put on records or index book to correspond and thus you have your record classified for instant selection.
No. 5A160. Per Pkg. of 25—
Complete with instructions and dowel for mounting..... **\$5.15**

DE LUXE RECORD ALBUMS

Made of sturdy cloth binding and heavy leatherette covers mounted on solid .110 pasted, mounting chipboard. Backbone embossed in gold in a dignified design. Holds 12 records.
No. 36A24. For 10-inch records. Net Each, **75c**; 10 Lots, Each..... **70c**
No. 36A25. For 12-inch records. Net Each, **\$1.15**; 10 Lots, Each..... **\$1.00**

PADDED ALBUMS

Full bound with pyroxylin (plastic) coated material over padding for deluxe appearance and feel. Covering is waterproof and stain, scuff, grease and wear resistant. Holds 12 records.
No. 5A175. For 10" Records. Net Each... **\$1.00** Each... **\$0.90**
No. 5A176. For 12" Records. Net Each... **\$1.45** Each... **\$1.30**

WALSCO TEST RECORD

For immediate, accurate, audible adjustment of record changers and coin-operated phonographs . . . solves the problem of adjusting the set-down position of the pick-up, and checks for proper tripping THROUGH SOUND. Accelerated Pitch, saves time, as playing time for record is less than 40 seconds. Proper tripping action is indicated by tone signals. Lead-in grooves are modulated with a series of three consecutive tones. If three tones are heard, pick-up is setting too close to edge of record . . . one tone indicates pick-up is setting down "too far in" . . . if two tones are heard, adjustment is correct. Stroboscope on rim of label indicates proper motor speed (78 RPM. at 60 cycles). Scientifically designed to R.M.A. and N.A.B. standards, precision-checked for perfect flatness, concentricity, thickness, and correct groove depth. Suitable for thousands of tests.
No. 4A47. Per 10" record. Each..... **88c** 6 Lots, Each..... **80c**
No. 4A48. Per 12" Record. Net Each..... **\$1.32** 4 Lots, Each..... **\$1.20**

WEBSTER "KNEE-ACTION"

Nylon Phonograph Needle permits "knee-action" in the vital area between point and shaft which absorbs and reduces needle scratch and surface noise. Has a top quality hand-polished sapphire jewel tip. The shank is of light weight great strength aluminum that fits securely in pick-up without danger of twisting or loosening. Lack of needle scratch and surface noise, quality of reproduction, minimum record wear, long needle life and long-lived protection of precious records. Retail for \$3.50 in handy plastic case.
Stock No. 18A377.
DEALERS PRICE per Carton of 10..... **\$17.50**

BRUSH CRYSTAL MICROPHONE

MODEL BA-106. Unexcelled for home recording, public address systems, home shocks and monitoring in all directions. Response is flat from 40 to 6000 cps. Output level-52 db. With 8 ft. shielded cable and desk stand with removable base.
No. 14A668. Net Each.... **\$9.85**

AUDIODISC CHIP-CHASER

Brushes recording thread out of way of stylus automatically, infallibly, winding it up on overhead post or drive pin. Fits any machine or turntable. Weighted base holds unit in place. Flexible joints position wiper blade. Tips up out of way when not in use. Cannot scratch or damage recording.
No. 5A151 For up to 12" turntable.... **\$3.50**
No. 5A152 For 16" turntable..... **\$4.38**

Rek-O-Dope. Cleans, lubricates, hardens, renews old and preserves new records and recordings.
18A321. 4 oz. bottle..... **44c**

PICK-UP CARTRIDGES, RECORDING HEADS, Accessories

POPULAR REPLACEMENT CARTRIDGES



(A) (B) (C) (D)
GENUINE RCA "MAGIC TONE CELL"
 Fig. A RCA Part No. 9890. For modernizing 69 different RCA Victor radio-phonographs and record players, 1938 and later. Greatly improves record reproduction, reduces record wear and needle noise. With permanent sapphire stylus and needle guard. Output 1 1/2 V. Complete with assorted mtg. hardware, technical and installation data. List Price \$8.00
No. 20B23. Net Each. \$4.70
 (B) RCA No. 38610. With stylus. **No. 14A566. Net Each. \$3.26**
 (C) RCA No. 37158. Top loading. **No. 14A571. Net Each. \$2.79**
 (D) Webster C2. Flat, 2-hole flange. **No. 14A575. Net Each. \$2.35**
 (D) Webster C3. Clamp mount, no flange. **No. 14A576. Net Each. \$2.35**

ELECTRO-VOICE Universal Replacement Crystal Cartridges



Three basic models replace over 100 popular types. Uses a newly devised method of coupling needle movement to all four corners of crystal, resulting in high efficiency, no bearings, light weight, very uniform frequency response tapering off at 6500 cps, zero output for vertical movement, excellent tracking with as low as 3/4 oz. pressure, and no needle talk. Packed with universal mounting hardware and replaceable whisker type osmium or sapphire needle.

WITH SAPPHIRE NEEDLE				
No.	Model	Volts	List	Each
20B36	L-125	0.75	\$8.50	\$5.00
20B37	M-125	1.50	8.50	5.00
20B38	H-125	3.00	8.50	5.00
Sapphire replacement needle.				
20B39			2.50	1.47
WITH OSMIUM NEEDLE				
20B40	L-120	0.75	7.50	4.41
20B41	M-120	1.50	7.50	4.41
20B42	H-120	3.00	7.50	4.41
Osmium replacement needle.				
20B43			1.50	.88

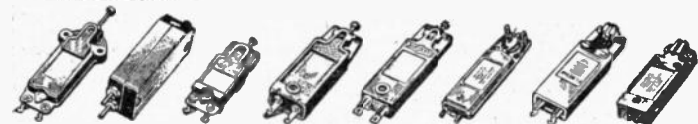
ASTATIC Recording Heads



(A) (B)
Astatic Model M-41-8 Magnetic. Driving voltage, 3 V. RMS; upper frequency limit, 7,000 cps; wt. 3 1/2 oz.; size 1 3/8 x 1 1/16 x 3 3/4". Oxidized finish. Imped. 8 ohms. Not interchangeable with crystal types. Illus. Fig. A above. **\$7.53**
No. 14A568. Your Cost. \$7.53
Astatic Model X-26 Crystal. Driving voltage, 75 V. RMS; upper frequency limit, 5,000 cps; wt. 5 1/2 oz.; size 1 3/8 x 5/8 x 3 1/4". Oxidized finish. Illus. Fig. B above. **\$7.53**
No. 14A532. Your Cost. \$7.53
Astatic Model X-29A Crystal. Driving voltage, 120 V. RMS; upper frequency limit 6,500 cps; wt. 5 1/2 oz.; size 1 3/8 x 5/8 x 3 1/4". Oxidized finish. Illus. Fig. B above. **\$7.53**
No. 14A533. Your Cost. \$7.53

WEBSTER WIRE RECORDING HEAD
 New shielded type, part No. 11X280. Replaces old style head part No. 11X180 on Webster wire recorders model 78, 79 and 80. **No. 20B19. Your Cost. \$6.17**

ASTATIC PICK-UP CARTRIDGES



(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Stock No.	Fact. Model	Illus. Needle Fig. Pressure	*Needle Type	Output Voltage	Range Cps.	List Price	Net Each
14A530	B-2	B 2 3/4 oz.	Optional	2.50	50-4,000	\$5.55	\$3.26
14A528	M-22	C 2 3/4 oz.	Optional	2.90	50-6,500	5.55	3.26
14A519	L-24A	D 2 3/4 oz.	Optional	2.95	50-6,500	5.55	3.26
14A521	L-26A	D 2 3/4 oz.	Optional	1.40	50-4,500	4.45	2.62
14A523	L-40A	D 1 1/4 oz.	Optional	0.60	50-4,500	4.45	2.62
14A557	L-46A	D 1 1/4 oz.	Optional	3.50	50-4,000	6.65	3.91
14A556	L-70A	E 1 1/4 oz.	Optional	1.00	50-4,000	5.55	3.26
14A558	L-71A	E 1 1/4 oz.	Optional	1.00	50-8,000	6.65	3.91
14A559	L-72A	E 1 1/4 oz.	Optional	3.50	50-4,000	6.65	3.91
14A560	L-75A	E 1 1/4 oz.	Optional	0.75	50-6,000	5.55	3.26
14B534	LT3-MA	F 3/4 oz.	"LT"	1.00	50-10,000	7.00	4.12
14A555	NYLON 1-J	G 1 1/4 oz.	"NYLON"	1.00	50-10,000	7.75	4.56
14A596	QT3-JA	H 1 oz.	"Q"	0.85	50-10,000	8.90	5.23

Fig. A (Astatic #401A)—REPLACES cartridge in RCA MODELS 31050, 31156, 32632, 33122, 33217, 34225, 34207. 2 3/4 oz., 1.4 V., 50-4500 cps.
Stock No. 14A531. Net Each. \$2.62
 *Any standard shank phono needle will fit cartridges marked "Optional". Needle not furnished. LT, Nylon and QT furnished with special needles illustrated below.

SPECIAL ASTATIC NEEDLES
 "T" Precious metal tipped. Fits "LT" cartridges. **88c**
 No. 14A659. List \$1.50. **YOUR COST**
 "NYLON" Sapphire tipped. Fits "Nylon" cartridges. **\$1.76**
 No. 18A374. List \$3.00. **YOUR COST**
 "Q" Precious Metal tipped. Fits "QT" cartridges. **88c**
 No. 14A660. List \$1.50. **YOUR COST**
 "Q" Sapphire tipped. For "QT" cartridges. **\$1.47**
 No. 14A597. List \$2.50. **YOUR COST**
 Ask for "Complete Specifications on Astatic Phonograph Pickups and Cartridges with Cartridge Replacement Reference Chart." Free with any order. Specify Stock No. 16A564.

NEW! ASTATIC "QC" "GLENNITE" Ceramic Element Pick-Up Cartridge
 An amazing new discovery! Not affected by high temperatures, low temperatures, moisture or dryness. The "Glennite" element is a true ceramic material with piezo-electric properties well suited for pickups. It will even work below -70° and up to 212° F. Frequency range 50-10,000 Cps., needle pressure 1 oz., output 0.5 V. at 1000 cps. Made up in the familiar "QT" housing with non-removable sapphire tipped stylus. **No. 14B520. List Price, \$8.90. YOUR COST. \$5.23**

NEW! ASTATIC MAGNETO-INDUCTION PICK-UP CARTRIDGE
 A clean break from traditional magnetic type reproducers. Has no critically adjusted, troublesome "air-gaps" to pickup lint and dirt—is not affected by humidity and temperature—does not require delicate handling. Velocity response flat to 12,000 cps. Output 100 millivolts. Impedance, 7500 ohms at 1000 cps, 110,000 ohms at 10,000 cps. Small size easily mounted in most present day pickup and transcription arms. Has fully shielded Mumetal housing to minimize hum pickup from phono motor and a non-removable precious metal needle. Requires equalizer-amplifier type EA-1, listed below, for proper operation. **No. 14B516 Model MI-2 Cartridge. YOUR COST. \$4.41**

EQUALIZER-AMPLIFIER for use with MAGNETO-INDUCTION CARTRIDGE
 MODEL EA-1 A two-stage amplifier using a 6SC7 dual triode tube. Requires 6.3 V. AC at .3 amp., 80 to 125 V. DC, well filtered, at 4 milliamperes. Mounts in space only 2 1/2 x 3 3/8". Has standard shielded phono input connection and compensating switch allowing flat response or high frequency "roll-off" of 15 db. at 10,000 cps. Output approx. 1 volt at 25,000 ohms, allowing use with most any amplifier. Supplied with tube. **No. 14A686. YOUR COST. \$5.82**

NEW MICRO-GROOVE CARTRIDGES
C.E. Variable Reluctance Model RPX-041. Has .001 radius sapphire stylus to fit groove of Columbia LP records. Tracks with 5 grams pressure. Interchangeable with standard variable reluctance cartridge. **20A781. Your Cost, Each. \$5.85**
Pickering Model D-140S. Equipped with .001 radius whole diamond stylus. Tracks with 5 grams pressure and like all Pickering cartridges has the lowest distortion and widest frequency range of any commercial reproducers. Equipped with keystone clip and quickly interchangeable with standard Pickering cartridges permitting use of both cartridges with one turntable and pickup. **20A782. Your Cost, Each \$36.00**

Tone Equalizer Model E-4P
 Provides TONE COMPENSATION for ALL CRYSTAL PICK-UPS; Bass, Med., Hi-Fi, and "Out". Easy to install. 1-hole mtg. 2" dia. x 3/4" thick. Chrome and black finish. **No. 14A565. E-4P. NET \$1.94**

SHURE "LEVER TYPE" CARTRIDGES



(A) (B) (C)
 Fig. A Light weight Rochelle Salt crystal cartridges that will replace most flat-type cartridges of equal output. Useful frequency range 60 to 6,000 cps. All types have pin tip terminals and chuck with set screw for standard shank replaceable needles. Mtg. centers 1/2". Max. dimensions 3/4" W., 2 5/8" L., 7/16" thick. All have button for arm rest clip except W57A. Furnished less needle.

Stock No.	Fact. No.	Needle Force	Output Voltage	Net Each
14A537	W57A	3/4 oz.	1.8	\$3.26
14A536	W58A	3/4 oz.	2.2	3.26
14A535	W59A 1	oz.	2.7	3.26
14A569	W56A	1 1/8 oz.	4.3	3.91

"MUTED STYLUS" CARTRIDGE
 Fig. B For unmatched performance in high quality phonos, coin-operated machines, etc. Practically eliminates surface noise, needle hiss, needle talk. Made famous through almost universal use by the country's largest phonograph and record changer manufacturers. Fits all standard flat-type pickup mountings with 1/2" centers and directly replaces Shure P30. Needle pressure 1 oz., output 1.6 V. Comes with replaceable whisker-type sapphire or osmium tipped needle.
No. 14A594. Model W60A with Sapphire Tipped needle. List Price \$8.50 Net Each. \$5.00
No. 14B514. Model W60B with Osmium Tipped needle. List Price \$7.50 Net Each. \$4.41
No. 14A595. Type A61A Sapphire replacement needle. List Price \$2.50 Net Each. \$1.47
No. 14A670. Type A62A Osmium replacement needle. List Price \$1.50 Net Each. .88c

PACK OF 5 SHURE CARTRIDGES REPLACES 86 TYPES
 Fig. C Contains the four standardized "lever-types" and the W60B "Muted Stylus" cartridge with a specific cross-reference chart for exact replacement of 86 different types, several different makes.
No. 14A573. Shure W50 Cartridge Pack. Net Each. \$18.11

BRUSH MODEL "RC-20" CRYSTAL CUTTER
 For high quality, low cost recordings in the home, school and studio. Cuts lateral type records in virtually all hard or soft disc materials. Design is simple and compact and readily adaptable to all types of transcription equipment. A 3-watt amplifier furnishes sufficient drive. Frequency response—flat within plus or minus 3 db. from 50 to 9,000 cps. Cuts "Constant Amplitude" without equalization, and "Constant Velocity" or other desired frequency characteristics with suitable equalization. **No. 14A593. Cutter (less stylus) Net Each. \$14.70**

BRUSH PL-20 PICKUP CARTRIDGE
 Type PL-2-Z. Exact replacement for Brush high-fidelity model PL-20 crystal pickup. **No. 14A540. Net Each. \$9.82**

ELECTRO-VOICE TORQUE DRIVE CRYSTAL MODEL L14
 Built especially for Micro-groove records. Response extends to 10,000 cps. Tracks with 6 grams pressure. Stylus radius, .001.
No. 20A783. With Osmium Needle. Your Cost. \$4.41
No. 20A784. Replacement Osmium Needle. .88
No. 20A785. With Sapphire Needle. Your Cost. 5.00
No. 20A786. Replacement Sapphire Needle. 1.47

Selected PHONO PICKUPS for BROADCAST; P.A. or HOME

NEW G.E. PICKUP ARM



Model UPA-002 for records to 12". Designed for and equipped with the famous GE sapphire tipped variable reluctance cartridge. Provides the very finest of high fidelity, noise free record reproduction. An easily installed assembly that can be used with any manual record player. Features, adjustable needle pressure (preset at one oz.), minimum tracking error, no undesirable arm resonance and single hole mounting. Furnished with template, arm rest and 24" shield lead. Blue Gray gold hammertone finish. Requires GE preamplifier when used with regular radio or phono amplifier. See listing under pickup cartridge. No. 14A715.

YOUR COST.....\$8.20

AUDAX "MICRODYNE" Magnetic Pick-Ups

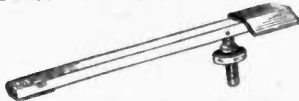


High Fidelity—Easy on Records "AUDAX" MOVING INDUCTOR principle eliminates the bugaboo of moving mass—vibratory momentum reduced to a most vanishing point. Needle-point pressure about 1/34 oz. Ideal for high fidelity! Specifications: RESPONSE, FLAT within plus or minus 3db. to about 6,500 cycles; rising bass curve reaches about 6db. at 50 cycles. Complete with mounting template, instructions. FINISH, black and silver.

No. 32A200. Model L-17. FOR RECORDS TO 12". Over-all length, 11"; HIGH IMPEDANCE. **\$16.50**

Net Each
No. 32A201. Model L-18. FOR RECORDS TO 18". Over-all length, 13 1/2"; HIGH IMPEDANCE. **\$23.70**

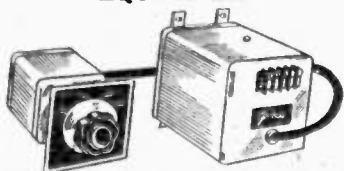
LIVINGSTON TRANS. ARM



An outstanding economical unit with all the best technical features—ball bearing rotational pivots, low friction cone type vertical pivots, adjustable stylus pressure, adjustable height for perfect mounting, low arm resonance. Cueing handle and adjustable let down stop. Accommodates GE, Pickering and other cartridges. Mounting centers 1/2". Overall length 15 5/8". Finished in beautiful gray enamel with bright plated fittings. Supplied less cartridge but with shielded lead.

32B206. Model A-16. **\$12.95**
ARM ONLY

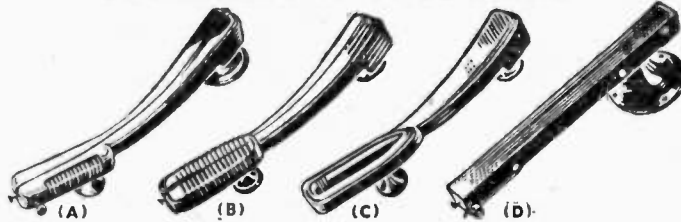
GRAY MODEL 601 EQUALIZER



Engineered to complement record and transcription characteristics when used with GE cartridge in the Gray Transcription Arm. Circuit is standard broadcast station insertion loss type. Four control positions No. 1 flat, No. 2 "NAB", and No. 3 and No. 4 to provide additional high frequency attenuation. Output level minus 67 dbm. Works into 250 ohm mike channel or untermated 250 ohm pre-amp input. No. 32B202.

Your Cost.....\$42.50

ASTATIC QUALITY PICKUPS FOR RECORDS UP TO 12 INCHES



(A) THE NYLON "508" (Fig. A) with Nylon Cartridge and Sapphire Tipped Nylon Needle. Employs the Nylon I-1 cartridge with replaceable, knee action sapphire tipped Nylon needle. Response 50 to 8000 cps. Needle pressure, 1 1/4 oz. Output voltage, 1.0 volts. Die cast tone arm, size 1 3/4 x 8 3/4" mtg. ctrs.; 8" with 13" cable. For 10" and 12" records.

No. 14A554. **Your Cost \$10.11**

(A) QT508 PICKUP

Same 508 arm but furnished with famous QTM cartridge using replaceable precious metal tip needle.

No. 20B48. **\$10.50**
YOUR COST.....

(B) HIGH OUTPUT "510"

Ideal for portable or compact equipment because of the short mounting center of only 7". Employs the L-72A replaceable needle type crystal cartridge with 3.5 volts output. Response 50 to 4000 cycles per second. Needle pressure 1 1/2 oz. Flanged type swivel base enhances appearance and makes mounting easy. Handsomely finished in light brown enamel. Size 7 5/8" long, 1 15/16" high. Has 13" cable and locking arm rest.

14A564. **Your Cost Each. \$4.41**

(C) ECONOMY MODEL "507"

A low-price, yet carefully engineered crystal pick-up extremely popular for replacements to improve existing equipment. 7" mtg. ctrs. make it ideal for most modern and compact phonos. Employs the L-40 cartridge. Adequate for all except especially low gain amplifiers. Spring counter-balanced die cast tone arm with flanged base and locking arm rest. Correctly curved with moderately offset head for improved needle tracking. Light brown enamel finish. Covers 50 to 4,500 cps. Needle pressure, 1 1/2 oz. Output 0.6 V. Comes with 13" cable.

14A563. **Your Cost Each. \$3.23**

(D) A FAVORITE with all who KNOW pick-ups! Frequency, 50-4000 cps.; 2 3/4-oz. needle pressure. B-2 bakelite enclosed cartridge! Vibration insulated arm, ball bearing swivel base. Distortion-free, WIDE RANGE reproduction with high output of 2.5 volts. 12" lead. Black wrinkle finish. Model S-8, for 10" and 12" records. Has 8" mounting center, 9 1/2" long. No. 32A211. **\$6.56**
YOUR COST.....

THE FINEST IN TRANSCRIPTION PICKUPS



(E) GRAY PROFESSIONAL PICKUP ARM

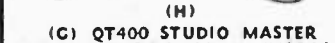
A scientifically designed Model to meet exacting requirements of modern highly compliant pickup cartridges such as G.E. Variable Reluctance, "Pickering", the better Shure and Astatic types. After extensive tests by professional engineers of two major networks the Gray arm has been adopted as standard equipment. Outstanding features include very low mass due to magnesium channel construction, ball bearing vertical and rotational pivots and a wide range of needle pressure adjustment through two carefully designed springs—no weights. These features maintain even needle pressure even on non-flat records and reduce record wear and scratch. Mounting radius 13".

37A74. Model 1035. **\$35.00**
YOUR COST.....

(G) STUDIO MASTER "400"

Streamlined Transcription Pick-Up with Nylon Cartridge. A professional type for use on all lateral transcriptions up to 16". Has swivel base which can be raised or lowered from 1 5/16" min. to 2 1/16" max. height. Uses IJ Nylon cartridge with replaceable sapphire tipped Nylon needle. Response 50 to 8000 cps. Needle pressure 1 1/2 oz. Output 1.0 volt. Brown hammerin finish. Length 12 1/8". Mtg. ctrs., 10 1/16" with 24" cable. Attractively designed with long slender gracefully curved lines and offset head for reduced tracking error.

14A553. **Your Cost, Ea. \$14.02**



(F) VIBROMASTER TYPE K PROFESSIONAL ARM

For any lateral recording up to and including 16 inch, 78 or 33 1/3 R.P.M. 22 grams pressure when used with the G.E. cartridge. Universal "one hole" mount permits installation in any turntable with hairline height adjustment. Precision made, finished in brushed aluminum and black to match existing turntables. Also works with Pickering cartridge.

No. 14A592. **\$33.82**
Less Cartridge. **Net Each.....**

(H) HPQT ASTATIC PICKUP

Always the broadcast and recording studio favorite this finely balanced arm is now better than ever with the "QT" type cartridge. Frequency range smooth from 50/10,000 cps. Very low surface noise and needle talk. Low friction ball bearing swivel base allows free tracking and reduced record wear. Has 1-oz. needle pressure, output .85-volt. Mounting centers 12", overall length 15".

No. 37A73. **YOUR COST \$16.38**

(I) S12 ASTATIC PICKUP

The least expensive transcription arms but highly approved for dependability. Uses B2 type cartridge. Frequency range 50/4000 cps. Needle pressure 2 3/4-oz., output 2.5 volts. Mounting centers 12". Overall length 15". No. 32A212. **\$8.17**
YOUR COST.....

SHURE PICKUPS



(J) MODEL 900
Features the outstanding Shure Muted Stylus crystal cartridge with replaceable sapphire needle 1.8-volt output and light weight easy tracking 1-oz. tone arm. Recommended for replacement and improvement of all manual record players. Has convenient handle at side of head and needle guards. No. 20B47. **\$5.88**
YOUR COST.....

(K) NEW! MODEL 900 MG
"Muted Stylus" light weight pickup for 10" and 12" Columbia Microgroove records. Needle pressure only 7 to 10 grams (1/4 to 1/3 oz.). Equipped with permanent osmium-tipped needle having .001" tip radius as required for playing microgroove recordings. Needle talk is eliminated. Fidelity of tone is amazing—nothing short of sensational. Output, approx. 1-volt. Can be added easily to existing dual speed equipment or combined with 33 1/3 RPM motor to make up a player expressly for microgroove recordings. No. 20A564. **YOUR COST \$7.35**

(L) MODEL 93A
Extremely light, needle pressure only 1 1/8 oz. Frequency response 60 to 6000 cps. Output 1.6 volts. Has accurately balanced die cast aluminum tone arm, curved to minimize tracking error. "High needle compliance" lever type crystal cartridge will take either semi or permanent stylus. Adjustable screw permits raising or lowering tone arm head to clear turntable. Standard 7 1/8" mtg. centers. For all records up to 12". No. 20A866. **Net Each... \$3.59**

NEW! ASTATIC PICKUP MODEL FL-33 FOR COLUMBIA MICROGROOVE RECORDS



A professional playing arm for up to 12" discs. Designed expressly to meet the precise requirements of the new long playing Microgroove 33 1/3 RPM recordings giving the ultimate in flawless reproduction never before obtainable from commercial records. Features instant slip-in cartridge to also permit use with standard 78 RPM and 33 1/3 RPM recordings. Needle pressure only 5 grams (less than 1/6-oz.) when equipped with either cartridge. Needle scratch and record wear are extremely low. Tone arm design eliminates resonances and provides perfect tracking at both 33 1/3 RPM and 78 RPM. Frequency range of cartridges 30/10,000 cps. Output approx. 1/2-volt. Needles are permanent sapphire type. Microgroove stylus radius .001". Standard stylus radius .003". Single hole mounting. Adjustable height permits proper positioning.

Model FL-33. Pickup with slip-in cartridge for Microgroove records. No. 20A569. **\$11.70**

Model FL-33. Pickup with slip-in cartridges for both Microgroove and Standard records. No. 20A568. **\$16.93**

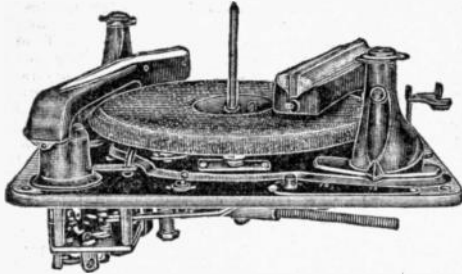
Model LP-33. Microgroove slip-in cartridge only. No. 20A567. **\$5.82**

Model LP-78. Standard slip-in cartridge only. No. 20A566. **\$5.82**

MODEL FL FILTER

An important accessory to be used with Model FL-33 pickup. Controls high frequency response to suit individual taste. No. 20A565. **Net Each... \$4.06**

General Industries RECORDERS and PLAYBACK UNITS



Recorder and record changer combination in a single unit. Cuts up to 10" dia. records — Plays all home recorded and commercial records up to 12" dia. manually. Automatically plays 12—10-inch or 10—12-inch commercial records.

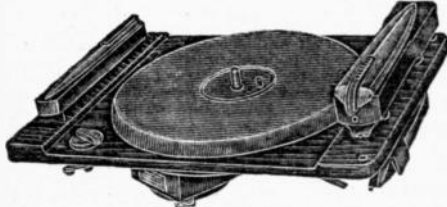
Crystal type recording head cuts at 110 lines per inch, working from outside — In. Convenient depth-of-cut adjustment on top of cutting arm.

Retractable record driving pin in 10" weighted turntable permits the playing of standard records without adjustment. 78 R.P.M. rim drive, smooth running, dynamically balanced motor. Pick-up is low pressure crystal type using standard replaceable needles. Base plate—14"x14"x 3/4"; mechanism extends 5 7/16" above and 2 3/4" below base plate. Brown iridescent finish. Comes with all mounting hardware and on-off switch. For 110-Volt, 60-Cycle AC.

Stock No. 30A95. Model GI-RC130L. Your Cost, Each..... **\$43.50**

DUAL SPEED RECORDER AND PLAYBACK

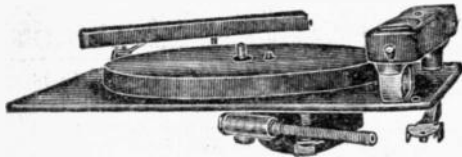
Cuts records up to 10" dia. and plays all types of records up to 12" dia. at 78 or 33 1/3 R.P.M. Motor changes from one speed to the other by merely turning the speed change dial. Lowering of cutting arm



over disc starts recording. Cut depth adjustment on cutting arm. Dynamically balanced, rim drive, induction motor, 10" weighted turntable; pickup and cutter arm rests; drawn steel base plate finished in walnut grain, plastic trim on pickup and cutter arms, engraved "Reproducer" and "Recorder". Turntable is recessed into well in base plate, size 15" long and 11 1/2" deep; extends 2 3/4" above and 3 7/8" below base plate. 110-volt, 60-cycle AC.

Stock No. 30A110. Model GI-R90L. YOUR COST, EACH..... **\$28.95**

SINGLE SPEED RECORDING AND PLAYBACK

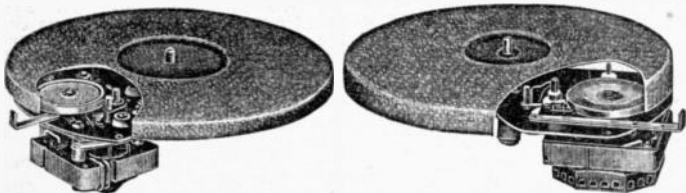


Cuts records up to 10" dia. and plays up to 12" records. Cutter feed mechanism requires merely lowering the cutter arm over record disc to start recording. Convenient depth-of-

cut adjustment. Retractable record driving pin. Self starting 78 R.P.M. rim drive, dynamically balanced induction motor, 10" weighted turntable, crystal cutting mechanism, low pressure crystal pickup (uses standard replaceable needles), cutter arm rest, pickup rest, base plate size 15" wide, 10" deep. Mechanism extends 2 11/16" above and 2 5/8" below base plate. 110-volt, 60-cycle AC.

Stock No. 30A111. Model GI-R70L. Your Cost, Each..... **\$24.51**

New! "G.I." DUAL SPEED RIM DRIVE PHONO MOTORS

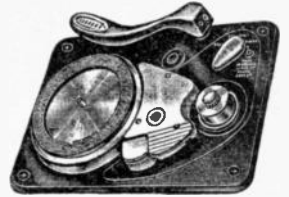


MODEL "DM" DUAL SPEED PHONO MOTOR (Illus. left above) is the ideal, low cost, dependable dual speed motor for providing facilities for playing BOTH "LP" (Long Playing) and STANDARD Phono Records! External speed change control for choice of 33 1/3 R.P.M. for "LP" Records, or 78 R.P.M. for Standard 10" or 12" discs—simple shift of lever moves rubber belt driven step pulley against idler wheel for 33 1/3 R.P.M.; for 78 R.P.M., speed shift lever moves step pulley away to permit idler wheel to be driven direct by motor shaft. Mounting plate is 3 1/8"x2 1/4" and extends 2 5/8" below. Weight, 4 lbs. Complete with AC motor leads for 110-volt, 60-cycle AC and 9" turntable. Stock No. 34A166. "G.I." Model DM Dual Speed Turntable. Net Each..... **\$6.75**

MODEL "DR" DE LUXE DUAL SPEED TURNTABLE. For playing EITHER the new "LP" long playing, or standard 78 R.P.M. records! Features heavy-duty 4-pole motor and external push-pull speed control lever to engage idler wheel with 2-diameter shaft to obtain speeds of either 33 1/3 or 78 R.P.M.! Delicate balancing of entire assembly assures uniform speed at all times—assures low rumble factor and minimum "wow"! Extra power to handle varying record and pickup loads at constant speeds. Mounting plate is 6" long, 5 5/8" wide, motor extends 2 5/8" below mounting board. Complete with 10" turntable; for 110-volt, 60-cycle AC. (Illus. right above.) No. 34A167. "G.I." Model DR Dual Speed Turntable. Net.... **\$11.70**

Crescent COMBINATION WIRE RECORDER MECHANISM

The identical essential mechanism for WIRE RECORDING-RECORD PLAYING as used by many Radio Manufacturers in fine console combination radio receivers! ★ Records up to one full hour on wire! ★ Records on wire from radio or records. ★ Plays back its own wire recordings. ★ Plays ANY 10" or 12" Phono record. ★ Heavy duty motor and die-cast take up drum form phono turntable, assures finest record reproduction—free from rumble and "wow"! U/L Approved Motor!



SPECIFICATIONS: Consists of complete wire recording and playback mechanism with Wire Recording and Erase Coils, wire transporting mechanism including take-up and re-wind; records on stainless steel recording wire at speed of 2 ft. per second, plays back at same speed; Re-winds played wire recordings at speed of 10 ft. per second! Take-up drum also serves as Record Turntable, operates at 78 R.P.M. for either 10" or 12" records—special designed phono pickup is featherweight, has L70 or P98B Crystal cartridge—takes any standard single or long-play needle. Wire Recording and Playback—Magnetically records on .004 or .0036 stainless steel wire, spools and leaders, 1/4, 1/2, or 1-hour spools as desired! Input to voice coil for recording is 0.6 volts rms at 1,000 cycles; Output from voice coil for playback is approximately 2 millivolts. Erase and bias coil, designed to operate at 30,000 cycles; impedance approximately 4.6 ohms; requires 700 M.A. at 4 1/2 volts at 30,000 cps. Head Impedances are: 12,000 ohms at 10,000 cps.; 7,600 ohms at 5,000 cps.; 2,240 ohms at 1,000 cps.; 500 ohms at 100 cps. Entire mechanism is assembled to heavy steel mounting plate and "floats" on four live rubber mounts; plate size is 9x13" requires inside cabinet space of 12 1/2"x15 3/4" to play 12" records; requires 3" above and 5" below mounting board. Mahogany Hammerloid enamel with cream plastic and chrome trim. With installation instructions. For 115-volt, 60-cycle AC.

Stock No. 34A168. "Crescent" Model C-1000A Wire Recorder-Phono Record Player Mechanism. Net, Each..... **\$49.98**

"MASCO" "MASTER-REMOTE" INTERCOM SYSTEMS



"MASCO" NEW—MODERN UNDERWRITER'S APPROVED "INTER-COMM" SYSTEMS CHOICE OF "Master-Remote" or "All Master" types. Simple to install! Simple to operate! 117-Volt, A.C.-D.C.

Master-Remote systems consist of ONE Model JM-5 Master Unit, shown at left above, and from ONE to FIVE Model JR Remote Stations—providing INSTANT communication between the Master unit and any or all of the Remote units! Master unit has 3-tube, 2 1/2-WATT AMPLIFIER, providing sufficient power for clear, life-like voice transmission over long distances to Remote units. 4-INCH Alnico-V speakers in BOTH Master and Remote units have 13-ohm voice coils. Master unit has 7-position Selector Switch; including a position for EACH Remote unit PLUS "All-Call" position for calling ALL Remotes at once, and "Stand-By" position to insure quiet at Master unit location and permit Remotes to call Master if desired. Combined Volume Control and on-off switch on Master units permits Master to adjust volume to satisfactory levels. Cast aluminum streamline cases on BOTH Master and Remote units are 6 5/8"x7 1/8"x5 1/4" high; wt. of Master is 6 lbs., of Remote, 3 1/4 lbs. REMOTE UNITS have 4" speakers and "Press-to-Talk" switch. Connecting cable, 3-wire unshielded to connect each Remote with Master.

Stock No. 36A47. Model JM-5 Master Unit. Net Each..... **\$18.67**
Stock No. 36A48. Model JR Remote Unit. Net Each..... **\$6.61**

"MASCO" MODEL IM-5 "ALL-MASTER" SYSTEMS

Accommodates up to SIX Master Stations (as few as two may be used)—allows complete privacy of 2-way conversations without "cross-talk" or interference! Each Master Unit (Illus. left above) has its own Station Selector Switch, Volume Control, "Press-to-Talk" switch; 4-inch Alnico-V speaker and 2 1/2-watt amplifier for life-like voice transmission over long distances. ALL-Call switch permits calling or talking to ALL stations at once; Connecting cable required is distance between ALL units in system—number of conductors in cable must be one more wire than total stations in the system. Any number from TWO to SIX Master Units may be used in a system. Each Master with 3 tubes and instructions. Stock No. 36A49. MODEL IM-5 MASTER STATION. Net Each... **\$18.67**

"MASCO" 2-WAY STEP-SAVER INTERCOM SYSTEM

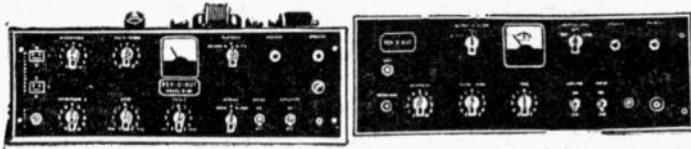


Complete, ready to install! Supplies instant, two-way communication between any two points up to 500 ft. apart! Life-like tone quality, ample power to make voices heard easily at least 25 feet from "slave" or remote station! Taylor-made for Physician, Dentist, Lawyer, Restaurant, HOMES.

MASTER UNIT features heavy duty 2 1/2-watt amplifier using 14F7, 50L6 and 50Y6 tubes. "On-Off" switch, combined with Volume Control, permits adjustment of volume to suit location. Both Master and Remote Units have "Press-to-Talk" switches; Remote may initiate calls to Master Unit; Remote Station can be used for 2-way conversation WITHOUT use of press-to-talk switch. Both Units housed in Cast Aluminum cases, size 6 5/8"x7 1/8"x5 1/4"; BOTH have 4-Inch Alnico-V speakers with 13-ohm v.c. impedance. Complete system with 50 ft. of cable and instruction. Weight, 9 1/4 lbs. Stock No. 31A61. Model "JMR" 2-WAY SYSTEM, NET..... **\$23.49**

RECORDING AND NOISE SUPPRESSOR AMPLIFIERS SOUND SPECIALTIES

REK-O-KUT "HI-FI" RECORDING AMPLIFIERS



MODEL R8A UNIVERSAL

MODEL R5A STANDARD

The new "Rek-O-Kut" Recording Amplifiers are the culmination of many months of exhaustive engineering research and painstaking production, resulting in a NEW STANDARD OF VALUE AND PERFORMANCE, now available in Models R8A "Universal" and R5A "Standard", described below.

RECORDING AMPLIFIER MODEL R8A "UNIVERSAL", 13.5 WATTS; 8 Tubes; Frequency response of plus or minus 1 db. from 30 to 20,000 cps. at normal setting of equalizer controls. Full power output at less than 3% total distortion into resistive load! 4 Input Channels—2 Hi-Imp. mikes; Radio; and Phono channel compensated for G.E. or Pickering pickups—chassis switch changes phono channel for nylon crystal pickup operation. Gain: Mikes, 120 db.; Phono, 90 db.; Radio, 80 db. Hum and Noise: 64 db. below 13.5 watts with all controls turned for maximum hum and noise output. Treble Equalizer, 14 db. boost, 15 db. attenuation above 8,000 cps., continuously variable; Bass Equalizer, 14 db. boost, 14 db. attenuation below 50 cps., continuously variable. Output Impedances, 4, 8, 15, 500 ohms for both cutter and speaker—output selector for Recording, Playback, and P.A.—mike inputs are muted at playback position of control. Recording level meter on front panel indicates correct recording level—Monitoring, 3-position switch for "off", "medium" or "loud"—speaker or headphones may be used. 7 controls for: Mike "A", Mike "B", Radio-Phono fader, output selector, treble and bass equalizers, and Monitor. Tubes are: 2 6SJ7, 2 6SL7, 1 6SC7, 2 6V6, 1 5Y3 (rectifier). Two stage inverse feedback circuit; "matching" for ANY cutter 4 to 500 ohm impedance; Treble and Bass equalization for correct Record and Playback characteristics on BOTH 33 1/2 and 78 RPM recordings; excellent output voltage regulation minimizes effect of cutter impedance change with frequency. Extra heavy duty, perfectly filtered power supply for continuous service, requires 100 watts at 105-125 volts, 50-60 cps. AC. Chassis size is 17x8 3/4"; front panel is 19x6 1/4", adaptable for rack or cabinet mounting. Weight, 17 lbs. Complete with tubes and instructions. **Net \$129.95**

"REK-O-KUT" MODEL R5A RECORDING AMPLIFIER, Model R5A "Standard" Recording Amplifier (illus. at right above), provides at very moderate cost; professional type facilities for making the finest recordings at either 33 1/2 or 78 RPM cutter speed! 6 TUBES provide 12 watts power output at less than 3% distortion into resistive load. Frequency Response is plus or minus 1 db. 50 to 15,000 cps. at normal setting of equalizer controls! 3 Input Channels, Microphone at 125 db. gain; Phono at 76 db. gain; and Radio at 76 db. gain. Output, 8 ohms for cutter and speaker, may be manually changed internally to 4, 15, 500 ohms. Output selector has positions for "Recording", "Playback" and "Public Address"—mike is muted in playback position. 2-position monitor switch for monitoring levels, or monitor may be cut out. Level Meter on front panel indicates proper recording levels. Treble equalizer provides 14 db. boost, 15 db. attenuation at 8,000 cps., is continuously variable. Bass Equalizer, switch type, provides 14 db. attenuation at 50 cps. TUBES: 1 6SJ7, 2 6SL7, 2 6V6, 1 5Y3CT (rectifier). Power supply requires 80 watts at 105-125 volts, 50-60 cps. AC. Chassis size is 17x8 3/4"; panel is 19x6 1/4" for either cabinet or rack mounting. Weight, 16 lbs. Complete with tubes and instructions. **Net \$89.95**

No. 31A71. "Rek-O-Kut" R5A Recording Amplifier. Net..... **\$89.95**



The Sensational "GOODELL" Dynamic Noise Suppressor Amplifier

(Licensed under H. H. Scott Patents Pend.). Designed for the most critical listeners. Model NSA-2 is the PERFECT Monitoring and Audition Amplifier — is ideal for custom-built Radio-Phonograph installations. Complete with pre-amplifier for "Pickering" or G.E. pickups. Model NSA-2 may be used with ANY Phono Pickup; though to obtain the ultimate in Record Scratch Elimination the use of some make of Dynamic pickup cartridge is recommended. Extremely flexible controls permit the very critical listener to adjust for maximum of music with a minimum of noise from ANY signal source! "Range" and "Suppression" Controls of Dynamic Noise Suppression section of amplifier are designed, when once set, to provide satisfactory scratch elimination from average records without continual adjustment! 11 TUBES: 1 5U4G, 3 6SG7, 2 6L6, 2 6SJ7, 1 6J5, 1 6H6, 1 6SN7, provide 10 watts minimum undistorted sine wave power output, with harmonic distortion below 1% at 8 watts power output. Frequency response, plus or minus 1 db. below 50 to beyond 15,000 cps., with slight roll-off beyond these limits. Intermodulation distortion measured with 100 and 7,000 cps. intermixed 4 to 1 with Pickering Intermodulation Analyzer below 5% at 8 watts output! Built-in 6-tube dynamic noise suppression circuit provides MORE than 30 db. effective reduction in objectionable noise or record scratch, and maintains wide range response by use of 3 reactance tubes, 4 high "Q" inductances, separate control voltage amplifier and rectifier, with 6-position Range Switch and continuously variable Suppression Control, 3 db. of volume expansion is automatically inserted in 2 positions of Range Switch. Input Impedances: 2 medium gain high impedance channels with front panel selector switch—plug-in pre-amplifier may be removed and its socket used for low impedance input transformer. Output impedance selector switch for 4, 8, 16, 250, 500 ohms, dual switch adjusts feedback resistance for voice coil and line impedances. Hum level, —60 db. (including pre-amplifier); input level required for both channels is approx. —4 db. (1-volt across 0.5 Megohms). Controls are: Radio-Phono gain, Volume, Treble, Bass, Range and Suppression. Treble control range is 36 db. (+20 or —16 db. at 10,000 cps.); Base Range is 32 db. (+16 db. or —16 db. at 50 cps.). Plug-in pre-amplifier uses 2 6AT6 tubes (in addition to tube complement of amplifier proper), provides more than ample gain with proper equalization for Magnetic pickups, G.E., Pickering, etc. Size is 14" long, 10" wide, 7 1/2" high. Weight, 18 lbs. **Net \$154.50**

No. 31A76. "Goodell" Model NSA-2 Amplifier. Net..... **\$154.50**

New! MAGNETAPE "TWIN-TRAX" TAPE RECORDER

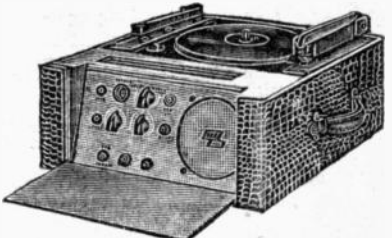


Provides one full hour of high fidelity tape recording on any standard 1/4" paper or plastic recording tape—TWICE as much as any other recorder—cuts tape costs in half! True High Fidelity—50/9,000 cps. frequency response at plus or minus 3 db.! Tape may be played back more than 1,000 times without any loss in quality! No special technical knowledge required for recording from Radio, Phono records or Voice! One recording track is made or played on forward movement of tape — and a second track is recorded and played back on reverse tape travel — with automatic reverse.

FEATURES: 10-Tube, 5-watt amplifier with 1-Meg. microphone and 1/2-Meg. Radio-Phono inputs. Has separate recording and playback amplifiers—extra low hum level (DC used on heaters); heavy duty, non-overheating motor; instant reverse control without unthreading tape; two each Recording and Erase heads—one for each track! Plays single track recordings made on any tape recorder! Absolutely no capstan tape slippage—rubber rimmed drive cannot develop "flats". Erase and bias frequency is 50 KC; minimum signal high gain, 0.001 volts; medium gain, 0.01 volt. Individual bass and treble controls, hi-frequency from +13 db. to —10 db. at 9,000 cps.; L.F. from +9 1/2 db. to —6 1/2 db. at 50 cps. Flutter and "wow" 0.1%! Amplitude variations (1,000 cps.) 3/4 db.! Complete with tubes, instructions, empty tape reel, less microphone. **Net \$285.00**

No. 31B14. Model 810-B "Twin-Trax" Tape Recorder. Net **\$285.00**
No. 14A663. 1-Hour "Brush" Tape and Reel. Net Each..... **\$2.50**
No. 14A664. Empty Tape Reel Only. Net Each..... **.65**

"MASCO" DUAL SPEED RECORDER—P.A. SYSTEM



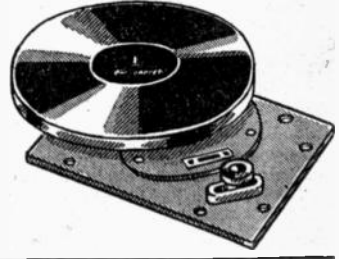
Complete, self-contained, portable 33 1/2 and 78 rpm. Disc Recorder and Playback with built-in Amplifier and 6-Inch "PM" speaker.

SCHOOLS, COLLEGES, TEACHERS, LECTURERS, ACTORS, MINISTERS — ALL will find these FEATURES to their liking!

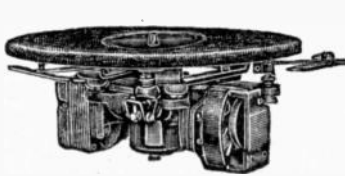
*Electronic "dubbing"—or electronic recording from any electric phono—permits exact copies of choice records! *Direct recording from radio to record disc on recorder, through input jack on panel. *Direct recording from any microphone. DUAL SPEEDS permit a 12-minute recording on a 10-inch disc at 33 1/2 rpm. speed! "Dubbing" at same speed permits recording of a standard 12-inch record on a 10-inch blank! Separate Volume and Tone Controls permit any desired volume or tone setting—Volume Indicator Neon Eye assures accurate recording level. Separate Input Channels for "Mike", Phono and Radio—any standard radio set may be used and adjusted for direct electronic radio recordings. High quality Crystal Cutting Head for recording and low pressure Crystal Pick-up for playing back recordings—playing any make of standard record up to 12-inch. Complete with 5 TUBES in handsome and durable Portable Carrying Case, drop front lid over controls and speaker opening, case covered with Brown alligator fabricoid. Size, 16x 19 1/4x8 1/2" high. Wt. 40 lbs. For 110-125 volt, 60 cycle A.C. current. **Stock No. 30B37. "Masco" Model RK-5 Portable Recorder. Net Each..... \$87.92**

REK-O-KUT T-12 Low Cost Transcription Turntable

Designed for perfect playing of the new "LP" (long playing) Records. TWO SPEEDS—33 1/2 and 78 R.P.M. Has same features of construction as Model G-2, including counterbalanced CAST ALUMINUM ALLOY turntable, driven by heavy duty, CONSTANT SPEED, Plus-Power top quality motor. Hardened steel, hand polished, forced lubrication drive shaft. Neoprene dual idlers for each speed. Noise level minus 42db. below recording level. Size of mounting plate is 15x13x6"; wt. of motor, 18 lbs. **Stock No. 30B61. Model T-12 TURNTABLE. Net..... \$79.50**



GREEN FLYER Model "D" 2-Speed Motor



33 1/2 and 78 RPM governor controlled speeds. For amateur recording and playback of Recordings, new "LP" records, or standard commercial 10" or 12" records! Heavy, cool running induction motor drives 10" turntable through enclosed spiral bakelite gears, running in oil bath. Long, oversize, self-lubricating bearings. Has speed change lever and regulator. **Net \$15.90**

No. 31A97. Model "D" Motor with 12" Turntable. Net..... **\$16.82**
No. 16A593. Automatic Stop for Above Model "D" Motor. Net Each..... **.87**

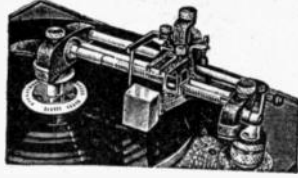
"BALLENTINE" PHONO MOTOR



Famous QUIET 78 RPM heavy duty, single speed phono motor, exceptional quality constructed for assured long life! Motor is rubber cushion mounted by 3-point suspension from heavy steel plate; has fan cooling and sealed bearings for long life. Positive friction drive to 9" turntable. Mounts in 6" space, depth 2 1/4". With 22" leads for 110-volt, 60-cycle A.C. Weight, 3 1/2 lbs. **Net \$4.29**

No. 5A144. "BALLENTINE" Quiet Phono Motor. Each..... **\$4.29**

16-IN. RECORDING TURNTABLE & OVERHEAD CUTTER



← **MODEL "V" STANDARD 16-INCH DUAL SPEED RECORDING TURNTABLE.** A proven success in the professional recording field and further improved by incorporation of a new Hysteresis capacity start and run motor—the smoothest, quietest, longest life motor possible to build! Motor meets all N.A.B. specifications, with margin to spare, on tolerance, rumble, and "wow". Laboratory tested, cast aluminum alloy turntable; lathe turned to perfect balance. 1" dia. turntable shaft, seated on steel ball bearing, is micro-ground and lapped into bearing for precise fit. Cast iron, ribbed "L"-beam type chassis has 3-point suspension. Rim drive of turntable by oil and wear resistant Neoprene idlers assures constant, even speed at either 33 1/3 or 78 R.P.M. Heavy rubber turntable cushion; entire assembly dynamically balanced for perfect operation. Micro-switch starts and stops motor when Speed Control knob is moved from neutral to 33 1/3 or 78 r.p.m. positions. Natural aluminum and gray crackle finish, size, 20"x20", requires 5 1/2" space beneath motor board, 2" clearance above; wt. 40 lbs. For use only on 105-125 volt, 60 cycle A.C. current.

No. 30A63; Model "V" Standard 16" Recording Turntable, Net..... \$165.45

MODEL "V" DE LUXE 16" RECORDING TURNTABLE with "Mastermatic" Speed Control; permits instantaneous control of turntable speeds by depressing the Control Knob and sliding to left for 78 r.p.m. or to right for 33 1/3 r.p.m.! Micro-Switch turns power "on" and "off" by movement of Mastermatic speed control. New Hysteresis capacitor motor and all other features described above for Model "V" Standard unit.

No. 30B62; Model "V" De Luxe 16" Recording Turntable, Net..... \$195.45

"MASTER-PRO" DE LUXE 16-INCH OVERHEAD RECORDING MECHANISMS (illus. at right above). Fits any 16" turntable with standard center pin; new cutter mount permits change to most any make of cutter. Precisely machined and rigidly tested to give unflinching daily service. **FEATURES:** Exclusive Mechanical Spiraling; two inbuilt over-running clutches permit perfect spiraling up to 3/16" groove spacings without danger of overcut or mechanism "jamming." Stainless steel lead screw turns on hardened steel ball bearings—half-nut drive prevents "grouping"; spring controlled micrometer depth cut mechanism is quickly adjustable without damage to cut or stylus. Patented end support permits positive leveling. Chip collector. Enclosed drive gears are permanently oiled; all working surfaces and moving parts are "micro-finished" to a mirror polish for quiet, velvet action. All parts of high-test steel or bronze! Cuts 120-lines-per-inch, Outside-In; also available, on request with order, for cutting 90 or 105 lpi I.O. or O.I., or 120 lpi I.O.; Chrome plate and gray crackle finish; wt. 17 lbs. Supplied complete with choice of "Webster-Racine" 8-Ohm Magnetic Cutter, or "Brush" RC-20 Crystal Cutter. (Crystal cutter normally requires use of Model T-45 Matching Transformer, listed below.)

No. 30B109-M. Model M5-S De Luxe Master-Pro Magnetic Cutter, Net..... \$215.00

No. 30B109-C. Model M5-S De Luxe Master-Pro Crystal Cutter, Net..... \$215.00

"MASTER-PRO" STANDARD 16-INCH OVERHEAD RECORDING MECHANISMS. Has ALL the fine engineering and construction features described above for De Luxe Master-Pro; except does not have Mechanical Spiraling. Choice of cutters and lead screws as stated above.

No. 30A64. "Standard" Master-Pro Magnetic Recording Mechanism, Net..... \$175.00

No. 30A65. "Standard" Master-Pro Crystal Recording Mechanism, Net..... \$175.00

MODEL T-45 MATCHING TRANSFORMER, for use with "Brush" RC-20 Crystal recording head. Has input taps of 8 and 500 ohms for tapping voice coil or 500-ohm line of amplifier—required where no high impedance output is available. **No. 13A200. T-45 Transformer. Your Cost..... \$9.50**

G-2 Professional 16-Inch Transcription Turntables



G-2 Standard 33 1/3 and 78 r.p.m. Transcription Turntable is free from "wow" on either vertical or lateral transcriptions—constant speed with less than 1/2 of 1% variation, beats N.A.B. specifications! Noise level is —45db below recording level; Induction motor picks up to 78 r.p.m. in 3/4 of 1 turn, to 33 1/3 r.p.m. in 1/4 turn! A WE 9A pickup will not jump a groove from a standing start or during speed shift from 33 to 78 r.p.m. while in motion! Cueing—15 1/2" turntable allows 1/4" overlap of transcription record, permitting cueing from the rim instead of the face of disc. Rim drive by neoprene idlers; cushion mounted motor, lathe turned cast aluminum alloy turntable with drive shaft lapped into bearing. Self oiling. Mochined, cast iron, 3-point suspension ribbed chassis. Size 20"x16"x7 1/2" high overall, wt. 36 lbs. For use only on 105-125 volt, 60 cycle AC current.

No. 30A115. Model G-2 Standard Transcription Turntable. Each \$125.00

MODEL G-2 DE LUXE TRANSCRIPTION TURNTABLE, has all features described for G-2 Standard model above, Plus synchronous capacitor type long-life motor and "Rek-O-Kut" Mastermatic semi-automatic speed shift. Same size and weight as Standard model.

No. 31A88. Model G-2 DE LUXE Transcription Turntable. Each \$165.45



REK-O-KUT "CHALLENGER"

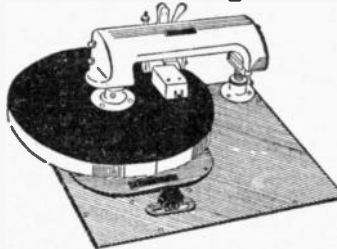
Designed and engineered to fit the needs of the Educational and Professional fields for a 12-INCH PROFESSIONAL Portable Recorder. Ideal for use by musical organizations and Home Recording enthusiasts. **PROFESSIONAL QUALITY** performance of the "Challenger" moderate price is assured by these **QUALITY SPECIFICATIONS:** Dual Speed 12-inch turntable, driven by quiet, long life motor with self-oiling system providing efficient and complete oiling to all moving parts. Positive, simple speed change from 78 to 33 1/3 r.p.m. in a "jiffy" without tampering with motor or mechanism. Master Pro Overhead Feed Cutting Mechanism, cuts up to 13 1/4" Masters, has stainless steel lead screw with constant mesh feednut—cutter raises automatically when feednut reaches end of lead screw; universal ball adjustment for quick alignment. Magnetic Cutter, 8-ohm, is flat from 40 to 7,000 cps. Leadscrew cuts outside-in at 108 lines per inch. Cast Aluminum, precision lathe turned Turntable, is internal rim driven through large neoprene compound drivers—cast aluminum, cross ribbed chassis. High Fidelity 6-Tube Recording and Playback Amplifier with frequency range of plus or minus 1 db. from 50 to 15,000 cps.; 2-stage inverse feedback circuit, excellent output voltage regulation minimizes effect of cutter impedance change with frequency. Power Output, 12-watts, 6-tubes, with push-pull 6V6GT outputs; provide Microphone Gain of 125db; Phono or Radio Input gains of 76 db each. Output wired for 8-ohm cutter and speaker, changeable internally to 4, 15 or 500 ohms. 3-Position Output Selector for Recording, Playback and Public Address; microphone is "muted" in playback position. Hum Level is 64db below recording level; Recording Level Meter for monitoring recordings. Treble equalizer, continuously variable, provides boost of 14db with attenuation of 15db at 8,000 cps. Bass Equalizer, switch type, provides attenuation of 14db at 50-cps. Monitor Switch provides two monitoring levels, or monitor speaker may be cut out for use of head phones or extension speaker. "Challenger" will play 16-inch "platters"; standard 10" and 12" records, or record and playback up to 13 1/4" recordings—or may be used with Microphone (Not included in price) for Public Address service! Housed in heavy duty carrying case with 8-inch PM Dynamic Speaker mounted in removable cover. Size, 27x24x15". Weight, 80 lbs. 115 volt, 60 cycle, A.C.

No. 36A83; "Challenger" Standard Recorder-Amplifier, NET \$329.95

"CHALLENGER" DE LUXE PORTABLE RECORDER-AMPLIFIER: Provides same facilities described above for Standard Challenger Recorder EXCEPT has **MODEL R-8A Recording Amplifier,** the finest possible to build at a reasonable cost, with these **FEATURES:** "FM" fidelity in frequency response of plus or minus 1 db. from 30 to 20,000 cps.; equalized pre-amplifier for G.E. or Pickering Pickups; Power Output of 13.5 watts at less than 3% total distortion into resistive load; 4-Input Channels, 2 Hi-Impedance Microphone, Phono, Radio, with switch for changing phono input from G.E. or Pickering to Nylon Crystal pickup cartridge. 8-Tubes, 2/6SJ7; 2/6SL7; 1/6SC7; 2/6V6; 1/5Y3 (rectifier). Input Gains, 120db on microphones, 90db on Phono, 80db on Radio. Output Impedances of 4, 8, 15 or 500-ohms for both cutter and speaker. Hum and noise level is 64db below 13.5 watts output with all controls set for maximum hum and noise output! 2-Stage inverse feedback circuit for A-1 output voltage regulation; Level Meter built-in; 3-position Monitor Level Switch for Off, Medium and Loud; provision for external speaker or headphones. Separate Microphone Input Controls, Radio-Phono Fader Control; Treble equalizer continuously variable, 14db boost and 15db attenuation above 8,000 cps; Bass Equalizer provides 14 db boost and 14 db attenuation below 50 cps. is continuously variable! Continuous duty power supply requires 100 watts at 105-125 volts, 60-cycle A.C. "Challenger De Luxe" Portable Recorder and amplifier has Special "Hysteresis" quick starting, even speed, extra long life Recording Motor—the finest money can buy; and the same perfectly balanced, cast aluminum turntable and chassis, and the identical cutting mechanism described in detail above for Standard Model Challenger Recorder; Playback pickup for 16" records, featherweight with Nylon Cartridge and playing stylus. Is housed in same type carrying case with 8-inch PM dynamic speaker baffled in lid of portable carrying case, removable for placing speaker in remote location. Overall size of Challenger DeLuxe is 27x24x15" thick. Weight, 80 lbs.

No. 36A84. "CHALLENGER DE LUXE" Recorder. Net Each... \$399.95

12-Inch. Recording Turntable and Cutting Mechanism



Model TR-12; 12-inch dual speed Professional type Recording Turntable; 33 1/3 and 78 R.P.M. The identical turntable as used in "Challenger" portable recorders described above—heavy duty, constant speed induction motor drives precision lathe turned Cast Aluminum turntable, internal rim drive by large neoprene, compound drivers. Ribbed, cast aluminum chassis is drilled and tapped for M-12 overhead cutting mechanism. Overall size, 16x15 1/2x7" deep. Weight, 22 lbs.

Stock No. 31A69. 12" Recording Turntable. Each..... \$89.50

"MASTER PRO" 12-INCH OVERHEAD CUTTING MECHANISM; Incorporates Rek-O-Kut precision in a professional quality cutter for recordings up to 13 1/4"; cuts 108 lines per inch, outside-in with exacting precision. Stainless steel leadscrew with constant mesh feed nut to prevent double cuts; automatic safety raises cutter at end of leadscrew, universal ball adjustment for quick alignment to any turntable; gray crackle finish streamline housing encases all moving parts. Magnetic cutter head (8 ohms) is flat from 40 to 7,000 cps. Size, 11 1/2x4 1/2x6". Weight, 9 lbs.

No. 31A68. Model M-12 CUTTING MECHANISM (12"). Net Each \$89.50



"VM-2" Recording Level Meter

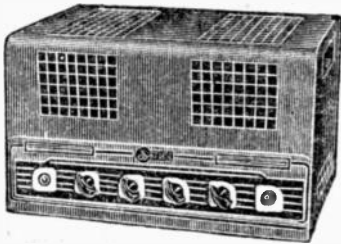
Takes the guesswork out of recording. Assures the recording artist a faithful reproduction of his own distinctive style. Large dial is readable at distances to 25 feet. Operates from outputs of 8-15-200 or 500-ohms. Gray crackle Cast Aluminum case size, 4 3/4"x6"x6 1/4" high. Weight, 5 lbs.

No. 20A812. VM-2 Recording Level Meter. Ea. \$29.50

Up-to-the-minute in engineering design and top-notch in quality, "Bogen" Hi-Fidelity Phono-Radio Tuner Amplifiers meet the demands of the most fastidious—in frequency response coverage—their provisions for ANY type of phono pickup input—and their ease of installation and operation. Available with or without protecting cage, they save unnecessary cost when installation is to be made in conjunction with other equipment in a common cabinet, or as modernization installation in existing console cabinets.

PX-15 PHONO-RADIO TUNER HI-FIDELITY AMPLIFIER

SCRATCH ELIMINATOR CONTROL is only one of the super-features of **MODEL PX-15**. Designed as a dual purpose unit for reproduction of the finest L.P. (long playing) or standard Phono records—with additional provision for use as an output amplifier for any FM-AM Radio Tuner. **15 WATTS POWER OUTPUT** at less than 2% distortion; peak power, 30 watts. Frequency response is 30/15,000 cps. plus or minus 1 1/2 db. with hum rating of -75 db. referred to rated output. Pre-amplifier accommodates C.E. Variable Reluctance, Pickering, Magneto-Induction and similar magnetic pickups in addition to any standard Crystal cartridge—maximum gain is 108 db. on Phono or Radio inputs; simple external switching of Pickup and Tuner removes "load" of magnetic pre-amplifier when tuner is in circuit. Phono record Scratch Eliminator Control, built in with 4-position selector for varied record noise conditions. Dual electronic tone corrector; Bass Control: +20 to -23 db. at 60 cps.; Treble Control: +20 to -20 db. at 10,000 cps. Selective Output Impedances of 4, 8, 15, 500 ohms available at terminal strip and 2 speaker sockets. TUBES: 2 6SL7GT, 2 6L6G, 1 5Y3GT (rectifier). Power consumption is 105 watts at 115-125 volts, 60-cycle AC. Heavy steel chassis overall size, with cage, is 15" long x 9 1/4" deep x 8" high. Weight, 30 lbs. U/L APPROVED!

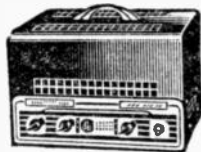


No. 30C29. Model PX-15 Phono-Radio Tuner Amplifier. Complete with Tubes and Cage Cover as Shown Above. Net Each **\$86.25**

MODEL PX-15-C Remote Control Phono-Radio Tuner Amplifier. Identical as described above except has 4-ft. extension controls, allows amplifier to be installed in out-of-sight space with controls brought out to panel—does not have ventilated cage cover as shown above for Model PX-15. No. 30B124. Model PX-15-C. Complete with Tubes and Instructions. Net Each **\$90.75**

PX-10 HI-FIDELITY PHONO-RADIO TUNER AMPLIFIER

Multi-featured 10-WATT amplifier; with built-in Pre-amplifier for accommodation of the newest design pickups, C.E., Pickering, Magneto-Induction, and all standard Crystal Cartridge types! Frequency response is 30/18,000 cps. plus or minus 2 db. at full 10 watts output—at less than 5% distortion! Hum is -70 db., referred to rated output; Input Impedances are: Magnetic, 47,000 ohms; Crystal Pickup, 470,000 ohms; Power Gain is 105 db. for Magnetic type pickups, 63 db. for Crystal pickups. TUBES: 1 6SC7, 2 6SL7GT, 1 6SA7, 2 6V6GT, 1 5Y3GT (rectifier). Output Impedances are: 4, 8, 15, 500 ohms with 500-ohm tap being equal to 70-volt Constant Voltage Tap, making PX-10 a "dandy" amplifier for Music Distribution Systems. Exclusive NEW Multi-step Tone Expander has 4 distinct tonal ranges: (1) Mellow Bass, (2) Wide Range, (3) Extended Range and (4) Brilliant! Power consumption is 78 watts at 115-125 volts, 60-cycle AC. Available with ventilated cover for "out-of-cabinet" use, or less cover and with 4-ft. extension controls for built-in or conversion use. Overall size, with cage, as shown above, 11" long x 7" wide x 7 1/4" high. Weight, 15 lbs. U/L APPROVED!



No. 31B51. Model PX-10 Phono Amplifier as Shown Above. Net. **\$54.15**

Model PX-10-C Remote Control Phono-FM/AM Radio Tuner Amplifier. Has controls on 4-ft. extension cable for installation in out-of-sight space. Does NOT have ventilated cover over chassis. U/L Approved. No. 31B52. Model PX-10-C Hi-Fidelity Remote Control Amplifier. **\$56.10**

"BOGEN" Dual Speed Wired Transcription Player

TYPE 8016-L; Heavy duty, DUAL SPEED Transcription player—plays all 10, 12 or 16-INCH records, whether "standard" or Commercial recordings—at regulated constant speeds of EITHER 33 1/3 or 78 R.P.M.! Two lever controls permit speed selection and control speed regulation; heavy 12-inch turntable runs "true" at all times on either speed. Pick-up: "Astatic" Type HP-16, counter-balanced, low pressure (1 oz.) with jewel type permanent stylus. Case is of reinforced heavy plywood, with ventilation for motor, durable leatherette covered; size, 21 3/4 x 17 x 7" thick; wt. 35 lbs. With 7 ft. A.C. cord and shielded pick-up cord. 110-V. 60 Cy. A.C. No. 30A98. "Bogen" Model 8016-L Transcription Player. **\$43.20**



"BOGEN" Dual Speed Heavy Duty Record Player

MODEL 8007 PORTABLE PHONOGRAPH—Dual Speed handsomely housed, WIRED type record player—for ANY PURPOSE requiring a constant speed record player for 33 1/3 or 78 R.P.M. recordings of 10" or 12" size—will operate on either 50 or 60 cycle A.C. current! Built-in Speed Regulator, "Astatic" Model AB-8 Crystal Pick-up assures proper tracking and excellent response. May be played through any PA amplifier, or amplifier section of any radio set. In handsome plywood, fabric-covered portable case with secure pick-up rest, catches and carrying handle, size, 15 3/4 x 13 x 7 1/4"; wt. 24 lbs. 110-volt AC. No. 30A97. "Bogen" Model 8007 Wired Record Player. Net. **\$29.80**



MULTI-FEATURE 2-STATION INTER-COMM SYSTEM

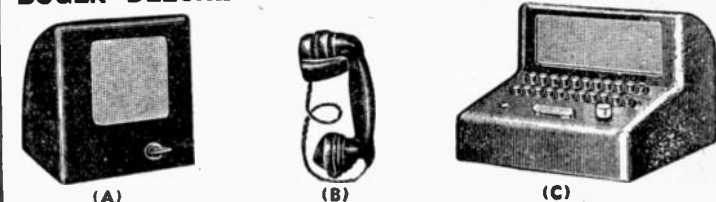
Bogen "CHALLENGER-200" — Complete 2-Station System with 45-foot connecting cable and plugs for easy, instant use! Features: Modern styling with cabinets of Polystyrene, Bar Type Press-to-Talk Switches and Master Station with Dual Duty Volume Control—(1) Allows Master to keep Remote talk-back unit "alive" at all times, and either hear all sounds in vicinity of Remote, or, (2) Volume control may be set to cut out all sounds from remote, but still allow remote unit to call Master at any time by merely depressing control button! Tailor-made for Nursery, Restaurant and Office applications! With Master volume control set in "silent" position, Master can instantly answer Remote at full volume by merely depressing press-to-talk bar! Master Station has 45-ft. cable connected and terminating in a plug. Remote has 5-ft. cable attached and terminating in a socket—to install it is only necessary to connect Master to AC power, locate the Remote, plug the cord connectors together—and put both units in immediate use. Both cabinets are 6 3/4" wide, 7 1/2" deep and 5 7/8" high. Weight complete, 11 lbs. U/L Approved! No. 32B218. "Challenger-200" Complete 2-Station Intercomm System. Net **\$23.97**



"600" Master Inter-Comm Systems feature extreme flexibility at very low cost. Master Station is a UNIVERSAL unit in that it is adaptable for use EITHER as the ONE Master station in conjunction with from one to five "Remote" stations—OR—Master Stations may be used exclusively in a system comprising up to SIX MASTER STATIONS—this extreme flexibility available at any time to owner by the mere change of a simple connection on the chassis of the Master Unit! Operating FEATURES are: Clean, clear voice transmission over long distances; Master units are housed in beautiful Polystyrene cabinets, size 6 3/4" wide, 7 1/2" deep, 5 7/8" high; PM dynamic speaker volume control on each Master Unit; Bar type Press-to-Talk switch; 7-position Selector Switch featuring "Silent" and "All Call" positions, plus 5 positions for calling other stations in the system—whether Master or Remote Units. Remote Units are identical to Fig. at right above, have Bar Type Switch to initiate calls to Master Unit. Master, weight 11 lbs.; Remote, weight 2 lbs. U/L Approved! Wiring: "All Master Systems" require cable with ONE MORE conductor than there are stations in the system—cable runs from No. 1 to No. 2, etc.; "Master-Remote" Systems require a 3-conductor cable from Master (Model 600) unit to EACH Remote (Model 60R) unit in system. All Master Systems may consist of two to six Model 600 units—permit several 2-way conversations at same time—all conversations are private! Master-Remote systems consist of ONE Model 600 unit and one to five Model 60R Remote units.

No. 32B219. Challenger "600" Master Station with Tubes. (For Either Master-Remote or All Master Systems.) Net Each **\$20.25**
 No. 32B228. Challenger "60R" Remote Station. (One to Five Remotes May Be Used with "600" Master.) Net Each **\$6.75**

BOGEN DELUXE DUAL-PURPOSE COMMUNO-PHONE



Moderately priced, highly efficient, dependable, day-in, day-out operation! MASTER UNITS: "11D" for either 11-station "All Master" System; or for 1 to 10 Model R55 Remote Stations in conjunction with one "11D" for Master-Remote systems. "21D" Masters accommodate total of 21 Stations, either all Masters, or one Master and 20 Model R55 Remote Stations. All Master Systems permit complete privacy and facilities for carrying on up to 5 or 10 2-way conversations at once. Master-Remote Systems permit Master to call any remote in system at will, or as many at a single call as may be desired, merely by depressing Remote Call Push Buttons for stations desired. Remote Stations may call Master, but cannot talk to or call each other. Both "11D" and "21D" Master Stations are "dual-purpose" units for either Master-Remote or All-Master Systems; may be changed for use on either system by a simple connection on back of chassis. Push-button selector switches; Talk-Listen Bar; Volume control; Neon pilot light; PM dynamic speaker; tubes are 1 each 14F7 and 50L6GT with Selenium rectifier. Plug-in French Privacy Phone may be added to any "11D" or "21D" Master. Furniture finishes: wood cabinets, 7 1/4" high x 9 1/2" wide x 8 1/4" deep. R55 Remotes are 7 1/4" high x 6 3/4" wide x 6" deep. Cabled wiring on Master units terminates in spaced lug terminal strip for quick connection to Model JU junction box. Installation, All-Master systems require cable with one more conductor than stations in system; Master-Remote Systems require only 3-wire cable run from Master to each remote in system. All units are U/L Approved and for operation on 115-volt AC or DC current.

No. 32B225. Model "11D" Master Station. Complete with Tubes. (For 1 to 10 additional Master or Remote Units.) Net Each **\$36.75**
 No. 32B226. Model "21D" Master Station. Complete with Tubes. (For 1 to 20 additional Master or Remote Units.) Net Each **\$49.50**
 No. 32B231. Model R55 Remote Station, with Call Switch. (For use with either "11D" or "21D" Master Units.) Net Each **\$11.10**
 No. 32B232. Model "UX" Universal French Phone Hand Set. (Plug-in type for use with "11D" or "21D" Masters.) Net Each **\$18.00**
 No. 32B230. Model "JU" Junction Box. One for use with each "11D" Master, 2 for use with each "21D" Master. Net Each **\$4.35**

Bogen DeLuxe PUBLIC ADDRESS AMPLIFIERS



The new "BOGEN" SUPER-AMPLIFIERS — For those who want nothing but the best in quality throughout, together with new and outstanding engineering developments, MODELS HX-50 and HX-30 as described and listed below, provide the absolute ultimate in fine P.A. Amplifiers. NEW ANTI-FEEDBACK CONTROL as incorporated in both models permits "tuning out" of acoustic feedback in the sound system without compromise to quality of output level! In action, it permits increase of the effective, useable output of these two fine amplifiers to be raised up to 10 db. above previous "feedback" levels—more useable power, more amplifier stability—and less critical microphone placement! BUILT-IN Remote Control of any TWO inputs for use of Model SRC-50 Remote Control.

Model HX-50 U/L Approved 50-Watt Super-Amplifier



De Luxe in design and construction; full 50 watts power output at less than 3% distortion, with frequency response of 30/20,000 cps. at plus or minus 2 db.!

FEATURES: 3 Microphone inputs at 120 db. gain on each, 1 Phono input at 80 db. gain, at fundamental hum level of -65 db.; mic. -58 db. Input impedances are 500,000 ohms on all inputs; (Low impedance "mike" inputs for 50,200 or 500 ohms can be furnished at additional cost). Output Impedances are 4, 8, 16 Ohms plus 2 constant voltage taps of 70 and 140 volts; speaker connections may be made at Terminal Strip or at two speaker sockets; constant voltage taps of 70 and 140 volts eliminate "matching" troubles when a number of speakers are to be operated at varying volume levels. **Tone Corrector Ranges:** Bass Control, +20 to -23 db. at 60 cps.; Treble Control, +20 to -20 at 10,000 cps. 12 TUBES: 4 6S7, 3 6SL7, 1 6SN7, 1 5R4CY, 2 807, 1 5Y3 (Rectifier). **Special features include:** Feedback regulated pre-amplifiers (eliminating critical 1st stage tube selection); multi-stage Inverse Feedback circuit for delivery of full 50-watt rated output over entire frequency range of 30/20,000 cps.; peak power of 90 watts at less than 5% distortion. Oil filled capacitors in high voltage power supply safety inter-lock switch cuts power "off" high voltage when amplifier cover is removed! U/L Approved throughout, including fused power circuit, cabled wiring and "terminal board" construction. Seven handy, large knob controls for easy operation; sloping illuminated panel; housed in heavy steel cabinet size 17" long x 9" high x 13 1/2" deep; finely finished in Bogen Blue-gray with contrasting trim. For operation only on 115-125-volt, 60-cycle AC; power consumption is 240 watts. Weight, 47 lbs.

No. 34A157. Model HX-50 DeLuxe Amplifier and Tubes. Net. **\$145.10**

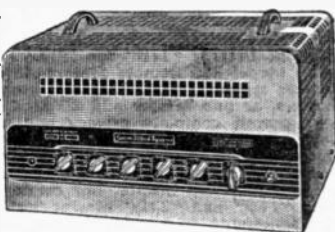
MODEL HX-30 DELUXE SUPER-AMPLIFIER

Has same outward and panel appearance as Model HX-50 illustrated above, with identical overall construction features described for Model HX-50 above. **MODEL HX-30 TECHNICAL SPECIFICATIONS:** 30 Watts Power Output at less than 3% distortion; peak power, 45 watts; Frequency Response, 30/20,000 cps., plus or minus 2 db. Inputs (4 total) include 3 Microphone at 121 db. gain at 500,000 ohms impedance and 1 Phono at gain of 80 db. at 500,000 ohms; 50-200-500 ohm Low Impedance inputs available at extra cost. Fundamental Hum level is -65 db., microphone hum level -58 db. referred to rated output. **Tone Corrector Ranges:** Bass Control, +20 to -23 db. at 60 cps.; Treble Control, +20 to -20 db. at 10,000 cps. 11 TUBES: 4 6S7, 3 6SL7, 1 6SN7, 2 6L6G, 1 5U4G (Rectifier). **Output Impedances** are 4-8-15 ohms plus constant voltage tap of 70 volts—all outputs available at terminal strip and 2 plug-in speaker sockets. Remote Control is built-in to permit remote mixing and fading of any two channels, by use of No. 17A737 Model SRC-50 Remote control unit at extra cost of \$8.70. Heavy duty power supply, fused, U/L Approved throughout! Power requirements are 200 watts at 115-125 volt, 60 cycles AC. Cabinet and panel same design as HX-50 above, size 17" long x 9" high x 10" deep. Wt., 38 lbs.

No. 34A158. Model HX-30 DeLuxe Amplifier and Tubes. Net. **\$108.00**

MODEL E-75 HIGH POWER AMPLIFIER

Two separate 35-watt amplifiers, each with its own power supply, inverse feedback circuit and Master Gain Control—COMBINED with a preamplifier common to both; eliminating complete breakdown at any time—and permitting continuous service, come what may! Component failure in one 35-watt section DOES NOT "shut down" THIS fine amplifier! Power Output is 70 watts; peak power, 100 watts. Frequency response, 30-14000 cps. 1 db. Gain: Microphone, 124 db.; Phono, 80 db. Hum, -70 db. at 70 watts output. Input Impedances: Two Microphone, 500,000 ohms; 1-Phono, 500,000 ohms. Output impedance, each of the TWO 35-watt sections are tapped at 4-8-15-500-1000 ohms. 14 TUBES: 2-6SF5, 2-6SL7GT, 2-6F6G, 2-7Z4, 4-6L6G; 2-5U4G (rectifiers). **CONTROLS:** 2—Microphone; 1—Phono; 2—Master Gain; 1—Bass-Treble; "On-Off" Switch. In heavy, ventilated steel cabinet, finished in pleasing gray, black and red; with Chrome Handles. Size, 17 1/2 x 12 1/2 x 10" high. Weight, 63 lbs.



Stock No. 30A16. Model E-75 Super-Power Amplifier. Net. **\$134.25**

COMPLETE 70-WATT AUDITORIUM SOUND SYSTEM

A real quality Sound System, tailored to the needs of Schools, Colleges, Dance Halls, Skating Rinks, Public Auditoriums. CONSISTS OF: Model E-75 Amplifier and tubes; FOUR "Jensen" latest model P12N 15-watt "PM" dynamic speakers (Our No. 34B128); FOUR special heavy duty wall baffles, (Our No. 40A9); 250 ft. Rubber Covered Speaker Cable; 4—speaker plugs; "Turner" 33-D Dynamic Microphone with 20 ft. cable and plug; and "Atlas" Type MS-24 De Luxe Mike Stand—a complete, De Luxe Sound System.

Stock No. 50A7. Complete Auditorium Sound System. Net. **\$307.87**

COMPLETE 70-WATT OUTDOOR STADIUM SOUND SYSTEM

Consists of E-75 Amplifier and tubes, FOUR "University" Reflex Trumpets with 25-watt Driver Units; "Turner" 33-D Dynamic Microphone with 20 ft. cable and plug; and "Atlas" MS-24 DeLuxe Floor Stand.

Stock No. 50A8. Complete 70-WATT System. Net. **\$303.13**

32-WATT DELUXE UNIVERSAL MOBILE AMPLIFIER



DUAL PURPOSE AMPLIFIER designed for use on EITHER 110 volt A.C. OR 6 volt battery current! CONSTANT SPEED PHONO MOTOR, rim drive; NO "wows" or waver on either battery or AC current! AMPLIFIER AND PHONO ASSEMBLY built as integral units—ALL INSIDE THE CABINET with hinged cover closing over entire unit. Three Input Channels allows mixing of 2-Microphones and Phono at the same time. TRIPLE RANGE ELECTRONIC TONE CONTROL provides complete control of Bass, Treble, and Middle register; permits PERFECT adjustment of tone and volume, regardless of indoor or outdoor use; creates ANY TONE RANGE WITHOUT LOSS OF VOLUME! Battery saver switch—cuts "B" power but leaves tube filaments "ON" for instant use. No outside power pack required—EX326 is completely self-contained; 6-volt DC and 110 volt

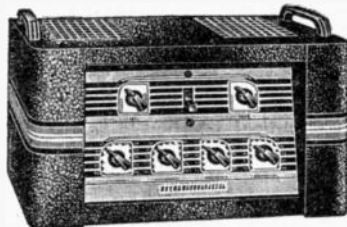
AC power supplies are built-in—changeover from battery power to AC is AUTOMATIC! ILLUMINATED sloping panel with all controls grouped for fast, accurate amplifier control. Scientifically ventilated case for cool operation at all times. **Technical Specifications:** 8-TUBES: 3-6SF5; 2-6SL7GT; 2-6L6G; 1-5U4G. OUTPUT: 32 watts undistorted peak power; 40 watts at less than 5% distortion; Gain, 120 db. on Microphone, 70 db. on phono; High Impedance Inputs; Output, 4-8-15-250-500 ohm. Frequency Response, 30-12,000 cycles, plus or minus 2 db.; current drain, 6-volt D.C. battery, 28 amps., 120-watts on 110 volt A.C. Shockproof "Astatic" crystal pick-up. Heavy steel cabinet, ripple gray enamel size 16x16x10 1/4" high. Complete with all tubes and instructions; weight 60 lbs.

Stock No. 30A17. "Bogen" Model EX-326 Amplifier. **\$150.00**
NET EACH.

COMPLETE 32-WATT MOBILE SOUND SYSTEM—READY TO PLAY!

Consists of above Model EX-326 Universal 6-volt/117 volt Amplifier and tubes; "Turner" Model 9D Dynamic "Handy-Mike" with 7 ft. cable and plug; and TWO "University" 3 1/2 ft. Reflex Trumpets & 25-watt Driver Units. Stock No. 50A9. 32-WATT Complete Mobile Sound System. Net **\$240.50**

35-WATT DELUXE AMPLIFIER — MODEL EX-35



Truly a De Luxe, **DEPENDABLE** Amplifier providing full 35 watts output at less than 5% distortion; REMOTE CONTROL of two channels; Electronic Tone Correction; 6L6 Push-Pull Output! 42 watts clean power when needed! Inverse feed-back and special transformers assure uniform output from several taps—at all frequencies— regardless of speaker loading. 4—INPUTS: 3 "mike"; 1—Phono at 500,000 ohms; Frequency Response: 30—14,000 cps., 1 db.; Tone Corrector range, minus 15 db. to plus 13 db. at 40 cps. on Bass; minus 10 db. to plus 8 db. at 10,000 cps. on Treble. GAIN, 120 db. on "mike" inputs; 80 db. on Phono. Hum, Fundamental down 64 db. and "mike" down 59 db. at rated output. Output Impedances: 4, 8, 15, 500, 1,000 ohms at terminal strip and 2 plug-in speaker sockets. Remote Control provision permits "mixing" and "fading" any 2 of the 4 inputs from a remote point from amplifier. (Model SRC-50 Remote Control Unit, Our No. 17A737 at \$8.53 extra, required.) 12 Tubes: 4-6SF5, 2-6SL7GT, 1-6SJ7, 1-6F6G, 1-7Z4, 2-6L6G, 1-5U4G (rectifier). In heavy steel, ventilated cabinet; Illuminated Control Panel, special gray enamel finish with trim of red and black; size 16 1/2 x 10 1/4 x 8 1/2" high. Weight, 43 lbs.

Stock No. 30A18. Model EX-35 DeLuxe Amplifier. Net. **\$100.35**

MODEL EX-35B COMPLETE INDOOR 35-WATT SOUND SYSTEM

CONSISTS OF Model EX-35 Amplifier and tubes, two 12-inch PM heavy duty speakers, mounted in Walnut wall baffles and with 25 ft. cables and speaker plugs; "Astatic" N-30 Crystal Microphone with 12 1/2 ft. cable, plug. Stock No. 50A10. Complete 35-Watt Indoor Sound System. Net **\$173.90**



"Pacemaker" 14-Watt Amplifier

The ideal amplifier for a multitude of applications and uses; 14 WATTS Audio Power at less than 5% distortion! Tailored to the needs of the majority of Sound Installations. MODEL E-14 FEATURES: Three Hi-Impedance Inputs: 2—Microphone, 1—Phono; Frequency Response: 40-12,000 cps. plus or minus 1.5 db. Gain: 115 db. on Microphones, 75 db. on Phono. Output impedances: 4-8-15-250-500 Ohms at terminal blocks and two speaker sockets. 7 TUBES: 2-6SF5, 1-6SN7GT, 1-6S7, 2-6L6G, 1-5Y3GT (rectifier). Hum, 64 db. below rated output. Power consumption, 90 watts at 117 volts, 60 cycle, A.C. Illuminated sloping panel with individual Gain Controls for all input channels, Tone Control, and "On-Off" switch. Noiseless Electronic Mixing for all channels, with bass-treble correction. In heavy steel cabinet, gray enamel with classy "Bogen" trim colors; size, 14x7 3/4 x 8" high. Weight, 25 lbs.

Stock No. 30A96. "Bogen" Model E-14 Amplifier. Net. **\$57.00**

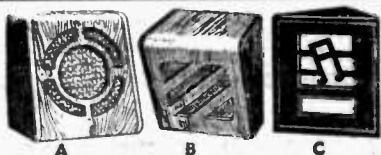
MODEL SRC-50 REMOTE CONTROL UNIT

Complete with 50-ft. cable and control box, this handy accessory provides remote control Fading and Mixing of any TWO INPUT CHANNELS of any "Bogen" amplifier listed on this page, except Model E-14; allows full control of inputs at distances up to 50 ft. from amplifier.

Stock No. 17A737. Model SRC-50 Remote Control Unit. Net. **\$8.70**

Quality BAFFLES, CABINETS FOR SPEAKERS & RECORD CHANGERS

WALL AND CORNER BAFFLES
 Illus. A—Super Deluxe Wall Baffle. The finest baffle possible to build! "Spot Welded" Construction by Electronic Heat—no parting at seams! Genuine Walnut, beautifully rolled front (not veneered), with sides of solid $\frac{3}{8}$ " thick gum-wood; reinforced by $\frac{1}{2} \times 1\frac{1}{4}$ " braces top and bottom! Engineered Trapezoidal design gives proper directional effect when mounted on wall or setting on floor or desk. Front drilled for speaker mounting bolts, decorative head mounting bolts furnished, together with hook and bolt for wall mount.



Stk. No.	For Speaker	High	Wide	Deep	Weight	Your Cost
32A291	5"	7 $\frac{1}{4}$ "	7 $\frac{1}{4}$ "	5"	1 $\frac{3}{4}$ lbs.	\$2.94
32A292	6"	8 $\frac{1}{2}$ "	8 $\frac{1}{2}$ "	6"	2 lbs.	3.53
32A293	8"	11 $\frac{1}{4}$ "	11"	6"	3 $\frac{1}{2}$ lbs.	4.50
32B42	10"	14"	12 $\frac{3}{4}$ "	7 $\frac{1}{2}$ "	4 $\frac{3}{4}$ lbs.	6.60
32B43	12"	16"	15"	9 $\frac{1}{2}$ "	6 $\frac{1}{2}$ lbs.	7.20

Illus. B—"B-A PLUS VALUE WALL BAFFLES." Neatly designed and solidly constructed baffles, finished in pleasing medium shade Walnut. Suitable for ANY Public Address or Intercommunication work.

Stk. No.	For Speaker	High	Wide	Deep	Weight	Your Cost
33B11	5"	7 $\frac{1}{2}$ "	5 $\frac{1}{2}$ "	4 $\frac{1}{2}$ "	1 lb.	\$1.95
34A103	6"	8 $\frac{1}{2}$ "	7 $\frac{1}{2}$ "	5"	1 $\frac{1}{4}$ lbs.	2.40
34A102	8"	10 $\frac{1}{2}$ "	9 $\frac{1}{4}$ "	6"	1 $\frac{1}{2}$ lbs.	2.70
34A101	10"	13 $\frac{3}{4}$ "	10 $\frac{1}{2}$ "	7"	2 $\frac{1}{4}$ lbs.	3.15
34A100	12"	13 $\frac{3}{4}$ "	14"	9"	3 lbs.	4.25

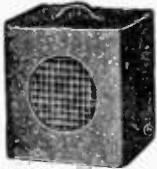
Illus. C—Base Reflex Corner Baffle. For 12" Speakers, completely enclosed with relief port at bottom. Massively built of heavy Walnut Veneer with 2-Tone Walnut finish. Fits any right-angle corner, may be used for heavy duty or coaxial type speakers. Ideal for Schools, Auditoriums, Clubs or any location where good distribution of high quality "sound" is essential. Size, 19 $\frac{1}{2}$ " wide at front, 20" high, 10 $\frac{1}{4}$ " maximum depth. Weight, 10 lbs.

Stock No. 31B7. Walnut Veneer Wall Corner Baffle. Net Each **\$8.65**

DE LUXE STEEL SPEAKER CABINETS

Ideal for portable "PA" speakers; NON-RATTLE construction in streamline design, rounded corners, ornamental grille, carrying handle; well baffled. Gray wrinkle enamel finish.

Stk. No.	Dimensions	For Speaker	Hole Size	Net Ea.
5A127	10x10x6"	6-Inch	4 $\frac{3}{4}$ "	\$3.00
5A128	12x12x7"	8-Inch	6 $\frac{1}{2}$ "	3.59
5A129	16x16x8"	12-Inch	11"	6.32



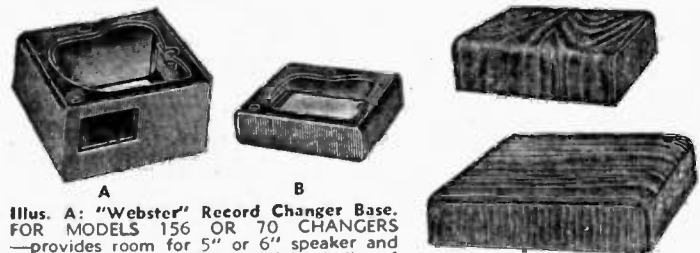
HI-FIDELITY BASS-ACOUSTIC SPEAKER CABINETS

Rugged plywood BASS-REFLEX CABINETS, engineered or Hi-Fidelity reproduction with any GOOD speaker. Ideal for Co-axial speakers, or "Tweeter"-Woofers wide range speaker systems. Rich Leatherette covered, complete with all necessary hardware. FINE CABINETS AT EXTREMELY LOW COST!

Stk. No.	For Speaker	Dimensions	Wt.	Net Ea.
40A13	8-Inch	22 $\frac{1}{2}$ x18x9"	29#	\$14.62
40A14	12-Inch	27x21x11 $\frac{1}{2}$ "	37#	19.03
40A15	15-Inch	32x24x14"	43#	23.44



RECORD CHANGER AND PHONO MOTOR BASES



Illus. A: "Webster" Record Changer Base. FOR MODELS 156 OR 70 CHANGERS—provides room for 5" or 6" speaker and small Phono Amplifier. Solidly built of heavy plywood, covered with good quality Leatherette, matching speaker grille cloth. Size, 16x15 $\frac{1}{8}$ x7 $\frac{3}{8}$ " high. Wt. 7 lbs.

Stock No. 34A104. "WEBSTER" CHANGER-AMPLIFIER BASE. Net Each **\$5.65**

Illus. B: "Webster" Record Changer Base (Without Speaker Grille). EXACTLY CUT TO FIT MODEL 156 OR 70 CHANGER—sturdily made of heavy plywood with durable Leatherette covering. Size 16x15 $\frac{1}{8}$ x4 $\frac{1}{2}$ ". Wt. 5 lbs.

No. 34A105. "WEBSTER" RECORD CHANGER BASE. Net Ea. **\$4.18**

Illus. (Right Below): POLISHED VENEER RECORD CHANGER BASE. Easily cut to fit ANY Record Changer—sturdy plywood has highly polished finish; pleasing Waterfall design. Room for phono oscillator, or may be used with single record phono motor and amplifier. Size 17x14 $\frac{1}{2}$ x4" high. Wt. 4 $\frac{1}{2}$ lbs.

Stock No. 30A133. Walnut Veneer Record Changer Base. Net Each **\$4.18**

Illus. (Right Above): Polished Veneer PHONO MOTOR BASE. Neat, Waterfall WALNUT veneer LOW COST base for ANY PHONO MOTOR—sturdy construction of plywood; size, 12 $\frac{1}{2}$ x10 $\frac{7}{8}$ x3 $\frac{3}{8}$ " high. Wt. 2 $\frac{1}{2}$ lbs.

Stock No. 30A132. Walnut Veneer Phono Motor Base. Net Each **\$2.86**

Portable and Table Model Record Changer Cabinets



Illus. A: PORTABLE RECORD CHANGER-AMPLIFIER CABINET. Beautiful Leatherette covered carrying case for ANY record changer, and additional space for phono amplifier with 5" or 6" speaker! Motor board size is 16x14 $\frac{7}{8}$ "; depth below panel is 3" and height above panel is 6". Durable, strong WOOD construction throughout, sloping panel in end has ventilators for amplifier. Leatherette covered with matching hardware and carrying handle of plastic. Over-all size, 21 $\frac{1}{2}$ x15 $\frac{3}{4}$ x10". Wt. 15 lbs.

Stock No. 32A39. RECORD CHANGER-AMPLIFIER CARRYING CASE. Net **\$13.15**

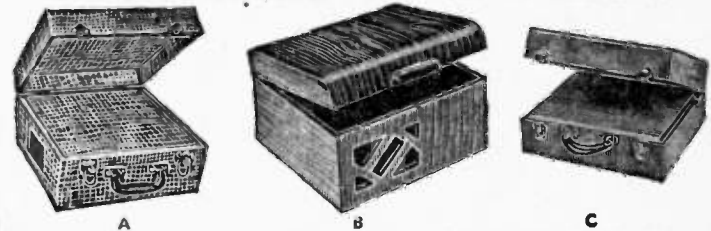
Illus. B: PORTABLE RECORD CHANGER CARRYING CASE. Accommodates ANY make of Record Changer; plywood construction with quality Leatherette covering, double clasps and carrying handle. Motor mounting board is 15 $\frac{3}{4}$ " square, inside lid depth 6 $\frac{1}{4}$ "; depth below motor board is 4 $\frac{3}{4}$ ". Over-all size is 16 $\frac{1}{2}$ " square, 11 $\frac{3}{4}$ " deep. Wt. 16 $\frac{1}{2}$ lbs.

Stock No. 30A90. RECORD CHANGER CARRYING CASE. Net Each **\$10.21**

Illus. C: TABLE MODEL RECORD CHANGER-AMPLIFIER CABINET. FOR ANY MAKE OF RECORD CHANGER with ample room for Phono-Amplifier, or radio set chassis; with room and baffle for 5" or 6" speaker. Solidly built of fine veneered plywoods with polished finish, rounded corners and semi-waterfall lid, with adjustable brace to hold lid "open". Changer mounting board is 14 $\frac{1}{2}$ " square with 6 $\frac{5}{8}$ " space above and 3 $\frac{1}{8}$ " below. Over-all size is 15 $\frac{1}{2}$ x18x11 $\frac{1}{2}$ " high. Reinforced corners. Wt. 16 $\frac{1}{4}$ lbs.

Stock No. 32A40. TABLE RECORD CHANGER-RADIO CABINET. Net Each **\$15.88**

RECORD PLAYER AND PHONO-RADIO CABINETS



Illus. A: Portable Phono-Amplifier Cabinet—10" or 12" records with lid closed. A "honey" of a portable cabinet with plenty of motor board space for phono motor (13 $\frac{3}{8}$ x13 $\frac{3}{8}$ ")—FITS ANY PHONO MOTOR! Speaker grille in end for 5-INCH SPEAKER—accommodates 10 or 12-INCH RECORDS with lid closed! Solidly built, double clasps; carrying handle. Covered with imitation Alligator leatherette. Size, 14 $\frac{1}{2}$ x14 $\frac{3}{4}$ x8 $\frac{1}{4}$ " deep. Wt. 8 $\frac{3}{4}$ lbs.

Stock No. 30B134. PHONO-RADIO PORTABLE CABINET. Net Each **\$8.60**

Illus. B: Table Model RADIO-PHONO COMBINATION CABINET. Beautiful Waterfall design in genuine WALNUT veneer over heavy plywood; plenty of room for ANY phono motor and amplifier, or radio-phono combination. Motor panel is 15 $\frac{1}{4}$ x12 $\frac{3}{4}$ ", allows playing of 12" records with lid closed. Speaker grille for 5" speaker; over-all size, 13 $\frac{3}{4}$ x16x10 $\frac{3}{4}$ " deep. Wt. 14 lbs.

Stock No. 30A130. PHONO-RADIO TABLE CABINET. Net Each **\$11.39**

Illus. C: Large Size PORTABLE PHONO MOTOR CABINET. Accommodates ANY phono motor and allows playing 12-inch records with lid closed; mounting panel is 12 $\frac{1}{2}$ x15"—roomy enough for phono oscillator, or even a small radio tuner. Black leatherette covering over sturdy plywood. Over-all size is 13x15 $\frac{3}{4}$ x7 $\frac{3}{8}$ " deep. Wt. 11 $\frac{1}{2}$ lbs.

30A107. PORTABLE RECORD PLAYER CABINET. Net Each **\$8.60**

Radio Cabinets for Experimental and Replacement Use



Left above:—Waterfall front, fine looking blank cabinet for radio chassis with 7 to 10 tubes. Reinforced dovetail construction with glued corner braces. INSIDE DIMENSIONS, 13 $\frac{3}{4}$ " long, 6" deep, 7 $\frac{1}{2}$ " high; over-all size, 15 $\frac{1}{4}$ " long, 6 $\frac{1}{4}$ " wide, 8 $\frac{1}{8}$ " high. Shaded WALNUT finish.

Stock No. 3A21; LARGE SIZE RADIO CABINET; NET EA. **\$3.59**

Center above:—Blank, WALNUT finish radio cabinet for 5 to 6-tube chassis. INSIDE DIMENSIONS, 10 $\frac{1}{4}$ " long, 4 $\frac{1}{4}$ " deep, 6 $\frac{1}{2}$ " high; OUTSIDE, 10 $\frac{7}{8}$ " long, 5 $\frac{1}{8}$ " wide, 7" high.

Stock No. 3A20. MEDIUM SIZE RADIO CABINET. NET EACH **\$2.68**

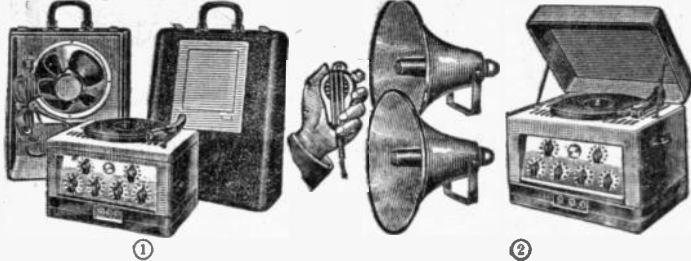
Right above:—WALNUT finish blank front radio cabinet for 4-tube chassis. INSIDE DIMENSIONS, 8 $\frac{3}{8}$ " long; 3 $\frac{1}{8}$ " deep; 5 $\frac{1}{2}$ " high. OUTSIDE, 9" long, 4 $\frac{1}{4}$ " wide, 6" high.

Stock No. 3A19; SMALL SIZE RADIO CABINET; NET EA. **\$2.15**

★ U/L APPROVED ★ "DIALGLO" LIGHTED RECESSED PANELS ★ FUSE PROTECTED ★ FULL RATED POWER

OUTSTANDING MOBILE EQUIPMENT

For Operation on 6-Volt DC or 115-Volt AC Power



"MASCO" MODEL MC-25PN MOBILE AMPLIFIERS FEATURE: Efficient operation from EITHER 6-volt battery or 115-volt power source. Battery-Saver Switch, shuts off vibrator during intermissions. Extra Heavy Duty DUAL Vibrator maintains steady voltage and frequency. FOUR INPUT CHANNELS, 3 Microphone, 1-Phono. HEAVY DUTY SWITCHES—LOW BATTERY DRAIN. HEAVY DUTY POWER CABLES for each power source! 25 WATTS, CLASS AB-1 POWER OUTPUT, less than 5% distortion! CONSTANT SPEED PHONO with featherweight Crystal Pick-up. 10 TUBES: 1 6SL7GT, 4 6J7, 1 6SC7, 2 6L6G, 2 7Z4 rectifiers. Frequency Response plus or minus 2 db., 50/15,000 cps.; Power Gain, Microphone, 133.5 db., Phono, 79 db. Hum Level; AC 64 db. below 25 watts output; DC ripple-free. Six Controls: 3 Microphone, Phono, Bass, Treble. Separate Switches for Filaments, Phono Motor and Battery Saver. Output Impedance of 4, 8, 15, 125, 250 and 500 Ohms on terminal board. Power Consumption (including phono motor) . . . on AC Power, 145 watts; on Battery Power, 23 Amps. at 6 volts. For operation on EITHER 105-125 volt, 60 cycle AC or 6-volt storage battery. In heavy steel cabinet with recessed Dialglo lighted panel; recessed carrying handles. Size, 14x11x 8 3/4" high, 44 lbs. Complete with tubes, matched connectors and power cables.

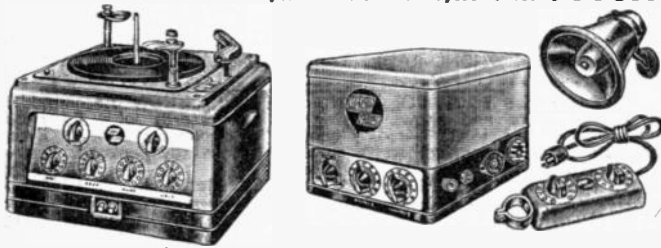
"MASCO" MOBILE AMPLIFIERS ONLY—With or Without Hinged Cover
 ① No. 30B49. "Masco" Model MC-25PN Mobile Amplifier Only. YOUR COST (Less Hinged Lid as shown at left above) **\$100.25**

② No. 30C12. "Masco" Model MC-25PC Mobile Amplifier Only. YOUR COST (With Hinged Lid as shown at right above) **\$112.01**

③ COMPLETE MOBILE PORTABLE AMPLIFIER SYSTEM, as shown at left in above illustration. Consists of Model MC-25PN Amplifier and tubes; heavy duty TWIN SPEAKER carrying case with TWO 12" PM SPEAKERS complete with 25-ft. cables and plugs and "Turner" Model 9-D Dynamic Hand Microphone with 7-ft. detachable cable and plug. Case size, 17 1/4 x 17 3/8 x 22 1/2" high; weight, 72 lbs. 6-volt DC; 115-volt AC.
 No. 30C32. Model MC-25PN. Cpt. Mobile System. YOUR COST **\$159.88**

④ "Masco" Model MCO-25PNC Complete SOUND TRUCK MOBILE SYSTEM. Consists of Model MC-25PC Mobile (6-volt DC; 115-volt AC) Amplifier and tubes in case with heavy hinged steel locking cover, TWO "University" 3 1/2"-ft. Trumpets and 25-watt Driver Units, each with 25-ft. speaker cable and plug; "Turner" Model 9-D "Han-D" Mike with 7-ft. cable and plugs. Amplifier size, 14x11x10 7/8" high; weight complete, 88 lbs.
 No. 50A221. SOUND TRUCK CPT. MOBILE SOUND SYSTEM. YOUR COST (With Locking Hinged Lid Amplifier Case.) **\$192.54**

"MASCO" MODEL MCO-25PN Complete SOUND TRUCK MOBILE SYSTEM. Identical to system priced immediately above, except, with Model MC-25PN Amplifier (without hinged lid). Weight, 86 lbs.
 No. 50A222. Model MCO-25PN Cpt. Mobile Outdoor System. Net **\$180.78**



⑤ 25-WATT MOBILE RECORD CHANGER AMPLIFIER. Identical in Amplifier Specifications to Model MC-25PN, described immediately under illustration at top of this column except has long-life and reliable RECORD CHANGER handling Twelve 10" or Ten 12" records (instead of single record phono top as on MC-25PN). Complete with tubes and matched set of plugs and connectors. Size, 15x15x10 1/2" high; weight, 52 lbs. For 6-volt DC or 115-volt AC power.
 Stock No. 30C30. Model MC-25RC Mobile Record Changer Amplifier. EACH **\$142.73**

⑥ 10-WATT Space Saver MOBILE SOUND SYSTEM (6-volt DC or 115-volt AC). Complete 10-watt Class "A" output sound system for truck or car use. Amplifier features 1 Mike and 1 Phono Input, 5 tubes; freq. response 100/8000 cps.; Mike gain 110 db., Phono, 75 db.; tapped outputs of 3.2, 8 and 15 ohms; On-Off Standby Operate controls with steering post clamp-on remote control of Mike and Phono channels. Power: 60 watts AC, 8 amps. DC. Amp. size, 7 1/2 x 6 x 6"; cpt. with "University" 1B8 speaker, cables, tubes.
 No. 50A223. MC-10 Mobile System, Less Mike. **\$70.94**
 YOUR COST
 No. 34A142. MC-10 AMPLIFIER ONLY. **\$42.74**
 With Tubes and Connectors. NET
 No. 34A143. Model RCM Remote Control Unit ONLY. **\$8.08**
 NET

17 or 25-Watt Complete Portable Sound Systems



COMPLETE SYSTEMS, OR AMPLIFIERS ONLY—With or Without Phono.
 ⑤ FEATURES OF 17-WATT AMPLIFIER (Illus. 5): Superior performance of new circuit using 1 6SC7, 1 6SJ7, 1 6SL7GT, 2 6L6G and 1 5V4G rectifier; 2 Mike and 1 Phono Inputs with gains of 132 db. on Mike and 78 db. on Phono; Frequency Response of plus or minus 2 db. 50/12,000 cps.; Hum Level, 62 db. below output of 17 watts. Individually controlled inputs permit mixing or individual use of all channels. Overall negative feedback for stability—heavy duty transformers for long hour operation! 17 Watts Class "A" Output, less than 5% distortion—peak power, 26 watts. Tapped Outputs of 4, 8, 15, 125, 250, 500 Ohms. In Steel case with recessed handles. Size, 13x8x8 3/8" high; finished in 2-tone gray and blue Hammertone enamel, Dialglo lighted recessed front panel. Model MA-17PN Phono Top Unit as used in complete system shown ⑥ above has constant speed phono motor and crystal pick-up with separate panel switch control. BOTH Phono and plain top 17-watt amplifiers are for use on 105-117 volt, 60 cycle AC power and require 125 watts of power.

⑥ 17-WATT PHONO TOP AMPLIFIER ONLY. Complete with tubes, plugs and connectors. Size, 14x10x8 3/8"; weight, 28 lbs.
 No. 30B48. MA-17PN Phono Top Amplifier Only. YOUR COST . . . **\$61.15**

⑦ 17-WATT AMPLIFIER ONLY, Without Phono Top. Otherwise as described at top above. Complete with tubes, plugs and connectors. Size, 13x8x8 3/8"; weight, 20 lbs.
 No. 30B35. Model MA-17N 17-Watt Amplifier. YOUR COST **\$49.24**

⑧ COMPLETE 17-WATT PORTABLE PHONO-AMPLIFIER SYSTEM. Consists of: Model MA-17PN Amplifier, Tubes, Connectors and Cables with TWO 12" PM speakers with 25-ft. cables and plugs, mounted in heavy duty Blue fabric covered case with electro flocked gray grille and Slide-Easy mounting board for Amplifier; and "Astatic" JT-30 Microphone with 12-ft. cable and connectors. Case size, 17 1/4 x 17 3/8 x 22 1/2" high; wt., 56 lbs.
 No. 30C36. MAS-17PN Complete Portable Sound System. Net . . . **\$114.66**

⑨ COMPLETE 17-WATT PORTABLE AMPLIFIER SYSTEM—LESS Phono Top. Consists of Model MA-17N Amplifier, 2 12" speakers with 25-ft. cables and mounted in carrying case with "Slide-Easy" board for mounting amplifier; and Astatic JT-30 Microphone, cord and connectors. Overall carrying case size, 17x15 3/8 x 18 1/8" high; wt., 45 lbs. 115-volt AC.
 No. 30C14. Model MAS-17N Complete Portable System. Net Each. **\$99.52**

⑩ FEATURES OF 25-WATT AMPLIFIER (Illus. 6). The Masco MA-25N Amplifier, basic unit of the above shown complete system, is packed with these OUTSTANDING FEATURES: 25 watts Class AB-1 output at less than 5% distortion; FOUR INPUTS, 3 Microphones with gain of 133 1/2 db. and 1 Phono with gain of 79 db. Frequency Response, plus or minus 2 db. 50/15,000 cps.; Hum Level, 64 db. below output level of 25 watts; 9 tubes, 4 6J7, 2 6SC7, 2 6L6G, 1 5V4G (rectifier); Tapped line and voice coil impedances of 4, 8, 15, 125, 250, 500 Ohms; 4-channel electronic mixing without interaction; self-shorting Microphone jacks; advanced circuit with over-all Negative Feedback; individual Bass and Treble equalizers for balancing to room acoustics. Power consumption, 145 watts. Steel case and chassis in blue-and-gray Hammertone enamel finish with Dialglo lighted recessed front panel; Underwriter's Laboratory Approved—as are ALL "Masco" Imperial line amplifiers. Available as individual amplifiers only, with or without Phono; or EITHER may be had in a COMPLETE PORTABLE SYSTEM as listed and priced below.

⑪ 25-WATT PHONO TOP AMPLIFIER ONLY. Electrical features exactly as described above except has Constant Speed Phono motor with Crystal pick-up and extra switch on front panel for Phono Motor. Size, 14x11x8 3/8" high; weight, 32 lbs. Complete with tubes and set of matched connector plugs. For 115-volt AC current.
 No. 32A271. Model MA-25PN Phono Top Amplifier Only. Each . . . **\$75.03**

⑫ 25-WATT AMPLIFIER ONLY. Without phono top and exactly as described in "Outstanding Features" article above. Size, 15x8 1/2 x 8 3/8". Complete with tubes and connecting plugs. 115-volt AC.
 No. 30B50. Model MA-25N AMPLIFIER ONLY. Net Each **\$65.03**

⑬ COMPLETE 25-WATT PORTABLE Phono Top AMPLIFIER SYSTEM. Exactly as shown in illus. ⑥ above. Includes Model MA-25PN Amplifier; TWO 12" PM speakers with 25-ft. cables and mounted in Deluxe carrying case with "Slide-Easy" mounting board for amplifier; Astatic JT-30 Crystal microphone with cable and plugs. Overall case size, 17 1/4 x 17 3/8 x 22 1/2" high; weight complete, 61 lbs. For 115-volt 60-cycle AC.
 No. 30B66. MAS-25PN Cpt. Phono Top Amplifier System. Net . . . **\$128.80**

⑭ COMPLETE 25-WATT PORTABLE AMPLIFIER SYSTEM—Less Phono. Consists of Model MA-25N Amplifier (without Phono Top) and ALL other accessories listed above for our No. 30B66 system. Weight and overall case size is same as Model MAS-25PN System.
 No. 32A270. MAS-25N Amplifier System, Less Phono Top. Each **\$117.63**



PREMIUM QUALITY

**Hi-Power P. A. Amplifiers — School Sound Systems
Phono and Musical Instrument Amplifiers**



① **FOUR-CHANNEL MICROPHONE MIXER.** Allows overall mixing and fading of **FOUR HI-Impedance Microphones** into a **SINGLE hi-impedance microphone input on ANY amplifier.** Has four mike connectors, with individual gain control for each; 4-ft. rubber covered cable and female "mike" connector for quick connection to hi-impedance microphone input of amplifier. **Stock No. 34A144. Model MM-4 Microphone Mixer. Your Cost . . . \$14.70**

② **SUPER-POWER WIDE RANGE AMPLIFIER** for Churches, Auditoriums, Skating Rinks, or for outdoor use in Stadiums, at Fairs, etc. Conservatively rated at 50 watts, **Class AB-1 output at less than 5% distortion**, with peak-power of 70 watts. This fine amplifier provides: **Five Input Channels—4 Microphone** with gain of 136.5 db. and 1 Phono with gain of 82 db. 13 tubes—1 6SJ7, 4 6J7, 2 6SC7, 4 6L6G and 2 5V4G rectifiers. Selective output impedances of 4, 8, 15, 125, 250 or 500 ohms provide speaker or line matching facilities for any need! Frequency response, plus or minus 2 db. 50 to 15,000 cps. Hum level, 67 db. below output level of 50 watts. Individual Gain controls for 4 Microphone and 1 Phono inputs, plus separate Bass and Treble controls and "On-Off" power switch on Dialgo Lighted sloping front panel. Heavy gauge steel case, 16x11x8³/₈" high, finished in 2-tone blue and gray Hammertone enamel; recessed carrying handles. U/L Approved. Complete with tubes and set of matching connector plugs. Weight, 41 lbs. **Stock No. 30C28. "Masco" Model MA-50N AMPLIFIER. YOUR COST (Complete with tubes and connecting plugs.) \$102.90**

③ **REMOTE CONTROL 50-WATT WIDE RANGE AMPLIFIER—Identical to above described amplifier in all characteristics, except—is supplied complete with Remote Control Unit, for independent or simultaneous operation of 2 Microphone Channels from any location up to 100 ft. from the amplifier, with no input loss, or inductive hum pick-up. Complete with tubes, connectors, Remote Control Unit and 100-ft. cable. Stock No. 50A227. Model MA-50NR-RCB Amplifier Your Cost \$116.72**

COMPLETE 50-WATT INDOOR OR OUTDOOR P.A. SYSTEMS

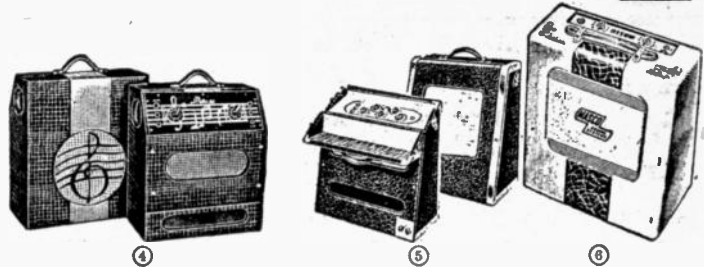
Our Sound Engineering Department will gladly quote on a complete "Tailor-Made" Hi-Power Sound System to suit individual needs and locations. Your letter, giving basic details and needs, addressed to attention of our Dept. S.E. will bring a prompt reply with all details and prices.

HIGH FIDELITY AMPLIFIERS

③ **25-WATT Model MA25-EX High Fidelity Amplifier**

The "critical" music lover's dream in a phono amplifier—excellent also for Broadcast and Recording Studio use in bridging, monitoring, or transcription play-back—a "honey" for use with that AM-FM Tuner in combination with any type of Record Changer or Player, whether equipped with Low or High Level output; Crystal, Pickering or "GE" Variable Reluctance Pick-up. Input switching system Built-in on the model MA25-EX allows instant change to ANY type of phono pick-up cartridge—without additional pre-amplifiers! Specifications: 25 watts at less than 5%—or 20 watts at less than 2% distortion—at all frequencies from 30 to 20,000 cps. within limits of plus or minus 2 db. Separately controlled INPUTS for high or low level Crystal, GE, Pickering, or Magnetic pick-ups—Radio Tuner—and separate high gain "Mike" input! Separate Bass and Treble controls, together with controlled Expander circuit and control makes possible any tonal combination desired or made necessary by the type of program material being handled. Hum level is 80 db. below output level of 25 watts. Input sensitivity and gain: .008 volts (90 db.) on Magnetic pick-up; 1.5 volts (60 db.) for high level crystal; .45-volt (70 db.) for low level crystal; .005-volt (120 db.) for microphone, and .3-volt (75 db.) for radio tuner. Output impedances of 4, 8, 16, 250, 500 ohms match ANY speaker, including "Stephens", "Altec" and "Jensen" co-axials. Maximum L.F. boost is 11 db. at 50 cps.; Treble boost, 10 db.; attenuation is 18 db. at 15,000 cps.; response is absolutely flat with Bass and Treble controls at "Normal"—controls have little or no effect in middle register. Controlled Expander variable from 0 to 15 db., is entirely free from time lag, thump and microphonics. 9 TUBES—1 12SC7, 1 12SJ7, 2 6SN7GT, 2 6SL7GT, 2 6L6G, 1 5V4G (rectifier). U/L Approved, for use on 105-125 volts, 60-cycle AC. In neat steel case 14x10x8³/₈" high; weight, 34 lbs. Power consumption, 140 watts at 125 volts. Finished in Masco Blue and Gray Hammertone enamel. Complete with tubes and connectors. **Stock No. 30B11. Model MA25-EX Phono Amplifier. Your Cost . . . \$88.32**

④ **12-WATT Model MA-12EX Phono Amplifier.** Provides 12 watts power output at less than 5% distortion, or 9 watts at less than 2% distortion! Features: Input switching provides immediate changeover to GE, Pickering, Magnetic, high level or low level Crystal Pick-ups with separate, compensated inputs for each! May be used as a Phono or combination Radio-Phono audio amplifier—the "answer" to a moderate priced, high-fidelity amplifier for home use, also suitable for distribution amplifier for Wired Music applications, or for Broadcast or Recording studio uses in bridging or recording. Input sensitivity and gain: Magnetic pickup, .008 volts (90 db.); High level crystal, 1.5 volts (60 db.); Low level crystal, .45 volts (70 db.); Radio Tuner, .3 volts (75 db.); Frequency response, plus or minus 2 db. 50 to 15,000 cps.; Output Impedances of 2, 4, 8, 15 and 500 ohms, provides "match" for "Stephens", "Jensen" or "Altec" co-axial speakers! Hum level, 65 db. below output of 12 watts. Treble boost, up to 16 db. with attenuation of 16 db. at 15,000 cps.; Bass boost, 14 db. at 50 cps. Variable Expander Control operates in a flash with no chopping effect or time lag. 8 TUBES—1 6SC7, 2 6SN7GT, 2 6SL7GT, 2 6V6GT, 1 5Y3GT (rectifier). U/L Approved, for operation on 105-125 volt, 60-cycle AC; power consumption, 80 watts at 117 volts AC. Neat, heavy duty steel case, finished in Masco Blue and Gray, is 13x8x8³/₈" high; weight, 20 lbs. **Stock No. 30B13. "Masco" MODEL MA-12EX Phono Amplifier With Controlled Expander Circuit, Tubes and Connectors. Your Cost \$54.54**



④ **15-WATT MUSICAL INSTRUMENT AMPLIFIER** For realistic reproduction of reeds and strings—inputs for 3 instruments, or for 2 instruments and Microphone! Suitable for instrumental solos and for combination of voice and instruments. Output variable from 15 watts full power to lowest volume without distortion. Acoustically engineered case, finished in Brown alligator fabricoid with tan saddle strap and musical insignia on speaker grille, houses amplifier and 12" heavy duty P.M. Speaker; sloping panel back has controls and ventilators for amplifier. Note these additional features: Frequency response, plus or minus 3 db. 50 to 12,000 cps. Power Gain, 110 db.; Tubes, 2 6SL7GT, 2 6L6G, 1 5Y3GT (rectifier). Two controls for Master Volume and Tone, plus "On-Off" AC switch on sloping control panel. Power Rating, 15 watts Class "A" power output at less than 5% distortion. Power consumption, 95 watts at 117 volts, 60-cycle AC. Size, 15³/₄" wide, 18¹/₄" high, 8¹/₂" deep; weight, 25 lbs. **No. 33A71. Model MAP-15 Musical Instrument Amplifier. Net . . . \$56.39**

⑤ **12-WATT MUSICAL INSTRUMENT AMPLIFIER** Pure, mellow tones at all levels of output; 10" P.M. heavy duty speaker. Safety fused, negative feedback circuit, acoustically designed case. Full 12 watts power output with less than 5% distortion; TWO INPUTS for Stringed Instrument Pick-ups or Microphone and Pick-up. Frequency Response, plus or minus 2 db. 50 to 10,000 cps.; power gain, 110 db. Tubes, 2 6SL7GT, 2 6V6GT, 1 5Y3GT (rectifier). Hum level, 62 db. below output level of 12 watts. Master Volume Control and separate Tone Control on top of case provide finger-tip control while playing; panel has pilot light and "On-Off" power switch. Power consumption is 60 watts at 117 volts, 60-cycle, AC. Neat, 1-piece case, blue and gray covered, is 13x8x16¹/₂" high; weight, 22 lbs. U/L Approved. Complete with tubes; no overheating! **Stock No. 30B10. Masco Model MAP-120N. Your Cost \$46.42**

⑥ **18-WATT Deluxe Musical Instrument Amplifier.** Three instruments or microphones, or any combination may be used separately or simultaneously; separate Input Controls, Individual Bass and Treble Tone Controls—finest stringed instrument reproduction through massive, built-in 12" P.M. Dynamic Speaker! Improved, exclusive circuit provides full 18 WATTS power output at less than 5% distortion. Hum level 62 db. below output level of 18 watts. TUBES—3 6SF5, 1 6SJ7, 1 6SL7GT, 2 6L6G, 1 5V4G (rectifier). Frequency Response, plus or minus 2 db. at 50/12,000 cps. Power Gain, all inputs, 110 db. Sloping control panel, protected by hinged cover, permits adjustment of controls by playing artist. Voice and instrument may be combined with bass and treble controls varying the overtones from crisp, clear melody, to rich, mellow bass! U/L Approved throughout! In handsome ventilated, heavy duty carrying case, size 15³/₄x9⁵/₈x18³/₄" high; weight, 36 lbs. Covering of case is handsome Blue-Gray with heavy flocced speaker grille. Power consumption is 140 watts at 117 volts, 60-cycle AC. Safety fused and non-heating! **No. 30B9. Model MAP-18 Musical Instrument Amplifier. Net . . . \$88.20**

B-A Super-Value Stringed Instrument Pick-ups "Musical Contact Microphones"—top quality and results at a new low in price! Operate with all instruments and all makes of amplifiers—easy to install and will not mar finest surfaces; require no special strings or changes in instrument. Provide brilliance of tone exceeding the power of the instrument alone! 8-ft. flexible cable. **No. 20A616. Contact Microphone, with Volume Control. Special, Each \$6.71**
No. 20A617. Contact Microphone, without Volume Control. Each \$5.14

MS-24 SCHOOL SYSTEM
All Models U/L Approved!

Provides 2-way communication and facilities for "Broadcasting" by means of Microphone, Radio or Record Player or Changer to ANY PART OR ALL Rooms or Speakers connected to the Master Console! For Schools, Offices, Industrial Plants or Hospitals, "Masco" Model MS Systems are the Low Cost answer to communications problems—add to the efficiency of any School, Hospital, Office, or Industrial Plant. Available in capacities of 6, 12, 18 or 24 rooms! Easy to install, requires only twisted, non-shielded 2-conductor cable for connections between Console and each speaker in system. Speakers may vary in size from 6" to 12" P.M. type, or University Type IB-8 Speakers may be used in outdoor locations, each speaker requiring a multiple line to V.C. transformer. Constant Voltage Output plus efficient circuit with 15 db. feedback in output stage assures non-varying volume at all speakers. Features: 28-watt Class AB-1 output; frequency response, plus or minus 2 db. 50/15,000 cps. Hum level, —64 db. at output level of 28 watts; power gain, 130 db. on Microphone, 85 db. on Phono. 3 Inputs, Hi-Imped. Mike, Phono, Radio. Monitor speaker in console for 2-way conversations and monitoring of radio or phono music. Push-button room selector switches. Separate incoming and outgoing volume controls, Magic Eye level indicator. With 7 tubes and instructions, in steel cabinet 16x9¹/₂x13" high; weight, 37 lbs. Power consumption is 145 watts at 117 volts, 60-cycle AC. Four room capacities as listed below:



Stk. No.	Model	Facilities for	List Price	Net Each
50A224	MS-24-1	6 Rooms	Complete with Tubes \$163.00	\$ 95.84
50A225	MS-24-2	12 Rooms	Complete with Tubes 168.00	\$8.78
50A226	MS-24-3	18 Rooms	Complete with Tubes 173.00	101.72
50A227	MS-24-4	24 Rooms	Complete with Tubes 178.00	104.64

GUARANTEED QUALITY AND SATISFACTORY PERFORMANCE AT MODERATE COST!

17-WATT AMPLIFIERS ★ ★ ★ 25-WATT AMPLIFIERS



OR
COMPLETE
SOUND
SYSTEMS
AS
SHOWN



①

②

① Masco "Economy" 17-WATT Amplifiers, with or without Phono Top are highly efficient for any medium power installation; their ease of set-up and operation plus the excellent tonal quality they produce and their years of satisfactory service in hundreds of sound installations are the result of these tried and proven Specifications: Dual Inputs, Microphone with gain of 118 db., and Phono with gain of 74 db.; Frequency Response, 50/10,000 cps.; Beam Power Output, using 2 6L6G tubes in addition to 1 each 6SJ7 and 7F7, plus 1 5Y3GT rectifier. Overall electronic mixing provided by individual input controls for "Mike" and "Phono". Tapped Output Impedances of 2, 4, 8, 15, 500 ohms match output of amplifier to any line or speaker. Hum level is -22 db. below rated output of 17 watts. Controls, "Microphone", "Phono", "Tone" and On-Off power switch. Phono Top Model MA-17P has addition of constant speed phono motor with separate switch and featherweight crystal pick-up arm. In heavy steel case size, 12x6 $\frac{3}{4}$ x7 $\frac{3}{4}$ " high; finish is gray crackle enamel with black and red trim. Power consumption is 90 watts at 117 volts, 60-cycle AC.

No. 30A86. Masco "Economy" Model MA-17 Amplifier Only. **\$36.26**
YOUR COST (Complete with Tubes). Weight, 18 lbs.

No. 30A3. Masco "Economy" Model MA-17P Phono Amplifier Only. **\$42.63**
YOUR COST (Complete with Tubes). Weight, 28 lbs.

① COMPLETE 17-WATT PORTABLE SOUND SYSTEMS. Consist of EITHER of above described amplifiers, supplied complete in heavy duty carrying case with TWO 10" mounted P.M. Speakers, each with 25-ft. cable and plug; Astatic JT-30 Microphone, 15-ft. cable and plug. Overall size, 14 $\frac{1}{2}$ x13x18" high; weight, 55 lbs.

No. 31B226. MASCO "ECONOMY" MODEL MAS-17. **\$77.32**
YOUR COST, Complete Portable 17-Watt Sound System.

No. 31B221. MASCO "ECONOMY" MODEL MAS-17P PHONO TOP. **\$83.78**
YOUR COST, Complete Portable 17-Watt Sound System.

② "ECONOMY" 25-WATT AMPLIFIERS provide perfect amplified sound reproduction for audiences up to 4,000 persons in Schools, Churches, Auditoriums, or for outdoor use with "Trumpet" speakers. May be used with 2 to 6 P.M. type 12" speakers in wall baffles for indoor use, or 2 outdoor weatherproof trumpets or baffled 12" speakers. FEATURES: 2 Microphone and 1 Phono Inputs in a multiple mixing circuit with individual controls for each input circuit. 7 TUBES, 2 7N7, 2 6SF5, 2 6L6G and 1 5U4G (rectifier). Power Gain, 125 db. on Microphone Inputs, 78 db. on Phono. Tapped Output Impedances of 2, 4, 8, 15, 500 ohms. Hum Level is -55 db. below output of 25 watts. Frequency Response, 50/10,000 cps. Controls, 3 individual "Gain", Tone control and "On-Off" switch. Power consumption is 120 watts at 117 volts, 60-cycle AC. Housed in heavy steel case size, 15x8x8". Wt., 25 lbs. Available as an individual amplifier, or complete system as listed below.

No. 30A4. MASCO "ECONOMY" MODEL MA-25. **\$41.01**
YOUR COST, Amplifier and Tubes Only. Weight, 25 lbs.

② "ECONOMY" COMPLETE 25-WATT PORTABLE SOUND SYSTEM. Consists of Model MA-25 Amplifier, tubes, TWO 12" P.M. Dynamic Speakers mounted in substantial, luggage covered carrying case; Astatic JT-30 Microphone with 15-ft. cable and plug; speakers are fitted with 25-ft. cables and plugs. Case size, 18 $\frac{1}{2}$ x15x23" high. Weight, 55 lbs.

No. 31B225. "Economy" Model MAS-25 Complete Sound System. **\$88.20**

"ORATOR" 8-WATT PORTABLE SOUND SYSTEM



Fills a multitude of Amplified Sound needs—8-WATTS CLASS "A" Output at less than 5% distortion—plenty of power to cover good sized audiences—the IDEAL SYSTEM for Carnivals, Auction Rooms, Sales Meetings, Department Stores, Clubs, Taverns, Churches, Schools, Demonstrators, etc. Compact, complete, light in weight, and provides everything needed for GOOD voice or music reinforcement and distribution. Consists of amplifier with 10-INCH "PM" SPEAKER, mounted in good looking and durable carrying case—25' speaker cable allows speaker portion of case to be placed at distance from speaker and amplifier. QUALITY FEATURES: 4 Tubes—1 6SF5, 1 6SJ7, 1 6L6G, 1 5Y3GT rectifier. Hum level is 60 db. below output of 8 watts

INPUTS for Microphone with gain of 128.5 db. and Phono with gain of 75 db. Frequency response is plus or minus 2 db. 50/10,000 cps.; Output impedances, 3.2, 8, 500 ohms. Controls, 1 each for Microphone, Phono, Tone and "On-Off" power switch. Amplifier case of heavy steel, size 10x7 $\frac{1}{2}$ x6"; finished in Masco DeLuxe Line Blue-Gray Hammertone enamel. Supplied complete with Astatic JT-30 Microphone with 12-ft. cable and connector, in carrying case size, 10 $\frac{1}{2}$ x13 $\frac{3}{8}$ x16 $\frac{1}{2}$ " high. Weight, 25 lbs.

No. 30B8. Masco DE LUXE Model MAS-8N Complete System. Net **\$63.21**

Definitely! It's "B-A" for "Best" in P.A. Equipment!

"B-A" can supply Amplifiers, Speakers, Trumpets, Microphones or associated equipment for ANY P.A. NEED—FROM STOCK, and you DO get your Cash Discount—all prices for P.A. Equipment in this catalog are NET and represent full Dealer Discounts from List Prices, with an additional 2% discount for cash ALREADY DEDUCTED!

★ LOW COST 6-V. DC — 115-V. AC AMPLIFIER



③

★ 35-WATT AUTO RECORD CHANGER



④

★ HIGH POWER AT LOW COST! IN THIS 35-WATT AMPLIFIER



⑤

③ "Economy" 25-WATT, 6-VOLT DC/115-VOLT AC MOBILE AMPLIFIER. The original and dependable Universal service (operates equally satisfactorily on EITHER 6-volt storage battery, or 115-125 volt, 60-cycle AC power). Triple Input Amplifier—again available at low cost, and packed with these FEATURES: Full 25 WATTS Power Output at frequency response of 50/10,000 cps. and a hum level of 55 db. below rated output. TWO Microphone and ONE Phono Inputs with gains of 125 db. on Microphone, and 78 db. on Phono—with individual Gain Controls, plus overall Tone control! 7 TUBES—2 7N7, 2 6SF5, 2 6L6G and 1 5V4G (rectifier) provide hum and ripple-free, true fidelity output to speakers—and with a power consumption of only 120 watts on AC, or 22 amps. on 6-volt DC battery power supply. Tapped Outputs of 2, 4, 8, 15, 500 ohms provide easy speaker or line matching. Constant speed Phono Motor and featherweight Crystal Pickup for ripple-free record or music reproduction—EITHER on Battery or AC power! Heavy-duty vibrator has 75% overload capacity—provides steady voltage and frequency when operating on battery power! Stand-by Battery Saver Switch for quick, easy control of vibrator power. In heavy steel, ventilated case size, 12x10x8"; finished in Gray ripple enamel with red and black trim. Weight, 40 lbs. No. 30A1. "Economy" Model MC-25P MOBILE AMPLIFIER. **\$82.32**
YOUR COST, Complete with Tubes, for 6-V. DC or 115-V. AC Power

④ "Economy" 35-WATT AC AMPLIFIER-AUTOMATIC RECORD CHANGER COMBINATION. Fills a two-fold need in sound systems for Schools, Night Clubs, Dance Halls, Mortuaries or Auditoriums. A "Top-Notch" 35-watt amplifier PLUS a quiet, dependable Record Changer for Twelve 10" or Ten 12" records! Dependability and long life is assured by these outstanding FEATURES: Three Inputs, 2 Microphone and Phono, with electronic "mixing"—individual controls for each Input; Bass and Treble Tone Equalizers; Inverse feedback stabilizing circuit. Beam-power output—8 TUBES, 1 7N7, 4 6SJ7, 2 6L6G and 1 5U4G (rectifier) provide Power Gain of 125 db. on Microphone Inputs, and 78 db. on Phono Record Changer Input. Hum Level is -20 db. below rated output. Frequency Response, 50/10,000 cps.; Tapped Outputs of 2, 4, 8, 15, 500 ohms. No-chip, No-stick Record Changer is equipped with Sapphire needle, and featherweight pickup arm and crystal cartridge. Amplifier Controls consist of: 2 Microphone, 1 Phono, 1 Bass, 1 Treble, "On-Off" Amplifier power switch; Pilot light on front panel; Record Changer controlled by separate On-Off, Reject-Repeat switch on changer base. In steel cabinet, 15x15x9"; weight, 45 lbs. Complete with tubes and instructions. Power consumption is 130 watts on 115-volt, 60-cycle, AC power. No. 30A2. MODEL MA-35RC Record Changer-Amplifier. Net. **\$79.38**

⑤ "Economy" 35-WATT AC POWER AMPLIFIER. Has the same tube complement, ALL the circuit features, and Triple Inputs described in Item ④ above for Model MA-35RC Amplifier—does NOT have the Record Changer mechanism. A truly dependable, low cost amplifier for larger Schools, Auditoriums, Skating Rinks, and any location where medium HIGH POWER is needed. A rugged Beam Power Output, Inverse Feedback stabilized amplifier in which ALL component parts are designed to stand 24-hour continuous operation and up to 75% overload, without overheating! Sufficient, hum-free power output to "drive" from 6 to 8 12" P.M. speakers for hall or auditorium use; or 2 to 4 weatherproof outdoor trumpets for stadiums, etc. In steel case, 15x8x8" with control panel having 5 controls for 2 Mikes—1 Phono, Bass, Treble, On-Off switch and Pilot Light. Weight, 30 lbs. **\$53.65**
Stock No. 33B88. MODEL MA-35 Amplifier and Tubes. Your Cost.

DELUXE 16-INCH TRANSCRIPTION PLAYER



WITH BUILT-IN 5-WATT AMPLIFIER AND 10-INCH "PM" SPEAKER! Model TP-16A Professional Transcription Player; completely self-contained, for playing 16" and standard 10" or 12" recordings at EITHER 78 or 33 $\frac{1}{3}$ RPM. 2-IN-PUTS; compensated Crystal Pick-up and Microphone—enabling the use of this fine unit as a "P.A." amplifier if desired. The solidly built PORTABLE Carrying Case has the 10-INCH speaker mounted in the cover; 12 ft. speaker cable and plug allows selective locations for the speaker, with quick and easy plug-in into the amplifier. Heavy duty dual speed "General Industries" phono motor with 12" turntable, complete with speed regulator and speed change lever. Sloping front control panel for easy, finger-tip operation of controls—BASS and TREBLE equalizers and Volume

Control. Has ASTATIC No. 400 ARM with "QT" Cartridge and Nylon Sapphire permanent stylus. 4 TUBES—2 6SL7GT, 1 6V6GT, 1 6X5GT (rectifier). Power consumption, including phono motor, is 80 watts; for operation on 115-125 volt, 60 cycle A.C. current. Light in weight, and compact and functional in design. Model TP-16A is prized in SCHOOLS, BROADCAST STUDIOS, THEATRICAL AGENCIES, and for Lecturers, Sales Meetings, etc. In beautiful Brown Alligator Fabrikoid covered carrying case, with drop-front cover over control panel, with secure phono pickup rest; size, 17 $\frac{3}{4}$ x22x10 $\frac{3}{4}$ ". Weight, 43 lbs. U/L APPROVED. **\$88.70**
Stock No. 30B15. Model TP-16A Transcription Player. Net.

NEW - MODERN Challenger AMPLIFIERS - LOW IN PRICE!

"Challenger" Amplifiers are engineered and manufactured by the David Bogen Company, makers of "BOGEN" Sound Systems and Intercommunication equipment.



① 18-WATT MEDIUM POWER 115-VOLT AC AMPLIFIER
 Uses 6 tubes, 2 6SF5, 1 6SL7GT, 2 6V6GT, 1 5Y3GT (rectifier) in Inverse Feedback circuit to produce full 18 watts power output with frequency response of plus or minus 2 db. 30/12,000 cps. Inputs, Microphone with gain of 118 db. and Phono with gain of 78 db. Outputs, 4, 8, 15 ohms and 70 volts; Challenger SelectTone Tone Control and all other features described at right above. Terminal strip and two plug-in sockets for speakers; in steel case with recessed carrying handles. Size, 14x8x8" high wt., 20 lbs. For operation on 105-125 volt, 60-cycle AC power. With tubes and instructions. Stock No. 31B1. "Challenger" CC-18 Amplifier and Tubes. **\$37.48**
 YOUR COST.....

② 30-WATT "CHALLENGER" 115-VOLT AC AMPLIFIER
 Features 2 Microphone Inputs at gain of 118 db. each, and Phono Input at gain of 85 db. Frequency response, plus or minus 2 db. 30/12,000 cps.; Output Impedances of 4, 8, 15 ohms and constant voltage output of 70 volts; Inverse feedback circuit provides output stability. Tubes, 2 6SC7, 1 6SL7GT, 2 6L6G, 1 5U4G (rect.). "SelectTone" tone control, output terminal strip with two speaker plugs, fused AC line, molded bakelite sockets and individual Input Gain Controls. In steel case, recessed handles. Size, 15x10x8" high. Weight, 24 lbs. Stock No. 31B2. "Challenger" Model CC-30 Amplifier. Your Cost. **\$47.04**

③ 60-WATT HI-POWER 115-VOLT AC AMPLIFIER
 Has every feature of ALL Challenger Amplifiers with power to spare to handle large crowds or halls—will drive four 12" PM speakers or three University Ph/MA25 Trumpets and Driver Units. TWO Microphone Inputs with gain of 120 db. on each, Phono Input with gain of 85 db. Response is plus or minus 2 db. 30/12,000 cps.; power output full 60 watts without objectionable hum. "SelectTone" tone control. Tapped outputs and 2 speaker plugs at impedances of 4, 8, 15 ohms, plus 70 and 140 volts constant voltage output! Inverse feedback circuit with type 807 tubes in output. Tubes, 2 6SF5, 1 6SL7GT, 1 6V6GT, 2 807, 1 5Y3GT, 1 5R4GY. Two oil filled, high voltage filter capacitors eliminate filter failures! Individual "Gain" controls for all inputs; molded bakelite sockets, Extractor type line fuse. In steel case size 17x11 1/2 x 9 1/4" high; weight, 35 lbs. For operation on 105-125 volt 60-cycle AC power. Complete with tubes and instructions. Stock No. 31B3. "Challenger" Model CC-60 Amplifier. Your Cost. **\$79.38**

COMPLETE "CHALLENGER" AC SYSTEMS



④ Model CC18P, Complete 18-Watt Portable AC Sound System. Consists of: Amplifier ① above, with Two 12" Alnico-V Speakers, each with 25-ft. cord and plug, and mounted in heavy duty divided, luggage covered carrying case (④ above), with space for Amplifier; Astatic (② above) JT-30 Microphone with 15-ft. cable and separable desk stand. Weight, 48 lbs. Stock No. 32A274. CC18P Complete Portable Sound System. Net. **\$81.00**

④ Model CC30P, 30-Watt Complete Portable Sound System. Consists of: Amplifier ② above, in carrying case as ④ above, case mounts Two 12" Alnico-V PM speakers, each with 25-ft. cords and plugs, Astatic (② above) JT-30 Microphone with 15-ft. cord and plug. Weight, 60 lbs. Stock No. 32A275. CC30P Complete 30-Watt Portable System. Net. **\$90.56**

INDOOR SYSTEMS WITH 12" SPEAKERS IN WALL Baffles: 18-Watt Indoor System, Model CC18B. Consists of: Amplifier ① above, Two 12" PM Speakers (⑥ above), each mounted in handsome Walnut wall baffle and having 25-ft. cord and plug; Astatic (② above) JT-30 Microphone with 15-ft. cable and plug. Weight, 42 lbs. Stock No. 50A228. CC18B Complete 18-Watt Indoor System. Net. **\$77.03**

30-Watt Indoor System, Model CC30B. Consists of: Amplifier ② above, Two 12" PM Speakers (⑥ above), each mounted in Walnut baffle and supplied with 25-ft. cables and plugs; Astatic (② above) JT-30 Microphone and 15-ft. cable and plug. Weight, 48 lbs. Stock No. 50A229. CC30B Complete 30-Watt Indoor System. Net. **\$86.58**

60-Watt "Auditorium" High-Power Complete Indoor System. Consists of: Amplifier ③ above, Four 12" Alnico-V PM Speakers (⑥ above), each mounted in fine Walnut wall baffle and equipped with 25-ft. speaker cable and plug; Astatic (② above) JT-30 Microphone with separable desk stand and 15-ft. cable and plug. Weight, 70 lbs. Stock No. 50A230. CC60B Complete 60-Watt Indoor System. Net. **\$149.85**

60-Watt "Stadium" High-Power Outdoor System. Consists of: Amplifier ③ above; Three Complete "University" Weatherproof Trumpets (⑦ above) using Model PH Trumpet with Model MA25 Driver Unit; and (⑦ above) Astatic JT-30 Microphone with separable stand, 15-ft. cord and plug. Weight, 85 lbs. No. 50A231. CC60T Complete 60-Watt Outdoor System. Net. **\$183.31**

EVERY "CHALLENGER" AMPLIFIER has these outstanding features:
 ★ "SelectTone" Tone Corrector, provides four distinctive "Tone" settings—
 1: "Deep Bass", ideal for popular music; 2: Mellow, reduces "scratch" and extraneous noises from record music and broadcast reception; 3: "Crisp", for sharp, natural reproduction of the spoken voice; 4: "Brilliant", accentuates both bass and treble, providing life-like reproduction of music and voice.
 ★ Constant Voltage Output—A feature on all "Challenger" Amplifiers (except 8-watt model) provides, in addition to "standard" output impedances, "Constant Voltage" for easy matching and balancing of speakers.
 ★ Molded Bakelite Sockets and Fused Line on ALL Challenger Amplifiers.

"CHALLENGER" BALLYHOO



DON'T MISS THIS!
6-V. DC—110-V. AC
MODEL CC-618



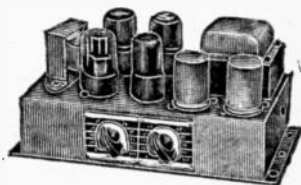
(A) "Challenger Ballyhoo" 8-Watt Complete Sound System. Full 8 watts power output—completely portable in a handy carrying case; plenty of power and audience coverage for Window Salesmen, Carnivals, Meeting Rooms, Auctions. Inputs: 1 Microphone with gain of 108 db., 1 Phono with gain of 71 db. Response is 80/12,000 cps plus or minus 2 db.; Output impedances of 4, 8, 16 Ohms for match to most any PM speaker; "SelectTone" Control of tone, 4 positions cover every possible need for adjustment! Tubes, 1 6SJ7, 1 6SF5, 1 6L6GA, 1 5Y3GT, (rectifier). Carrying case is neat, well made, covered with durable tan luggage covering, with Amplifier mounted with controls accessible from back. 8" Alnico-V PM Speaker is connected to amplifier and baffled to carrying case—all complete and ready to go to work! Astatic JT-30 Microphone with 15-ft. cable and plug included. Weight, 18 lbs. 115-volt AC. Stock No. 31B4. CC8S "Challenger Ballyhoo" Complete System. Net. **\$49.10**

(B) 6-Watt Mobile (6-Volt DC) Amplifier. Ideal for CAR installation, the finest Little Giant Amplifier available for car use! 4-Position mount makes for easy installation in any make of car; Vibrator replaceable from front, without dismantling amplifier or removing cage! Complete chassis comes out by removing 4 screws! Full 6 WATTS Power with optimum frequency response for speech work; Microphone Input has gain of 109 db.; Outputs of 4, 8, 15 Ohms to match any speaker! Tubes, 2 6SF5, 1 6L6GA, 1 6X5GT (rectifier). Fused battery power cable built-in, is complete with extra heavy battery clips; Power Saver Standby Switch reduces battery drain. Primary power circuit isolated from high gain circuit to minimize hum. In steel cabinet, size 3 1/4" wide x 8" deep x 7" high. Weight, 10 lbs. Stock No. 31B5. Model CD6 Mobile (6-volt) Amplifier. Net. **\$31.60**

(C) 18-Watt Universal (6-Volt DC, 115-Volt AC) Mobile Amplifier and Phono. All the newest improvements and better service are built into this fine mobile unit—full 18 WATTS power output, using 2 6SF5, 1 6SL7GT, 2 6V6GT and 1 7Z4 (rectifier) tubes. Microphone Input has 118 db. gain, Phono Input 78 db. gain; frequency response is 30/12,000 cps. plus or minus 2 db. Constant Voltage Output at 70 volts with additional outputs tapped for 4, 8, 15 Ohms. SelectTone Tone Control, Remote control of Standby (by means of microphone switch) to reduce battery drain! DC Cable and clips. Individual input controls; Inverse feedback circuit to "steady" power output. Built-in constant speed phono with featherweight crystal pickup—no "wow". Foolproof, instant conversion from Battery to AC power. Terminal strip and 2 speaker sockets for instant connection of speaker lines. In modern design, heavy steel case, size 15" wide x 10" deep x 10" high. Wt., 38 lbs. No. 31B6. CC618 Mobile (6-V. DC, 115-V. AC) Amplifier. Net. **\$75.26**

"BOGEN" LOW COST 10-WATT PHONO AMPLIFIER

10-WATT, humless output with Multi-Range selective Tone Control, variable in 4 steps from deep bass to extended over-all response for "FM" or fine phono records. INPUT for any Crystal pick-up, or the output from any radio set may be connected to PH-10 to provide Hi-Fidelity reproduction. Frequency response, 40-15,000cps. Gain, 72db.; Output, 3.2 and 8 ohms; Hum, -73db. 4 TUBES; size, 11x5x6" high. No. 34A147. **\$29.25**



MODEL PH-10C; Identical to above except provided with 4-ft. cable and controls for cabinet mounting. 34A148. Model PH-10C Remote Control Phono Amplifier. Net **\$32.25**

"BOGEN" 6-WATT AC-DC UNIVERSAL AMPLIFIER

Mighty Midget Mobile Sound Amplifier—operates on EITHER 6-volt storage battery, or 110 Volt A.C.! "Stand-by" switch saves battery while keeping amplifier ready for INSTANT use; increases tube life! Mike and Phono Inputs are hi-impedance, with gain of 110db. on Mike, and 75db. on Phono. Phono jack permits quick use of record player. Frequency response is plus or minus 2db. 60-9,000 cps. Hum is 62db. below rated output of 6 WATTS; Peak Power output is 8 watts. Variable output impedance of 4-8-15 ohms at 5-prong speaker socket. 4 TUBES with 6L6GA beam power output. Power consumption is 50 watts on A.C.; 7 Amps. on 6-volt battery. Truly a "honey" of a little Mobile Amplifier, requiring very small mounting space, with cable connections and controls handily located; tubes or vibrator may be removed without disturbing mounted amplifier. Size, 5 3/4 x 7 3/8 x 6 3/4" high. Weight, 15 lbs. 32A233. "Bogen" E-6 Mobile Amplifier and Tubes. Net. **\$42.90**





Reflex TRUMPETS and HIGH POWER DRIVER UNITS



HIGH EFFICIENCY REFLEX TRUMPETS. "University" all metal, weather-proof projector trumpets have stood the test of "battlefront" conditions—their famous "RUBBER RIM" tends to eliminate all possible rattles and resonant vibration. These trumpets when used with "University" hermetically sealed DRIVER UNITS assure a weatherproof, WATERPROOF outdoor loud speaker with assurance of continual, long life operation, regardless of climate or temperature. Non-corrosive finish limits possibility of rust or deterioration. UNIVERSAL "U" BRACKETS permit mounting of trumpets in any position. **NEW MODEL "GH"**—Super Reflex Trumpet; 6-FOOT AIR COLUMN; 30" diameter bell, low frequency cut-off of 85 cycles; well suited finest music reproduction of Aluminum; 25" long (without driver); weight

tion or for voice. Made of Aluminum; 25" long (without driver); weight 22 lbs. 90° dispersion. Stock No. 40A37. **MODEL "GH" TRUMPET ONLY. NET..... \$35.28**

MODEL "LH" REFLEX TRUMPET—4 1/2-FOOT AIR COLUMN; very satisfactory for BOTH VOICE AND MUSIC; low frequency cut-off, 120 cps. Bell diameter, 25 1/2"; length 18 1/2". Made of heavy steel finished in gray weather-proof enamel. Wt. 5 lbs. 90° dispersion. Stock No. 40A24. **MODEL "LH" TRUMPET ONLY. YOUR COST. \$26.16**

MODEL "PH" REFLEX TRUMPET—3 1/2-FOOT AIR COLUMN; ideal for voice, low frequency cut-off, 150 cps. Bell diameter 20"; length 15". Does a fine job on combination voice and music jobs. Heavy steel, gray enamel finish; wt. 10 lbs. 80° dispersion. Stock No. 40A23. **MODEL "PH" TRUMPET ONLY. NET..... \$17.05**

MODEL "SMH" REFLEX TRUMPET—2 1/2-FOOT AIR COLUMN; made of aluminum with 15 1/2" diameter bell, 12" long; wt. 6 lbs. Low frequency cut-off is 200 cps. 75° dispersion. Stock No. 40A22. **MODEL "SMH" TRUMPET ONLY. NET.... \$14.41**

RADIAL REFLEX PROJECTORS—PAGING SPEAKERS



① "University" RADIAL REFLEX PROJECTORS—of exceptional merit for reproduction of CHIMES in CHURCH TOWERS and widely used in all installations requiring clear sound dispersion in ALL DIRECTIONS! Designed for maximum, uniform delivery of sound energy at approximately 20° from horizontal at full 360° coverage! For use with ANY of the University Driver Units listed at right above. Two Driver Units may be used on a single projector by the addition of "2YC" dual trumpet connector, shown on next page, to provide extra long distance coverage! Rubber loaded deflector, oven baked finish for all-weather protection.

② MODEL RLH RADIAL REFLEX PROJECTOR, designed for Church Towers for reproduction of Chimes and low frequency music reproduction. Low frequency cut-off, 120 cps.; Air Column, 5 ft.; Dia. 28 1/4"; height, 25 1/4". Weight, 21 lbs. With "U" bracket mounting. LESS Driver Unit. Stock No. 40A31. **"RLH" Radial Reflex Projector. Net..... \$34.69**

③ MODEL RPH RADIAL REFLEX PROJECTOR, designed for BOTH speech and music. Low frequency cut-off, 150 cps.; 4 ft. Air Column; dia. 24 3/4"; height, 19 1/2"; weight, 18 lbs. LESS Driver Unit. Stock No. 40A8. **"RPH" Radial Reflex Projector. Net..... \$26.46**

④ MODEL RSH RADIAL REFLEX PROJECTOR, specially designed for reproduction of Speech at high clarity. Low frequency cut-off, 180 cps.; Air Column, 3 ft.; Dia. 18 3/4"; height, 16 3/4"; weight, 12 lbs. Stock No. 40A9. **"RSH" Radial Reflex Projector. Net..... \$22.64**

The complete speakers listed below ALL have compact, reflex horns and built-in, hermetically sealed Driver Units; corrosion proof finishes, and are completely weatherproof throughout!

⑤ MODEL "IBR" 12-Watt, 8-Ohm Voice coil, 360° dispersion complete Radial Reflex Speaker. Frequency response, 300/6,000 cps. Useful with P.A. amplifiers as Paging speaker, or for music and voice reproduction; used in many Intercomm installations for both paging and talk-back. Hermetically sealed Driver Unit. Rugged waterproof construction and finish with rubber "damping" ring. Dia., 9"; height, 11"; weight, 5 lbs. With hanging ring and short connecting cable. Stock No. 34A133. **MODEL IBR Radial Reflex Speaker. Net... \$22.93**

⑥ MODEL "MIL" Complete 3-Watt Reflex Paging and Intercomm Speaker. Permits "Talk-back" at distances to 50 ft.; requires very low driving power; has 120° dispersion, adjustable wall bracket mounting. Frequency response is 400/9,000 cps.; 8-Ohm V.C. Dia., 6"; depth, 7"; weight, 3 1/2 lbs. Stock No. 34A106. **MODEL "MIL" Reflex Speaker. Net..... \$14.70**

⑦ MODEL IB8 12-Watt Directional Reflex Speaker. Dispersion angle, 90°; Frequency Response, 300/6,000 cps.; 8-Ohm V.C.; adjustable wall bracket mounting. For continuous duty at 12 watts power input, the ideal speaker for Paging and Announcing. Dia., 9"; depth, 9"; weight, 5 lbs. Stock No. 34A132. **MODEL "IB8" Reflex Speaker. Net..... \$19.11**

For VALUABLE INFORMATION on Church Tower, P.A. or Intercomm installations—AT NO COST—write us for: No. 60A1. "Design Bulletins on Sound Installations" — Free On Request!



"UNIVERSITY" DRIVER UNITS ALNICO-V PM 25-WATT UNITS BREAKDOWN PROOF! 1-YEAR GUARANTEE Dural Voice Coil Suspension Bakelite Diaphragm Completely Weatherproof!



MODEL "PAD" 25-Watt DeLuxe Driver Unit (illus. left above). The finest of University drivers, absolutely shock and submergence proof—breakdown proof in the toughest of heavy duty service. Frequency, 80/9,000 cps; 16-Ohm V.C. Size, 6 1/2" dia.; 6" high; wt., 11 1/2 lbs. Threads, 1 3/8" x 18. Stock No. 37A44. **University Model "PAD" Driver Unit. Net... \$35.13**

MODEL "PAH" 25-Watt Standard Heavy Duty Driver Unit. Frequency range, 80/6,000 cps.; 16-ohm V.C. Absolutely Weatherproof and breakdown proof! Size, 5 1/4" dia.; 5" high; weight, 9 lbs. Has binding post terminals, not illustrated above; standard 1 3/8" x 18 thread. Stock No. 34A135. **University Model PAH Driver Unit. Net.. \$29.11**

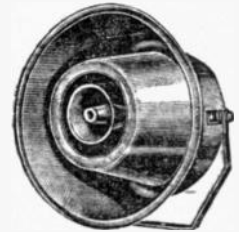
MODEL SA-HF 25-Watt Wide Frequency Range Driver Unit. Ideal for combination voice-music use due to extended frequency range of 90/10,000 cps. Will "stand up" under continuous 25-watt input; completely weatherproof; 16-Ohm V.C. Size, 4 1/2" dia.; 4 3/4" high; weight, 5 lbs. A brand NEW unit scheduled for wide usage in P.A. work! (illus. right above.) Stock No. 34B134. **University Model SA-HF Driver Unit. Net.. \$21.76**

MODEL MA-25. NEW LOW-COST 25-WATT DRIVER UNIT. Similar in appearance to illus. at right above, this new unit has ALL the fine features of "University" Drivers, Continuous service; Breakdown proof construction; Frequency Range is 90/6,000 cps. for Voice or Music work; Voice Coil Imped., 16-ohms. Size, 4 1/2" dia.; 3 3/4" high. Stock No. 31B25. **University Model MA-25 Driver Unit. Net.. \$14.70**

CO-AXIAL TRUMPETS

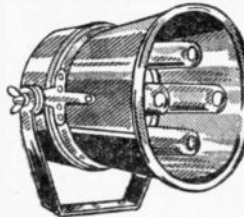
"UNIVERSITY" MODEL WLC

25-Watt, High Fidelity, Completely Weather-proof Co-Axial Speaker. Consists of a highly efficient 12" Cone (Woofer) speaker in combination with a unit-driven 25-Watt "Tweeter" unit, coupled by built-in Crossover network at frequency of 1,000 cps. Frequency response is essentially flat from 50/10,000 cps. FEATURES: Sturdy, corrosion resistant construction, Moisture-proof cone 12" Woofer Speaker in large volume, sealed enclosure; retractant design of housing assuring maximum protection to cone at all times, with complete immunity to rain! Adjustable "U" Bracket allows WLC to be swung in all directions. 90° dispersion for wide-angle coverage of large areas; WLC may be adjusted and positive LOCKED at any angle! For fine, high quality reproduction of Voice and Music, Model WLC is "IT" for use in Band Shells, Auditoriums—any outdoor or indoor installation where high quality reproduction of music and voice are essential! Will "Carry" full 25 watts continuously without a trace of blasting or overloading; may be constantly exposed to weather, regardless of temperature or humidity conditions! Size, diameter, 33"; depth, 18"; weight, 70 lbs. 8-ohm V.C. Stock No. 40A30. **Model WLC Complete Coaxial Trumpet. Net.. \$117.60**



LOW COST 100-WATT QUADREFLEX TRUMPET

MODEL 4A4 "University" Super-Power Reflex Trumpet—accommodates FOUR standard 25-watt Driver Units, each feeding into individual reflexed air columns, and joining together into a 100-watt concentrated beam of sound power! Especially designed and adapted to broadcasting from aeroplanes, or transmission of Chime and Organ music from Church towers; provides the most economical high-power speaker installation available and requires LESS space than any ordinary 25-watt reflex trumpet! The output of this Reflex High Power Speaker will easily overcome the high noise levels common in industrial areas, or football fields and stadia. When equipped with Four type SA-HF 25-watt wide frequency range driver units Model 4A4 will provide clear projection for ONE MILE at 80° dispersion! Size, 16" in dia.; 17" long; weight, 23 lbs. LESS Driver Units. Sturdily constructed, oven baked finish to stand continuous exposure in any weather. Adjustable "U" bracket may be locked in any position. Stock No. 40B38. **Model 4A4 Reflex Trumpet Only. NET.... \$54.68**



WEATHERPROOF LINE MATCHING TRANSFORMERS.

Housed in rubber gasketed, water-tight housing; for use with "University" Speakers in outdoor or indoor locations. Model 5402 (Illustrated) has bracket for direct mounting to "U" brackets of any University trumpet. Models 5401, 5409, and 5410 are designed for use with types IB8 and MIL speakers, providing mounting and support for transformer and speaker.



Stk. No.	Model	Watts	Pri. Impedance	Sec. Impedance	Net Each
37A45	5401	12	500-1000-1500-2000	4-8 Ohms	\$ 7.35
33A93	5402	25	250-500-1000-1500-2000	4-8-16 Ohms	11.76
37A46	5409	12	45 Ohms	8 Ohms	7.06
37A47	5410	20	500-1000-1500-2000	16 Ohms	7.94

FREIGHT ALLOWANCE ON ALL ORDERS TOTALING OVER \$100:

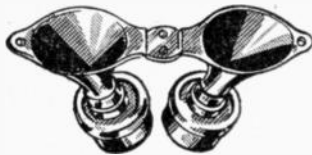
Buy from "B-A" and save! On any order for \$100.00 or more, you may deduct 2% from the TOTAL value of such order as a FREIGHT ALLOWANCE. ALL PRICES IN THIS CATALOG ARE "NET" and are not subject to any further discounts, other than our "Freight Allowance" discount above.



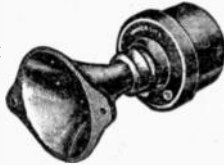
HIGH FIDELITY — 2,000/15,000 CPS. HI-FREQUENCY MODERNIZATION SINGLE AND DUAL "TWEETER" UNITS

The Tweeter Units listed below offer a variety of means for modernization of speaker systems in existing console or custom radio-phonograph installations. Adaptable to ANY good PM type cone speaker, Tweeter Units are easily installed and connected; in use they "bring out" the formerly lost high notes, reproducing voice and music with breath-taking realism. All Tweeter Units (except No. 34A149 complete in cabinet) require No. 34A152 High Pass Filter and Volume Control unit for either single or double Tweeters.

WIDE RANGE HI-FREQUENCY "TWEETER" UNITS



FOR USE WITH ANY GOOD CONE SPEAKER. PROVIDES TRUE HIGH FIDELITY AT LOW COST



Illus. at Left: DUAL TWEETER UNIT; frequency response, 2000-15000 cps.; Input Impedance 8 ohms; Power Rating, 12 Watts; horizontal distribution area, 100°; vertical distribution area, 50°. Size, 9 1/2" wide, 5" deep, 2 5/8" high. Stock No. 34A150. Dual "Tweeter" Unit, **\$23.52**

Illus. at Right: SINGLE TWEETER UNIT; has identical frequency response, sound distribution area and Input Impedance as Dual Unit above; Power Rating, 6 Watts; the ideal unit for installation in Console Radio cabinets or Radio-Phono combinations in conjunction with existing cone speaker for full HI-FIDELITY music and voice reproduction. Size, 4x5x2 3/4". Stock No. 34A151. Single "Tweeter" Unit. **\$11.76**

QUICK-ADAPTER TWEETER FOR 12-IN. SPEAKERS

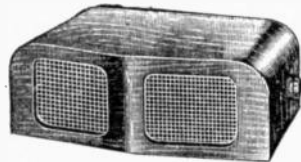


Ready-made modernization Tweeter Speaker, complete with steel adapter ring to fit ANY 12" PM speaker frame. Consists of Model 4401 Single Tweeter Unit with ALL necessary screws, bolts, etc., for mounting to the frame of speaker. Merely remove speaker from baffle-board, attach steel ring to speaker, and re-mount entire assembly to baffle board; requires only 3 1/2" additional depth space! Requires Model 4405 Hi-Pass Filter Unit listed below. Simple installation instructions supplied. No. 34A156. Single Unit Tweeter Speaker. Complete With Mounting Ring. NET. **\$14.70**

HIGH PASS FILTER AND VOLUME CONTROL UNIT—MUST be installed with ANY of the above "Tweeter" units; "routes" hi-frequencies to Tweeter Unit and bass or low frequencies to cone speaker. Volume control permits "building up" or suppression of high frequencies as desired. Easily connected to Tweeter Unit and Cone Speaker by merely attaching two wires to existing speaker. Stock No. 34A152. Model 4405 High Pass Filter Unit. NET. **\$5.88**

DUAL "TWEETER" in Cabinet

Complete Tweeter Unit, together with High Pass Filter and Volume Control installed in beautiful Walnut Cabinet, 11 1/2" long, 6 1/2" deep and 3 3/4" high—quickly and easily connected to any radio set. Stock No. 34A149. Model 4404 Cabinet "Tweeter". 8 Ohms. **\$35.28**
Net Each



360° Radial Cone Projector



"UNIVERSITY" MODEL RBP-12. RICH TONE QUALITY equal to large wall speaker enclosures! Large acoustic chamber with rubber cushioned opening correctly loads rear of cone speaker for FULL RANGE reproduction of VOICE or MUSIC! Frequency uniform down to 50 cycles. Diameter 26"; height, 14"; weight, 19 lbs.

Stock No. 32A22. MODEL RBP-12 PROJECTOR ONLY FOR 12-INCH CONE SPEAKERS; YOUR COST **\$20.58**
MODEL RBP-8; SAME AS ABOVE FOR 8" CONE SPEAKERS. 17" diameter x 10 3/8" high; weight, 9 lbs. **\$11.52**
Stock No. 32A23. YOUR COST

REFLEX TRUMPET ADAPTERS



Illus. "A": "University" PMA Adapter — Bolts securely to "U" bracket or trumpets and has 1/2-inch I.P.T. female threaded socket for secure fastening to 1/2" pipe; 5 1/2" wide, 2 3/4" high; wt. 12 oz. **88c**
No. 31A26. "PMA" Adapter. Net.

Illus. "B": "University" 2YC DUAL DRIVER UNIT CONNECTOR. Heavy threaded casting with acoustically correct design, permitting use of TWO driver units on a single Reflex Trumpet. Male threads fit all trumpets, female threads fit all driver units. Size, 4 1/8 x 2 1/2 x 2"; wt. 8 oz. **\$5.88**
Stock No. 31A48. "University" Model 2YC Dual Adapter. Net.

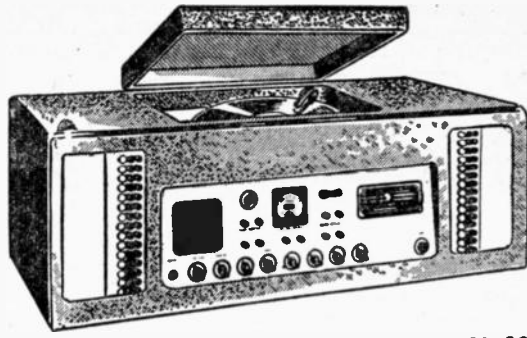
PARABOLIC BAFFLE



For 12-Inch Speaker
20" Bell
Heavy Steel

Vibration and WEATHERPROOF for most severe field service; NEW interlocking WATER-TIGHT SEAL between sections. Mounting holes drilled fit any 12-inch speaker—mtg. bolts supplied. Hangin loops supplied, or may be mounted on baffle fixture at right. Baked BLUE-GRAY weather resistant enamel finish. Stock No. 32A24. Model SM-12. Your Cost. **\$9.11**

"Bogen" DE LUXE SCHOOL SOUND SYSTEMS



FULLFILL EVERY MODERN SCHOOL NEED!

MODELS For 15 to 60 ROOMS WITH EVERY NECESSARY FACILITY

"BOGEN" MODEL "SM" DE LUXE SCHOOL SOUND SYSTEMS are a definite aid and necessity to the broadening scope of today's school activities—providing ALL the time-proven necessities, and, in addition, NEW and EXCLUSIVE FEATURES to meet modern requirements of expanding school curriculum—PLUS EASE OF OPERATION! All systems include new design High Fidelity, 12-Tube, "FM"—"AM" Radio Tuner!

MODEL "SM" SYSTEMS PROVIDE: HI-FIDELITY RADIO; highly selective and sensitive—assuring reliable reception in the most congested or the most remote locations; manual tuning and Electronic Tuning Eye insure foolproof operation. HI-FIDELITY RECORD PLAYER: Dual-speed, heavy duty Transcription Player with constant speed motor and high quality crystal pick-up; permit the playing of EITHER standard 10" or 12" records at 78 rpm.; or ANY type of special recording of music or instruction at 33 1/3 rpm.—including Broadcast type 16-inch "platters" recorded for "outside-in" or "inside-out" playback!

EXCLUSIVE FEATURES OF MODEL "SM" SYSTEMS: 3-Channel mixing for Auditorium use; 2 MICROPHONES and PHONO usable simultaneously; ROOM PICK-UP—can be "mixed" with 2 microphones and phono; ANNUNCIATOR indication of room calling identifies room by indicator on console; optional at additional cost.

ADDITIONAL FEATURES: Separate Intercommunication Channel, built-in; Auditorium pick-up to ALL rooms; ROOM PICK-UP from any room to all rooms, or to selected rooms; Push-button room selection; Single button EMERGENCY CALL; built-in provision for REMOTE CONTROL "mixing" of two input channels—requires only the purchase of Model "SR" Remote Control Unit, permitting the control of volume level of program being distributed, from a remote point even several hundred feet removed from the Central Console. Multiple Channel Operation: Two microphones, Phono music and Intercommunication between rooms may ALL be used simultaneously—TWO AMPLIFIERS provide separate power for Intercom and Radio or Microphone program distribution. Electric Chimes or School Bells may be amplified and carried throughout the entire school.

CONSTRUCTION: 12-Tube Radio Tuner; 2-Tube Communication Amplifier and 8-Tube Program Amplifier, Record Player, housed in strikingly attractive steel cabinet finished in brown baked Hammerloid, with sloping control panel in dull silver with brown and green markings. Size, 40 3/4" wide, 21" deep, and 16 1/4" high. Record Player may be used with HINGED LID CLOSED. MONITOR SPEAKER on console panel, with VOLUME LEVEL INDICATING METER, for adjustment to satisfactory volume of transmission to any or all rooms.

Wiring Requirements: 2-Wire Shielded Cable required between speaker in EACH room, and the Master Console—if Annunciator is to be used, an additional un-shielded 2-wire cable must be "run" to each room. Power requirements: Standard 110-125 Volt, 60 Cycle A.C.; Power consumption is 200 watts.

ALL MODELS PRICED BELOW are complete with "FM"—"AM" Radio Tuner, Transcription type DUAL SPEED Record Player, and all tubes. ANY Console may be increased in capacity after installation, by 15-room additions.

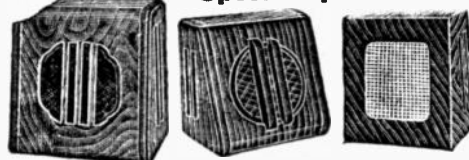
Stock No.	"Bogen" Model	Rooms	List Price	NET PRICE
50A19	SM-15F	15	\$783.50	\$470.10*
50A20	SM-30F	30	821.50	492.90*
50A21	SM-45F	45	859.50	515.70*
50A22	SM-60F	60	897.50	538.60*

*Note:—Any of the above systems may be had with Automatic Record Changer instead of Transcription Player at NO additional cost. Add "RC" to Number.

For "SM" Systems complete with ROOM ANNUNCIATORS; specify on order and ADD the following prices to NET PRICES of the various systems: for Model SM-15, add \$19.50; for Model SM-30, add \$36.15; for Model SM-45, add \$52.80; for Model SM-60, add \$69.45.

No. 50A23. MODEL "SR" Remote Control Unit, less cable. Net Each... **\$5.21**
No. 2A113. Cable for "SR" Remote Control Unit. Net Per Foot... **3 1/2c**
No. 2A125. Two-Wire Shielded Cable for above Systems. Net Per Foot... **7c**
No. 2A94. Two-Wire Annunciator Cable for above Systems. Net Per Ft... **2c**

Special Speakers for School Systems

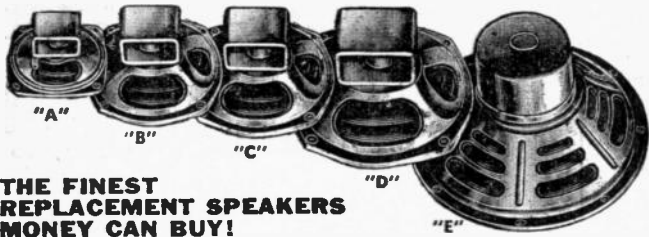


These matching speakers for Type "SM" School Systems are finest "PM" Dynamics. 12" for Auditoriums. 8" and 6" for Classrooms and Offices.

Illus. at left: DE LUXE Heavy Duty 12-Inch "PM" speaker in fine, heavy Walnut Baffle; with Transformer to match "SM" Systems. Stock No. 50A24. Type BSX-12 Speaker in Cabinet. Net Each... **\$37.05**
Illus. at center: De Luxe 8-Inch "PM" Speaker, Walnut cabinet, with transformer, for large classrooms or office. Stock No. 50A25. Type BSX-8 Speaker in Cabinet. Net Each... **\$13.80**
Illus. at right: Standard 6-Inch Speaker, in Utility cabinet, walnut finish; with transformer; for small to medium classrooms. Stock No. 50A26. Type WS-6 Speaker in Cabinet. Net Each... **\$9.30**

Jensen "Standard Series" SPEAKERS

"ALNICO-5" Replacement "PM" Dynamic Speakers



THE FINEST REPLACEMENT SPEAKERS MONEY CAN BUY!

"Alnico-5" JENSEN PM's — "tops" in performance — long magnet life — DUSTPROOF. All Speakers Below Are Priced "Less Transformer".

NOTE:—ALL SPEAKERS BELOW ARE PRICED "LESS TRANSFORMER".

Speaker Size	Dimensions		Voice Coil		Jensen Model	Stock No.	Your Cost
	O. D.	Depth	Diam.	Ohms			
4-inch	5"	2"	3/4"	3-4	P4-X	14B600	\$2.44
5-inch	5"	2 1/4"	3/4"	3-4	P5-X	14B601	2.53
6-inch	6 1/2"	3"	3/4"	3-4	P6-X	14B602	2.94
8-inch	8 1/2"	3 1/2"	3/4"	6-8	P8-U	34A107	4.91
8-inch	8 1/2"	3 1/2"	3/4"	3-4	P8-T	34A108	5.59
10-inch	10 1/2"	5 1/2"	1"	6-8	P10-T	34A109	6.26
10-inch	10 1/2"	5 1/2"	1"	6-8	P10-S	34A131	8.97
12-inch	12 1/2"	6 1/2"	1"	6-8	P12-T	34A110	6.97
12-inch	12 1/2"	6 1/2"	1"	6-8	P12-S	30A23	9.70

Jensen Standard Series Field Coil Dynamics

These NEW and MODERN DESIGN Field Coil Dynamic Speakers are of the highest possible quality; DUSTPROOF; and all have bucking coils.

NOTE:—ALL VOICE COILS ARE 3 TO 4 OHM VOICE COIL IMPEDANCE.

Speaker Size	Dimensions		V.C. Dia.	Field Res.	Power, Watts	Jensen Model	Stock No.	Your Cost
	O. D.	Depth						
4-inch	5"	2 1/4"	3/4"	450	2.0	F4-X	14A718	\$3.03
4-inch	5"	2 1/4"	3/4"	1000	2.0	F4-X	14B603	3.06
5-inch	5"	2 1/4"	3/4"	1000	2.5	F5-X	14B604	3.18
5-inch	5"	2 1/4"	3/4"	450	2.5	F5-X	14B605	3.14
6-inch	6 1/2"	3"	3/4"	1000	3.0	F6-X	14B606	3.32
8-inch	8 1/2"	3 1/2"	3/4"	1000	4.0	F8-W	34A124	3.91
10-inch	10 1/2"	5 1/2"	1"	1500	9.0	F10-S	34B123	7.47
12-inch	12 1/2"	6 1/2"	1"	1500	10.0	F12-S	34A129	8.58
12-inch	12 1/2"	6 1/2"	1"	1000	10.0	F12-S	34B128	8.73

Professional Series SPEAKERS

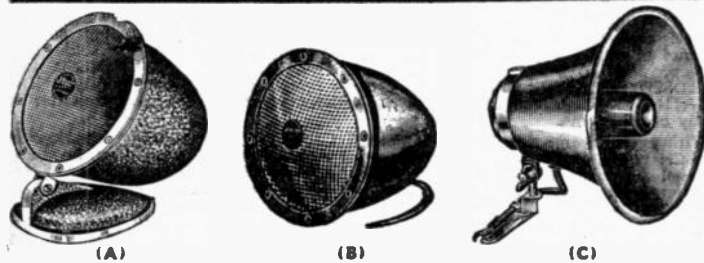


Illustration A: "JENSEN" Model AP-10 Speechmaster Projector

For DESK or WALL mounting, these beautiful streamline design speakers are especially recommended for PAGING and INTERCOM use. Their special radiating system and PERIDYNAMIC DESIGN insure clear, crisp SPEECH reproduction, and even BETTER music reproduction than obtained from the average small radio. Extra sturdy construction, double DUSTPROOFED, fitted with internal mounting for 1/2x1/2" transformer; base has tilt adjustment for easy wall mounting. Good "TALK-BACK" performance when used in "PA" systems—IDEAL for "CW" telegraph use as they override QRM and QRN, husky voice coil "takes" keying transients in stride. A fine SHORT WAVE LISTENER or "HAM" speaker—many used in POLICE, AVIATION and similar fields. 4-OHM voice coil matches output of radio sets; 45-OHM for use with intercom. systems using 40 to 50-ohm lines. With 36" R. C. connecting cord. Size, 6 1/4" high, 5 1/8" deep, 5" dia. bell; wt. 5 1/4 lbs. Gray, Chrome trim.

Stock No. 34A119; 4-OHM SPEECHMASTER PROJECTOR. Net Ea. **\$8.17**
 Stock No. 34A120; 45-OHM SPEECHMASTER PROJECTOR. Net Ea. **\$8.52**

Illustration B:—MODEL AP-11 SPEECHMASTER PROJECTOR, identical to AP-10 described above, except WITHOUT base or swivel and designed for PANEL MOUNTING. Front rim has eyelets for mounting screws, fits 4-27/64" cut-out. Depth from front panel 4 1/2"; with screws and drilling template. Wt. 3 1/4 lbs. 4-OHM VOICE COIL—a dandy for rack mounting; gray with chrome trim.

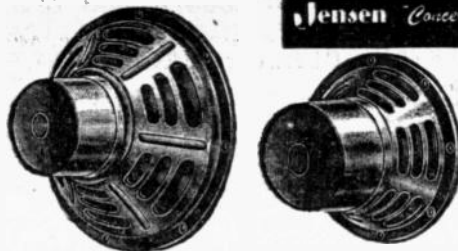
Stock No. 34A118; PANEL MOUNT SPEECHMASTER PROJECTOR. Your Cost **\$6.64**

Illustration C: Model VH-91 Hypex Speechmaster Projector

The ideal paging and intercommunication speaker, extra efficient in voice ranges! Delivers CLEAR, intelligible speech with plenty of "punch" for high noise level locations. 15-WATTS power capacity, has phenolic impregnated, cloth base diaphragm; V.C. impedance is 8-ohms; provides useful output over a 100-degree total angle—clever MTC. BRACKET points projector in ANY direction, securely LOCKS into position with a single wing nut. May be mounted on ceiling, wall, post or table; 2-wire R.C. cable for connections. Bell Diameter 8 7/8", bell length 7 3/4". Wt. 4 1/2 lbs.

Stock No. 34A138; VH-91 HYPEX PROJECTOR. Your Cost.... **\$19.11**

Jensen "Concert Series" SPEAKERS



These famous "PM" speakers all have Alnico-5 magnets—are heavy duty, highly efficient speakers for public address or finest quality radio or phono uses. They are designed for use with BASE REFLEX CABINETS.

(Note: Transformers are NOT included in prices quoted below.)

Speaker Size	Dimensions		Voice Coil			Jensen Model	Stock No.	Your Cost
	O. D.	Depth	Diam.	Imped.	Watts			
8-inch	8 1/2"	4 1/2"	1"	6-8	9.0	P8-R	34B*26	\$8.97
10-inch	10 1/2"	5 1/2"	1"	6-8	10.0	P10-R	34B*26	10.88
12-inch	12 1/2"	6 1/2"	1 1/2"	8	13.0	P12-Q	30A24	16.32
12-inch	12 1/2"	6 1/2"	1 1/2"	8	15.0	P12-N	30A25	28.80
15-inch	15 1/2"	7 1/2"	1 1/2"	8	17.0	P15-N	32A44	32.34

"Special Series" SPEAKERS

Extended Range Single Radiator Hi-Fidelity "PM" Speakers

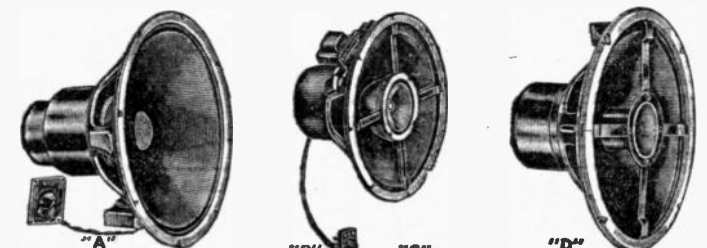
"Special Series" high fidelity speakers provide excellent response up to 10,000 C. P. S.—will accommodate indoor audiences of 100 persons or more. They are ideal for "FM"; WIRED MUSIC; RADIO - PHONO COMBINATIONS; and are highly qualified for BROADCAST STATION monitors. Used with Bass Reflex Cabinets they provide HIGHEST QUALITY reproduction!



All the following are "Alnico-5" PM Dynamics; priced LESS transformer.

Speaker Size	Dimensions		Coil Voice			Jensen Model	Stock No.	Your Cost
	O. D.	Depth	Diam.	Imp.	Watts			
6-inch	6 1/2"	3 1/4"	3/4"	3-4	4.5	P6-TH	34A112	\$ 6.73
8-inch	8 1/2"	3 3/4"	1"	6-8	7.5	P8-SH	34B130	8.39
12-inch	12 1/2"	6 1/4"	1 1/4"	6-8	12.0	P12-QH	34B137	17.20
15-inch	15 1/2"	7 1/4"	1 1/2"	6-8	16.0	P15-NH	34B136	33.65

Jensen "Coaxial Series" SPEAKERS



"Jensen" Coaxial speakers cover a wide range of performance and price. TWO separate speakers in a unitary assembly—a cone type l.f. speaker with a horn type h.f. "tweeter"—each speaker giving smooth frequency response within the limits of its own range.

Illustration "A": MODEL HNP-51 15" SUPER COAXIAL. Frequency range of 50/15,000 cycles. Maximum power, 25 WATTS. Cone type l.f. speaker and Horn type h.f. speaker BOTH have "Alnico-5" PM fields. Integral 2-channel type network. "Roll-off" type H.F. Control with 4-position control switch. INPUT IMPEDANCE is 500-600 ohms. Size, 15 1/8" O.D., 10 1/2" deep, 13 1/2" baffle. Weight 20 lbs. List Price, \$125.00.

Stock No. 30B46. "JENSEN" MODEL HNP-51 COAXIAL SPEAKER. NET **\$81.66**

Illustration "B": MODEL JAP-60 15" COAXIAL SPEAKER. Maximum power 17 WATTS. Frequency response 50/15,000 c.p.s.; Input Impedance, 500-600 ohms. Network, Integral 2-channel type with "Roll-off" type H.F. Control with four position switch; "PM" field. Size 15 1/8" O.D., 8 1/8" deep, 13 3/4" baffle opening. Weight 27 lbs. List Price, \$85.00.

Stock No. 30A20. "JENSEN" MODEL JAP-60 COAXIAL SPEAKER. NET **\$55.54**

Illustration "C": MODEL JHP-52 15" COAXIAL SPEAKER. 14-WATT true fidelity speaker; range 50/15,000 c.p.s. Integral 2-channel network complete with "Roll-off" type H.F. Control and four position selector switch. Has "PM" field; Input is 500-600 ohms. Size 15 1/8" O.D., 7 1/2" deep, 13 3/4" baffle opening. Weight, 19 1/2 lbs. List Price, \$72.00.

Stock No. 30A21; "JENSEN MODEL" JHP-52 COAXIAL SPEAKER. NET **\$47.04**

Illustration "D": MODEL JRP-40 12" COAXIAL SPEAKER. Frequency range 50/12,000 cycles. Maximum power, 10 WATTS. "PM" field with input of 6-8 ohms. "Bridging" type network. LESS High Frequency control (Our No. 13A193 H.F. Control should be ordered extra, if desired; Price, \$1.76). Size 12 1/2" O.D., 5 5/16" deep, 11" baffle opening. Weight, 14 lbs.

Stock No. 30A22. MODEL JRP-40 COAXIAL SPEAKER. NET.. **\$19.60**

"Jensen" H-F Speaker and 2-Channel Network



MODEL Q8P Frequency Speaker Unit; for use with A40-1 Network above together with a suitable low (standard) frequency speaker of 12" or 15" size as found in most console model radio sets or radio-phonograph combinations. Reproduces frequencies from 4,000 to 15,000 cps.; voice coil impedance, 16-ohms. "PM" design. Over-all diameter, 5 1/2", depth, 3 3/8". Wt. 3 1/2 lbs.

No. 34A111. Model Q8P H.F. Speaker Unit. Your Cost **\$7.64**



Model A40-1 Frequency Dividing Network provides the means of converting the speaker of any Radio or Phono (having a good 12" or 15" standard speaker) to a modern 2-way speaker system; combining LOW and HIGH frequency speakers to produce WIDE RANGE tonal response, with 4-position control of the high frequencies. A40-1 Network frequency division is at 3,500 cps. with attenuation of 10-12 db. per octave outside of pass band on each filter. L.F. Channel for any good 8-ohm, 12" or 15" speaker. H.F. Channel will take 1 to 4 Q8P H.F. Speakers; using 16, 8 or 4-ohm taps. INPUT 500-600 ohms. Unit-built in heavy steel case, complete with H-F Range Control, escutcheon and knob. Wt. 6 lbs.

Stock No. 33A9-. "JENSEN" MODEL A40-1. Two-Channel Network. Your Cost **\$20.58**

"L" PADS



"JENSEN" H-F LEVEL CONTROL, Model ST-606; a simplified system of fidelity control easily added to Model JRP-40 speakers to control the level of the H-F section or may be used as a general purpose 16-ohm, 15-watt level control. 3/8" bushing, 1" long; with Bronze escutcheon plate and bakelite knob.

No. 13A193. NET **\$1.76**

L-PAD, Model ST411; 8-ohms res., for up to 15-watts power. Complete with dial plate and knob. **\$1.76**

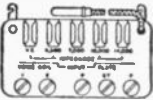
No. 14A518. NET **\$1.29**

L-PAD, Model ST276; 6-ohms, 5-watts. **\$1.29**

No. 14A517. NET **\$2.06**

Stock No. 14B515. L-PAD ST-761; 500-600 Ohms, 15 watts. Net Each.

Impedance Matching TRANSFORMERS



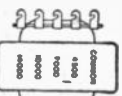
Pin adjustment Types "ZY" and "ZX" transformers have clearly marked impedance values opposite each jack on bakelite terminal board on top of transformer; pin plug and flexible lead permits quick, easy adjustment to impedance value desired. Mounting centers fit Jensen speakers. HIGH QUALITY, moisture protected.

Type "ZX" Plate Matching Transformers, Impedance values: Voice Coil, 4,500, 7,000, 10,000 and 14,000 ohms, all except voice coil C.T.

Stock No.	Jensen No.	Core	V.C.	For Jensen Speakers	Net Each
13B185	ZX1007	1"x1"	8	P15N, P15NH, P12N	\$5.73
13A183	ZX1005	3/8"x3/8"	6-8	P12Q; P12QH; P10R; JCP-40	4.23
13B188	ZX1002	3/4"x3/4"	6-8	P12T; P10S; P10T; P8R; P8SH; P8T	2.94

Type "ZY" Line Matching Transformers, Same style as "ZX" above except have "Line" impedances of 500, 1,000, 1,500, 2,000 ohms and Voice Coil.

Stock No.	Jensen No.	Core	V.C.	For Jensen Speakers	Net Each
13B189	ZY2005	1"x1"	8	P15N, P15NH, P12N	\$5.73
13A186	ZY2003	3/8"x3/8"	6-8	P12Q, P12QH, P12S, P10R, JCP40	4.23
13B187	ZY4004	3/4"x3/4"	3-4	P8T	2.94
13A302	ZY2002	3/8"x3/8"	6-8	P12T, P10T, P8R, P8S, P8SH	2.94
13A303	ZY4002	3/4"x3/4"	3-4	P6T, P6TH	1.97
13A291	ZY4005	3/8"x3/8"	6-8	VH91 "Hypex"	1.97



Solder Terminal Types "ZP" and "ZL"; LOW COST, high quality Adjustable Impedance Transformers, similar in design to Pin Adjustment types "ZX" and "ZY", EXCEPT, instead of pin and jack adjustment, have SOLDER connections to terminals. ALL TYPES are mountable on speaker, and have terminal boards clearly marked with impedance values.

Type "ZP" Plate Matching Transformers; Models ZP1023, ZP1024, and ZP1026 have impedances of 4,500, 7,000, 10,000, 14,000 ohms and Voice Coil. Model ZP1025 for 50L6, 25L6, 25B6, etc., tubes has impedances of 1,500, 2,000, 2,500 ohms and Voice Coil. Models ZP1024 and ZP1026 have Center Tapped primaries.

Stock No.	Jensen No.	Core Size	V. C.	For Speakers	Net Each
13B178	ZP1023	3/4"x3/4"	3-4	P6X; P5X; P4X	\$1.26
13B179	ZP1024	3/8"x3/8"	3-4	P6T; P6TH	1.53
13B180	ZP1026	3/8"x3/8"	6-8	VH-91 "Hypex"	1.47
13B181	ZP1025	3/2"x3/2"	3-4	P6X; P5X; P4X	1.26

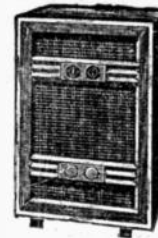
Type "ZL" Line Matching Transformers; All have selective LINE impedances of 500, 1,000, 1,500 and 2,000 ohms.

Stock No.	Jensen No.	Core Size	V. C.	For Speakers	Net Each
13B182	ZL2021	3/8"x3/8"	3-4	P6X; P5X; P4X	\$1.26
13B184	ZL2022	3/4"x3/4"	6-8	VH-91 "Hypex"	1.47

TYPE "Z" FIXED IMPEDANCE CASED TRANSFORMERS; SCREW TERMINALS. For HNP51, JAP60, JHP52 speakers—ALL have 500-ohm secondaries; center tapped Primaries as shown below, NOT mountable on speakers; wt. 4 lbs.

Stock No.	Jensen	Pri. Imp.	V. C.	Mtg. Ctrs.	Net. Ea.
13A190	Z-3155	3000 Ohms	1"x1 1/2"	1" x 3"	\$7.84
13A191	Z-3156	5000 Ohms	1"x1 1/2"	1" x 3"	7.84
13A192	Z-3157	10000 Ohms	1"x1 1/2"	1" x 3"	7.84

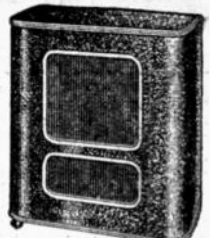
Jensen Bass Reflex CABINETS



①



②



③

① "CUSTOMODE" Model M-251 Bass Reflex Cabinet for 15" speakers—New, modern design, of selected veneered woods over a 3/4" thick base combine strength and beauty in a striking, yet dignified decorative touch. Fully effective BASS REFLEX performance with ANY good 15" speaker is assured by acoustically coordinated design and baffling. Symmetrical, modern design allows cabinet to be used either in horizontal or vertical position—base rails are supplied unattached to permit choice of positions. FOUR concealed cut-outs in front cross bars are easily removed for installation of Coaxial speaker "level" controls. Size, 36" high, 24" wide, 18" deep, highly polished natural BLONDE finish. Shipping weight, 50 lbs.

Stock No. 40A12. "Customode" Bass Reflex Speaker Cabinet. **\$66.39** Net Each.

② MODEL "D" Imperial Bass Reflex Cabinets for 12" and 15" Speakers—Handsome styling and solid construction of heavy backed, beautiful veneers, PLUS "sound" engineered design for full range reproduction of the output of ANY GOOD 15" or 12" SPEAKER—especially recommended for use with COAXIALS. Choice of Blonde or Walnut finishes. Overall sizes are 31 1/4" high, 27 3/4" wide, 13 3/8" deep. Shipping weight, 50 lbs.

No. 40A11. Model D221 BLONDE Cabinet for 12" Speakers. Choice **\$51.94**

No. 40A10. Model D251 BLONDE Cabinet for 15" Speakers. Each **\$51.94**

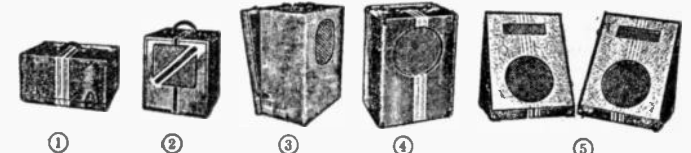
No. 40A3. Model D121 WALNUT Cabinet for 12" Speakers. Choice **\$50.63**

No. 40A4. Model D151 WALNUT Cabinet for 15" Speakers. Each **\$50.63**

③ MODEL "B" Utility Bass Reflex Cabinets for 8", 12" or 15" Speakers—All the benefits of the BASS REFLEX principle of construction in which exact acoustical balance of port and cabinet volume provides extended l.f. response by controlled use of speaker energy otherwise wasted. Solidly constructed of impregnated composition board finished in hammered brown lacquer—grille openings trimmed in aluminum, removable aluminum finished base feet.

Jensen Model	For Speaker	High	Wide	Deep	Shipping Weight	Stock No.	Your Cost
B 81	8"	22 3/4"	18 "	9 "	10 lbs.	32A35	\$20.58
B121	12"	28 1/2"	22 3/4"	11 7/8"	13 lbs.	40A1	29.06
B151	15"	30 3/4"	27 1/4"	12 1/4"	14 lbs.	40A2	34.47

PORTABLE SPEAKER BAFFLE-CARRYING CASES



① **AMPLIFIER CARRYING CASE.** Deluxe type of heavy plywood, completely reinforced and covered with handsome gray leatherette. Cover, held with 4 heavy duty clasps, slips off quickly for access to amplifier, which may be used without taking off base of case. Heavy carrying handle, reinforced corners. FITS any unit equal to or less than INSIDE dimensions of 17 7/8" long, 11 1/2" deep, 9 3/4" high. Weight, 16 lbs.

Stock No. 30A129. MODEL 133X AMPLIFIER CASE. NET, EACH. **\$12.20**

② **PORTABLE DUAL SPEAKER-AMPLIFIER CASE.** Divided case, each half with carrying handle, for TWO 12" speakers and amplifier space of 14x8x8" deep; overall size, 16x14 1/2x20" high; weight, 16 lbs. Heavy reinforced plywood with quality leatherette covering.

Stock No. 30A127. Model K-20 Speaker-Amplifier Case. Net, Each **\$14.99**

③ **Portable Dual Speaker-Amplifier Case.** For TWO 12" speakers and amplifier space of 15x9 1/4x8" high. Weight, 17 lbs.

Stock No. 30A128. Model K-30 Speaker-Amplifier Case. Net, Each **\$14.99**

④ **PORTABLE SINGLE SPEAKER-AMPLIFIER CASE.** Designed for the smaller P.A. or Phono amplifiers and mounting baffle for ONE 10" or 12" speaker. Outside dimensions are, 18 3/4" high, 14 7/8" wide, 9 7/8" deep.

Stock No. 30A136. AMPLIFIER-SPEAKER CASE. NET EACH. **\$9.92**

⑤ **"BOGEN" PORTABLE SPEAKER BAFFLE.** Strong, 3/8" plywood DUAL 12" SPEAKER BAFFLE, divided diagonally—each section serving as a baffle assuring GOOD TONE QUALITY. Grills protected by strong screen; rattle-proof snap locks; strong leather handle—metal corners and bumper feet. Size, overall, 24" high, 16" wide, 10" deep.

Stock No. 30A137. BOGEN MODEL 134X SPEAKER BAFFLE. EACH **\$12.79**

⑥ **"BOGEN" DELUXE DUAL 12" SPEAKER BAFFLE.** COMPLETELY ENCLOSED, designed for HEAVY DUTY SPEAKERS and will contribute considerable to the quality of reproduction of ANY sound system! Acting as "Infinite" baffles, they have a special GRILL VENT above speaker grill to eliminate "boominess" or cavity resonance. Built of heavy 3/8" plywood with reinforced corners, rubber bumper feet, and NON-RATTLE safety catches. 2-TONE leatherette covering. Outside dimensions, closed, 22 1/2" high, 18" wide, 12 1/2" deep.

Stock No. 30A138. BOGEN MODEL 140 SPEAKER BAFFLE. EACH **\$18.67**

"STEPHENS"



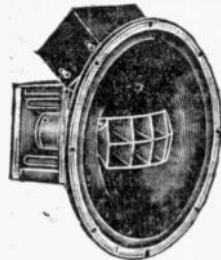
Wide Range Multi-Cellular and Co-Spiral Speakers

WHY COAXIAL AND SEPARATE TWO-WAY SPEAKER SYSTEMS?

Ordinary speakers are a compromise in design—with a single voice coil and diaphragm attempting to cover a tone range of 8 octaves (30-16,000 cps.)—the bass, or low notes with the voice coil moving in and out as far as 3/8" AND, with the SAME CONE and voice coil attempting to also vibrate rapidly over exceedingly small distances to generate the treble tones—too much to expect from ONE cone and ONE voice coil—THEREFORE—"TRUSONIC" speaker systems (Coaxials) have TWO DRIVING UNITS; one large in size to cover and reproduce the first half of the audible spectrum; and a second unit small in size, built to the accuracy of a fine watch, to produce the treble tones with utmost fidelity. Treble notes from most coaxials speed like a bullet, straight out from the speaker—in "TRUSONIC" COAXIALS, these treble notes are "spread" over a wide arc, thus providing the pleasure of true, HI-FIDELITY music over full-room area!

MULTICELLULAR COAXIAL

Series P-52A TRU-SONIC COAXIAL SPEAKER is a 15-INCH hi-fidelity speaker, with an 8-cell "Tweeter" hi-frequency unit; and a "Woofer" low frequency 15-inch cone; utilizing the magnetic power of 6-POUNDS of Alnico-V to provide the widest angle high and low frequency reproduction and distribution. A suitable DIVIDING NETWORK, or electrical cross-over system "routes" the lower register notes to the 15" cone speaker, and the high register "treble" notes to the 8-cell "tweeter" unit—producing living, vibrant realism with the full, deep resonance of low notes and the tinkling high notes of philharmonic orchestra or voice; reaching the listener in perfect balance, and proportion and breath-taking realism! Built for handling audio power output



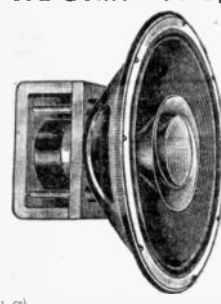
up to 20 WATTS, frequency response, plus or minus 5db. from 50 to 12,000 cps. Input, 16 ohms. The 15-inch CONE is moisture resistant, seamless, and suspended from the heavy cast, machined, fraiffé at two points, outer rim and inner spider-cone area is 125 sq. in., with resonance of 55 cycles. VOICE COIL of the 15" cone is 2" in diameter, precision wound and covered with temperature resistant varnish. The HIGH FREQUENCY MULTI-CELLULAR "Tweeter" unit has a 1 1/2" voice coil, and has a diaphragm resonance of 400 cps. Dividing network has high Q, air core coils, quality condensers, and low insertion loss of less than 1/2 db. Over-all diameter of P52A is 15 1/2", baffle opening, 13 1/2", depth 10"; wt. 35 lbs.

Stock No. 32A37. "TRU-SONIC" Model P52A COAXIAL Speaker. Net

\$120.54

Tru-Sonic "Co-Spiral" 12 and 15-in. Co-Axial Speakers

The MIRACLE SPEAKER with tonal response and realistic reproduction of BOTH low and high musical registers far beyond that of the ordinary speaker! HIGHLY RECOMMENDED for ANY INDOOR PUBLIC ADDRESS SYSTEM, RADIO, or RADIO-PHONO COMBINATION where better tone quality is desired than available from "ordinary" speakers. Both 12" and 15" CO-SPIRAL Speakers will handle full 15 watts; standard mounting holes fit ALL baffles! Revolutionary design provides TWO acoustic sections—one for lowest bass tones and the other for extended treble tones—a combined Frequency Range of 40 to 14,000 CPS. at full 15 Watts power input! Seamless curvilinear cone reproduces ALL the bass notes while the new and radically different "Silver Spiral" Differential Diffuser "brings out" all the brilliance of the extended high frequency tones with diffusion of these high notes over a



90° dispersion! Powerful 2 1/2 lb. Alnico "V" Magnet "drives" both the bass cone and Silver Spiral high frequency cones. Choice of 12" or 15" sizes as listed below.

"Tru-Sonic" Co-Spiral 15" Co-Axial Speaker. Overall dia. 15 1/4"; baffle opening, 13 3/4"; overall depth, 7 7/8"; weight, 23 lbs. 8-Ohm Voice Coil. Stock No. 40A32. Model P52FR 15" Co-Spiral Speaker. Net Each.

\$47.04

"Tru-Sonic" Co-Spiral 12" Co-Axial Speaker. Overall dia. 12 1/8"; baffle opening, 10 3/4"; overall depth, 6 3/4"; weight, 20 lbs. 8-Ohm Voice Coil. Stock No. 40A33. Model P22FR 12" Co-Spiral Speaker. Net Each.

\$41.16

"TRU-SONIC" HI-FIDELITY CABINETS

Acoustically engineered and built of fine veneers over 3/4" bonded woods; fully enclosed and lined with acoustic materials—finished like a piano in choice of Blonde or Mahogany! A cabinet that brings out the best in tonal response of "Stephens" speakers listed above—or ANY good 15" coaxial speaker! Cubical content, 6 cu. ft.; resonant frequency, 42 cycles. This cabinet WILL NOT spoil good music by resonating at any frequency audible to the human ear! Release port to eliminate objectionable "boom". Heavy metal grille, removable back. Size, 34 1/2 x 23 1/2 x 16 1/2"; deep; with 15" speaker mounting baffle.



No. 40A16. Model 52D Tru-Sonic Cabinet, Natural BLONDE finish. No. 40A17. Model 52D Tru-Sonic Cabinet, MAHOGANY finish.

\$76.44

Model P52A/52D Complete Speaker and Cabinet: Consists of P52A Multi-cellular Co-Axial speaker INSTALLED in 52D Cabinet; 16-ohm Voice Coil. Your Choice

No. 50B1. P52A Co-Axial Speaker in 52D BLONDE Cabinet. No. 50B2. P52A Co-Axial Speaker in 52D MAHOGANY Cabinet.

\$198.98

Model P52FR/52D Complete Speaker and Cabinet: Consists of Model P52FR Co-Spiral 15" speaker INSTALLED in 52D Cabinet; 8-ohm Voice Coil. Your Choice

No. 50B3. P52FR Co-Spiral Speaker in 52D BLONDE Cabinet. No. 50B4. P52FR Co-Spiral Speaker in 52D MAHOGANY Cabinet.

\$125.48



2-WAY SPEAKER SYSTEM UNITS COMPLETE CABINETED SYSTEMS

The listings below allow the Custom Builder, Professional, Sound, Broadcast or School Engineer to select separate L.F. Speaker, H.F. Driver Unit, Cellular Horn and Low Loss Cross-over units to suit his own particular needs.



① Model P-52L Low Frequency 15", 20-Watt P.M. Speaker. Powerful generator of deep, fundamental bass tones. 4-Pound Alnico-V magnet; 2" diameter voice coil, and 125 sq. in. effective driving area of the curvilinear-designed, seamless moulded and moisture resistant cone promotes an ideal piston-like action of the diaphragm. Flux density of 14,000 lines per sq. cm. Frequency range is flat within 4 db. from 50 to 5,500 cps. Dia. 15 1/8", baffle 13 1/2", depth 8 1/2"; weight, 25 lbs. Stock No. 40A32. Model P-52L 15", 16-Ohm Voice Coil. NET.

\$47.04

"Tru-Sonic" High Frequency Driver Units. For use with the High Frequency Horns and Cross-overs listed below, to provide extended range reproduction of music in the higher frequencies of the treble range when combined in a 2-way system with Type P-52L speakers above, or any good L.F. speaker.

② (Lower Illus) 30-Watt Type P-30 High Frequency "P.M." Driver Unit. Frequency Range, 350/16,000 cps. 16-ohm Voice Coil. Size, 5" dia., 4" deep; weight, 25 lbs. No. 32B203. Type P-30 High Frequency Driver Unit. Net Each.

\$70.56

③ (Upper Illus.) 20-Watt Type P-15 High Frequency "P.M." Driver Unit. Frequency Range, 500/16,000 cps. 16-ohm Voice Coil. Size, 4x6x3 3/4"; wt., 12 lbs. Recommended for use with a single "woofer" L.F. Speaker. No. 32B204. Type P-15 High Frequency Driver Unit. Net Each.

\$41.16

④ High Frequency Horn Model 625H. For use ONLY with Model P-30 Driver Unit and 600X Cross-over. Ten 5x5x15" 600-cycle cells and mounting throat for P-30 driver unit; provides 40x100° dispersion, intercepts 20° solid angle. Size, 23 1/2" wide x 16 1/2" deep x 11 1/2" high; weight, 35 lbs. Stock No. 40A19. Model 625-H Cellular Horn. Net Each.

\$64.68

⑤ High Frequency Horn Model 824-H. For use ONLY with Model P-15 Driver Unit together with Model 800X Cross-over; 8 cells, each 4x4x11" with mounting throat for P-15 Driver. Size, 16" wide x 10" deep x 11 1/2" high; weight, 15 lbs. Stock No. 40A20. Model 824-H Cellular Horn. Net Each.

\$29.40

⑥ Model 600X Low-Loss Cross-over. 80-Watt, 600-Cycle Electrical Cross-over. 12 db. attenuation per octave with attenuation of 3 db. at cross-over frequency; phase rotation is 270°; non-metallic case eliminates distortion; construction holds insertion loss to 1/2 db.; 16-ohms impedance. Size, 5x3 3/4 x 3 3/4"; weight, 8 lbs. For use with P-30 Driver. Stock No. 32A272. Model 600X Low-Loss Cross-over. Net Each.

\$39.69

⑦ Model 800X Low-Loss Cross-over. 40-Watt, 800-Cycle Cross-over for use with Model P-15 Driver Unit. 16-ohms impedance. Size, 5x3 3/4 x 3 3/4"; weight, 6 lbs. No. 32A273. Model 800X Low-Loss Cross-over Unit. Net Each.

\$26.46

"TRU-SONIC" 2-WAY SYSTEMS IN CABINETS



① Model P63HF System in Model 63SD Blonde or Mahogany Cabinet. The ultimate in fine speaker systems, consists of TWO model P-52L "Woofer" speakers, 1 Model P-30 H.F. Driver, Model 625H Horn and Model 600X Low-Loss Crossover, installed in 30-cycle resonance cabinet of fine veneers over heavy 3/4" bonded base wood. Size, 36" wide, 45 1/2" high, 25" deep; weight complete, 245 lbs. List \$807.50. Input, 16-ohms. Choice, Each

\$474.81

No. 50A100B. Model P63HF/63SD; Blonde Cabinet System. No. 50A100M. Model P63HF/63SD; Mahogany Cabinet System.

② Model P63HF UTILITY CABINET Complete Speaker System. Consists of same components listed above for DeLuxe cabinets; a fine speaker for Broadcast Station Monitors or custom building in Home or Office. With H.F. attenuator to balance room acoustics. Cabinet size, 36" wide, 45" high, 25" deep; weight complete, 245 lbs. List, \$675.00. No. 40A25. Model P63HF Utility Cabinet System. Net.

\$396.90

③ Model P52HF System in Model 52SD Blonde or Mahogany Cabinet. Consists of P-52L "Woofer", P-15 H.F. Driver Unit 824H Horn and 800X Low-Loss Crossover, mounted complete in gorgeous cabinet size, 28 3/4" wide, 36 1/2" high, 19" deep; weight complete, 80 lbs. List, \$440.00. Choice, Each

\$258.72

No. 40A29. Model P52HF/P52SD Mahogany Cabinet System. No. 40A21. Model P52HF/P52SD Blonde Cabinet System.

④ Model P52HF System in UTILITY CABINET, for Broadcast Station Monitor, or Custom Home or other installations. Consists of same components described above for DeLuxe Cabinet, mounted in Utility Cabinet size, 23 1/2" wide, 32" high, 17" deep; weight, 70 lbs. Utility cabinets are finished in Gray enamel with Wine flocked grille. List, \$320.00. No. 40A26. P52HF/52U Utility Cabinet System. Net Each.

\$188.16

⑤ Model 52SD Blonde DeLuxe Cabinet Only; No. 40A28B. Each.

\$105.84

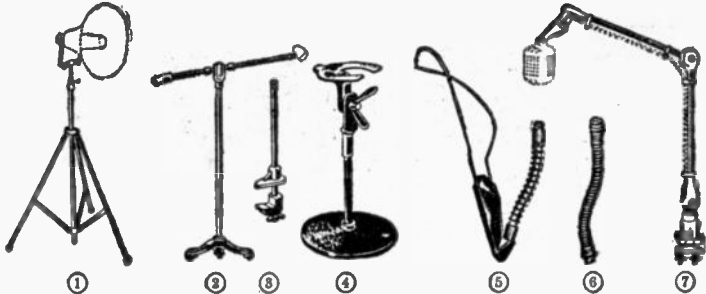
⑥ Model 52SD Mahogany DeLuxe Cabinet Only; No. 40A28M.

\$105.84

⑦ Model 52U Utility Cabinet Only; Stock No. 40A27. Net Each.

\$35.28

MICROPHONE STANDS & P.A. ACCESSORIES FOR EVERY NEED



① **Atlas Model SS-2 Heavy Duty TRIPOD TRUMPET STAND**
Provides quick, convenient and reliable means of trumpet speaker placement especially in outdoor locations! Adjustable from 5 to 10 ft. in height—and easily and quickly collapsible. Solidly constructed, all parts accurately machined; Cadmium Plated Steel Tubes and tripod legs. Two-way telescoping locking device. Upper tube threaded $\frac{3}{4}$ " I.P.T.—Universal fittings supplied permit use of stand with ANY Trumpet having "U" bracket mounting, regardless of make! Weight, 24 lbs. complete.
No. 32B18. ATLAS Model SS-2 Trumpet Tripod Stand. Net Each... **\$22.05**

② **American HB-3 BOOM FLOOR MICROPHONE STAND**, for Recording and Orchestra pickup. Silent, positive adjustment of "mike" at any position in 180° arc from straight up to straight down; boom extends "mike" 34" out from stand, easily positioned by dual leather cushioned locks; positive locking, finger-tip control angle adjustment. Boom assembly mounts on 1" iron pipe with sleeve fit to 12 lb. heavy iron tripod base. 34" boom tube Chrome plated, $\frac{3}{4}$ "-27 thread; lower assembly satin black. Weight, 16 lbs.
Stock No. 32A19-2. Model HB-3 Floor Boom Stand. Net Each... **\$14.41**

③ **Atlas Bracket Clamp, Model BC-1**. For quick, easy attachment of "mike" to any flat surface 2" thick or less; may be clamped or permanently bolted. Chrome tube section, 6" long has $\frac{3}{8}$ "-27 thread for any microphone, goose-neck, boom or other adapter. Weight, 2 lbs. List, \$3.00.
No. 20A601. Net Each... **\$1.76**

④ **Atlas Model ST-8 PARABOLIC BAFFLE Adjustable Mounting Fixture**. For mounting parabolic baffles on sound trucks, walls, etc., 12" high with 8" dia. base; locking thumb-nut adjustment of saddle angle. Has $\frac{1}{2}$ " iron pipe stem. Black crackle finish. Weight, 5 lbs.
Stock No. 34A113. Parabolic Baffle Adjustable Bracket. Net Each... **\$3.09**

⑤ **TURNER "THIRD HAND"**. Holds "mike" in ANY position, flexible goose-neck has $\frac{5}{8}$ "-27 thread; slips over neck.
Stock No. 32A213. TURNER 3-H "THIRD HAND". NET... **\$2.94**

⑥ **SUPER-CHROME, 13" FLEXIBLE GOOSE NECK**. $\frac{5}{8}$ " threads, male and female. For ALL types of stands.
Stock No. 31A57. MODEL GN-13 GOOSE NECK. NET... **\$1.18**

⑦ **"FLEXO" MIKESTER Clamp-On Desk or Pulpit Boom Stand**. Has same features as described for "Mikester" floor stand in column at right (Fig. 0); clamps to any desk or pulpit; positions microphone in 36° arc in any direction—the BEST Pulpit or Desk Stand! Weight, 6 lbs.
Stock No. 31A50. "FLEXO" MIKESTER Pulpit or Desk Stand. Net Each **\$7.06**

DESK MICROPHONE STANDS

- ★ BASE FLANGES
- ★ STEMS
- ★ HOOKS



① **GRIP-TO-TALK DESK STAND**. Grip bar operates ON-OFF switch for control of transmitter. Sockets in top of stem fits plug-in connector on type D104 and DN-HZ Astatic microphones. Tube and grip bar finished in chrome with gray wrinkle base. Supplied with 8 ft. 2-conductor shielded rubber covered cable. Over-all height 8 1/4".
Stock No. 31A58. Astatic Model G Stand. Net... **\$6.44**

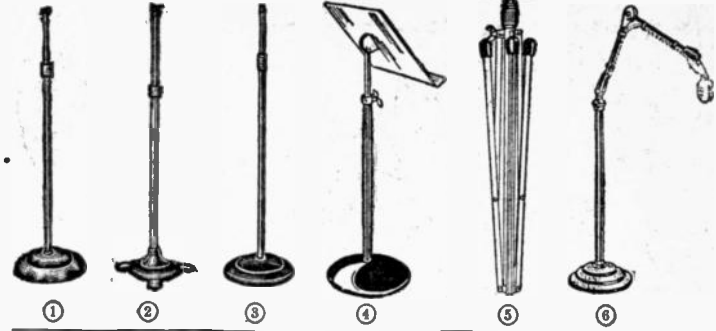
② **"Velvet Action" BANQUET STAND**. Adjustable 18" to 32"; same size BRASS tubes and type clutch as MS-12C; 5 lb. base is 8" in dia., has rubber bumpers. Super Chrome finish tubes with red lined gun-metal base. $\frac{3}{8}$ "-27 thread.
Stock No. 31A56. MODEL TS-5 BANQUET STAND. NET... **\$4.17**

③ **TRIPLE CHROME-BRASS TUBE DESK STAND**. 7" high with 6" dia. felt padded base in gun-metal finish. $\frac{3}{8}$ "-27 thread.
Stock No. 32A214. MODEL DS-5 DESK STAND. NET... **\$1.62**

④ **"B-A" LEADER VALUE DESK STAND**. A "red-hot" value! 6" Chrome stem with $\frac{3}{8}$ "-27 clean threads to fit any "mike"—6" dia. weighted base with felt pad; base, black wrinkle enamel. Weight, 3 lbs. List, \$2.75.
Stock No. 20A602. "B-A" Leader Value Desk Stand. Net Each... **\$1.38**

⑤ **TAKE-APART DESK STAND**. For Desk or Hand use. One twist of hardwood handle locks it securely to 4 1/2" dia. metal base. Handle has $\frac{3}{8}$ "-27 metal threads. Handle, 6" long. Weight complete, 2 lbs.
Stock No. 20A104. 2-Piece Take-Apart Desk Stand. Net Each... **\$1.47**
No. 20A622. Wood Handle ONLY of Above Take-Apart Stand. Each... **59c**

- ⑥ No. 17A586. Chrome Plated Brass Male Base Flange. 1 1/4" base dia. with 3 mounting holes. $\frac{3}{8}$ "-27 thread for microphone... **44c**
- ⑦ 17A587. Chrome Plated Brass Female Base Flange. $\frac{3}{8}$ "-27 threads. Each **44c**
- ⑧ 17A588. 6" Solid Aluminum Extension Rod. $\frac{3}{8}$ "-27 male threads. Each **44c**
- ⑨ 17A589. 12" Solid Aluminum Extension Rod. $\frac{3}{8}$ "-27 threads. Each **59c**
- ⑩ 17A1073. Suspension Hook, Brass, Chrome plated. $\frac{3}{8}$ "-27 threads. Each **71c**



① **"ATLAS" AUTOMATIC SLEEVE-ACTION STAND**. Cannot "creep" or change position without deliberate pressure on the "Sleeve-Action" control—slight downward pressure LOWERS telescoping section; to RAISE stand, telescoping tube is grasped at ANY point and simply extended. Model MS-115—De Luxe All Chrome with 10" weighted base with $\frac{1}{8}$ " lower tube and $\frac{5}{8}$ " upper section—height adjustment is 35" to 65". Wt. 12 lbs.
Stock No. 32B5. "Atlas" Sleeve-Action De Luxe Floor Stand. Net Each... **\$10.22**

"ATLAS" FULL-GRIP VELVET ACTION MICROPHONE STANDS

② **"Velvet Action" 24-POUND, STUDIO DE LUXE FLOOR STAND**. Adjustable 42" to 72"—BRASS TRIPLE CHROME PLATED oversize tubes, 1 1/8" outer and 7/8" inner. 4-INCH CLUTCH with bakelite collet defies wear. Rubber cushioned semi-tripod base, 17" dia. $\frac{3}{8}$ "-27 thread.
Stock No. 32A2. "MS-24" DE LUXE FLOOR STAND. NET... **\$11.47**

③ **Professional Floor Stand, Model MS-20**. Cast base, 12" dia. with Triple Chrome oversize telescoping tubes, adjustable from 42" to 72" height; lower tube 1 1/8" dia., upper tube 7/8" dia. $\frac{3}{8}$ "-27 thread. Weight, 15 lbs.
Stock No. 32A1. Professional Floor Stand Model MS-20. Net Each **\$8.23**

④ **"Velvet Action" ALL CHROME ADJUSTABLE FLOOR STAND**. NON-TIP BASE has "anti-tip" points between rubber leveling pads! BRASS TUBES are TRIPLE CHROME plated, outer tube $\frac{7}{8}$ " and inner tube $\frac{3}{8}$ " in diameter. Bakelite "collet" clutch mechanism—easily adjusted with ONE HAND after setting to weight of mike. Adjusts 35" to 65" in height—10" base. Standard $\frac{3}{8}$ "-27 thread.
Stock No. 34A8. MODEL MS-11C FLOOR STAND. NET... **\$6.70**

⑤ **"B-A LEADER VALUE FLOOR STAND"**. A top-notch quality stand with heavy high-gloss double chrome plated Brass Tubes. Easily adjustable from 35" to 68" in height by simple, damage-proof one-hand clutch, without mar or scratch on the chrome tubes! Weighted 10" dia. base is finished in baked wrinkle enamel, has pads to prevent floor mars. Clean $\frac{3}{8}$ "-27 threads.
Stock No. 32A3. Leader Value Floor Stand. Wt., 11 1/2 lbs. Net Each... **\$4.90**

⑥ **SPEAKER'S OR ORCHESTRA "DESK-RACK"**. Chrome Plated steel "Rack" is 15" wide x 20" long with bottom "lip" for holding music or Speaker's notes—locking tilt device positions rack quickly. $\frac{3}{8}$ "-27 thread on Rack fits ANY standard floor or desk type microphone stand! COMPLETE unit as shown consists of Rack PLUS high quality 2-piece adjustable floor stand with double Chrome Plated Brass Tubes and 10" dia. weighted base; stand adjustable from 35" to 68". Weight Complete, 16 lbs.
No. 32A17. Orchestra Music Rack and Stand, Complete. Net Each... **\$10.95**

⑦ **SPEAKER'S OR ORCHESTRA "DESK-RACK" ONLY**. 15x20" Rack with locking adjustable tilt device, $\frac{3}{8}$ "-27 thread collar for quick attachment to any standard microphone stand. Model DA-1. Weight, 5 lbs.
Stock No. 32B36. Desk-Rack Attachment Only. Net Each... **\$5.88**

⑧ **COLLAPSIBLE TRIPOD TYPE MICROPHONE STAND**. Dandy portable but substantial stand that folds up to a mere 23" overall length. Two Chrome Plated brass tube sections adjust in height to 62". Tripod Base is of cadmium plated steel, has locking device. Weight, 5 lbs. $\frac{3}{8}$ "-27 thread.
Stock No. 32A16. Collapsible Tripod Type Stand. Net Each... **\$10.00**

⑨ **"FLEXO" MIKESTER FLOOR STAND**. Consists of 40" high floor stand with 1 1/2" dia. base "topped" by the NEW "Flexo" Mikester Universally adjustable Patented "Flexo" spring controlled floating arms—each arm is 18" long, allowing a finger-touch adjustment to countless positions within an arc of 36° in any direction! "Stays-put" in any position, without loosening and tightening screws—carries up to a 4-lb. microphone. Built for heavy service of shock-proof, noise-reducing materials throughout—finished in beautiful Royale Gray. Weight, 23 lbs. Model No. 3.
Stock No. 32B9. "FLEXO" Floor Mikester Stand. Net Each... **\$11.91**



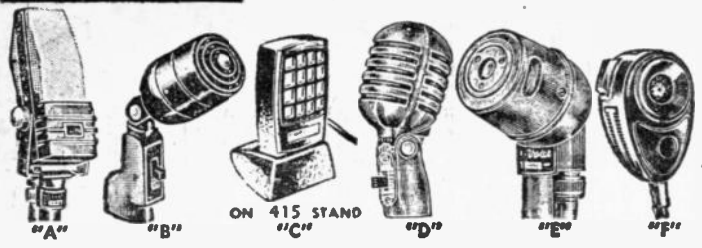
"READY-MADE" MIKE CABLES AND ADAPTORS

(All cable fittings and adaptors listed below are Brass with double Chrome Plate.)

- 20A609. Adaptor. $\frac{3}{8}$ "-27 Male to $\frac{1}{8}$ " I.P.T. Female (RCA) Each **29c**
- 20A608. Adaptor. $\frac{1}{8}$ " I.P.T. Male to $\frac{3}{8}$ "-27 Female (RCA) Each **45c**
- 20A607. Adaptor, $\frac{1}{2}$ " I.P.T. Male to $\frac{5}{8}$ "-27 Female. Each **59c**
- 20A606. Adaptor. $\frac{3}{8}$ "-27 Male to $\frac{1}{2}$ " I.P.T. Female. Each **59c**
- 20A605. Shock Absorber. $\frac{3}{8}$ "-27 Male to $\frac{3}{8}$ "-27 Female. Each **\$1.47**
- 20A604. 25-ft. Std. Microphone Cable. $\frac{3}{8}$ "-27 M.G.F. Connectors. Each **\$3.23**
- 20A603. 25-ft. Mike Ext. Cable. 2 $\frac{3}{8}$ "-27 Female Connectors. Each **\$3.23**



NEWEST DEVELOPMENTS IN QUALITY MICROPHONES



"A"—MODEL V-1 VELOCITY; provides maximum pick-up front and back, substantially flat frequency response, 40-9,000 cps; high sensitivity specially rolled pure aluminum ribbon in steel reinforced frame with reflection-free woven metal housing—all set in locking type cradle to allow tilt of 90°. OUTPUT LEVEL is minus 65db below 1 volt. "ON-OFF" slide switch in housing base. Standard 5/8"-27 stand coupler with built-in shock absorber. Size 2 1/4"x2 1/4"x6 1/4"; wt. 2 lbs. With 20 ft. cable. HI-IMP. Stock No. 20A897; "ELECTRO-VOICE" Model V-1; Your Cost **\$21.46**

"B"—MODEL 630 DYNAMIC; Versatile HIGH FIDELITY all purpose microphone, ruggedly built for heavy duty service; unusually HIGH OUTPUT for speech and music, indoors or outdoors; grill design minimizes wind noise. Frequency response is 40-9,000 cps with output level rating of 53db; 90° arc TILTING HEAD for directional or non-directional pick-up; "ON-OFF" slide switch. Standard 5/8"-27 thread; Satin Chromium finish; size 2"x4 1/4"x4 1/4"; wt. 1 1/2 lbs. Cpt. with 20 ft. cable. HI-IMPEDANCE. Stock No. 20A896; "ELECTRO-VOICE" Model 630-C; Your Cost **\$21.46**

"C"—MODEL 915 CENTURY CRYSTAL. Unmatched for low cost public address, paging, recording and amateur transmitting. Fits hand naturally, mounts on any 5/8"-27 threaded stand or reclines in Model 415 stand. Overall size 3x2 3/16x1", lustrous gray brown finish, high impedance moisture sealed crystal. Frequency response 60-7500 cps. output—50 db. 7 1/2 ft. shielded cable attached. Stock No. 14B621. Model 915. Your Cost **\$5.88**

"C"—MODEL 615 CENTURY DYNAMIC. Same exclusive case design as Model 915 Crystal, output—57 db., frequency response 55-7500 cps., high impedance. Also features Acoustalloy diaphragm, withstands severe service in any climate. 7 1/2 ft. shielded cable attached. Stock No. 14B622. Model 615. Your Cost **\$9.70**

"C"—MODEL 415. Desk stand for either above Century Mikes. Stock No. 14B623. Your Cost **88c**

"D"—MODEL 950 CARDIOM DYNAMIC; DUAL FREQUENCY RESPONSE for high fidelity sound or extra crisp speech—selector on back adjusted with screw driver, "in" position for wide and rising response—"out" position for wide and flat response with full, natural reproduction. An IDEAL "MIKE" for soloist or orchestra, single speaker or group work—INDOORS OR OUT! Output 57db in OUT position, 48db in IN position; wide range, wide angle pick-up at front—dead at rear; tilting head; Satin Chrome finish, size 2 1/4"x2 1/4"x6 1/4"; wt. 1 3/4 lbs. Standard 5/8"-27 thread; "ON"—"OFF" switch; 20 ft. cable. HI-IMP. Stock No. 20A100; "ELECTRO-VOICE" Model 950; Your Cost **\$23.23**

"D"—MODEL 726 CARDIOM DYNAMIC; designed for the most EX-acting Studio, Recording, remote Broadcast, Communications, P.A. work. Unidirectional E-V Mechanophase gives wide angle front pick-up over wide frequency range, dead at rear—fine definition and fidelity at increased working distance from "mike". Alnico V magnet with Acoustalloy diaphragm withstands mechanical shocks, humidity and extremes of temperature. Frequency response 40-10,000 cps, substantially flat, at output level of 53db. Tilting head with built-in "ON"—"OFF" switch, rubber mounted on 5/8"-27 thread fitting. Satin Chrome finish, size 2 1/4"x3 1/4"x9"; wt. 2 1/2 lbs. With 20 ft. shielded, low loss cable. Stock No. 20A896; "ELECTRO-VOICE" Model 726; Your Cost **\$34.99**

"E"—MODEL 606 DIFFERENTIAL DYNAMIC; NEWEST DEVELOPMENT of "E-V"; in a moving coil, ANTI-NOISE dynamic; specially designed for use in Airport Control Towers, Police and Special Event broadcasting; high-noise INDUSTRIAL applications; close talking Public Address—indoors and outdoors! Hi-Z, 25,000 ohm impedance with output of 57db at response of 100-6,000 cps., substantially flat to sounds of close origin. "Acoustalloy" diaphragm, head at fixed tilt of 22; Satin Chrome finish; 2/8"-27 thread; 8 ft. shielded cable; size 2"x3 1/4"x2 1/4"; wt. 12 oz. Stock No. 20A649; "ELECTRO-VOICE" Model 606-8; Your Cost **\$21.46**

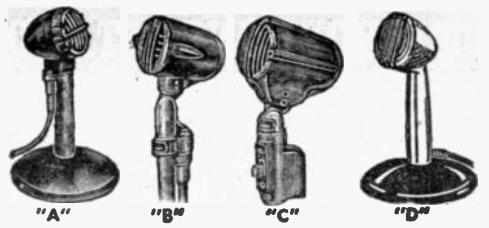
"F"—MODEL 600D. MOBILE. DYNAMIC. Compact, light weight, fits hand naturally. Withstands rough handling and extremes of temperature and humidity. Press-to-talk switch controls relay. High impedance, 100-6000 cps., output—55 db. Has dash mounting clip and 8 ft. shielded lead. Stock No. 20A600. YOUR COST **\$20.58**

ELECTRO-VOICE "COMET" CRYSTAL MIKE
A unique high output crystal microphone with stand attached. Perfectly balanced for use in hand or on desk. Particularly suited for home recording, paging and amateur use. Output level, minus 48 db. Frequency response substantially flat, from 70 to 7000 CPS. Has moisture sealed crystal cartridge and inside grill of spun glass. Case is lustrous gray, non-breakable plastic. Size 8 1/8" H, base 3 3/4x5 1/2". Supplied with 7 1/2 ft. shielded, rubber covered cable. Stock No. 20A620. 902 Comet, Net Each **\$7.79**

E-V "COMET-D" DYNAMIC MICROPHONE
Has the new "Acoustalloy" diaphragm for smooth, high quality reproduction plus an unusually rugged internal moving coil assembly. For in or outdoor use, individual or group pick-up. Can be used in any climate. Output level minus 53 db. Frequency response 70 to 7000 cps. Has same style and size case as Comet Crystal. Supplied with 7 1/2 ft. shielded rubber covered cable. High Impedance. Stock No. 20A621. 601 Comet, Net Each **\$11.47**



CRYSTAL and DYNAMIC QUALITY MICROPHONES



"A"—MODEL JT-30 CRYSTAL MIKE. POPULAR AMATEUR, HOME RECORDING and PUBLIC ADDRESS mike! Response 30-10,000 cps.; output level minus 52 db. Complete with 2-piece desk stand; removable handle! Height, 8"; dia. 2 5/16"; depth, 3 1/16"; wt. 2 1/4 lbs. 15-ft. cable. Gray with Chrome grille. High impedance. Stock No. 20A877. MODEL JT-30 With Stand. YOUR COST **\$9.97**

"B"—MODEL N-30 HIGH IMPEDANCE CRYSTAL. HIGH FIDELITY; WIDE RANGE. Response, 30-10,000 cps., substantially flat and free from peaks. OUTPUT minus 52db. Tilting head is gray with chrome grille, size 5 1/4" high, 2 1/4" dia. and 3 1/4" deep. Wt. 2 lbs. 15 ft. cable. Stock No. 20A648; MODEL N-30 CRYSTAL MIKE; YOUR COST **\$11.26**

"C"—MODEL "DN" DYNAMIC—NEW AND IMPROVED with advanced ideas. For varying temperatures and high humidity locations—rugged construction. Tilting head. Substantially flat response of 50-7,000cps. at output level of minus 56db. High Impedance model illustrated has type "g" "ON-OFF" switch. Gray with bright CHROME grille. Size 6 1/4" high, 2 1/4" dia.; 4 1/4" deep. 15 ft. cable. Stock No. 20A650; MODEL DN-HZ-8; YOUR COST **\$16.08**

"D"—MODEL 200 CRYSTAL "VELVET VOICE". Rich gold finish with chrome grille and brown detachable base. For use on desk or as a pleasingly balanced hand mike. Also threaded to fit all 5/8"-27 floor stands. Smooth frequency response 30-10,000 cps. output—50 db., high impedance. Height 8" grille dia. 2 1/2". 15-ft. shielded cable attached. Stock No. 20A611, Model 200. YOUR COST **\$8.20**



ASTATIC "HAM" MICROPHONES

Model D104. The first practical crystal microphone ever developed... and still the Amateur's favorite the world over. Crystal element is shock-proof mounted and has a high output level of minus 48 db. Possesses definitely reduced RF feedback tendencies. Chrome plated over all. With 7 ft. shielded cable and adapter to fit 5/8"-27 threaded stand, or plugs directly into Astatic Grip-to-talk Desk Stand.

Stock No. 20A619. Astatic D104 with Cord and adapter, Less Stand. Net Each **\$14.46**
Model D104. With type G grip-to-talk stand and 8-ft. shielded cable attached. Stock No. 20A613. YOUR COST **\$17.70**

Model DN-HZ. Moving coil dynamic microphone. Highly favored for use where high temperatures and humidity are encountered. Semi-directional and substantially flat from 50 to 7000 cps. Output level, minus 55 db. Finished in beautiful opalescent gray and bright chrome. Supplied with 15 ft. cord and adapter to fit 5/8"-27 threaded stand or plugs directly into Astatic Grip-to-talk Desk Stand.

No. 20A618. With cord and adapter. Less Stand, Each **\$14.46**
Model DN-HZ. With type G grip-to-talk stand and 8-ft. shielded cable attached. Stock No. 20A612. YOUR COST **\$17.70**



QUALITY MICROPHONES PG DYNAMIC

Brings studio quality to ordinary PA jobs—you can HEAR the difference! UNIDIRECTIONAL pick-up pattern HIGH OUTPUT of minus 60 db. RESPONSE of 70-8000 cps.; FLAT and FREE of peaks. REDUCES FEEDBACK to lowest point of all diaphragm microphones. IDEAL FOR EITHER SPEECH OR MUSIC! Case designed for high efficiency in accordance with modern acoustic principles. TILTING HEAD, ON-OFF SWITCH! True dynamic ruggedness; not affected by temperature, altitude, or humidity. HI-IMPEDANCE, 12 ft. cord and cable connector. "PGAH" Dynamic. Stock No. 20A900. Your Cost **\$14.70**



AMPERITE KONTAK MIKE

For musical instrument pick-up. Easily attached to the instrument. Magnetic induction principle provides a rugged unit, unaffected by temperature or moisture. Gives full, rich, distortion-free reproduction. For use with any musical instrument amplifier and all regular high gain amplifier. Up to 5 mikes may be attached to one input. High impedance. Frequency response 40-9000 cps. minus 40 db. Has soft rubber case and 25 ft. cord attached. Model SKH without volume control. Stock No. 20A874. Net Each **\$7.06**
Model KKH with volume control. Stock No. 20A875. Net Each **\$10.58**

Accessories for Use With Kontak Instrument "Mikes"

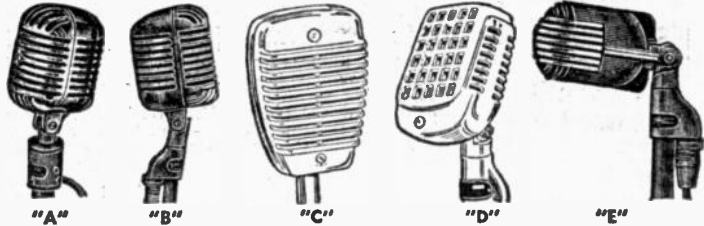
Model KF foot pedal volume control, connects to model SKH mike to vary volume by foot pressure on the pedal. Stock No. 17A724. Net Each **\$10.58**
Kontak Strap for flat top guitars. Stock No. 17A725. Net Each **59c**





CARDIOID DYNAMIC and CRYSTAL MICROPHONES

A "MIKE" FOR EVERY USE



A. Model 556 Super Cardioid Broadcast Dynamic. Designed to meet the exacting requirements of the broadcast studio, this extremely popular microphone now includes the new "Multi-Impedance" selector which enables one microphone to match all amplifier input impedances used in broadcasting, recording, or public address work. See the impedance table listed below. The exclusive Shure Uniphase principle of acoustic design reduces rear pick-up 15db., but gives wide angle front pick-up. This directional feature practically eliminates unwanted sound pick-up and feedback simplifying microphone placement. Head tilts 90° to allow positioning at most favorable angle. A special "Vibration isolation unit" is built into the base. Frequency response free of peaks 40/10,000 cycles. Has a double windscreen permitting noise-free outdoor use. The attractive, satin chrome finished head measures 1 1/4" high, 3 1/4" wide, 3 1/2" deep. Fits 5/8"-27 threaded stands. Has a 7' two-conductor shielded cable, which can be easily removed with two set screws for replacement. Stock No. 20B894. **Net Cost \$51.45**

B. Model 55 Unidyne Dynamic. Has the greatest acceptance of any microphone by engineers and artists engaged in high quality recording, public address and remote broadcasting. Includes all the features of model 556 described above, such as "Multi-Impedance" selector (see table below) "Unidirectional" pick-up and frequency response but does not have the special built-in shock mount. Complete with 25' detachable cord. Stock No. 20B892. **Net Each \$36.75**

C. Model 51 New Sonodyne dynamic. A rugged, general purpose, high output microphone, especially suited to public address, recording and communication service. Features new "Multi-Impedance" selector. (See table below.) One microphone matches all impedance requirements. Frequency response 60-10,000 cps. Semi-directional pick-up. Attractive pearl gray case of modern design. Fits 5/8"-27 stands. Complete with 20' detachable cord. Stock No. 20B890. **Net Each \$22.05**

*Multi-Impedance Table for Models 556-55 and 51 above.

Impedance Table	Output Level
Sw. Pos. L—35-50 ohms.	56.1db. below 1 milliwatt/10 bar signal
Sw. Pos. M—150-250 ohms.	55.8db. below 1 milliwatt/10 bar signal
Sw. Pos. H—High Imped.	55db. below 1 volt per bar

D. Model 737A New Monoplex Super Cardioid Crystal. A high output crystal microphone of uniphase acoustic principle. It is practically unaffected by noise from the rear and permits more volume without feedback. A sensitive microphone for public address and recording work. Smooth frequency response, 60/10,000 C.P.S. Output 53db. below 1 volt. High impedance type. Long life crystal metal sealed. Stunning new modern designed head, pearl gray finish. Tilts to 90°. Fits 5/8"-27 stands. Complete with 20' detachable cord. Stock No. 20A163. **Net Each \$20.87**

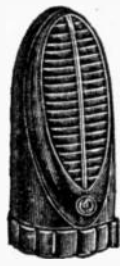
E. Model 708-A Stratoliner Crystal microphone. A low priced, expensive looking mike, engineered with response characteristics for high quality reproduction. Can be used in all public address, recording and communication service. High output (53db. below 1 volt bar). Frequency response 60/8,000 cps. Genuine Bimorph crystal. High impedance. Size 2 1/2" wide, 4 7/16" long. Pearl grey finish. Has swivel for tilting head. Fits 5/8"-27 stand. Complete with detachable 20' cord. Stock No. 20A889. **Price \$15.58**

MODEL 76-B CRYSTAL LAPZEL MICROPHONE

Only 1 7/8" diameter, weighing 1 1/2 oz. Especially designed for speech reproduction. Simply clips onto lapel, is inconspicuous and allows user to move freely about. Response 40/6,000 cps., output 57db. below 1 volt bar. Grey finish case with clip and attached 25' cable. Moisture-sealed crystal. High impedance. Stock No. 20A652. **Net Each \$15.88**



SHURE VERSATEX MICROPHONE THE VERSATILE CRYSTAL MICROPHONE



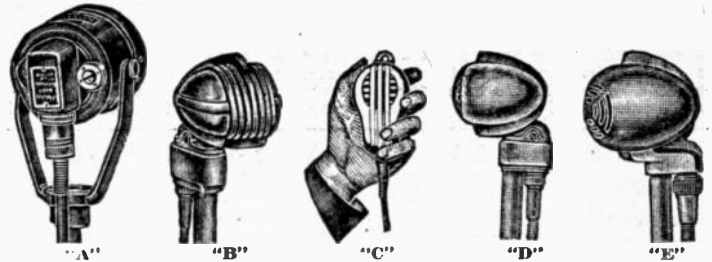
Can be used "as is" on a desk, on a floor stand or in your hand. Voice response is ideal for Hams, paging systems, home recording, P.A., etc. The crystal cartridge is moisture-proofed and mounted in rubber. An R.F. filter is incorporated to prevent crystal burn-out. Case is rich maroon-colored plastic. Output level —53 DB. No. 20A657. **Shure Model 718A, Each \$6.76**

UNIVERSAL Carbon Microphone AN EXPERIMENTER'S FAVORITE. SMALL SIZE, LIGHT WEIGHT. HIGHLY SENSITIVE, EASY TO USE.



Highly sensitive, single button. For detectors, phones, midget transmitters, etc. A favorite among experimenters. Button impedance 200 ohms, output—12 DB. Case is black plastic with metal back and screw terminals. Dia. 1 7/8x1/2" thick. Complete with instructions. Stock No. 20A647. **Universal Model W, Each \$2.35**

TURNER MICROPHONES for Certified Performance



"A"—MODEL U-9S VARIABLE IMPEDANCE DYNAMIC—ONE MICROPHONE FOR ALL NEEDS; impedances of 50-200-500 OHMS or HIGH IMPEDANCE available by the twist of a switch on the back! ADJUSTABLE for semi or non-directional use, Model U-9S is completely free from peaks and holes over its frequency range of 40-9,000 cycles. Output level at high impedance is minus 52db. Professional in construction and appearance, tilting head, complete with 20 ft. detachable cable; gun metal finish. Stock No. 20A888. **MODEL U-9S DYNAMIC. YOUR COST \$23.52**

"B"—MODEL 33-D DYNAMIC; LOW IN COST and built to withstand hard usage and bad climatic conditions. Smooth, high level dynamic cartridge with FREQUENCY RANGE of 30-9,000 C.P.S. with OUTPUT LEVEL of minus 54db. Tilting head, satin chrome finish, with 20 ft. shielded cable set. High Impedance. Stock No. 20A884. **MODEL 33-D DYNAMIC. YOUR COST \$15.88**

"B"—MODEL 33-X CRYSTAL; IDEAL LOW COST "MIKE" FOR RECORDING, PUBLIC ADDRESS, OR COMMUNICATIONS USE. High capacity crystal has response of 50-9,000 C.P.S., free from peaks, output level of minus 52db; low feedback. Crystal impregnated against moisture; blastproofed. Ruggedly built, tilting head, satin chrome finish. Complete with 20 ft. shielded cable set. Stock No. 20A883. **MODEL 33-X CRYSTAL. YOUR COST \$14.41**

"C"—MODEL 9-D "Han-D" MIKE DYNAMIC hand microphone. HANG IT—HOLD IT—OR FIT IT to any standard microphone stand—engineered for maximum voice response, and natural music pick-up; specially recommended for bad climatic conditions, intense heat and rough handling uses. "ON-OFF" SWITCH; response of 60-7,000 cycles with output level of minus 52db. Satin chrome finish with 7 ft. detachable cable. High Impedance. Stock No. 20A886. **MODEL 9-D "Han-D". YOUR COST \$15.88**

"D"—MODEL 22X HIGH IMPEDANCE CRYSTAL; TOPS in performance at very low cost—clear, clean, sharp reproduction with feedback held to absolute minimum. Built-in wind gag permits outdoor operation; IMPREGNATED CRYSTAL guards against moisture; automatic barometric compensator. High level minus 52db. RANGE 50-9,000 cycles. 90° tilting head permits any position from horizontal to vertical. With 7 ft. cable set. Stock No. 20A881. **MODEL 22-X CRYSTAL MIKE. YOUR COST \$11.76**

"D"—MODEL 22-D HIGH IMPEDANCE DYNAMIC; Identical in appearance and case construction to Model 22-X; has HIGH LEVEL dynamic unit for SMOOTH reproduction indoors or out at all frequencies. RANGE, 50-9,000 cycles; Output minus 54db. Complete with 7 ft. cable set. Stock No. 20A882. **MODEL 22-D DYNAMIC MIKE. YOUR COST \$14.99**

"E"—"CHALLENGER" MODEL CX HIGH IMPEDANCE CRYSTAL; dependable, neat in appearance, LOW COST! RANGE, 50-7,000 cycles, OUTPUT minus 52db; SHOCKPROOF crystal cartridge—moisture sealed; barometric valve; wind gag to prevent blasting. Chrome type finish, with 7 ft. removable cable set. Stock No. 20A879. **MODEL "CX" CRYSTAL MIKE. YOUR COST \$9.56**

"E"—"CHALLENGER" MODEL BX LOW COST CRYSTAL MIKE—ideal for home recording, AMATEURS, and PUBLIC ADDRESS. HIGH IMPEDANCE with range of 50-6,000 cycles, OUTPUT minus 52db. Shock and moisture-proof cartridge, wind gag. Bronze enamel finish, complete with 7 ft. attached shielded cable. Stock No. 20A878. **MODEL "BX" CRYSTAL MIKE. YOUR COST \$6.38**

"E"—"CHALLENGER" MODEL CD HIGH IMPEDANCE DYNAMIC; rugged and dependable for all uses or voice or music—clear cut reproduction; RANGE, 50-7,000 cycles; OUTPUT, minus 52db. Chrome type finish; 7 ft. removable cable set. Stock No. 20A880. **MODEL "CD" DYNAMIC SPEAKER. COST \$11.47**

TURNER NOISE CANCELLING DYNAMIC MODEL 15D-NC



A close talking hand-held microphone for clear, sharp speech pick-up under extremely noisy conditions found in factories, machine shops, aircraft, etc. The specially designed diaphragm responds only when spoken into directly from the front at close range, while other sounds cancel out. The louder the din and clutter, the more effective is the cancellation and the voice comes thru clear and sharp at normal conversational level. Push switch for relay operation. Has die-cast case finished in gray gun metal, 7" long, 2 3/8" wide and 1 1/2" deep. Has hook ring at top. High impedance output. Minus 52db. Stock No. 20A161. **Net Each \$20.58**

TURNER HAND TYPE CRYSTAL MODEL 20X



An economical light weight microphone natural to hold and use. Ideal for home recording, paging systems, and for amateurs. High impedance output, minus 54db. Moisture sealed crystal. Smooth pick-up for voice and music over frequency range 50-7,000 C.P.S. Rich brown finish. 6 1/4" long. 1" thick and 2 1/8" wide. Has hook ring. 7' cord attached. Stock No. 20A162. **Net Each \$7.56**

HEARING AID CRYSTAL MICROPHONE MODEL HA12S



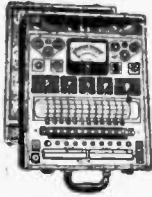
A small crystal cartridge, light in weight, designed for flush mounting. Use for replacement in hearing aids and microphones or in experimental sound or vibration pick-up devices. Output level, minus 50db. Frequency response 40-9,000 C.P.S. Humidity sealed. Case 3/8" dia. over all x 1/4" thick. Mounts in 1/4" hole has connecting leads. Stock No. 20A160. **Net Each \$4.70**

"PRECISION"

Standard of Accuracy RADIO-ELECTRONIC TEST INSTRUMENTS

- YOU GET MORE FOR YOUR DOLLAR IN PRECISION INSTRUMENTS!
- Full ONE YEAR GUARANTEE ON EVERY "PRECISION" INSTRUMENT.
- New Tube Chart Service, FREE on request direct to factory at any time.
- FREE instrument use and application service, direct to you by factory.
- FREE Technical Data at any time, direct from factory to you!
- Precision DOES NOT lose interest in you after your instrument purchase!

SERIES 10-12 ELECTRONIC TUBE TESTER

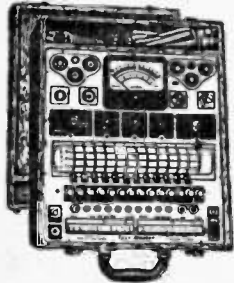


THE TUBE TESTER OF THE FUTURE! This brand-new, TRULY free-point Master Electronic Tube Tester offers MORE than just Mutual Conductance tube testing—here—in a single fine instrument, is the ultimate in tube testers—an all-inclusive, single operation POSITIVE Vacuum Tube Performance tester! TESTS ALL TUBES, including all the newest "button" types, sub-miniatures, Octals, Loktals, Bantam Jr.'s; ballasts, low power transmitter types; all the old stand-by types; with a POSITIVE "Good" or "Bad" reading on the big 4 1/2" full vision meter. Filament voltages to 117 volts and including .75, 10, 18.9, and 85-volt settings to accommodate

ANY tube that may be introduced during the long life of this fine TUBE AND BATTERY TESTER! Double-window, geared Roller Tube Chart and speedy Push Button operation provide fast checks on tube quality, "shorts", leakage, and continuity. Special double sensitivity "short" test circuit for use in matching tubes to special critical standards! Pin-jack noise test; special shielded circuits for accurate tests of television and "FM" tubes. Special single selector controlled Battery Test for testing dry A-B-C batteries under proper loads! Fused power circuit, all test circuits insulated from power line for utmost safety. In hard wood cabinet, 13 3/4 x 17 1/4 x 6 3/4"; sloping test panel and removable cover. Weight, 21 lbs.

No. 32A8. SERIES 10-12P Electronic Tube Tester. Your Cost... **\$94.18**

DeLuxe Series 10-54 Electronic "Test Master"



Electronic SERIES 10-54P TEST MASTER. Has all Tube Test functions described above for Series 10-12P; tests A-B-C Batteries; and includes 20,000 Ohms-Per-Volt, 35 Range, Push Button Operated Super-Sensitive A.C.-D.C. SET TESTER. SET TESTER RANGES: 0-6-12-60-300-1200-6000 D.C. volts at 20,000 ohms-per-volt; and identical A.C. VOLTS RANGES AT 1000 Ohms-Per-Volt! D.C. Current Ranges of: 0-60-120 Microamps., 0-1.2-12-120-1200 M.A. and 0-12 Amperes! Resistance Ranges of: 0-6000-600,000 Ohms, AND 0-6-60 Megohms, no A.C. or external batteries required for any resistance range! DB Ranges: -20 to +70db. Output Volts, same as A.C. volts ranges. 4 5/8" wide vision meter with 50-microamp. movement; 1% wire-wound and matched metalized resistors! Two tip jacks serve for ALL functions and

ranges of set tester. All tube and set testing circuits insulated from power line. Complete with high voltage test leads in hardwood carrying case, size 13 3/4 x 17 1/4 x 6 3/4". Sloping panel. Weight, 23 lbs.

No. 32A7. Series 10-54P Portable Service Laboratory. Your Cost...

\$131.71

Popular E-200-C 8-Band AM-FM Signal Generator

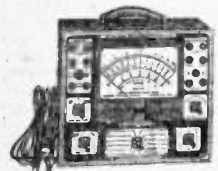


8 BANDS—88 kc to 120mc! Speedy, Dynamic Signal Analysis by the exclusive "Precision" "Servicing by Signal Substitution" covered in easy-to-understand manner by booklet furnished with each instrument. Individually hand calibrated, this fine instrument features: Maximum of 1% deviation from calibrated frequency on ALL bands—ceramic spaced band switch—silver plated contacts—zero drift silver mica loading condensers—Unit Oscillator construction with positive freedom from effects of mechanical shocks! 0-1000 point Vernier Dial; 6 1/2" diameter; full

vision and NO GLARE; has Ball Bearing Planetary Drive—no backlash, and providing nearly 8 FEET of easy reading, deeply etched scales! Twin engraved hair-line indicators afford frequency readings free from parallax. Four types of signals: Unmodulated RF; 400-cycle modulated RF; Externally modulated RF (frequency or amplitude); and 400-cycle Audio Output. 400-cycle Sine Wave Audio Oscillator provides modulation and external test signal from zero to 50 volts—is independently controlled, and allows direct testing of Audio Power Output independent of all other stages! Direct reading variable modulation, 0-100% modulation of RF signal at will—TRIPLES signal utility as compared to only 30% to 40% fixed modulation. Direct reading AVC substitution system; AVC voltage, 0-50 volts at front panel—eliminates alignment troubles arising from receiver AVC! 6-position frequency selector switch covers 88kc.-30mc. on fundamentals—to 120mc. on powerful harmonics—8 Direct Reading Calibrated Bands! Black ripple steel case, 10 1/2 x 12 x 6"; with coaxial output cable, tubes, and copy of "Servicing By Signal Substitution." Weight, 18 lbs.

No. 35A5. Series E-200C Multi-Band Signal Generator. Your Cost... **\$65.90**

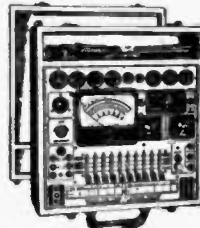
Series EV-10 Vacuum Tube Voltmeter-Megohmmeter



Combines both V.T.V.M. and Standard 1000 o.p.v. measurements, with 8 Zero-center DC Volts ranges to 6,000 volts; 6 Circuit-probing zero center DC V.T.V.M. ranges 3 to 600 volts; with input resistances to 133-1/3 meg. at 6,000 volts; 6 Ohm-Megohm ranges from 2,000 ohms to 2,000 megohms; plus 8 AC-DC Output voltage ranges from 3 to 6,000 volts at 1,000 o.p.v.; 7 DC. Current Ranges from 600 micro-amps to 12 amps; 8 Decibel ranges from minus 26 to plus 70 db. 7" rectangular meter. Steel case 10 1/2 x 12 x 6". Weight, 19 lbs.

Complete with tubes, battery and Coaxial test probes. No. 35A4. Series EV-10-MCP V.T.V.M.-Megohmmeter. Net... **\$88.15**

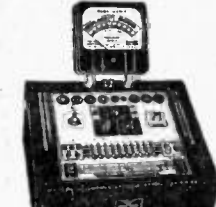
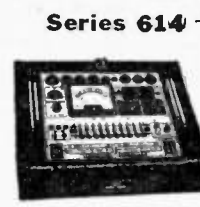
Series 620 Cathode Conductance Tube & Set Tester



Tests ALL Tubes—"Portable" "A" and "B" Batteries PLUS a complete AC-DC Multi-range Circuit Tester at 1,000 o.p.v. sensitivity! Complete portable service laboratory with every essential feature for general purpose test and check of radio and electronic equipment—AT LOW COST! FEATURES: Tube Testing facilities are identical to those described below for Model 612 Tube Tester. Roller Tube Chart; Dynamic "Under-Load test of all popular A, B and C dry batteries. Circuit Testing Functions: 28 functions and ranges including—5 AC-DC Output Volts Ranges from 12 to 3,000 volts; 5 DC Current Ranges from 1.2 to 120 M.A. and 1.2 to 12 Amps; Self-contained Ohmmeter Ranges of 0, 1,000, 100,000 Ohms and 0-10 Megohms. Five DB Ranges from minus 12 to plus 64 db. 2% accuracy, 4 5/8", 400 microampere rectangular meter with all circuit testing scales easily legible and "Good?-Bad" Tube Test section, 1% tolerance resistors; rotary Range and Function selectors; only 2 Pin Jacks for all circuit tests. Complete with battery and instructions in hardwood portable case, size, 12x13x6". Weight, 19 lbs.

No. 35B86. Series 620-P Tube and Circuit Tester. Net... **\$92.22**

SERIES 612 TUBE AND BATTERY TESTERS



Available in THREE CASE STYLES as shown above. Series 612 Tube and battery testers ALL have the tube-test functions and features as follows: Quickly classify as "Good" or "Bad" all types of standard radio receiving tubes PLUS 7-pin Acorn, 7-pin "button" types, 9-pin Noval types, dual capped H.F. and "FM" and "TV" amplifier tubes! Brass geared Roller Tube Chart, kept up to date by no-cost direct factory service (on customer request). 4 1/2" Wildo Vision Meter indicates Line Voltage and "Good?-Bad" tests for Portable Radio Batteries and all tube types. Individual element tests of multi-section tubes; Ballast Tube Tests, Pilot and Signal lamp tests. Absolute Free-Point lever selection for both "short" and "merit" tests. Radio batteries tested under proper "load" for accuracy. Pin jacks for NOISE and CONDENSER tests; "Precision" engineering, components and construction throughout, including cabled wiring of plastic coated moisture-proof wire; continuous line voltage adjustment; panel fused power cord. All Series 612 and 614 instruments are for operation on 115-125 volt, 60-cycle AC power.

(A) SERIES 612-MCP TUBE TESTER with all features described above, in heavy steel, open face case with handle, anodized, deep etched, aluminum panel. Size, 10 1/2 x 12 x 6". Weight, 21 lbs.

No. 35B87. MODEL 612-MCP Tube Tester, Complete. Net Each... **\$65.32**

(B) SERIES 612-C Counter Model Tube Tester, also has ALL features described above for Series 612. In modern, Chrome Trimmed Counter Case of heavy steel in fine black ripple finish. Size, 16x13 1/2 x 7" high at back, sloping to 3" high at front. Weight, 22 lbs.

No. 50A232. MODEL 612-C Counter Tube Tester. Net Each... **\$70.46**

(C) SERIES 614 Counter Model TUBE MERCHANDISER. 7" METER, chrome trimmed, really SELLS TUBES! Meter provides a full view of tube or battery test results for both operator and customer. Has ALL test functions described above for Series 612 instruments. Meter is off-set mounted on heavy steel, Chrome Trimmed case, size 16x13 1/2 x 7" high at back, sloping to 3" high at front. New tube charts for Roller Tube Chart mechanism supplied free of charge direct from factory upon request of customer. An exceptional instrument to step up tube sales. Weight, 30 lbs.

No. 35B7. MODEL 614 Counter Tube Merchandiser. Net Each... **\$87.51**

SERIES 85 and 80 SUPER-VALUE MULTI-TESTERS



TWO FINE INSTRUMENTS IDENTICALLY CASED! Compact, molded Bakelite cases on BOTH instruments are only 5 1/2 x 7 1/2 x 3"; securely attached plastic handles—leather Instrument Cases available, as listed below.

SERIES 85—20,000 o.p.v. DC; 1,000 o.p.v. AC Features: Voltage Ranges are 0, 3, 12, 60, 300, 1,200, 6,000 Volts DC at 20,000 Ohms per volt; same ranges at 1,000 ohms per volt for AC and Output Volts! DC Current Ranges of 0-120 Microamps, 0, 1.2, 12, 120 MA; and 0, 1.2, 12 DC Amperes! Resistance Ranges, all on self-contained batteries are: 0, 6,000, 600,000 Ohms, 0, 6, 60 Megohms! DB Ranges of -26 to +70 db. Rotary selector switch and 4 5/8", 50 microampere meter—only 2-tip jacks for all ranges and functions. 2% accuracy! No. 35B89. Series 85-Multi-Tester. With Batteries and Test Leads. Net Each **\$37.97**

SERIES 80 WIDE RANGE TEST SET: Identical in appearance to Model 85, has 400 microampere meter with 4 5/8" "easy-read" scales; Rotary Range Selector for these Ranges: 0, 6, 12, 60, 300, 1,200, 6,000 Volts DC, AC and Output! 6 DB Ranges of -20 to +70 db.; Self-Contained Resistance Ranges of 0, 1,000, 100,000 Ohms and 0, 1, 10 Megohms! DC Current Ranges of 0, .6, 6, 60, 300 MA and 0, 1.2, 12 DC Amperes. Recessed 6,000-volt safety jack; 1% resistors; anodized, etched aluminum panels on Models 85 and 80, resistant to moisture and wear. Complete with batteries and Test Leads. Weight, 5 lbs.

No. 35B90. SERIES 80 Wide (34-Range) Test Set. Net Each... **\$32.05**

BROWN LEATHER CARRYING CASE for either Model 80 or 85. Genuine top grain, heavy cowhide, waterproof suede lined; adjustable strap.

No. 35B16. Net Each... **\$8.57**

Modern ELECTRONIC TEST INSTRUMENTS

Recognized as the STANDARD OF QUALITY FOR A THIRD OF A CENTURY—"HICKOK" Service Instruments Models 534, 533, 288X, 209, 156, and 505 are available in choice of standard cases or the NEW "D" SERIES DISPLAY CASES—making possible an impressive, terrific, "Point-of-Sale" punch; the appearance alone of these fine instruments working for YOU as a selling and safeguarding agent for YOUR SERVICE! Each "D" Series instrument is housed in a standard, beautiful steel case of a uniform dimension of 18 1/4" high, 17" wide and 11" deep—making it possible to arrange "Hickok" instruments to best advantage in multiples or sections of associated instruments for specialized service needs; with rearrangements possible at any time to suit YOUR needs! "Hickok" Instruments in "D" (display) cases PUT YOUR KNOW-HOW WHERE YOUR CUSTOMERS CAN SEE IT!



HICKOK MODEL 534A Dynamic Mutual Conductance TUBE AND SET TESTER

Important, advanced improvements in the new MODEL 534A provide for accurate determination of tubes "OK" for TELEVISION SERVICE! Plus—the doubly important NEW FEATURE—Models 534A and 533 enable the Serviceman to forecast WHEN TUBES ARE GOING TO FAIL—even though the tube being tested shows "OK" at time of test—it may have only a short useful life left—then is the time to sell a new replacement tube! MODELS 534A and 533 Tube Tester NOW have new Finger-fitting Push Buttons—an ADDED 20-VOLT filament switch position to enable testing of Television and other new

types of tubes soon to be common; this new feature in addition to the ability of Models 534A and 533 to test ALL old and new tube types, including Bantal, Loktal, Octal, Bantam, Acorn; in short, any receiving tube having a filament voltage of 117-volts or less! Labeled Tube Test Switches makes possible the testing of tubes by mere reference to a Tube Data Book—Roller Tube Chart provides complete, easy control settings, 5,000 Ohm-per-volt 4 1/2-Inch Meter is calibrated in "Micro-Mhos" in addition to "Good-Bad" for tube testing—has additional calibrations for multi-range Set Testing functions; Line Voltage, continuity; dual rectifiers energize both plates and grids of tubes under test! Other exclusive features include, GAS TEST, NOISE TEST, "short" test, separate Diode test at low voltage to eliminate danger of tube paralysis. Set Testing Ranges are: AC-DC VOLTS Ranges of 0-20-200-500-1,000-5,000 volts at 5,000 ohms-per-volt; 0.1 Ohm to 100 Megohms Resistance in 3-ranges, with internal batteries! Capacitance tests 0.0001 to 150 Mfd.; Inductance to 100 Hy.; Current, 0-5-20-200 DCMA; DB Ranges of -10 to +50; Leakage checks of electrolytic condensers; Hum Test in any stage of receiver. Portable case is 17"x18"x8 1/2"; wt. 35 lbs. Available in either Portable or Display case models as listed:

Stock No. Hickok MODEL 534A Tube and Set Tester, Net, **\$149.00**
32B10 Cpt. in Portable Hinged Lid Carrying Case,.....

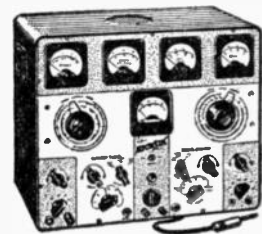
HICKOK MODEL 534A Display Tube and Set Tester, identical to Portable model in all electrical specifications; installed in streamline DISPLAY case of heavy steel—lends itself to uniform grouping with other Hickok instruments, or as a bench instrument alone.
Stock No. 50A233; Hickok Model 534-AD
Tube and set Tester, Net Each..... **\$152.00**

Hickok Dynamic Mutual Conductance Tube Testers

MODEL 533; Portable Model Tube Tester; Identical in TUBE TESTING functions to Model 534 described above (does not have multimeter functions); In portable case, 17"x18"x8 1/2"; wt. 25 lbs.
Stock No. 35B34; Model 533 Portable Tube Tester, Net,..... **\$128.00**

MODEL 533D; Tube Tester housed in Service Bench Display Case, otherwise identical to Model 532-P; Size, 18 1/4"x17"x11" deep; wt. 28 lbs.
Stock No. 35B1; Model 533D Display Tube Tester, Net..... **\$131.00**

"HICKOK" MODEL 156-A TRACEOMETER



Permits the tracing of a signal through the receiver from Antenna to Speaker, allowing the simultaneous checking of all sections of the circuit. Five precision indicating Meters. Five metered test circuits—1: RF-IF low frequency circuit, three ranges, 95-1600kc.; 7-voltage ranges, 5000 microvolts to 25 volts; shielded test lead prevents distortion and loading of circuits. 2: Oscillator-HF circuit; three ranges, 600kc. to 15mc.; 7-voltage ranges 0-750 volts; shielded capacitive test lead prevents loading of circuits under test. 3: A-F Voltmeter, 7 ranges, 0-500 volts through frequency ranges of 20-20,000 cps. plus or minus 2 db., with input impedance of 2 Meg. 4: D.C. V.T. Voltmeter, center zero scale with ranges of 0, 2.5, 25, 50, 250, 500 volts; all ranges with a constant impedance input of 18 Meg.; shielded lead with 3 Meg. resistor prevents loading of circuits. 5: Wattmeter, 0-150 watts; fuse protected. Monitor Speaker checks RF, IF and AF stages for distortion and similar troubles. 11 TUBES, including voltage regulator and rectifier; voltage regulated power supply provides extreme stability for all functions. Complete with four 42" low capacity shielded cables, instructions. In steel case 13x16x10", finished in Blue Enamel with panel in Satin Chrome. For 115-volt, 60-cycle AC. Wt., 32 lbs.
Stock No. 32A13. Hickok Model 156-A Traceometer. Your Cost..... **\$195.00**

MODEL 156AD; Traceometer in steel DISPLAY CASE; makes an exceedingly effective and functional bench display; front panel appearance and specifications identical to that of 156A described above. 18 1/4"x17"x11".
Stock No. 50A235; Model 156AD Display Traceometer, Net..... **\$204.35**

"Hickok" Model 900-A Volt-Ampere-Wattmeter; electronic circuit analyzer; A.C. Watts, 0-20-100-500-1000-2000; A.C. Amps.: 0-1.3-6.5-13-26; A.C. Volts, 0-130-260, A.C. Milliampers, 0-260. 3 3/4" meter scale. 9 1/2"x6 1/4"x3". Wt. 8 1/2 lbs.
Stock No. 35A41, Model 900 Circuit Analyzer. Your Cost..... **\$59.07**

HICKOK 288X Crystal Controlled Signal Generator

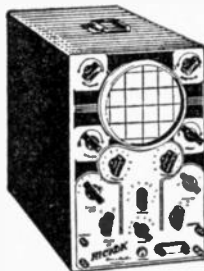


7-Bands 100kc. to 110mc. Amplitude modulated pure R.F. Frequency Ranges AND 100kc. to 160mc. Frequency Modulated output. Extremely accurate CRYSTAL CONTROLLED signal at 100kc and 1000kc; modulated at 400 cycles or unmodulated, is accurate at 0.01% Harmonics of Crystal Controlled oscillator provide accurate signals up to 125mc. in multiples of 100kc. and 1000kc. Technical Characteristics: "AM" PURE R.F. Frequency Ranges, 100-300-850-2200kc.; 2.2-6.5-20-50-110mc. in SEVEN BANDS; 100 inches of dial scales. Frequency Modulated R.F. Ranges of Narrow Band in 7 ranges of 100kc. to 110mc. (0-30kc. sweep); Wide Band of 1mc. to 160mc. in 7 ranges (0-150-450kc. sweep). Modulation: Amplitude at 400 cycles; FM at 0-450kc. variable sweep, 50mc. at 60 cycles modulating frequency; 0-150kc. variable sweep, 1000kc., modulating frequency 60 cycles. External modulation, FM or AM variable 0-15,000 cycles. AF Range: Fixed at 400 cycles, variable 0-15,000 cycles. Crystal Controlled Output: 100 and 1000kc., 400 cycle amp. Mod. to 15 and 125mc. (harmonics); 100kc. and 1000kc. Unmodulated to 15 and 125mc. (harmonics). AF Range: Fixed at 400 cps; variable 0-15,000 cps. RF Output; continuously variable in steps X1, X10 and X100; Synchronized Sweep Voltage: 60 cycle. DB Meter Range 10 to 6; 6 to 22; 22 to 38db. Six Tubes: 1 each 6C4, 6SN7, 6K8GT, 6SG7, 6SJ7, 6X5G. Power consumption is 20 watts at 115 volts; operates on 105-125 volt. 50-70 cycle A.C. in Blue Baked Lacquer finished steel case, size 14x16 1/2"x8". Satin chrome finish panel. Complete with full instructions, tubes, necessary cables. Wt. 28 lbs.

able sweep, 50mc. at 60 cycles modulating frequency; 0-150kc. variable sweep, 50mc. at 400 cycles modulating frequency; 0-30kc. variable sweep, 1000kc., modulating frequency 60 cycles. External modulation, FM or AM variable 0-15,000 cycles. AF Range: Fixed at 400 cycles, variable 0-15,000 cycles. Crystal Controlled Output: 100 and 1000kc., 400 cycle amp. Mod. to 15 and 125mc. (harmonics); 100kc. and 1000kc. Unmodulated to 15 and 125mc. (harmonics). AF Range: Fixed at 400 cps; variable 0-15,000 cps. RF Output; continuously variable in steps X1, X10 and X100; Synchronized Sweep Voltage: 60 cycle. DB Meter Range 10 to 6; 6 to 22; 22 to 38db. Six Tubes: 1 each 6C4, 6SN7, 6K8GT, 6SG7, 6SJ7, 6X5G. Power consumption is 20 watts at 115 volts; operates on 105-125 volt. 50-70 cycle A.C. in Blue Baked Lacquer finished steel case, size 14x16 1/2"x8". Satin chrome finish panel. Complete with full instructions, tubes, necessary cables. Wt. 28 lbs.
Stock No. 35A37. Model 288X Signal Generator. Your Cost **\$169.20**

MODEL 288XD: Signal Generator mounted in DISPLAY CABINET, identical in functions and specifications to Model 288X described above.
Stock No. 50A234. Model 288XD Freq. Mod. Signal Generator, Net, **\$172.20**

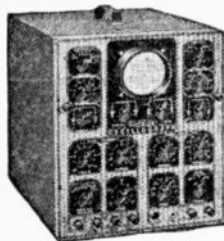
HICKOK MODEL 195 5-INCH OSCILLOSCOPE



Provides dynamic visual analysis and alignment of Television, F.M. and A.M. Receivers! FEATURES: 6 tubes, including 5-inch type 5-UP-1 Cathode Ray with light shield and calibrated screen. Extra high gain Vertical Amplifier, .05 (50 m.v.) per inch deflection; Sinusoidal and Linear sweep circuits with phasing control, for proper I.F., R.F. and discriminator. Frequency Range, Vertical Amp. 30 cycles—50kc. Horizontal Amp. 10 cycles—50kc. Deflection Sensitivity and Input Impedances: Vertical—.05 volts (rms) per inch at 1 Meg., 25mmf.; Vertical Direct—15-volts (rms) per inch at 2.2 Meg. Horizontal—.15 volts (rms) per inch at 4 Meg. 35mmf. Horizontal Direct—20 volts (rms) per inch at 2.2 Meg. TUBES: 1 each types 6SJ7, 384, 6AC7, 6X5, 5Y3 and 5-UP-1 Cathode Ray. In blue baked lacquer finished steel case with Satin Chrome finish panel; size, 18x13x8 1/2"; wt. 28 lbs. For 115-volt 60-cycle AC.
Stock No. 32A11. Hickok Model 195 Oscilloscope. Your Cost **\$132.00**

MODEL 195D; Identical to above described Model 195, except, mounted in Bench Display Case, 18 1/4"x17"x18 1/2" Deep.
Stock No. 50A236; Model 195D Display 5" Oscilloscope, Net, **\$140.84**

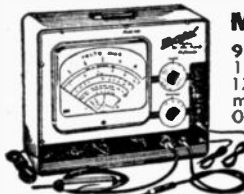
HICKOK "505" OSCILLOSCOPE



The only 5-inch Oscilloscope that will operate with full efficiency on all functions with ANY good RF Oscillator! Wide and Narrow band FM Oscillator—1000kc. at 0-30kc. sweep width; and 50mc. at 0-450kc. sweep width, BOTH modulated at 60-cycle frequency—no separate FM oscillator necessary! Wide band, high gain Vertical Amplifier—to 1 megacycle! Horizontal Amplifier with Sinusoidal and linear sweep, with phasing control. Demodulator, Signal Tracer Jack, Self Contained Mixer Circuit, Return Eliminator, Modulation Circuit, Retractable Light Shield, With 9 tubes in steel case with Satin Chrome finish panel; size, 14x11 1/2"x19"; wt. 35 lbs.
Stock No. 32A12. Hickok Model 505 Oscilloscope. Your Cost **\$179.00**

MODEL 505D; Identical to above Model 505, except is installed in steel Bench Display Case; size 18 1/4"x17"x18 1/2" deep.
Stock No. 50A237; Model 505D Display 5" Oscilloscope, Net, **\$187.51**

Model 209 Vacuum Tube Multimeter

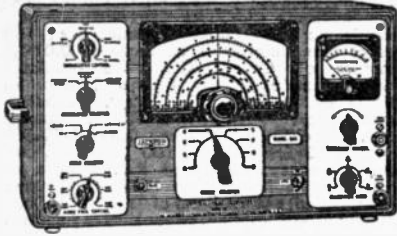


9-inch meter has ranges of: D.C.-Volts, 0-3-12-30-120-300-1200 at 15 Meg. input. A.C.-Volts, 0-3-12-30-120-300-1200 at 12 Meg. shunted by 6 mmf. D.C. Mils., 0-3-12-30-120-300-1200. Capacity, 0-10,000 Mmf. and 0-1000 Mfd. Inductance: 50mh-100 hy. Resistance: from 1/10th OHM to 10,000 Megohms. Frequency: A.C. up to 200 Megacycles. Low Capacity, high frequency probe—wide frequency range up to 300 mc. Measures current (D.C.) from 5 Microamperes to 1200 M.A. Steel case, size 14x16 1/2"x8". Weight, 25 lbs. For 105-125 Volt, 50-70 Cycle A.C. With test leads, HF probe, standard probe, line cord and instructions.
Stock No. 35B36. "Hickok" Model 209 Electronic V.O.M.A. Net **\$99.60**

Bench Display Model 209D; identical to Model 209 except in Bench Case
Stock No. 35B3; Display Cased Model 209D V.T. Multimeter, Net **\$102.60**

Test Instruments for the Modern Service Shop

"JACKSON" Universal Signal Generator—Model 641



Specifically designed for the accurate alignment and service of "AM", "FM" and Television receivers! Wide Range Frequencies of: AM—100kc. to 120mc. FM—100kc. to 160mc. METERED OUTPUT, RF Voltmeter constantly monitors output level of RF voltage with no reference adjustment required—is adjustable by attenuator controls. Built-in Frequency Modulator with sweep ranges of 0-40kc. narrow band adjustable, fixed oscillator at oscillator at 40mc.; Modulation frequency 100-10,000 cycles, adjustable, or may be modulated at 60 cycles externally. Output impedance, constant for all ranges, excellent attenuator circuit coupled to powerful oscillator, develops rated output voltage with 30 ohms output impedance! Full vision, glass protected dial, accurate to 1/2 of 1%, is directly calibrated in 8 RANGES from 100kc. to 120mc.—all on FUNDAMENTALS! Calibrated Output 0-100,000 Microvolts, with jack provided for high output. Audio Output, Variable, 100-10,000 cycles available from external jack. Visual Resonance: 60 cycle sweep, locking pulse for CRO timing. Modulation: 0-80% continuously variable. Multiple shielded RF oscillator unit, ruggedly built of finest materials and component parts; in heavy steel cabinet 16 3/4 x 7 x 9 1/2" high. Complete with tubes, coaxial output cable, fused line cord and instructions. For operation on 105-125 Volts, 50-60 cycle AC current.

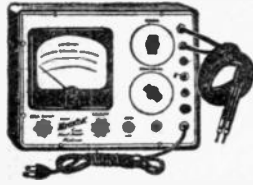
1,000kc.; and 0-400kc. wide band with fixed modulation frequency 100-10,000 cycles, adjustable, or may be modulated at 60 cycles externally. Output impedance, constant for all ranges, excellent attenuator circuit coupled to powerful oscillator, develops rated output voltage with 30 ohms output impedance! Full vision, glass protected dial, accurate to 1/2 of 1%, is directly calibrated in 8 RANGES from 100kc. to 120mc.—all on FUNDAMENTALS! Calibrated Output 0-100,000 Microvolts, with jack provided for high output. Audio Output, Variable, 100-10,000 cycles available from external jack. Visual Resonance: 60 cycle sweep, locking pulse for CRO timing. Modulation: 0-80% continuously variable. Multiple shielded RF oscillator unit, ruggedly built of finest materials and component parts; in heavy steel cabinet 16 3/4 x 7 x 9 1/2" high. Complete with tubes, coaxial output cable, fused line cord and instructions. For operation on 105-125 Volts, 50-60 cycle AC current.

No. 32A28. "Jackson" Model 641 Oscillator. Your Cost... **\$171.00**

Additional NEW JACKSON INSTRUMENTS

Stk. No.	Jackson Model	Description	Your Cost
35C46	648B	New Tube Tester, Open Face Metal Case....	77.91
35A48	640	100kc-120mc Push-Button RF Oscillator.....	61.25
35A47	637	Dyn. Output Tube & Set Tester, Portable.....	95.55
35A52	643	1,000 o.p.v. Push-Button Multi-Meter.....	44.10
35A50	645	32-Range, AC-DC Vacuum Tube Multi-meter	67.11
35A49	650A	Push-Button Condenser Tester.....	53.41
50A202	655	20/200,000 cps. Audio Oscillator.....	132.30
35A53	642	20,000 o.p.v. Push-Button Multimeter.....	58.31

"HICKOK" MODEL 203



Identical to Model 209 described on page at right—SAME ranges and functions—except—has 5-inch instead of 9-inch meter; and does not have the special H.F. Probe. A true ELECTRONIC Volt-Ohm-Capacity-M.A. for servicing television, "FM" and "AM" Receivers! Measures Capacitances and Inductances—checks trimmer condensers, inductance of coils, leakage resistance of insulation! In steel case, size 9x11 1/2x7"; wt. 13 lbs. or 18 lbs. packed. No. 35A38. "Hickok" Model 203. NET..... **\$84.60**

HICKOK TELEVISION ALIGNMENT GENERATOR

SENSATIONAL NEW MODEL 610. A complete UNIVERSAL Television Instrument—this SINGLE INSTRUMENT REPLACES three pieces of Television Test Equipment: Sweep Generator, Marker and Trap Alignment Generator—Crystal Calibrator! Model 610, in ONE Instrument, has these outstanding features: 10mc to 250mc Frequency Range! 0-15mc completely variable Sweep Width; Frequency calibrated dial readable to accuracy of 0.5%; Self-contained Markers, direct dial calibrated to .05mc; Sound and Video IF Alignment by 20-30mc range for trap alignment with directly calibrated markers! Provision for external marker from external generator. Controlled output strength of markers in both pip oscillator and absorption type marker; Output impedance, first 3 stages, is 5 ohms; 0.75 volts output permits stage-by-stage alignment. 5-step ladder attenuator; Standby Switch cuts "off" "B" Plus—holds instrument in readiness for instant use by flip of switch! 7 Tubes, including new, modern miniature types; provision for plug-in Crystal Oscillator Xtal on front panel. In open face steel case, blue Hammertex and Satin Chrome finish panel, size 14x16 1/2x8". Weight, 31 lbs. No. 35B83. Hickok 610 Television Alignment Generator. Net... **\$169.20**

MODEL 610D TELEVISION ALIGNMENT GENERATOR, DISPLAY cased for use on bench or shelf; DISPLAY CASE matches exactly the cases of other Hickok Display Case model instruments. No. 50A238. Model 610D Display Cased T.V. Generator. Net... **\$172.20**

"SILVER" 909 FM-TV SWEEP SIGNAL GENERATOR

For Use with Oscilloscope for Visual Alignment of TELEVISION or "FM" Receivers! A High Quality Instrument at a Price That Amazes the Industry! Center Frequency Range 2/226 mc., 5" vernier-driven calibrated dial. Covers 2/77, 70/154 and 151/226 mc. in 3 bands without band-switching! Stability is extraordinary. Uses new U.H.F. tubes. Scope pictures will "stay put" for hours. Sweep Frequency variable from 0/9 mc. Sweep is true electronic, non-distorting. No troublesome mechanical sweep system to get out of order. Synchronization is either power line sine wave, or saw-tooth to scope from 909. R. F. Output 0/500,000 microvolts maximum, ample for visual alignment with any good scope. Output Cables, Coaxial, 3-ft. long. DC isolated, 5/125 ohms impedance for R.F. Has separate horizontal synchronizing cable. Both cables terminated with clips. Matches other Silver instruments. Size 12 3/8 x 7 3/8 x 6" overall. Operates on 105-125 volt 50-60 cycle AC. No. 35B84. NET ONLY..... **\$48.50**

FAMOUS "HEWLETT-PACKARD" LABORATORY TEST INSTRUMENTS for Laboratories and Industrial Plants are available from "B-A" for PROMPT SHIPMENT—SPECIAL CATALOG available on request, giving complete descriptive information and latest prices. WRITE FOR IT!



RCA TEST EQUIPMENT



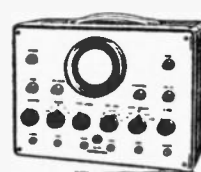
RCA VOLTOHMYST TYPE 195-A

MODEL 195-A VOLTOHMYST
AC ELECTRONIC MULTIMETER—Constant Accuracy! Provides in ONE instrument, electronic measurements of DC Volts, AC Volts-Decibels, AF Volts, Resistance, Output Volts, "FM" Alignment Indicators! Electronic overload protected meter has printed brass scales, anti-static treated plastic case. Electronic DC Volts Ranges of: (10-Meg. constant input) 0, 5, 10, 50, 100, 500, 1000; AC Volts-Decibels, 0, 5, 10, 50, 100, 500, 1000 by linear diode rectifier, direct reading on DC Volts scales! Resistance, 0.1 Ohm to 1,000 Megohms, one setting for all ranges—20 cy. to 100 kc. flat freq. response to 100 volts with input impedance of 200,000 ohms at 170 volts! Complete with tubes, ground lead, isolating probe, cable and instructions. Reverse etched brushed Chrome Panel: size 9 5/8 x 6 3/8 x 6 3/4"; 115-volt 60-cycle AC. No. 35A32. Model 195-A VoltOhmyst. Net..... **\$79.50**

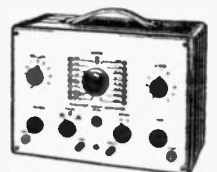
RCA "W" SERIES TEST INSTRUMENTS — THE BEST!



(A)



(B)



(C)

The following listed RCA "W" Series Test Instruments Incorporate the newest improvements in Service Instruments — complete Technical Descriptive Bulletins covering each instrument listed herein are available on request.

(A) Model WV-95A MASTER VOLTOHMYST, AC operated. Includes all features of the popular 195-A, PLUS current and capacity scales. No. 50A245. Model WV-95A Master AC Operated VoltOhmyst. Net... **\$152.50**

(B) Model WO-55A 3" OSCILLOSCOPE. Replaces and is an improved version of the former Model 155-C. No. 50A246. Model WO-55A 3" Oscilloscope. Net..... **\$129.50**

(C) Model WR-59A TELEVISION SWEEP GENERATOR. Engineered by the leaders in Television. Provides sweeps for 13 TV bands; IF and Video. No. 50A247. Model WR-59A Television Sweep Generator. Net... **\$325.00**

MODEL WR-39A Television Calibrator (Not Illustrated). Provides markers for all ranges of Model WR-59A Sweep Generator. No. 50A248. Model WR-39A Television Calibrator. Net..... **\$250.00**

MODEL WO-58A 5" Television Oscilloscope, wide range. Wide band vertical amplifier for observation of sync. and blanking impulses. No. 50A249. Model WO-58A 5" Television Oscilloscope. Net... **\$345.00**

MODEL 162-C RCA-RIDER CHANALYST (Not Illustrated). Long time favorite of radio servicemen for overall Signal Tracing. No. 35A30. Model 162-C "CHANALYST". Net..... **\$162.50**

RCA LABORATORY MEASURING EQUIPMENT

No. 50A239. MODEL WO-27A—5" DC Oscilloscope. Net.....	\$1150.00
No. 50A240. MODEL WO-60C—5" General Purpose Scope. Net.	345.00
No. 50A241. MODEL 715-B—5" Laboratory Oscilloscope. Net.....	2400.00
No. 50A242. MODEL WV75-A—Adv. VoltOhmyst & Diode Probe	125.00
No. 50A243. MODEL WV-73A—Audio Voltmeter. Net.....	175.00
No. 50A244. MODEL WG-275—Diode Probe for VoltOhmysts. Net	30.00

LOOK! READ! B-A BARGAIN TEST INSTRUMENTS!

We ran out of catalog space! YOU SAVE MONEY by buying ANY of the following Nationally Known, BRAND NEW instruments that we couldn't find space for a detailed listing in this, our new Catalog No. 491—most every Serviceman is familiar with the specifications of the instruments listed below—but if you're not—we will mail details on request. Quantities are limited—prices are LOW—orders subject to stock on hand!

SUPREME 5" OSCILLOSCOPE, Model 552. Essentially the same to newest Model 655—but—YOU SAVE ALMOST \$30.00! No. 35B2. Supreme Model 552 5" Oscilloscope. Net..... **\$79.50**

SUPREME MODEL 561. Combined AF-RF Signal Generator with Frequency Modulator—one of the finest service instruments ever made; RF Oscillator 65kc to 20 mc; AF Oscillator, 15/15,000 cps. No. 35A12. Supreme Model 561 AF-RF Oscillator. Net..... **\$99.50**

SUPREME MODEL 592 PUSH-BUTTON 44-RANGE MULTIMETER. 20,000 o.p.v./1,000 o.p.v. Dual Sensitivity meter 3.5-1400 AC-DC volts. Current Ranges, 7 ma. to 14 amps; Resistance, 1/4 Ohm to 50 Meg. In fine Oak case with removable cover. A Red Hot Bargain Buy! No. 35A15. Supreme Model 592 Multimeter. Net..... **\$43.95**

SUPREME MODEL 546 3" OSCILLOSCOPE. A "dandy", easy to operate scope—SAVE \$25.00 on this one while they last! No. 35A13. Supreme Model 546 3" Oscilloscope. Net..... **\$64.75**

"SILVER" Model 906 AM-FM OSCILLATOR. A real "buy" on these! No. 35A63. Silver Model 906 AM-FM Oscillator. Net..... **\$99.50**

MEISSNER "ANALYST". 12-Tube Signal Tracer... "NUFF SAID!" No. 32A14. Meissner "Analyst". Complete. Net..... **\$89.50** (REMEMBER—Every Instrument Above Brand New—Subject to Prior Sale.)

QUALITY RADIO TEST EQUIPMENT FOR MODERN SERVICING NEEDS

SPRAGUE "TO-3" DE LUXE TEL-OHMIKE



New and improved version of the popular TO-2—the NEW TO-3 is a bridge type Resistance and Capacitance Analyzer with BUILT-IN D.C. Volt-Milliammeter! A necessity in the Modern Radio Shop—Tel-Ohmike locates "open", intermittent, or "shorted" condensers—WITHOUT REMOVING THEM FROM THE CIRCUIT! In addition, Tel-Ohmike checks motor-starting condensers, and measures insulation resistance of Motors, Transformers, etc.—truly a multi-purpose instrument for the Radio-Electric Shop! Specifications: Capacity Ranges: .00001 to 2,000 MFD. in 4 Ranges; Power Factor Ranges of 0-50% at 60 cycles. Insulation Resistance: 0-2500 Megohms; Electrolytic Leakage: in MA at rated D.C. voltage; power factor of electrolytics with rated polarized voltage applied. Resistance Ranges: 2.5 Ohms to 25 MEG. in 3 Ranges; D.C. Volts: 0-15-150-750; D.C. MA: 0-1.5-15-75. Simplified operation: 1 pair of marked binding posts, and 5 controls for "Speedy-Check" service on all functions, large direct reading dial is color-coded to match selector switch. In steel case $13\frac{1}{4} \times 10\frac{1}{8} \times 5\frac{1}{2}$; wt. 15 lbs. For 115-Volt 60 cycle A.C. **\$58.51**

Stk. No. 35A19. Model TO-3 De Luxe TEL-OHMIKE. Your Cost

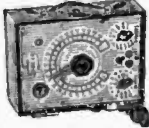
"Solar" Model C-F EXAM-METER



The most comprehensive CAPACITOR ANALYZER available—the ONLY ONE with "Solar" patented "QUICK-CHECK" CIRCUIT! Operates without disturbing set wiring or soldered connections in the QUICK location of Intermittent, "open" or "shorted" capacitors of ALL types—PLUS high power factor and high r-f impedance electrolytics! WIEN BRIDGE capacitance measurements for ALL condensers from 10 mmf. to 2000 mfd., on four overlapping, long scale ranges; Power Factor of ALL electrolytics, polarized or not, is indicated on special POWER FACTOR scale when making capacitance checks; range 0-55 per cent. Stepless, in-built test voltages 0-550 volts indicates leakage on meter scale. INSULATION RESISTANCE, 3-10,000 meg. indicated on meter. Wheatstone bridge resistor tests, 100 ohms to 7.5 megohms, on 2 long scale ranges; reads high values to 10,000 megohms. AC-DC Vacuum Tube Voltmeter; SCALES, 0-550 DC volts in 3 ranges; meter CANNOT be damaged by excess voltage on any scale. AC SCALES, 10-50 volts for audio output measurements. $\frac{1}{2}$ " METER, recessed. ETCHED BRIDGE SCALES, scratch proof. In gray wrinkle metal case, $12\frac{3}{4} \times 10 \times 5\frac{1}{2}$ " deep; weight, $12\frac{3}{4}$ lbs. Complete with tubes and instructions. **\$58.50**

Stock No. 35A20. "SOLAR" MODEL CF-160. Your Cost

"SOLAR" CBC CAPACITOR ANALYZER

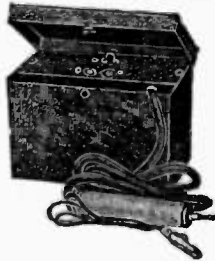


New, further improved version of famous Solar previous models "CB" and "CBB"—little brother of famous "CF" Exam-eter listed above! Has these Features: ★ Quick-as-a-wink bridge balance indication by Magic Eye tube. ★ Capacitance Bridge, 10 mmf to 800 mf. ★ Power Factor Range, 0-50%. ★ Resistance Bridge, 100 Ohms to 7 Megohms! ★ Simplified Neon-Lamp circuit for visual check of insulation resistance and leakage! In portable hand rubbed wood case, detachable cover, attractive gray panel and easy-to-read, clear scales. Case size is $9\frac{1}{2} \times 7\frac{1}{2} \times 6\frac{1}{4}$ ". Weight, 7 lbs. **\$38.22**

Stock No. 35A76. Solar Model CBC Capacitor Analyzer. Net.

"Feiler" Signal Tracing Analyzer

Will quickly pay for itself in time saved in ANY Service Shop — large or small! For RAPID TESTS of any receiver or amplifier without complicated and bothersome adjustments! Quickly locates Noise, Hum, Poor Sensitivity, Speaker Defects, Open Coupling Condensers and Coils, loops, transformers, checks faulty resistors, locates INTERMITTENTS! SMALL SIZE, only $6\frac{1}{4} \times 4\frac{3}{4} \times 3\frac{3}{4}$ " with HAND SIZE PROBE 1" dia. x $\frac{1}{4}$ " long which houses NEW, war developed MINIATURE tube and circuit components. HERE IS A DEPENDABLE TEST INSTRUMENT THAT REQUIRES NO SPECIAL SKILL TO OPERATE—yet is a real time saver in any shop! Complete with necessary batteries but requires headphones for operation. **\$11.12**



Stock No. 35A44; "FEILER" SIGNAL TRACER; NET

"FERRET" MODEL 721 SERVICE SPEEDER!



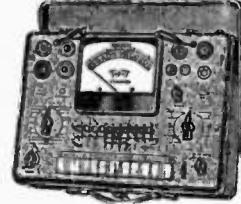
A time-saver for ANY Service Shop! PROVIDES: (1) Test Speaker, special 6" PM with low resonant point, together with test field impedances of 500, 1000, 2500 Ohms. Voice coil permits substitution of ANY output transformer. Rotating input and field switches permit matching to any single or push-pull output tubes. (2) Selective substitute paper and electrolytic condensers AND substitute resistors—600-volt Paper capacitors of .001, .01, .02, .05, .10 and .25 Mfd.; 450-volt Electrolytics in capacities of 30-50-80 MFD. Resistance substitutions of: 400-50,000-100,000-500,000 Ohms; 2.2 and 5 Megohms. Aluminum cabinet $10\frac{1}{4} \times 10\frac{1}{4} \times 5\frac{1}{2}$ "; wt. 7 lbs. **\$29.95**

Stock No. 32A25. "Ferret" Model 721. Your Cost

MODERN, DEPENDABLE "TRIPLETT" INSTRUMENTS



Model 625NA



Model 3413



Model 3480

Triplett MODEL 625NA (Illus. left above). Popular 39-Range Volt-Ohm-Milliammeter—10,000 and 20,000 o.p.v. DC sensitivity—10,000 o.p.v. AC sensitivity. Resistance to 40-Megohms—6" "Red Dot" 50 micro-amp. meter! Meter Ranges are: 0-1.25-5-25-125-500-2,500 DC Volts at 20,000 Ohms-per-volt; 0-2.5-10-50-250-1,000-5,000 DC and AC Volts at 10,000 ohms-per-volt; 0-50 DC Micro-amps.; 0-1-10-100-1,000 DC Mils.; 0-10 DC Amps.; 0-2,000-200,000 Ohms (12-1,200 center scale); 0-40 Meg. (240,000 center scale); six DB Ranges from minus 30 db. to plus 69 db.; Six Output Ranges, condenser in series with AC volts ranges. 5" mirror meter scale has vari-colored markings for different ranges; 2 banana jacks on front panel for V.O.M.A.—A. and Com. with high voltage jack for 2,500 and 5,000 volts. In black molded case with handle, size $2\frac{1}{2} \times 5\frac{1}{2} \times 6$ ". Weight, 3 lbs. Complete with 50" test leads, detachable alligator clips, and batteries. **\$44.10**

Stock No. 35A22. Triplett Model 625NA Multimeter. Net. \$44.10
Stock No. 35B70. Leather Case for Model 625NA. Net. \$5.39

Triplett MODEL 3413 Lever Switching Tube Tester. For faster, more accurate testing of ALL receiving tubes! Only 1 socket used for each type tube base, sockets for newest types including Miniature and 9-pin Noval types! Big 6" meter has 5.6" length "Bad-? Good" scale plus Line Voltage indication! All element check gives conclusive tests of individual tube elements; individual control, by lever switches, for each tube element handles "roaming" elements, dual cathode and multi-purpose types. Neon "Short" test, hot cathode type, has wide-angle neon indicator for greater visibility of glow test! Lever Switching and "picture circuit" is faster and more accurate—enables "setting up" test data for new tube types without waiting for new tube chart. Illuminated Speed-Roll Tube Test Chart is double window type, only one-half length of most test charts! 18 Filament Voltages available for all tubes from 0.75 to 110-volt filaments! Dual-purpose Portable-Counter steel case with detachable cover is size $15\frac{3}{8} \times 11\frac{6}{8} \times 6\frac{1}{8}$ "; rounded edge 2-tone panel with brown on tan contrasting markings; overall 2-tone "hammered" baked enamel finish; strap handle, nicked hardware and rubber feet. 115-volt 60-cycle AC. Weight, 20 lbs. **\$65.41**

Stock No. 35B26. Triplett Model 3413 Tube Tester. Net. \$65.41

Triplett MODEL 3480 Tube and Set Test Laboratory (Illus. right above). Conclusively tests all receiving tubes (has all tube test facilities described above for Model 3413) PLUS 10,000 o.p.v. DC and 2,000 o.p.v. AC sensitivity of large 6" "Red Dot" 100 micro-amp. movement meter with 5.6" scale at top of arc—has "Bad-? Good" tube test scales and clear, clean marked multi-meter scales for the V.O.M.A. Ranges: 0-3-12-60-300-1,200 DC volts at 10,000 o.p.v.; 0-3-12-60-300-600-1,200 AC and Output Volts at 2,000 o.p.v. 0-1.2-12-120 DC Mils.; 0-12 DC Amps.; 0-1,000-10,000 Ohms; 0-1-50 Megohms. Illuminated Roller Tube Chart (speed roll brings all tube settings in view in one-half of usual chart length): combination portable-counter type steel case with removable cover finished in 2-tone "hammered" baked enamel; easy-read panel has brown markings on tan background. Complete with batteries and 50" test leads with banana plugs and removable alligator clips; for 115-volt, 60-cycle AC. Size, $15\frac{3}{8} \times 11\frac{6}{8} \times 6\frac{1}{8}$ ". Weight, 25 lbs. **\$96.77**

Stock No. 35B66. "Triplett" MODEL 3480 Conclusive Test Combination Tube and Set Tester. Net. \$96.77

SENSATIONAL TRIPLETT MODEL 630



20,000 Ohms/Volt; 5,000 Ohms/Volt — 32-Range V.O.M.A. New, true Streamline case has $5\frac{1}{2}$ " Meter FLUSH with case surface—new construction! has resistors, shunts, selector switch, batteries ALL housed in molded base, integral with selector switch! $\frac{1}{2}$ " knob on selector switch is recessed in panel, out of way and easy to turn! Each resistor in molded compartment, all resistors SEALED for permanent accuracy! All switch contacts are permanently sealed, lifetime lubricated and forever sealed against dirt—retain permanent contact alignment—no loss between contacts—ever! Note these RANGES: 0-3-12-60-300-1,200-6,000 DC Volts at 20,000 ohms-per-volt! Same ranges available for AC volts at resistance of 5,000 o.p.v.; Condenser in series for Output Volts for five Output Volts Ranges. Resistance Ranges are 0-1,000-10,000 (4.4 and 44 center scale) and 0-1-100 Meg. (4.400 and 440,000 center scale). Current Ranges: 0-60 DC Micro-amps.; 0-1.2-12-120 DC M.A., and 0-12 Amperes. Six DB Ranges from minus 30 to plus 70 db. Series ohmmeter circuit eliminates battery drain with switch left in "Ohms" position! Banana Jacks (3), two of which handle 25 ranges! Complete with 50" test leads with banana plugs and removable alligator clips. Size, $3\frac{1}{4} \times 5\frac{1}{2} \times 7\frac{1}{2}$ ". Weight, 4 lbs. **\$36.75**

No. 35B67. "Triplett" Model 630 Volt-Ohm-Mil-Ammeter. Net. \$36.75
Leather Carrying Case for Model 630. Model 639, fine black leather with room for 630 Tester, instruction book, and accessories. **\$5.63**

TRIPLETT MODEL 666-HH POCKETMETER

MODEL 666-HH Pocket Size Volt-Ohm-Milliammeter—Long time favorite of Servicemen! 3" Lifetime Meter is flush with surface of the molded, streamline case, only $3\frac{1}{16} \times 5\frac{7}{8} \times 2\frac{9}{16}$ "—small overall size and light weight of $1\frac{1}{2}$ lbs. Ranges: 0-10-50-250-1,000-5,000 DC Volts; 0-10-50-250-1,000-5,000 AC Volts; both AC and DC volts at 1,000 Ohms-Per-Volt! Current Ranges, 0-10-100-500 DC M.A. at 250 millivolts. Ohms: 0-2,000-400,000 (12 and 2,400 center scale). Banana type jacks; simplified switching; special resistors provide greater stability on "volts" ranges. With 50" test leads, plugs and clips, batteries. **\$21.56**

No. 35A29. Triplett Model 666-HH V.O.M.A. Net. \$21.56
No. 35B69. Leather Case for 666-HH. Net. \$4.65



DEPENDABLE SERVICE TEST INSTRUMENTS AT MODERATE COST

"APPROVED" LOW COST SIGNAL GENERATOR



Packed with FEATURES that make MODEL A-200 OUTSTANDING IN THE SIGNAL GENERATOR FIELD! NEW POST-WAR CIRCUIT assures MORE ACCURACY AND STABILITY! 6-RF BANDS: 100kc to 75mc! HUGE, DIAL is 9" wide at base, has Lucite hair line pointer and large direct drive knob. MULTI-COLOR SCALES for each band have widely separated calibration marks and large figures for accurate readings. 6-FUNDAMENTAL BANDS, 100kc to 25mc; —100/250kc; 190/500kc; 420/1000kc; 1000/3000kc; 2.8 to 9mc and 8.9 to 25mc; 7th Band covers 18-50mc on second harmonic; 8th Band, 27-75mc on powerful 3rd harmonic. Internal modulated at 440 cps. 40-30,000 cps. EXTERNAL modulation possible; Phase Shift Audio Oscillator and internal modulator. Continuously variable RF-AF Fine Attenuator Control; specially designed ULTRA-STABLE 3-terminal RF oscillator. Cathode Follower Tube—Attenuator settings have no effect whatever on frequency! Modulation percentage continuously variable at front panel from 0 to 100%. Extremely LOW LEAKAGE on ALL bands, electrostatically shielded transformer. Co-Axial Output Lead! REAL QUALITY BUILT—"Hammerlund" INVAR double spaced, ceramic insulated variables assure NO capacity change or sweating in humid climates or in radical temperature changes! Oil filled condensers, 4-standard tubes; in 16-ga. steel cabinet with 16-ga. Aluminum panel; case size 12"x10"x7 1/2"; wt. 22 lbs.; Battleship gray crackle enamel. Stock No. 32A29. "APPROVED" MODEL A-200. NET EACH. **\$38.71**

Offers the same high quality at low cost in an FM-TV servicing instrument as the famous Model A-200 R.F. Signal Generator, illustrated above—designed and built by "specialists" in the H.F. Service Instrument field, Model A-300 is Mr. Average Serviceman's answer to his need for modern servicing instruments for FM-TV — and AT LOW COST! Model A-300 is almost identical in appearance to Model A-200 shown above and provides frequency range of 2 to 227 mc in 3-bands of overlapping coverage—without necessity of Band Switching! Overlapping Bands are, "A", 2-77mc; "B", 40-154mc; "C", 151-227mc; plus calibration and reference scales! Sweep width is 50kc to approx. 10mc; 10 to 1 ratio tuning control, plus Phasing Control, RF Output Control, Output Selector Switch, Horizontal Sweep Output. Four type 6C4 tubes serve as Reactance Modulator, FM Modulated Oscillator, continuously variable B.F. oscillator, and Mixer cathode follower output tube; a type 7Y4 serves as rectifier. Output may be either frequency modulated or pure RF. Maximum output is 500,000 microvolts! High frequency insulation throughout, power line filter, pilot light indicator. In steel cabinet, 12"x10"x7 1/2"; wt. 18 lbs; for 105-125 volts, 60 cycle AC; power load, 35-watts. Complete with all tubes and concise operating instructions. Stock No. 35B88; "Approved" Model A-300 Sweep Generator. Net, **\$42.63**

STAR VALUE QUALITY TEST INSTRUMENTS



MODEL TE-1 PRECISION TUBE TESTER—A Modern Tube Tester—guaranteed for ONE YEAR and at MINIMUM COST!

Tests ALL receiving type tubes, including seven and nine pin types used in FM and Television! Separate switching for each pin of each socket provides maximum flexibility in testing—prevents obsolescence! Tests individually all sections of multi-section tubes; tests for "shorts" and opens between all tube elements! Checks line voltage. 3-inch square, wide vision "Good-?-Bad" meter. Has etched aluminum panel in rugged crackle finished metal cabinet with handle, size 9x7x3 1/2". Wt. 6 lbs; Cpt. with up-to-date tube charts and instructions for calibrations to test new types of tubes yet to be announced. High quality materials and 1st. class workmanship are combined in this fine little instrument to produce a value that cannot be surpassed! 110-volt AC. Stock No. 35B9; "Star" Portable Tube Tester Model TE-1. Net. **\$29.95**

STAR VALUE TUBE TESTER AND 27-RANGE V.O.M.A.



Combines ALL the features for Tube Testing as described for Model TE-1 immediately above, PLUS, in the tube testing section; a quick check Condenser Test, Tube Noise Test, and Pilot Light Tests! Tests ALL receiving tubes, including newest 7 and 9-pin FM and TV types now being released—plus easy calibration instructions for testing additional new types not yet released! Checks all sections of multi-purpose tubes for "shorts" and leakage! Big, 4 1/2-inch square, 400 micro-amp. meter; in addition to "Good-?-Bad" tube test indications—HAS THESE 27-V.O.M.A. RANGES:

Five AC Volts Ranges to 1,000 volts; Five D.C. Volts Ranges to 1,000 volts with all voltage ranges at 1,000 ohms-per-volt! Four DC Current Ranges to 1-Ampere; Five Output Volts Ranges to 1,000 volts, Three Resistance Ranges to 5 Meg. I These combined ranges offer complete facilities for point-to-point analysis of Radio-Electronic equipment in a single hardwood cabinet with removable cover, leather handle and separate compartment for line cord and the test leads supplied. Size, 14"x12"x5"; wt. 10 lbs. For 105-125 volt, 60 cycle AC operation; complete with Test Leads, Tube Charts and instructions. Extra heavy, 14-gauge aluminum panel, clearly etched! Stock No. 35B25; "Star" Model MT-12 Tube & Set Tester, Net, **\$53.50**

DON'T MISS IT! NEW "RCP" 8073 "SERVISHOP"

Only \$83.25 for a complete set of Radio Test Instruments—all in a single, oak carrying case! Every service need of AM or FM Radio Sets is covered by the separate and distinct instruments included in "SERVISHOP"—Tube Tests—Condenser Tests—Voltage Tests—plus RF Stage and tuning condenser alignment! Tube Tester: has over 800 listings for receiving tube tests, including all the newest types; has every feature needed in a good tube tester.***Multitester—25 Ranges for: 0-10-50-500-1000 AC and DC Volts; 0-1-10-100-1000 DC M.A.; 0-10 DC Amps.; 0-500-5,000 Ohms; 0-0.1-1-10 Megohms! Minus 8 to Plus 55db in four ranges; 0-10-50-500-1000 Output Volts.***AM Signal Generator; for alignment of sets quickly "on-the-job"; has fixed frequencies of 1500kc and 550kc for Broadcast band alignment; 456kc and 465kc for I.F. coil alignment!***"FM" Signal Generator with all needed frequencies available in Frequency Modulated fundamentals. Four fixed frequencies with switch selection for I.F. of 10.7mc; 88mc; 98mc; and 108mc—all accurately calibrated to 1% limits.***Condenser Tester reads "Good-Bad" directly on scale of 4 1/2" meter for testing leakage of electrolytic, mica or paper capacitors.***Audio Oscillator, provides 400-cycle audio output. Complete in Oak case with all tubes, test leads, instructions; for use on 105-135 volt 50-60 cycle A.C.; wt. 15 1/2 lbs. Stock No. 35B27; "RCP" Model 8073. Complete Servishop. Net. **\$83.25**



EXCEPTIONAL VALUES IN Other "RCP" INSTRUMENTS



Model 322-P Model 777 Model 705
MODEL 322 "DYNOPTIMUM" TUBE TESTERS—test ALL Receiving tubes, correctly, quickly, simply—only 5-controls. Has test sockets and facilities for testing every type of tube including newest sub-miniatures—checks individual sections of all multi-purpose tubes; has headphone jack for noise test, Neon "short" and leakage tests between all tube elements. Big "Alnico" magnet AC meter reads "Poor-?-Good"; extremely low test circuit voltage drop assures close tolerances on tube tests. Compact, sturdily built; in steel case size 12 1/2"x9"x5", with clip-on steel cover and handle. Black crackle enamel finish. Wt. 13 lbs. Stock No. 35A42; "RCP" Model 322P Dynoptimum Tube Tester. Net. **\$41.11**

MODEL 322 COUNTER MODEL "DYNOPTIMUM" TUBE TESTER—Combines tube sales punch with identical tube testing features described above for Model 322P; Sloping panel in open face, black crackle finished steel case size, 12 1/2"x9"x5" high at back. Wt. 13 lbs. Stock No. 35C59; RCP Model 322 Counter Tube Tester. Net, **\$37.19**

MODEL 777 DYNATRACER, highly sensitive Signal Tracer. Covers ALL FM-AM-TELEVISION RECEIVERS—provides high amplification to really trace the signal, or any variation in its intensity, from the antenna, step-by-step through each stage of r.f., i.f., a.f.—without operating ANY switches or changing to different channels in the instrument! Accurate Meter readings of "Gain" of any stage or of complete receiver with negligible disturbance to set under test due to input capacity of only 3 mmfds. Attenuation, 10,000 to 1 by ladder type, vernier control. Sensitivity, 10,000 Microvolts full scale! Frequency coverage—through 150 mc! Traveling Detector, probe housing for detector and amplifier at end of 50" lead. 4-Inch Alnico V PM speaker, with switching for Meter or Speaker indication alone—or both simultaneously! In steel case, size 8 1/2"x11 3/4"x5 5/8"; wt. 9 1/2 lbs.; for 105-125 volt, 50-60 cycle A.C. Stock No. 35B28; RCP DYNATRACER Signal Tracer Cpte, Net, **\$40.67**

RCP MODEL 705A SIGNAL GENERATOR (illus. at right above) 100kc to 25mc frequency range—NEW BAND "F" provides useful signals to 150mc! Aligns "FM" i.f. stages by zero discriminator current method! 5-step attenuator, ladder type; 2% accuracy of scale calibrations on 5-overlapping band scales—3% accuracy on Band F; Choice of direct or vernier drive of planetary driven tuning condenser, accurate double and tuning indicator. Band switch "shorts out" coils not in use; zero drift during "warm-up" time. 400 cycle sine wave generator modulates carrier at EITHER 30% or 80%; 400 cps also available for external use! Individually shielded components insure fully stable operation. In black steel case size 11 3/4"x8"x5" deep; black and white highlighted panel. 110-130 volt 50-60 cycle AC. Wt. 11 lbs. Stock No. 35B61. RCP MODEL 705A Double Modulation Signal Generator. Complete with Tubes and Instructions. Net. **\$48.51**

RCP 802N TUBE & SET TESTER

Complete tube testing of all receiving tube types—headphone noise test—condenser tests; Plus 25-range set tester! 4 1/2-inch Meter! Germanium rectifier for AC voltage measurements! 100,000 Ohm Resistance range is battery operated—permits complete set tests without AC current connection! Set Tester Ranges are: 0-10-50-500-1000 AC-DC Volts and Output Volts; 0-1-10-100-1000 DC M.A. and 0-10 Amperes! Resistance Ranges: 0-500-5000 Ohms, 0-0.1-1-10 Meg. Minus 8 to Plus 55db in 4-ranges; Meter has Alnico high torque movement for fast readings. In hardwood case, removable cover, size, 13"x9 1/2"x5"; wt. 13 lbs. For 100-130 volt 50-60 cycle AC. A fine "Take to the job" tester, cpt. with batteries and test leads. Stock No. 35A43; RCP Model 802N Tube & Set Tester, Net, **\$58.31**
RCP "ROLLINDEX" ROLLER TUBE CHART for use with RCP Models 322P Tube Tester or 802N Tube and Set Tester, as listed above No. 35A56; Model 103 Rollindex (fits in tester cases).....Net, **\$7.35**



Specially Selected RADIO AND ELECTRONIC TEST INSTRUMENTS

"SIMPSON" MODEL 260 VOLT-OHM-MILLIAMMETER

High sensitivity Set Tester—for "FM", Television and Radio Set Servicing; 20,000 Ohms-Per-Volt on "D.C."; 1,000 Ohms-Per-Volt on "A.C."! Ranges to 5,000 VOLTS on BOTH D.C. and A.C. Unique and revolutionary molded sub-panel construction—with individual compartment for each and every resistor—permits short, direct connections with elimination of possible "shorts" and easy accessibility of all components. Newly designed Front Panel features recessed, "molded-in" Pin jacks and NO metal parts exposed on the panel! All figures and markings are molded into the panel and filled with white for legibility and long wear. Ranges of Model 260: 0-2.5-10-50-250-1,000-5,000 D.C. Volts at 20,000 Ohms-Per-Volt! Identical A.C. Ranges as for D.C., except at 1,000 Ohms-Per-Volt. Output A.C. Volts, same as A.C. Volts ranges. Current Ranges of 0-10-100-500 M.A. and 0-10 Amperes, D.C. Additional current range of 0-100 Microamperes, D.C. Resistance Ranges: 0-2,000-200,000 Ohms (12 and 1,200 Ohms Center Scales); and 0-20 Megohms with 120,000 Ohms center scale! DB Ranges of minus 10 to plus 52 in five ranges! In heavy duty molded case (2 styles available as listed below); size 5½x7x3"; complete with test leads and self-contained batteries. No. 35A60. "Simpson" Model 260, as illustrated above. NET. **\$38.17**



Model 260 in new ROLL TOP SAFETY CASE, unit-molded heavy duty Bakelite case with molded Bakelite Roll Cover which rolls up, out of sight and way, at a flick of the finger! Case slightly larger than Standard Model 260 shown above to provide a compartment for test leads. Stock No. 35B51. "Simpson" Model 260 Special, NET. **\$45.03**

Other Simpson Instruments Available on Your Order Any of the Simpson Instruments listed below are immediately available, on your order to us—space does not permit illustrations or long descriptions; however, complete descriptions and illustrations are available on request.

SIMPSON MODEL 415A SIGNAL GENERATOR—75kc/130 mc. Incorporates built-in sweep circuit for FM servicing, with frequency modulated signal up to plus or minus 1-megacycle; internally modulated at 60 and 400 cycles; 120 cycle sawtooth voltage for "scope use. Has 3 AM bands, 5 FM bands, all fundamentals! Size, 5½x11½x15½". No. 50A203. Simpson Model 415A AM/FM Signal Generator. **\$142.10**

SIMPSON MODEL 330 MUTUAL CONDUCTANCE TUBE TESTER. Tests tubes in Percentage of Dynamic Mutual Conductance. Roller tube chart and ten push buttons, with selector switches make for fast, accurate tests. Tests tubes at A.F. frequency of 2,500 cycles, automatic voltages applied on each tube tested reproduce actual tube operating conditions! In portable case, size 15½x9½x6". Stock No. 50A205. Simpson Model 330 Tube Tester. NET. **\$129.85**

SIMPSON MODEL 445 TUBE AND SET TESTER. Tests all tubes by plate-conductance method, has "no backlash" roller tube chart; is push-button operated and has all V.O.M.A. ranges contained in the Model 260, described in detail at top of this column. Size, 16x12½x6¾". No. 50A251. Simpson Model 445 Tube and Set Tester. NET. **\$125.93**

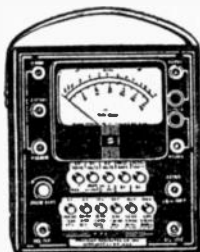
SIMPSON MODEL 221 ROTO-RANGER MULTI-RANGE TESTER. 20,000 Ohms/Volt DC; 1,000 Ohms/Volt AC; Roto-Ranger eliminates errors by providing a separate meter scale for each range of selector switch, automatically brought into view as selector switch is turned! 25 Ranges including AC and DC volts from 2.5 to 5,000 volts; M.A. DC, 10 to 500; Micro-amps, 0-100; Amps. 0-10; Five Output Ranges, Ohms, 0, 2,000, 200,000 and 0-20 Megohms. In Portable case with removable cover. No. 50A252. Simpson Model 221 Roto-Ranger V.O.M.A. NET. **\$68.45**

"PRECISION" POPULAR VOLT-OHM-MILLIAMMETERS



31-Range AC-DC Test Set. Self Contained to 6,000-Volt! In molded bakelite case only 3¾x6¼x2½". Series 40 Wide Range Circuit Tester has every advanced design feature of larger "Precision" instruments—1% shunts and multipliers, large numerals, easy reading meter, heavy duty insulated pin jacks—rotary Range Selection! Self Contained Ranges: 0, 3, 12, 60, 300, 1,200, 6,000 Volts DC-AC Output! 0, 0.6, 6, 60, 600 DC M.A.; Resistance Ranges of 0, 5,000, 500,000 Ohms and 0-5 Megohms; Six Decibel Ranges from minus 22 to Plus 70 db. ALL RANGES, including 6,000 volts and 5 Megohms are self-contained and ready to operate! No external batteries required! Full size 3" METER has 400 microampere movement, is accurate to 2%! Anodized, etched aluminum panel, resistant to moisture and weather. Recessed 6,000-volt safety jack! 2-Pin jacks for all ranges! Complete with batteries and Test Leads. No. 35B91. "Precision" Series 40 V.O. MA. NET. **\$24.25**

"PRECISION" SERIES 847 54-RANGE MULTI-MASTER



5,000 AND 1,000 OHMS-PER-VOLT DC. Ruggedly built for continuous usage and handling. "Precision" Automatic Push-Button Range and Function selection system for speedy efficiency! NOTE THESE RANGES, 8 Voltage Ranges of: 0-3-6-12-60-300-600-1,200-6,000 covering DC Volts at 5,000 Ohms-Per-Volt; DC Volts at 1,000 Ohms-Per-Volt AND AC Volts at 1,000 Ohms-Per-Volt! AC Output ranges same as for AC volts. SELF-CONTAINED Resistance Ranges: 0-2,000-20,000-200,000 OHMS, and 0-2-20 MEG-OHMS! 200 Megohm range for insulation test by use of external power. 8 DC Current Ranges: 0-3-1.2-3-30-300-600 M.A. AND 0-1.2-12 Amperes! 4½" meter. Bakelite case 7½x8½x3". Complete with test leads, batteries. Stock No. 35A24. Series 847L "Multi-Master", Your Cost. **\$46.69**



RCP GIANT METER MULTI-TESTER

RCP MODEL 462 combines 6½" Meter, Germanium Crystal meter rectifier and dual meter sensitivity of 20,000 o.p.v. DC and 5,000 o.p.v. AC to produce the ideal, low cost instrument for servicing FM and TV receivers! Individual unit (flashlight) cells are used for all "Ohms" ranges, including 20-Meg. range—cheap to replace and quickly slip into clips provided! Model 462 has these Ranges: 0-2.5-10-50-250-1,000-5,000 DC Volts at 20,000 o.p.v.; 0-2.5-10-50-250-1,000-5,000 AC Volts at 5,000 o.p.v. 0-10-100-500 DC M.A.; 0-100 Micro-amps; 0-200-200,000 Ohms; 0-20 Megohms! Minus 10 to Plus 55 db. 1% accuracy of shunts and multipliers, plus 50-microampere meter sensitivity makes Model 462 ideal for grid current measurements, a.f. control diode balancing circuits, T.V. circuits; "leading" of delicate circuits is negligible—particularly on AC! Extra long meter scale, clearly marked, provides excellent legibility of all scales. In open face hardwood case size, 4¼x8½x10½". Weight, 5 lbs. Stock No. 35B64. RCP Model 462 Sensitive Multitester. NET. **\$40.67**



POCKET SIGNAL GENERATOR

"RCP" Model 710. A REAL Signal Generator—accurate in calibration, with sufficient output, and small enough to slip into your pocket—AT LOW COST! FEATURES: Broadcast band alignment by fixed frequencies of 1500 kc and 550 kc; Intermediate Frequency alignment by fixed frequencies of 456 kc and 465 kc. Provision is made for recalibrating by means of trimmer condensers. Operates on AC or DC with chance of shock, short circuit, or burn-out eliminated by isolated power supply. Makes possible a complete alignment job on a broadcast receiver without "toting" the set to your shop! Ideal for the small shop or beginner who does not own a large Signal Generator; or for "on-the-job" receiver alignment for ANY SERVICEMAN—large or small operator! In attractive metal case, 3x6x2¾", complete with tubes, shielded output cable, line cord and plug, ready to operate. Weight, 2 lbs. No. 16A341. "RCP" Model 710 Pocket Signal Generator. For "AM" BROADCAST RECEIVERS ONLY. NET EACH. **\$17.59**

"RCP" Pocket Signal Generator for "FM" Receivers

Identical in appearance and size to Model 710 illustrated above. EXCEPT provides Frequency selections of 10.7, 88, 98 and 108 MC and does NOT have standard broadcast band frequencies. Regardless of whether you service many or few "FM" receivers you will find this handy, low cost Pocket "FM" Signal Generator a "Must" money-maker for your shop! No. 16A340. "RCP" Model 720 Pocket Signal Generator. For "FM" TUNER AND RECEIVER ALIGNMENT. NET EACH. **\$19.55**

DEPENDABLE "SUPREME" TEST INSTRUMENTS

Model 632 MULTIMETER, 38 RANGES, 7-INCH METER

A beautiful Serviceman's Multimeter—no squinting to read the huge 7-INCH METER, with easily legible readings for 38 Ranges of: D.C. VOLTS, 0-5-25-100-250-500-1,000-5,000, volts at 1,000 ohms per volt. A.C. VOLTS, 0-5-25-100-250-500-1,000-5,000 A.C. volts at 1,000 opv. Output Volts at same ranges as for A.C. volts—proper ranges for receiver alignment! Resistance Ranges of: 0-2,000-20,000-200,000 Ohms and 0-2-20 Meg. D.C. Current Ranges of: 0-5-25-100-250-500-1,000 D.C. M.A. PLUS, 0-10-25 D.C. Amperes! Capacitance ranges of 0.1-4; and 10-400 MFD for capacity readings of electrolytic and large paper condensers! In heavy steel case, with removable cover, size 11¾x8½x4¾"; wt. 16 lbs. Stock No. 32B47. Model 632 7" Multimeter. NET. **\$45.57**



Model 584 Super-Sensitive "POCKET" MULTIMETER

★ 50 MICRO-AMPERE MOVEMENT, 4-INCH METER!
★ 20,000 Ohms-Per-Volt on D.C. Volts Ranges of: 0-5-25-100-500-1,000-5,000 D.C. Volts.
★ 1,000 Ohms-Per-Volt on D.C. Volts Ranges of: 0-5-25-100-500-1,000-5,000 D.C. Volts.
★ 1,000 Ohms-Per-Volt on A.C. Volts Ranges of: 0-5-25-100-500-1,000-5,000 A.C. Volts.
★ AC Output Ranges: Same as for AC Volts.
★ Resistance Ranges of: 0-2,000-20,000 Ohms AND 0-20 Megohms, self contained batteries!
★ D.C. Current Ranges: 0-10-100-500 M.A. and 0-100 Microamperes. Steel case with steel protective cover over meter, size 5x7½x3". Wt. 4 lbs. With batteries and instructions. Net Stock No. 32A33. "Supreme" Model 584. Each **\$33.76**

Model 542-B AC-DC MULTIMETER

24 Ranges-5,000 Ohms-Per-Volt DC BIG 3" SQUARE METER with knife-edge pointer and ranges of: A.C. Volts/Output Volts —0/6/30/150/600 (first scale division 0.1 volt); D.C. Volts—0/6/150/300/1500 (first scale division 0.1 volt); D.C. Mils. 0/0.8/6/30/150 (first scale division 5 Microamps.); OHMS: 0/2,000/20,000/200,000/2 Megs. with 1-ohm first scale division and center scale reading of 25 ohms. 4 DECIBEL RANGES from —6 to +50 D.B. Self-contained batteries, all ranges. Bakelite case 3x5¾x2". Weight, 23 ozs. Stock No. 35A17. "Supreme" Model 542-B. YOUR COST. **\$24.70**





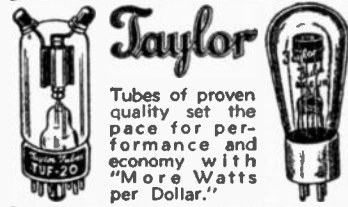
The New Instant Heating Tubes are Tops for Economical Mobile Operation.

20A153.	2E30, Inst. Heating 10W. Beam Pentode.	Net Each.....	\$2.45
20A155.	5516, Inst. Heating 15W. Beam Pentode.	Net Each.....	\$6.95
20A154.	5514, Zero Bias 65W. Hi Mu. Triode.	Net Each.....	\$4.95
20A152.	2E25, Inst. Heating 15W. Beam Tetrode.	Net Each.....	\$6.50
20A156.	HY31Z, Inst. Heating 30W. Double Triode.	Net Each.....	\$6.50
20A157.	HY75A, Inst. Heating 15W. V.H.F. Triode.	Net Each.....	\$4.70
20A151.	OB2, Miniature VRI05 Regulator Tube.	Net Each.....	\$2.30



Tubes of foremost design for dependable, highly efficient service.

Stock No.	Type	Price
20A189	3C24/24G	\$ 8.00
20A670	25T	8.00
20A671	35T	9.50
20A190	35TG	10.00
20A158	4-65A	14.50
32A251	100TH	16.50
33A46	100TL	16.50
33A49	250TH	30.00
32A248	250TL	30.00
33A47	4-125A	27.50
33A48	4-250A	37.50
32A249	KY-21A	12.00



Tubes of proven quality set the pace for performance and economy with "More Watts per Dollar."

20A761	T-20	\$ 2.75
20A762	TZ-20	2.75
20A672	T-21	2.50
20A763	T-40	3.95
20A764	TZ-40	3.95
20A765	T-55	6.50
20A766	203-A	12.00
20B183	211	12.00
20B182	805	10.00
20B181	810	12.50
20A767	866JR	1.25
20A768	866A	1.75



TUBE BASE DIAGRAM GUIDE R.C.A. TRIPLE INDEX

Actually three separate identical books placed end to end on a spiral binder under the same cover. You can select three different base diagrams for instant viewing. No hunting back and forth. Saves time and eliminates confusion. Over 425 types listed. A most valuable service help. No. 16A357. Net Each.....**75c**

R.C.A. RECEIVING TUBE MANUAL Completely revised with up to the minute data on all receiving types including new miniatures. Also contains tube application data, Resistance coupled amplifier chart, circuit section and tube outline diagrams. 256 pages packed with tube information vital to all radio men. No. 16A66. RC15. Each.....**35c**
No. 16A555 RCA Form MNT-30A Quick reference for miniature tubes. With any order. Each.....**5c**
No. 16A556 RCA Form TT-3 Air Cooled Transmitting Tube manual. Your Cost Each.....**35c**



AMATEUR, BROADCAST, INDUSTRIAL AND SPECIAL PURPOSE TUBES

Stock No.	Type	Price
20A733	1C21	\$2.45
50A29	2C22	1.60
20A736	2D21	2.00
20A623	2E24	5.10
20A624	2E26	3.85
20A737	2V3G	3.15
20A738	2X2A	2.05
20A709	3A4	1.20
20A139	3A5	1.95
20A625	3E22	8.30
50A39	4-125A/4D21	27.50
50A40	4E27/8001	24.50
20A711	5R4GY	1.50
50A41	6AG7Y	1.75
20A713	6AK5	1.80
21A36	6AS7G	4.90
20A631	6F4	6.40
20A632	6J4	8.05
50A44	6S7JY	.85
21A37	10Y	1.95
20A720	12A6	1.25
20A719	12K8-Y	1.30
20A633	12L8-GT	2.25
21A48	26A6	2.20
21A47	26C6	1.85
21A46	26D6	2.00
32A238	203A	13.75
32A239	211	12.00
32A240	579B	12.00
21A38	627	15.00
50A72	800	11.50
50A73	801A	3.75
20A626	802	4.75
32A242	803	24.25
21A39	804	17.50
20A746	805	13.50
20A747	807	2.50
20A627	809	4.00
20A748	810	14.30
20A749	811	3.30
20A750	812A	4.05
20A751	813	16.00
32A243	814	14.25
20A752	815	6.90
20A674	816	1.30
20A754	828	13.75
20A755	829B	16.25
20A756	830B	11.50
20A628	832A	11.75
32A244	833A	49.50
21A40	837	4.75
32A246	845	13.75
20A757	866A/866	1.95
20A758	872A/872	8.20
20A741	884	1.85
20A742	885	2.00
20A723	954	5.65
20A724	955	3.60
20A725	956	6.30
20A658	957	3.75
20A659	958A	6.25
20A630	991	.75
21A41	1603	7.40
50A114	1612	3.00
21A42	1614	2.05
50A118	1619	2.50
21B50	1620	6.60
21B51	1621	2.15
21B52	1622	2.30
50A122	1623	4.05
20A759	1624	4.00
20A760	1625	2.65
50A189	1626	1.85
50A190	1629	1.40
50A191	1631	2.50

Stock No.	Type	Price
50A193	1633	\$1.95
50A194	1635	2.15
50A123	1644	3.10
50A124	1851	2.90
20A743	2050	1.85
20A744	2051	1.90
32A247	8000	14.50
21B53	8003	13.00
20A629	8005	7.40
50A138	8008	8.20
20A726	9001	3.10
20A727	9002	2.50
	9003	3.10
	9004	2.30
20A730	9005	3.45
20A731	9006	1.60

CATHODE RAY TUBES TELEVISION KINESCOPES

20A775	2AP1A	\$10.55
20A776	3AP1A	14.25
20A777	5BP1A	22.50
50A196	5BP4	22.50
50A168	5CP7A	27.25
50A171	5TP4	59.40
50A173	5UP1	17.75
50A208	7CP4	35.25
50A176	7DP4	23.80
36B63	7JP4	22.08
50A178	9AP4	57.60
36B79	10BP4	34.00
50A180	12AP4	66.00
32A237	902A	12.50
20A640	913	15.50

VOLTAGE REGULATORS

20A700	0A2	\$2.20
20A701	0A3/VR75	1.35
20A732	0A4G	1.25
20A151	0B2	2.30
20B712	0B3/VR90	1.20
20A702	0C3/VR105	1.35
20A703	0D3/VR150	1.30
20A740	874	2.75
20A630	991	.75

PHOTO TUBES

20A734	1P29	\$2.95
50A148	1P40	1.85
50A149	1P41	2.80
50A150	1P42	5.70
20A704	868	2.50
50A151	917	1.95
20A636	918	3.50
21B54	919	2.85
20A705	921	3.50
20A637	922	1.95
20A706	923	2.05
50A155	925	2.15
21B55	926	2.90
20A707	927	2.50
20A708	929	1.75
20A638	930	1.65
20A639	931A	9.75
50A158	934	3.40

RCA SPECIAL RED TUBES

Long life counter-parts of regular receiving tubes as listed below. Features 10,000 hour minimum service and extreme uniformity and rigid construction.

21A33	5691-6SL7GT	\$7.75
21A34	5692-6SN7GT	7.75
21A35	5693-6SJ7	6.40

"R.C.A." SALES PROMOTIONAL AIDS

NEW FLUORESCENT SIGN

RADIO SERVICE
Brilliantly lighted, white letters on red background. Stands out day or night. Size 26x3 1/2". With 20-watt lamp and chain. 110-volt 60-cycle A.C. Regular \$7.50 Value.
No. 32B224 Your Cost with \$5.00 Order ONLY... **\$3.75**

BOOKS and BULLETINS

No. 16A557. RCA Form 2F215 Receiving Tube price Schedule.
No. 16A558. RCA Form 2F19 Non-Receiving Tube price schedule.
No. 16A559. RCA Form SRB-1002. Special Red Tube bulletin.
Any above free with order.
Latest RCA Vest pocket size tube data book, radio dictionary, atlas.
No. 16A118. Net Each.....**45c**

OUTDOOR METAL SIGN

Size 12 x 18 with flange for easy mounting. Durable red, white and black.
No. 32B223
With any tube order. Your Cost.....**\$1.00**

HELPFUL RCA TUBE DATA BOOKS

No. 16A323 RCA Form 1275-D Receiving Tubes for TV, FM and Standard broadcast. With any order. Each.....**10c**
No. 16A324 RCA Form PG101 Power and Gas Tubes for radio and industry. With any order. Each.....**10c**
No. 16A325 RCA Form CRPS-102. Photo tubes, Cathode Ray and special tubes. With any order. Each.....**10c**



SUPERIOR NEW BANTAL TUBES

Bantal tubes feature rugged eight pillar type support for great structural strength and stability. Fully shielded internally, no outside shielding necessary. Directly interchangeable with metal as well as GT types. Has short leads, low grid to plate capacitance and glass seal to assure permanent vacuum. A superior tube at no increase in price.

Stock No.	Type	Net Each
21B63	6SA7GT	92c
21B56	6S7GT	84c
21B57	6K7GT	92c
21B58	6S07GT	84c
21B59	12SA7GT	92c
21B60	12S7GT	84c
21B61	12SK7GT	92c
21B62	12SQ7GT	84c

SPECIAL PURPOSE SUB MINIATURE TYPES

For pocket size radio receivers and transmitters. Features small flat construction with flexible leads to solder direct into circuit, or leads can be cut to .20 inch length to fit common miniature sockets. Bulb size 1 9/16 in. long, 0.3 in. thick, 0.4 in. wide.

20A140	2E31/32 RF Pent.	\$1.56
20A141	2E35/36 Output Pent.	1.88
20A142	2E41/42 Diode Pent.	1.56
20A143	2G21/22 Triode Hept.	1.56
20B166	CK551AXA Diode Pent.	1.50
20B167	CK553AXA RF Pent.	3.15
20B168	CK5676 (CK556AX) OSC	3.90
20B169	CK5677 (CK568AX) OSC	3.90
20B170	CK5678 (CK569AX) Pent	2.60

HEARING AID TUBES

Very small size, flat shape and low battery drain are features of these tubes used in thousands of hearing aid units and similar midget size electronic equipment.
*Voltage amplifier. All other pentodes are output type. 1 1/2 in. long, .385 in. wide and .285 in. thick with 1 1/2 inch flexible leads.

20A144	CK502AX Pentode	\$1.88
20A145	CK503AX Pentode	1.88
*20A146	CK505AX Pentode	1.88
20A147	CK506AX Pentode	1.88
20A148	CK507AX Pentode	1.88
20A149	CK510AX Tetrode	3.15
*20B171	CK512AX Pentode	1.88
20B172	CK518AX Pentode	1.88
20B173	CK521AX Pentode	3.15
20B174	CK522AX Pentode	1.88
20B175	CK523AX Pentode	1.88
20B176	CK524AX Pentode	3.15
20B177	CK525AX Pentode	2.38
20B178	CK526AX Pentode	3.15
20B179	CK527AX Pentode	3.15
20B180	CK528AX Pentode	1.88

RK61. MINIATURE RADIO CONTROL TUBE

Only 1 13/16" long x .55" diameter. Has flexible tinned leads. Its light weight, small size and low battery drain has won this tube popular acclaim in the model aircraft control field.

Stock No. 20A188. Net Ea. **\$3.50**

RAYTHEON RK-4D32

A 100-watt beam tetrode for 600 volt plate supply that requires only 1.25 watt grid drive. Full efficiency to 60 MC. No neutralization needed.
Stock No. 20A673. Net Each **\$9.75**
CK-1013/5517 RECTIFIER TUBE. Miniature, half wave, cold Cathode type. For photoflash power supplies.
Stock No. 20A138 YOUR COST... **\$2.25**

HEAT RADIATING CONNECTORS

Designed to dissipate heat generated at the grid and plate terminals of transmitting tubes.

Stk. No.	Tube	Lead Size	Net Ea.
12A415	HK-24	.052"	\$.35
12A416	35-T, HK-5, etc.	.073"	.35
12A417	100-T, 807, etc.	.375"	.59
12A418	866, T-125, etc.	.578"	.59
12A419	450-TH, etc.	.110"	.59



Stancor Chokes and TRANSFORMERS



Smoothing Filter Chokes for D.C. Power Supplies

Stock No.	Stancor No.	Rating HYS at MA DC	DC Ohms	Volts Insulation	Mtg. Type	Dimensions H. W. D.			Your Cost
13A51	C-1515	20 15	900	1500	A	1 1/2	2 1/2	1 1/2	\$1.06
13A60	C-1080	3.5 50	200	1500	A	1 1/2	2 1/2	1 1/2	1.00
13A41	C-1706	4.5 50	300	1500	A	1 1/2	2 1/2	1 1/2	.94
13A42	C-1707	7 50	550	1500	A	1 1/2	2 1/2	1 1/2	.94
13A61	C-1279	8.5 50	400	1500	A	1 1/2	2 1/2	1 1/2	1.03
13A62	C-1215	9 50	500	1500	A	1 1/2	2 1/2	1 1/2	1.03
13A43	C-1003	16 50	580	1500	A	2	3 1/2	1 1/2	1.26
13A44	C-1708	13 65	500	1500	A	2	3 1/2	1 1/2	1.38
13A45	C-1002	15 75	400	1500	A	2 1/2	3 1/2	2 1/2	1.73
13A46	C-1709	8 85	250	1500	A	2	3 1/2	2 1/2	1.62
13A50	C-2305	5 100	300	1500	TD	2 1/2	2 1/2	2 1/2	2.36
13A48	C-1001	10.5 110	225	3000	A	2 1/2	4 1/2	2 1/2	2.18
13A52	C-2303	2.5 130	100	2000	A	2	3 1/2	1 1/2	1.47
13A49	C-1421	7 140	165	3000	C	3 1/2	2 1/2	2 1/2	3.12
13A47	C-1710	7 150	200	1500	A	2 1/2	4 1/2	2 1/2	2.06
13A53	C-1410	4 175	100	3000	C	3 1/2	2 1/2	2 1/2	3.00
13A54	C-1411	4.5 200	80	3000	C	3 1/2	3	3 1/2	3.70
13A55	C-1412	4 250	60	3000	C	3 1/2	3	3 1/2	4.53
13A56	C-2308	8 300	80	3000	C	4 1/2	4	3 1/2	6.82
13B134	C-1413	8 300	80	5000	D	4 1/2	4	4 1/2	6.76
13B136	C-1415	6 500	75	7500	FS	7 1/2	6 1/2	7	19.29

Swinging Chokes for Input Sect. of D.C. Power Supplies

Stock No.	Stancor No.	Inductance Range MA	DC Ohms	Volts Insul.	Mtg. Fig.	Dimensions H. W. D.			Your Cost
13B136	C-1401	12-2 20-200	80	3000	C	3 1/2	3	3 1/2	\$3.82
13B137	C-1403	20-4 30-300	80	5000	D	4 1/2	4	4 1/2	6.61
13B138	C-1405	16-4 50-500	75	7500	FS	7 1/2	6 1/2	7	19.29

*Indicates 115-230 V., 60 cy. Primary. Others 115 V. only. D.C. outputs are after 2-section choke input filter using 2MFD condensers.

PLATE TRANSFORMERS

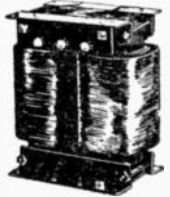
Stock No.	Stancor No.	DC Output Volts	MA	Mtg. Fig.	Dimensions H. W. D.			Your Cost
13A304	P-8045	1000/750	250	FS	7 1/2	6 1/2	8	\$26.58
13A305	P-8027	1250/1000	500	FS	7 1/2	7 1/2	9	34.57
13A306	P-8028	1500/1250	300	FS	7 1/2	7 1/2	8 1/2	32.93
31B40	P-8031*	1750/1500	500	FS	11 1/2	7 1/2	8 1/2	62.04
31B41	P-8032	2000/1750	300	FS	11 1/2	7 1/2	9 1/2	41.76
31B39	P-8035*	2500/2000	500	FS	11 1/2	7 1/2	9 1/2	65.86

Filament Transformers

All Primaries for 117 V., 60 cy. operation. *Pri. tapped for 117/107 V.

Stock No.	Stancor No.	Secondary Volts	Amps.	Insulation Test V	Mtg. Fig.	Dimensions H. W. D.			Your Cost
13B139	P-6133	2.5 CT	5	7500	S	2 1/2	3 1/2	2 1/2	\$2.65
13B140	P-3024*	2.5 CT	10	2500	B	3 1/2	2 1/2	2 1/2	3.67
13B141	P-3060	2.5 CT	10	10000	B	3 1/2	2 1/2	2 1/2	3.35
13B143	P-4088	5 CT	3	2500	B	3 1/2	2 1/2	2 1/2	2.82
13B144	P-6135	5 CT	10	2500	N	3 1/2	2 1/2	2 1/2	3.53
13B145	P-5014	6.3 CT	3	2500	B	3 1/2	2 1/2	2 1/2	2.65
13B146	P-3064	6.3 CT	6	2500	B	3 1/2	2 1/2	2 1/2	3.23
13B147	P-6308*	6.3 CT	10	2500	N	3 1/2	2 1/2	2 1/2	3.76
13B148	P-6138	7.5 CT	8	2500	N	3 1/2	3 1/2	2 1/2	4.47
13B149	P-5016	10 CT	4	2500	B	3 1/2	2 1/2	2 1/2	3.53
13B150	P-6139	10 CT	8	2500	N	3 1/2	3 1/2	2 1/2	4.38

POWERFUL, COMPACT — MADE TO TAKE IT! ELECTRO PLATE SUPPLY TRANSFORMERS



Distinctive design and construction allows unbelievably small size and weight with high overload capacity. Coils are sealed against dirt and moisture and protected at ends by tough insulating boards. All leads are brought out to terminals. Secondary is split, two-section type, mica insulated. Primary may be operated on either 115-volt or 230-volt 60 cycles. Core is made of high grade transformer alloy. Equipped with grounded electrostatic shield between windings. Types E5105 and E5017 have tapped secondary.

Stock No.	Type	DC Output Volts	DC MA ICAS	CCS	Size W. D. H.	Wt.	Net Each
37A1	E-5706	2500	500	—350	7 1/2 5 1/4 8 1/2	34	\$32.34
37A2	E-5707	3000	650	—430	7 1/2 5 1/4 10	40	47.04
37A3	E-5105	1500 1750 2000	500	—350	7 1/4 4 3/4 7 3/4	30	29.40
37A4	E-5017	750-1000 1250-1500 2000	650	—430	7 1/4 5 1/4 9 1/4	38	44.10

220 TO 110 VOLT STEP-DOWN TRANSFORMERS

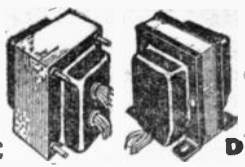


For operation of 110 V., 60 Cy. A.C. devices in areas where 220 V., 60 Cy. A.C. is the standard supply voltage. All types have 110 V., A.C. plug-in receptacle mounted on side of transformer. Windings are not isolated, being of auto-former type. *Pri. tapped for 200, 220, 240-volt.

Stock No.	Wattage Rating	H.	W.	D.	Your Cost
13A295	80	3 5/8	3	3 1/4	\$4.51
13A82	150	4 1/2	3 5/8	3 5/8	5.90
13B151	300*	4 3/4	4	4 1/8	7.50
13A296	500*	4 3/4	4	5 1/8	11.27
37A36	1000*	5 1/2	4 3/8	4 1/2	21.82



SELECTED POWER TRANSFORMERS



Highest quality materials and workmanship insure dependable performance. Check these values for receiver replacement and construction, public address amplifiers and amateur use. All types are for 115-volt 60-cycle AC operation.

RECEIVER REPLACEMENT TYPE (Mounting Fig. C)

Stock No.	Merit No.	Plate V. MA	Fil. No. 1 V. A.	Fil. No. 2 V. A.	Mtg. Area	Your Cost
37A10	P-2949	480CT 40	5 2	6.3CT 2	3 x 2 1/2"	\$2.94
37A11	P-2950	650CT 40	5 2	6.3CT 2	3 x 2 1/2"	3.09
37A12	P-2951	700CT 70	5 3	6.3CT 2.5	3 x 3 1/2"	3.97
37A13	P-2952	700CT 90	5 3	6.3CT 3.5	3 3/8 x 3 3/4"	4.26
37A14	P-2953	700CT 120	5 3	6.3CT 4.7	3 3/4 x 3 1/2"	4.70

Type P-3156. For amplifiers or large sets. Upright mtg. Fig. D. H.V. sec. 870 V. CT 250 MA, with 80 V. bias tap; Fil. windings 5 V. 3 A., 2.5 V. 10 A., 6.3 V. CT 3 A. and 6.3 or 5 V. 3 A. Dimensions 3 13/16 x 4 7/8 x 4 5/8" high. Stock No. 37A15. YOUR COST, EACH.....\$8.53

AMATEUR PLATE TRANSFORMERS (Mounting Fig. D)

Stock No.	Merit No.	Sec. RMS Volts	DC MA	Dimensions	Your Cost
37A16	P-3157†	{ 660-660 } { 550-550 }	250	3 1/2 x 4 3/8 x 4 5/8" High	\$6.76
37A17	P-3158*	{ 1080-1080 } { 500-500 }	{ 125 } { 150 }	3 1/2 x 5 x 4 5/8" High	8.23
37A18	P-3159	{ 900-900 } { 800-800 }	225	3 1/2 x 5 1/8 x 4 5/8" High	7.94

†P-3157 has 40-V. bias tap. *P-3158 for simultaneous operating both ratings.

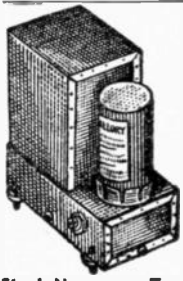


Variable autoformer type transformers for 50/60-cycle operation. Control on panel calibrated in volts. Output independent of load. Provides smooth control. Ruggedly constructed and well ventilated.

Stock No.	Input Volts	Output Volts	Max. Va.	Price Each
31A42	115	0-140	860	\$23.09
31A43	115	0-140	1500	44.59
31A44	230	0-140	860	27.93

ISOLATION TYPE

Similar to above but with separate primary and secondary. Fuse protected. Recommended for service shops to check intermittent parts by increasing voltage on sets. Rated at 500 VA. No. 31A45. 115 Volts Input. Each. \$28.91 No. 31A46. 230 Volts Input. Each. 30.87



Mallory "Vibrapack" Portable Power

Dependable and inexpensive plate voltage for portable and mobile equipment. The ideal plate voltage where electric power is not available. Delivers up to 300 volts at 100 M.A. of easily filtered rectified D.C. Output variable in 4 steps of 25 volts each, controlled by switch connected to various transformer taps. Maximum efficiency is obtained for all load conditions. Small in size—easily mounted.

Models 551, 552 and G556 are self rectifying. Tube rectifiers supplied with all others. *High Output Type, VP555 supplies 200 ma., VP557, 150 ma. All others 100 ma.

Stock No.	Type	Input Volts	Nominal Output Voltage	Your Cost
33A29	VP551	6.3	125-150-175-200	\$12.94
33A30	VP552	6.3	225-250-275-300	18.44
33A31	VP553	6.3	125-150-175-200	14.41
33A32	VP554	6.3	225-250-275-300	16.91
33A33	VP555*	6.3	300	30.58
33A34	VP557*	6.3	400	30.58
33A35	VPG556	12.6	225-250-275-300	16.91
33A36	VPF558	32	225-250-275-300	18.38
33A37	VF223		Single Unit Filter	4.70

Mallory Filtered Vibrapack

Completely Filtered Type VP540, complete "B" power unit for any electronic device operating on 250 V. D.C. with 60 ma. drain; powered from 6 V. storage battery. Ideal for auto, marine and airplane broadcast or short wave receivers and for mobile police receivers. Self rectifying. Size 7 1/2 x 4 5/8" 33A38. Your Cost, Each.....\$17.64

New! Stancor High Fidelity Audio Transformers

Freq. range 20/20,000 cps. within 1.0 db. Balanced hum-bucking construction and high permeability magnetic shielding minimize hum pickup. Vacuum impregnated. Cases designed for top or bottom mounting. HF-1 case size, 3 1/4 x 2 9/16 x 3 1/16". HF-2 case size, 4 1/8 x 3 1/16 x 4 3/16".

Type	Primary	Secondary	Price
Type HF-20 Low Impedance to Grid.	50, 125, 200, 250, 333, 500/600 ohms.	Secondary 60,000 ohms in 2 sections. Maximum level 15 db. Case HF-1.	\$14.40
No. 37A52. NET EACH.....			
Type HF-29 Single Plate to P.P. Grids.	2A3, 6A3, 6B4C, 6L6, etc. Pri. 15,000 ohms. Sec. 95,000 ohms overall. Max. level 17 db. Case HF-1.		\$13.82
No. 37A53. NET EACH.....			
Type HF-65 Output.	P.P. 2A3, 6A3, 6B4C, 6L6, etc. Pri. 3000 or 5000 ohms to line or voice coil. Sec. 1.2, 2.5, 5, 7.5, 10, 15, 20, 30, 50, 125, 200, 250, 333 or 500 ohms. Case HF-2.		\$16.17
No. 37A54. NET EACH.....			



Transformers for Specialized Applications

THORDARSON POWER TRANSFORMERS

Supplied with adjustable mtg. brackets for flush, vertical or horizontal placement Mtg. Fig. AGF. All Primaries for 117 V. 50/60 cy. All Fil. 2 are C.T. *Has additional 2.5 V. C.T. 3.5 A. Fil. †Has additional 2.5 V. C.T. 5 A. Fil.

Stock No.	Thord. No.	H. V. Sec.		V. A.	Fil. 1	A.	Fil. 2	V.	A.	Mtg. Area	Net Price
		V.A.C.	MA.D.C.								
13A275	T-22R00	500 C.T.	40	5	2	6.3	2	2 1/2	3	2 1/2 x 3	\$4.06
13A276	T-22R01	550 C.T.	50	5	2	6.3	2.5	2 1/2	3	2 1/2 x 3	4.12
13A277	T-22R02	600 C.T.	70	5	2	6.3	3	2 1/2	3	2 1/2 x 3	4.91
13A278	T-22R04	600 C.T.	90	5	2	6.3	3.5	2 1/2	3 1/2	2 1/2 x 3 1/2	5.03
13A279	T-22R05	600 C.T.	120	5	3	6.3	5	3 1/2	3 1/2	3 1/2 x 3 1/2	5.69
13A280	T-22R08	650 C.T.	150	5	3	6.3	5	3 1/2	3 1/2	3 1/2 x 3 1/2	6.44
13A281	T-22R07	700 C.T.	200	5	3	6.3	6	3 1/2	4 1/2	3 1/2 x 4 1/2	7.29
13A282	T-22R08	500 C.T.	40	5	2	2.5	4	2 1/2	3	2 1/2 x 3	4.06
13A283	T-22R09	550 C.T.	50	5	2	2.5	7.5	2 1/2	3	2 1/2 x 3	4.41
13A284	T-22R10*	650 C.T.	85	5	2	2.5	9	3 1/2	3 1/2	3 1/2 x 3 1/2	6.76
13A285	T-22R11†	650 C.T.	120	5	3	2.5	12.5	3 1/2	3 1/2	3 1/2 x 3 1/2	6.44

6-VOLT VIBRATOR POWER TRANSFORMERS

*Also Has 117 V. A.C. Primary and 6.3 V. C.T. 4.75 A. Secondary

Stock No.	Thord. No.	Secondary		Mtg. Fig.	Dimensions			Net Each
		D.C. Volts	M.A.		W.	D.	H.	
13B256	T-22R20	250	60	CAV	2 1/2	2 1/2	3 1/2	\$3.73
13B267	T-22R22	325	75	CAV	2 1/2	3	3 1/2	4.41
13B258	T-22R24*	325	135	GGV	3 1/2	4 1/2	4 1/2	8.47

TELEVISION POWER TRANSFORMER

Type T-22R40 for high voltage, low current cathode ray tube and test equipment. All secondaries insulated at 7,500 V.R.M.S. test. Primary—117 V., A.C., 60 cy. H.V. Secondary, 1,800 V., A.C. at 2 MA. Fil. No. 1, 2.5 V. at 1.8 A., Fil. No. 2, 6.3 V. at 6 A. tapped at 2.5 V. at 2.1 A. Mtg. Fig. GGV., Mtg. area 3 5/32x3 3/4". Supplied with instructions.

Stock No. 13A293. Net Each **\$8.82**

EXPANDER—COMPRESSOR FEEDBACK CONTROL

Type T20A26, Fig. RTV. The control element of a newly developed system of expansion-compression much superior to the D.C. grid bias control method. Can be incorporated in high fidelity amplifiers for AM-FM, Phono or amateur use. Technical details supplied with each unit.

Stock No. 13B235. Net Each **\$5.59**

DUAL TONE CONTROL COMPONENTS

Type T20C74 Reactor Fig. RAV. For use with R1068 Dual Tone Control below. Coil and core of hum-backing type. Res. 220 ohms.

Size 1 9/16" diameter, 2" high. Stock No. 13B233. Net Each **\$2.70**

Type R1068 Dual Tone Control. For use with T20C74 Reactor in tone compensating circuit to boost or attenuate bass or treble frequencies independently of one another. System may be installed between two resistance coupled stages. Instructions furnished.

Stock No. 13B234. Net Each **\$2.44**

NEW THORDARSON OUTPUT TRANSFORMERS

for low cost replacement. Type BAH

Stock No.	Thord No.	Impedance		Single Tubes	Prim. Ma.	Wts.	Mtg. Area	Your Cost
		Primary	Sec.					
20A594	TS-24550	2000	3-4	50L6-25B5	55	5	2 3/8 x 1 1/4	\$0.87
20A595	TS-24551	5000	3-4	35L6-154	40	5	2 3/8 x 1 1/4	.91
20A596	TS-24552	7000	3-4	30S-6V6	30	5	2 3/8 x 1 1/4	.94
20A597	TS-24554	15000	3-4	6F6-1T5	10	5	2 3/8 x 1 1/4	.97

UNIVERSAL TYPE

20A598	TS-24560	4M to 14MCT	1-29	Single or P.P.	35	4	2 3/8 x 1 1/2	1.41
20A599	TS-24561	4M to 14MCT	1-29	Single or P.P.	40	8	2 3/8 x 1 1/2	1.59

THORDARSON PHOTO-FLASH TRANSFORMERS

Type T-22R42 Power Transformer—Primary 117 V., 60 cy., high voltage secondary 2,250 V. at 1.5 MA., rectifier filament secondary 2.5 V. at 1.75 A. Mounting type BAV, size 4x2 3/8x2 3/8" high. Weight, 2 lbs.

Stock No. 13A297. Your Cost **\$3.88**

Type T-22R43 Power Transformer. Primary 117 V., 60 cy. or 4 V. vibrator, secondary 1,100 V. at 1.5 MA. mtg. type BAV, size 3 1/8x2 3/8x2 1/16" H. Weight, 1 1/2 lbs.

Stock No. 13A298. Your Cost **\$5.64**

Type T-22R44 Ignition Transformer. Primary 200 V. condenser discharge, secondary 15,000 V. Mtg. type BAH, size 2 1/4x1 1/8x1 1/2" H. Weight 1/4 lb.

Stock No. 13A299. Your Cost **\$3.18**

Thordarson Photo-Flash Power Supply Bulletin. Complete descriptive details for construction of a practical power supply for photo-flash applications.

Stock No. 16A316. Your Cost **15c**



SPRAGUE PHOTOFLASH CAPACITORS

Energy storage type. "Vitamin Q" oil filled. Designed especially for photo flash service. Ratings are for maximum of 1800 flashes per hour. For continuous voltage application, decrease voltage rating by 20%. Can also be used in flash welding circuits where a great amount of current is required momentarily.

No.	Type	Watt/Sec.	Mfd.	Volts	Size	Net Cost
19A265	PQ-315	67	15	3000	3 3/4 x 3 3/4 x 4 1/8" H.	\$14.41
19A267	PQ-2525	78	25	2500	4 1/8 x 3 3/4 x 5 1/4" H.	15.57
19A270	PQ-2535	109	35	2500	4 1/8 x 3 3/4 x 7" H.	19.11

SPRAGUE PHOTOFLASH BROCHURE

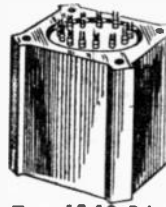
Gives comprehensive data on Photoflash with a discussion of its principles. Gives details and diagrams of How to Build and use a simple, useful "Speed-light" unit.

No. 16A326. YOUR COST, EACH **25c**

RAYTHEON CK-1013 RECTIFIER TUBE

Half wave, gas filled, cold cathode, miniature, rectifier for use in photo-flash power supplies. 2800 Volts peak inverse, 6 MA average current. Has Miniature base. Height 2 1/4".

No. 20A138. PRICE EACH **\$2.25**



BROADCAST QUALITY UTC AUDIO TRANS.

The only audio units with a guaranteed uniform response plus or minus 1.3 DB. from 20 to 20,000 cycles. Minimum hum pick-up is accomplished through use of a hum balanced, semi-toroidal coil structure. Low level units use a special alloy shield case plus outer case.

Case	Length	Width	Height	Mounting
LS-1	3 1/8	2 5/8	3 1/4	1 1/8 x 2 1/8
LS-2	4 1/8	3 1/2	4 1/8	2 1/8 x 3 1/8
LS-3	5 1/8	5	4 1/8	4 1/8 x 5 1/8

LOW IMPEDANCE TO GRID TRANSFORMERS

Type LS-10 Pri. 50, 125, 200, 250, 333, 500/600 ohms. Sec. 60,000 ohms over-all in 2 sections. Max. level, +15DB. Case LS-1.

Stock No. 19A94. Net Each **\$14.70**

Type LS-12, as above except for P.P. grids. Sec. 120,000 ohms over-all in 2 sections. Case LS-1.

Stock No. 19A95. Net Each **\$16.46**

Type LS-26. Bridging line to single or P.P. grids. Pri. 5,000 ohms. Sec. 60,000 ohms in two sections. Max. level +20DB. Case LS-1.

Stock No. 19A96. Net Each **\$14.70**

INTERSTAGE AUDIO TRANSFORMERS

Type LS-19, 15,000 ohm single plate to P.P. grids. Split Sec. 95,000 ohms over-all, 1.25:1 each side. Max. level +17DB. Case LS-1.

Stock No. 19A97. Net Each **\$14.11**

Type LS-22, 30,000 ohms P.P. plates to P.P. grids. Split pri. and sec. Sec. 80,000 ohms over-all. Ratio 1.6:1 over-all. Max. level +26DB.

Case LS-2. Stock No. 19A98. Net Each **\$18.23**

MIXING TRANSFORMERS

Type LS-30. Mixing, low imp. mike, pick-up, or multiple line to multiple line. Pri. 50, 125, 200, 250, 333, 500/600 ohms. Sec. imped. same as pri. Max. level +17DB. Case LS-1.

Stock No. 19A99. Net Each **\$14.70**

Type LS-31. Three isolated lines or pads to multiple line. Each pri. 30, 50, 200, 250 ohms. Sec. 50, 125, 200, 250, 333, 500/600 ohms. Max. level +15DB. Case LS-1. Stk. No. 19A100. Net Ea. **\$16.46**

Type LS-32. Mixing low imped. mike or pick-up or parallel mixer to multiple line. Pri. 2.5, 5.5, 10, 15, 22, 30, 38, 60 ohms. Sec. 50, 125, 200, 250, 333, 500/600 ohms. Max. level +15DB. Case LS-1.

Stock No. 19A101. Net Each **\$16.46**

INPUT TO LINE TRANSFORMERS (CASE LS-1)

Sec. imped. all types 50, 125, 200, 250, 333, 500/600 ohms.

Type LS-27. Pri. 15,000 ohms single plate, level +20DB.

Stock No. 19A102. Net Each **\$14.11**

Type LS-51. Pri. 30,000 ohms PP plates, level +20DB.

Stock No. 19A103. Net Each **\$14.11**

Type LS-151. Pri. 16,000 ohms for bridging 50 to 600 ohm line. Level +22DB. Stock No. 19A104. Net Each **\$14.70**

OUTPUT TO LINE AND VOICE COIL

Sec. imped. all types 1.2, 2.5, 5, 7.5, 10, 15, 20, 30, 50, 125, 200, 250, 333, 500 ohms.

Frequency range 25-20000 Cps plus or minus 1 db.

Type LS-55. Pri. 5000 and 3000 ohms C.T., P.P. 2A3's, 6A3's, 6L6's. Mox. level 20 watts. Case LS-2.

Stock No. 16A700. NET EACH **\$16.46**

Type LS-61. Pri. 10,000 and 6000 ohms C.T., P.P. 6F6's, 6V6's, 6A6's. Max. level 15 Watts. Case LS-2.

Stock No. 16A701. NET EACH **\$16.46**

Type LS-6L1. Pri. 9000 Ohms C.T., P.P. 6L6's, self-bias. Max. level 30 watts. Case LS-3.

Stock No. 37A27. NET EACH **\$24.70**

HIGH LEVEL LINE MATCHING TRANSFORMER

Type LS-33. Pri. 50, 125, 200, 250, 333, 500/600 ohms. Sec. 1.2, 2.5, 5, 7.5, 10, 15, 20, 30, 50, 125, 200, 250, 333, 500/600 ohms. Max. level 15 watts. Case LS-2.

Stock No. 16A702. NET EACH **\$16.46**

U.T.C. GUNGER AUDIO TRANSFORMER

FREQUENCY RANGE 40/15,000 CPS.

Fully impregnated and sealed in drawn aluminum housing 7/8" dia., 1 1/2" H. Mtg. opposite terminals. Weight only one ounce. Max. operating level 0 db. No D.C. in pri. windings.

Type O-1 Mike, pickup or line to single grid. Pri. 50, 200/250, 500/600 ohms. Sec. 50,000 ohms.

Stock No. 37A28. NET EACH **\$7.79**

Type O-3 Dynamic mike to single grid. Pri. 7.5/30 ohms. Sec. 50,000 ohms. Stock No. 37A29. NET EACH **\$7.06**

Type O-4 Single plate to single grid. Pri. 15,000 ohms. Sec. 60,000 ohms. Stock No. 37A30. NET EACH **\$6.17**

Type O-8 Single plate to line. Pri. 15,000 ohms. Sec. 50,200/250, 500/600 ohms. Stock No. 37A31. NET EACH **\$7.79**

UTC MICROPHONE CABLE TRANSFORMERS

For insertion in cable circuit, adapting low impedance microphone to tube grid. Pri. tapped at 30/50 and 200/250 ohms. Very ruggedly constructed to withstand mechanical abuse. Cable connections are made through spring strain relief to terminal boards inside the end caps, permitting universal choice of cable fittings for microphone and amplifier. Dia. 1 1/2", wt. 1/2 lb.

Type MC-1 Standard fidelity for general PA and amplifier service.

No. 19A105. NET EACH **\$7.64**

Type MC-2 High fidelity, for high quality PA and broadcast service.

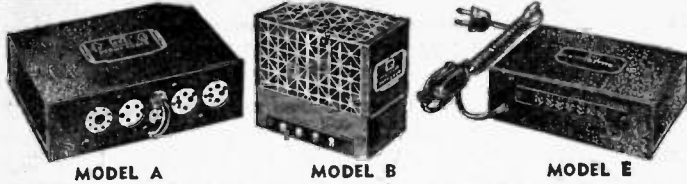
No. 19A106. NET EACH **\$10.00**

MASCO MICROPHONE INPUT TRANSFORMER

Mounts permanently inside amplifier on a unique swivel joint. Requires single hole in chassis. Transformer can be rotated and tilted for minimum hum pickup. Primary impedance 50 ohms for unbalanced line. Secondary, high impedance to grid.

No. 37A9. NET EACH **\$12.35**

INVERTERS, ELIMINATORS, CHARGERS & ACCESSORIES



MODEL A. A simple, plug-in unit to convert 1½ volt battery sets for all electric operation from 110 V., 60 cycle AC lines. It has universal sockets to accommodate any radio and its small size will also fit most portables. Sufficient "A" and "B" power is supplied for 4 to 6 tube sets, 1½ volts "A" at 350 MA and 90 volts "B" at 13 MA. The advanced design provides instant starting hum-free radio reception and trouble-free operation for many years. Complete with instructions. Size 2½x4½x6¾". Wt. 4 lbs. Supplied with AC line cord and plug.

Stock No. 36A11. NET EACH **\$9.85**

Model B. Converts 6 volt radios for all electric operation on 110 V., 60 cycles AC lines. The newly designed unit has two isolated 6 volt sources, one for the vibrator and one for the filament circuit of the radio, completely eliminating interference caused by the vibrator. Each 6-volt source provides 1½ amperes, a total of 3 amps when connected in parallel. There are no tubes to replace and it will give years of trouble-free service. Size 3½x6 6½x5½ inches. Wt. 7 lbs. Supplied with AC line cord and plug.

Stock No. 36A12. NET PRICE **\$11.73**

Model E. For converting 2 volt battery radios to operate on 110 V., 60 cycle AC lines. Has terminals for 2 V. "A" at ¾ amp. and 135 V. "B" at 25 MA tapped at 112 V., 90 V. and 67 V. Fits into radio battery compartment. Size 2¼x4¼x6 13/16". Supplied with AC cord, plug and switch. Wt. 4 lbs. Stock No. 36A34 NET EACH **\$11.02**

MALLORY Ultra-Compact Rectifiers
Only ½" dia., and ¾" over-all height including terminals. Type 1B4R. Replacement in Porta-Power, Electro and similar 1¼ volt units. No. 14A634, Net Each **\$1.47**
Type 1B8R. Like above, except has 8 junctions instead of 4. Max. AC Volts (115 line or equivalent) 7.2 at no load, 6.44 operating. Max. intermittent DC amps. 5. No. 14A632. Net Each **\$1.84**

MALLORY 6 AND 12 VOLT TAPER TYPE BATTERY CHARGERS
With trouble-free dry disc rectifiers and auto type fuse to protect the charger from improper connection to battery, and from serious overloads. Charges at maximum rate at start, decreasing as battery becomes fully charged. May also be used for electroplating, toy and model train operation, loud speaker fields, coin machines, and other applications requiring low voltage DC. Type MMF-12 Filter can be added to 6 volt models where well-filtered DC is required. Type can be added to all models. All are equipped with 6 ft. AC line cord and 6 ft. battery cable with clips. For use on 115 V. 60 cycle AC.

FOR 6 VOLT BATTERY
Type 6AC4. Max. charging rate 4 amps, tapers to 2 amps. Size 4 7/16x 7 3/8x3 5/16" deep. Less ammeter. Stock No. 33A26. Your Cost, Each **\$9.90**
Type 6AC6. (Illustrated) Max. charging rate 6 amps, tapers to 4 amps. Size 6x8x4¼" deep. With ammeter. Stock No. 33A27. Your Cost, Each **\$13.03**
Type 6AC10. Max. charging rate 10 amps, tapers to 7 amps. Size 6¾x 10 3/8x5½" deep. With ammeter. Stock No. 33A90. Your Cost, Each **\$18.91**

FOR 12 VOLT BATTERY
Type 12AC5. Max. charging rate 5 amps, tapers to 3 amps. Size 6¾x 10 3/8x5½" deep. With ammeter. Stock No. 33A28. Your Cost **\$23.49**

CHARGER ACCESSORIES
Type 652 Dash Receptacle. Universal Clamp-on connector for installation in car. Special plug and cord furnished for connection to charger. Makes connection to battery extremely fast and simple. Stock No. 33A91. YOUR COST **\$1.18**
Type R655 Plug-in Adapter. Special plug to fit cigar lighter dash receptacle. Makes positive contact to battery circuit and requires no wiring changes or additions in car. Stock No. 14A768. YOUR COST **\$1.18**
Type MMF-12 Filter. Capacity rating 12,000 mfd at 10 V. DC. For use with all chargers above except type 12AC5 or on any other DC source not exceeding 10 V. Converts charger to DC power pack for testing radios, etc. Stock No. 37A35. YOUR COST **\$9.31**

VARIABLE VOLTAGE REGULATORS
Especially recommended for use on radios in areas where line voltage is high or varies considerably. Helps prevent tube and parts failure due to overload. Also useful for controlling soldering iron heat or light intensity. Plugs into power outlet ahead of load. Equipped with cord receptacle and voltage adjuster. Type 211 for equipment rated up to 65 watts. Adjustable, 5 positions. Stock No. 17A1185. YOUR COST **\$1.76**
Type 211B for equipment rated up to 150 watts. Adjustable, 8 positions. Stock No. 17A1186. YOUR COST **\$2.94**

ATR RADIO INVERTERS



Specially designed for operating AC radios, public address systems, television sets, intercoms and similar electronic equipment in DC districts, on ships, trains, planes, etc. Radio frequency interference is completely suppressed. Equipped with four-point voltage regulators and special long life plug-in inverter vibrator. Input cord on 6 V. and 12 V. types equipped with battery clips. Efficiency greater than 5%. Recommended load power factor 80% or greater. In attractively finished grey-wrinkle metal cabinets size RSC 8 3/8x9x5 1/4". Wt. 19 lbs. Size RHC 6 1/2x11 1/8x8 1/2". Wt. 30 lbs. Output voltage of all models is 110 V. AC, 60 cycles.

Stock No.	DC V. INPUT	OUTPUT WATTAGE INTERMITTENT	OUTPUT WATTAGE CONTINUOUS	ATR TYPE NO.	NET EACH
32A277	6	85	75	6RSC	\$25.87
32A278	12	125	100	12RSC	\$25.87
32A279	32	150	100	32RSC†	\$26.75
32A280	32	200	180	32B-RHC†	\$40.87
32A281	110	250	150	110-RSC†	\$26.75
32A282	110	200	150	110-TVA*	\$44.10
32A283	110	325	225	110A-RHC†	\$38.22
32A284	110	500	350	110B-RHC†	\$44.10

*Equipped with built-in automatic switch. Especially for small Television receivers. Starts and stops automatically as radio is turned on or off.
†Plug-in automatic switching unit with wave form corrector may be added to these models. Provides automatic operation as radio is turned on or off.
No. 19B87 for 32 volt DC operation. NET EACH **\$10.58**
No. 19B88 for 110 V. DC operation. NET EACH **\$10.58**

ATR INDUSTRIAL INVERTERS

For operating 110 V. AC motors and electrical appliances from 32 V. DC and 110 V. DC. Radio frequency interference not suppressed. Equipped with plug-in inverter vibrator of new design utilizing eight 1/4" tungsten power contacts and two silver alloy driver contacts. Four point voltage regulator adjusts output voltage and helps compensate for high or low input voltage. Recommended for loads with power factor as low as 60%. May be equipped with plug-in automatic switching unit to start and stop converter as load is turned on or off. Size 6 1/2x11 1/8x8 1/2". Wt. 30 lbs.
Model 32B-IHP. Input 32 V. DC. output 110 V. AC 60 cycles, 200 watts intermittent, 180 watts continuous. Stock No. 33B39. NET EACH **\$40.87**
Plug-in automatic switching unit for Model 32B-IHP. Stock No. 19B87. NET EACH **\$10.58**
Model 110B-IHP. Input 110 V. DC. output 110 V. AC 60 cycles, 500 watts intermittent—350 watts continuous. Stock No. 33B42. NET EACH **\$44.10**
Plug-in automatic switching unit for Model 110B-IHP. Stock No. 19B88. NET EACH **\$10.58**

ATR "A" BATTERY ELIMINATORS

Delivers direct current for testing and demonstrating auto radios and other 6 V. DC electrical apparatus, relays and motors. Operates from 105-125 volt 50-60 cycle AC. Noiseless and interference free. Dry disc selenium rectifiers assure long life and trouble free service. Units may be hooked in parallel or series to obtain higher current or voltage. Gray wrinkle cabinets have rubber feet and 6 ft. cord and plug.
Model 610-ELIB. Rated 6 volt 10 amperes. Has voltmeter and 8 step control for exact voltage setting, wing nut output terminals off-on switch and fuse. Size 6 1/2x9 1/8x8 1/2", weight 22 lbs. Stock No. 32A285. NET EACH **\$29.11**
Model 620C-ELIP. (Illus.) Heavy duty dual purpose unit, rated 6 volts at 18 amperes or 12 volts at 9 amperes. Has output voltmeter and ammeter with 8 step voltage control. Dual rectifiers provide dependable trouble free service. Size 6 1/2x12 7/8x8 1/2", weight 33 lbs. Stock No. 32A286. NET EACH **\$44.98**



ELECTROX MASTER BATTERY ELIMINATOR
Delivers 6 volts direct current from 110 V. 60 cycle AC line. Output is exceptionally free of hum. Equipped with accurate direct current voltmeter and rheostat for adjusting to exactly 6 volts for any load between 3 and 15 amperes. Has wing nut binding posts for DC output, off-on switch, panel mounted fuse, and 6 ft. AC cord. Size 11 1/2" long 7 1/4" wide 6 5/8" inches high. Weight 20 lbs. Brown wrinkle finish. Stock No. 32A276, Model AR-2. Your Cost **\$39.15**

ELECTRONIC LAB. REPLACEMENT VIBRATORS
Exact replacements for Converters and Amplifiers.

Stock No.	Vib. No.	Fits EL Model	Your Cost
19A89	32171	102	\$7.50
19A90	11028	204	7.50
19A91	VTD1083	262	10.80

GENUINE G.E. TUNGAR BULBS

For replacement in battery chargers and DC power supplies. With thoriated tungsten filaments and gas filled for long, efficient life.

No.	Type	Fig.	Anips	Each
37A37	289881	A	0.5	\$2.94
37A38	12X825	B	2	2.94
37A39	206501	C	2	2.94
37A40	20X672	B	5	3.67
37A41	189048	D	6	3.67
37A42	189049	D	6	3.67
37A43	217283	D	15	7.36



INSULATED *Metallized* and WIRE WOUND RESISTORS

The Standard Of Quality. The World Around!



Actual Size

Type BTS, BTA, BT2 Insulated Metallized

Newly-designed compact size general purpose resistors with a metallized element sheathed in an over-all covering of moisture proof phenolic compound. Meet rigid JAN-BF specifications. Non-inductive. Have pig-tail wire leads. Tolerance plus or minus 10%.

STANDARD RMA CODE—Specify Values

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Mega	Mega
0.47	3.6	24	180	1,300	10,000	75,000	0.47	2.6
0.51	3.9	27	200	1,500	11,000	82,000	0.51	3.9
0.56	4.3	30	220	1,600	12,000	91,000	0.56	4.3
0.62	4.7	32	240	1,800	13,000	100,000	0.62	4.7
0.68	5.1	36	270	2,000	15,000	110,000	0.68	5.1
0.75	5.6	39	300	2,200	16,000	120,000	0.75	5.6
0.82	6.2	42	330	2,400	18,000	130,000	0.82	6.2
0.91	6.8	47	360	2,700	20,000	150,000	0.91	6.8
1.0	7.5	51	390	3,000	22,000	160,000	1.0	7.5
1.1	8.2	56	430	3,200	24,000	180,000	1.1	8.2
1.2	9.1	62	470	3,600	27,000	200,000	1.2	9.1
1.3	10	68	510	3,900	30,000	220,000	1.3	10
1.5	11	75	560	4,300	33,000	240,000	1.5	11
1.6	13	82	620	4,700	36,000	270,000	1.6	12
1.8	15	91	680	5,100	39,000	300,000	1.8	13
2.0	16	100	750	5,600	43,000	330,000	2.0	15
2.2	18	110	820	6,200	47,000	360,000	2.2	16
2.4	19	120	910	6,800	51,000	390,000	2.4	18
2.7	20	130	1,000	7,500	56,000	430,000	2.7	20
3.0	22	150	1,100	8,200	62,000		3.0	22
3.3	24	160	1,200	9,100	68,000		3.3	

100 Lot prices applies to purchase of one Value Only

1/2 Watt—BTS	1 Watt—BTA	2 Watt—BT-2
Size 1/2 x 1/4". Meet Spec. JAN-R11 RC10 or RC20. Range 470 ohms to 22 megohms. 15A1002. 100 Each...8c Lots 4c	Size 1/2 x 1/4". Meet Spec. JAN-R11 RC30. Range 330 ohms to 22 megohms. 15A1004. 100 Each...10c Lots 6c	Size 1 1/4 x 1/4". Meet Spec. JAN-R11 RC41. Range 470 ohms to 22 megohms. 15A1006. 100 Each...15c Lots 8c

"BW" Insulated Wire-Wound Resistors

Similar to the BT units listed above, but contain a wire wound element, completely encased in molded compound. Tolerance plus or minus 10%. Order sizes desired from tabulated listing above. Specify Resistance.

1/2 Watt—BW-1/2	1 Watt—BW-1	2 Watt—BW-2
Size 1/2 x 1/4". Range 0.47 to 320 ohms. 15A1001. 100 Each...9c Lots 5c	Size 1 1/4 x 1/4". Range 0.47 to 470 ohms. 15A1003. 100 Each...10c Lots 6c	Size 1 1/4 x 1/4". Range 1.0 to 680 ohms. 15A1005. 100 Each...15c Lots 8c

This Cabinet FREE with the following Kits!



Sturdy 4 drawer (7 compartments in each) cabinets, 11x6 1/2x5 1/2". Blue and silver finish. Shipped with resistor assortments as listed below.

Kit No. 1: 8 Type BTS, 37 BTA, 10 AB10, 4 ABA. Total of 59 Resistors. 33A19. List value \$16.91. **Your Cost... \$9.95**

Kit No. 2: 6 Type BW 1/2 and 94 BTS. Total of 100 1/2 watt Resistors. 33A20. List value \$13.12. **Your Cost... \$7.71**

Kit No. 3: 6 Type BW1, and 77 BTA. Total of 83 1-watt Resistors. 33A21. List value \$14.11. **Your Cost... \$8.30**

YOU PAY ONLY for the CONTENTS CABINET is FREE

Kit contains 220 1/2-watt, 135 1-watt and 22 10-watt most popular resistors, 8 volume controls, 3 switches and 3 shafts most often needed. Included Free an all-metal Cabinet for wall or bench with divided compartments and 2 drawers—provides extra space for additional parts and tools. No. 36A9. List Price Contents \$81.24. **Your Cost \$47.76**



IRC ALL METAL RHEOSTATS

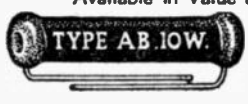
Unique, all-metal aluminum construction halves operating temperature. Rating based on dissipation of entire element. Spiral connector gives positive contact between rotor arm and center terminal. Can be used as either a potentiometer or rheostat. Diameter, 1 21/32" for 25 watts and 2 3/8" for 50 watts. A dependable, long life unit.

PR-25 (25 Watts)				PR-50 (50 Watts)			
Ohms	Stk. No.	Max MA	Net Price	Ohms	Stk. No.	Max MA	Net Price
6	19A174	2,040	\$3.06	6	19A184	2,880	\$3.44
10	19A175	1,580	3.06	16	19A185	1,770	3.44
25	19A176	1,000	3.06	50	19A186	1,000	3.44
50	19A177	709	3.06	125	19A187	630	3.44
100	19A178	500	3.06	225	19A188	470	3.44
250	19A179	315	3.06	500	19A189	315	3.44
500	19A180	222	3.06	1000	19A190	223	3.64
1000	19A181	155	3.44	2500	19A191	140	3.64
2500	19A182	100	3.44	5000	19A192	100	3.82
5000	19A183	70	3.64	10000	19A193	70	3.82

IRC POWER WIRE-WOUND RESISTORS

These famous IRC resistors have a durable cement coating, non-hygroscopic ceramic core, careful winding and highest quality resistance wire. Built to stand overloads, intense heat, dampness, humidity, and even salt water immersion. Units of 25-watt and up include mtg. brackets. Accuracy on all within 5%.

FIXED TYPE AB, 10-WATT, Size 5/16x1 3/4"



Available in Value as Listed Below, Except 40,000 or 50,000.

1	50	300	1,250	4,000	15,000
5	75	350	1,500	5,000	20,000
7.5	100	400	2,000	6,000	25,000
10	150	500	2,500	7,500	40,000
15	200	750	3,000	10,000	50,000
25	250	1,000	3,500	12,500	

No. 15B1007. Specify Resistance Wanted. 1 to 1,000 ohm. Each...34c
1,250 to 5,000 ohm. Each...37c
6,000 to 10,000 ohm. Each...42c

FIXED TYPE DG, 20-WATT, Size 9/16x2"



Available in All Values Shown Above. No. 15B1009. Specify Resistance wanted.

1 to 1,000 ohm.	Each
1,250 to 5,000 ohm.	44c
6,000 to 10,000 ohm.	48c
12,500 to 20,000 ohm.	52c
25,000 to 35,000 ohm.	56c
50,000 ohm.	73c

ADJUSTABLE — FURNISHED WITH ONE BAND

25 to 200-Watt types now furnished with Positive Pressure Band—prevents oxidation and corrosion at point of contact—eliminates wire damage and breakage. Cannot be adjusted too tightly. Designed for high temperatures.

TYPE ABA, 10-WATT, Size 5/16x1 3/4"



Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
5	50	200	750	2,000	5,000
10	100	300	1,000	2,500	7,500
25	150	500	1,500	3,000	10,000

In Values Above, Specify Resistance.

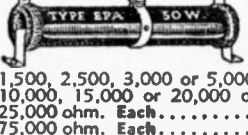
No. 15B1011. 5 to 1,000 ohms. Each...70c
1,500 to 5,000 ohms. Each...73c
7,500 to 10,000 ohms. Each...78c

TYPE DHA, 25-WATT, Size 9/16x2 1/2"

Stock No. 15B1501. Available in Values Shown Below.

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Each
5	50	250	1,000	2,500	10,000	5 to 1,000 ohms...\$0.92
10	100	300	1,250	3,000	15,000	1,250 to 5,000 ohms... .93
15	150	500	1,500	5,000	20,000	7,500, 10,000 ohms... 1.00
25	200	750	2,000	7,500	25,000	15,000, 20,000 ohms... 1.03
						25,000 ohms... 1.11

Type EPA—50 Watts



Each resistor complete with mounting brackets and one new type positive pressure band. Size 4 1/2 x 3/4". Ranges as listed. Stock No. 15B1506.

100, 250, 500 or 1,000 ohm.	Each
1,500, 2,500, 3,000 or 5,000 ohm.	\$1.16
10,000, 15,000 or 20,000 ohm.	1.39
25,000 ohm.	1.50
50,000 ohm.	1.62
75,000 ohm.	1.80
100,000 ohm.	1.91

100 Watts

Type HAA—Adjustable

Size 6 1/2 x 1 1/8" in ranges shown below. Price includes mounting brackets. Specify values wanted. Each complete with mounting brackets and one new type band.

Stock No. 15B1508

Ohms	Ohms	Ohms	Ohms	Ohms
100	10,000	\$1.89	15,000	2.01
200	20,000	2.01	25,000	2.14
500	30,000	2.14	50,000	2.23
1,000	60,000	2.23	75,000	2.33
1,500	100,000	2.43		

Extra Silders

200 Watts

Type HOA—Adjustable

Size 10 1/2 x 1 1/8" in ranges shown below. Prices include mounting brackets. Specify values wanted. Each complete with mounting brackets and one new type band.

Stock No. 15B1512

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
100	10,000	\$2.30	15,000	2.42	20,000	2.42
500	25,000	2.42	50,000	2.47	75,000	2.53
1,000	100,000	2.53				
2,000		2.66				
2,500		2.77				
5,000						

Extra Silders

15A1012. For ABA...12c
15A1013. For DHA...12c
15A1014. For EPA...12c
15A1015. For HAA-HOA...15c

PRECISION WIRE WOUND RESISTORS

Dependable precision meter multipliers and shunts. Guaranteed accuracy 1%. Non-inductively wound. Winding is specially impregnated, which insures constant resistance at all frequencies to 50,000 cycles.



Stock No.	Res. Ohms	Net Each	Stock No.	Res. Ohms	Net Each
15B1017	1	\$1.00	15A1062	5000	\$1.03
15B1018	5	1.00	15A1063	7500	1.03
15B1019	10	1.00	15A1064	10000	1.03
15B1020	25	1.00	15A1065	12500	1.03
15B1021	50	1.00	15A1066	15000	1.03
15B1022	100	1.00	15A1067	20000	1.12
15A1057	200	1.00	15A1068	25000	1.12
15A1058	300	1.00	15A1069	30000	1.12
15A1059	500	1.00	15A1070	40000	1.12
15A1060	1000	1.00	15A1071	50000	1.12
15A1061	2500	1.00	15A1072	60000	1.32

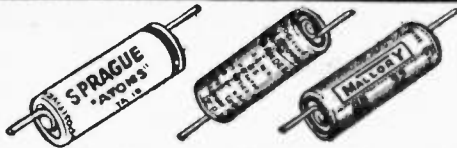
Stock No. 15A1073. Res. Ohms Net Each

Stock No.	Res. Ohms	Net Each
15A1073	75000	\$1.32
15A1074	100000	1.44
15A1075	150000	1.65
15A1076	200000	1.88
15A1077	250000	2.06
15A1078	300000	2.24
15A1079	400000	2.79
15A1080	500000	2.94

Popular MALLORY • AEROVOX • SPRAGUE Condensers

Aerovox 'Dandee'

Mallory 'TC' Sprague 'Atoms' Tubular Electrolytics



Aerovox—Mallory—Sprague. Finest quality available, standard compact dry electrolytic tubulars, ideal for all applications. Fully rated and clearly marked for capacity, voltage and polarity. Specify make wanted, adding to the stock number A=Aerovox, M=Mallory, S=Sprague.

450 WORKING VOLTS			150 WORKING VOLTS			50 WORKING VOLTS		
Cap. Mfd.	Stock No.	Price Each	Cap. Mfd.	Stock No.	Price Each	Cap. Mfd.	Stock No.	Price Each
4	15A201	\$0.53	4	15A221	\$0.44	5	15A236	\$0.53
8	15A202	.56	8	15A222	.47	10	15A237	.47
10	15A203	.62	12	15A223	.50	25	15A238	.53
12	15A204	.68	16	15A224	.53	50	15A239	.62
16	15A205	.79	20	15A225	.56	100	15A240	.88
20	15A206	.88	30	15A226	.59	25 WORKING VOLTS		
40	15A207	1.18	40	15A227	.65	10	15A241	.44
8-8	15A208	1.10	50	15A228	.71	15	15A242	.50
*8-8	15A209	1.23	8-8	15A229	.68	25	15A243	.59
10-10	15A210	1.09	20-20	15A230	.76	50	15A244	.71
15-15	15A448	1.29	30-30	15A400	.88	100	15A244	.62
*4 Leads.			50-30	15A401	1.00	10-10	15A245	.65
			50-50	15A449	1.09	25-25	15A450	.65

Midget Tubular Electrolytics in HIGHER D. C. Working Voltages

Aerovox "Dandee" midget-can tubular electrolytics like above in higher operating voltages to meet the stepped up potentials in circuits such as oscillographs, television sets, etc. 650 V. Surge Peak, 500 V. D.C. Wkg. 8 mfd. size 13/16x3". No. 15A402. Net Each 77c

16 mfd. size 15/16x3". No. 15A403. Net Each \$1.18

750 V. Surge Peak, 600 V. D.C. Wkg. 8 mfd. size 13/16x3". No. 15A404. Net Each \$1.62

16 mfd. size 1 1/16x3". No. 15A405. Net Each \$1.91

850 V. Surge Peak, 700 V. D.C. Wkg. 8 mfd. size 13/16x3". No. 15A406. Net Each \$1.76

16 mfd. size 1 1/16x3". No. 15A407. Net Each \$2.65

HIGH CAPACITY Low Voltage Tubulars

Compact like above, in aluminum tubes with external insulating covers.

Cap. Mfd.	D.C. Volts	Wkg. No.	Stock No.	Price Each
1000	3	15A1518		\$1.06
1000	6	15A1519		1.32
500	15	15A1520		1.23

COMPACT CAN TYPE DRY ELECTROLYTICS

Hermetically sealed in aluminum cans and have twist prong tabs for washer or direct to chassis mounting. Terminals are solder lug type all at one end. Cans are in majority of sizes 1" dia. and 2 to 3" long. The largest is 1 3/8" dia. Extremely dependable under heavy ripple current and high surge voltage.

Cap. Mfd.	Volts DC	Stock No.	Price Each
10	450	15A270	\$0.76
15	450	15A271	.91
20	450	15A272	1.03
40	450	15A273	1.32
10-10	450	15A274	1.23
20-20	450	15A275	1.56
20-20	150	15A277	.91
30-30	150	15A278	1.03
50-50	150	15A279	1.23
10-10-10	450	15A276	1.47
10-10-20	450/25	15A281	1.38
20-20-20	450/25	15A282	1.73
20-20-20	150/25	15A429	1.29
20-20-20	150	15A430	1.29
20-10-20	350/25	15A283	1.44
30-20-20	150/25	15A431	1.29
40-20-20	150/25	15A432	1.36
40-40-20	450/25	15A433	2.15
40-20-200	150/25	15A434	1.76
40-40-40	150	15A435	1.53
50-30-100	150/25	15A436	1.82
10-10-10-10	450	15A439	1.91
15-15-10-20	450/25	15A438	2.00
20-20-20-20	450	15A440	2.44
40-40-30-20	150/25	15A437	1.82

Sprague Triple Section Tubular Electrolytics

Popular replacements in small sets. These units all have cathode by-pass sections. The first types are for AC-DC sets, the sixth for AC-DC battery portables and the seventh is for AC sets. Very compact approx. 1x2 1/8".

Cap. Mfd.	DC Working Volts	Stock No.	Price Each
20-20/20	150/25	15A441	\$1.12
30-30/30	150	15A442	1.29
40-30/20	150/25	15A443	1.21
50-30/20	150/25	15A444	1.23
50-50/20	150/25	15A445	1.32
30-30/100	150/12	15A446	1.47
12-12/20	450/25	15A447	1.29

All are with 4 leads—Common Neg.

SPRAGUE TYPE "WR" 500 Working—600 Peak Volts DC AT NEW LOW PRICES!



Wet Electrolytic Replacements

NOT SUBSTITUTES, but dry electrolytics of very high voltage formation specifically designed for use wherever wet electrolytics were used before. Will stand high peak voltages and handle A-C ripples that might cause ordinary dry electrolytics to break down.

Cap. Mfd.	Stock No.	Size	Your Cost
8	15A251	1 3/8 x 4 7/8"	\$0.91
16	15A252	1 3/8 x 4 7/8"	1.38
25	15A231	1 1/2 x 5 3/8"	1.62

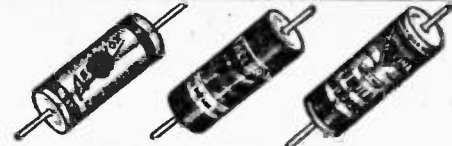


Can Type Dry Electrolytics

Extremely compact etched foil dry electrolytics in drawn metal cans. May be mounted in any position—above or below sub-panel. With standard threaded bushing, lock nut and insulated wire leads. Can is completely insulated from sections.

Cap. Mfd.	Stk. No.	Can Size	Your Cost
450 V.D.C. Wkg.—625 V. Peak			
8	15A253	1 x 2 3/4"	\$1.03
16	15A254	1 x 3 1/4"	1.41
30	15A255	1 1/4 x 3"	1.76
8-8	15A256	1 1/2 x 3"	1.62
16-16	15A427	1 1/2 x 4"	2.06
475 V.D.C. Wkg.—600 V. Peak			
8	15A257	1 1/2 x 3"	\$1.32
16	15A258	1 3/4 x 3"	2.06
8-8	15A259	1 1/2 x 4"	2.15

For extra tough service such as P.A., power amplifiers, etc.

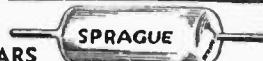


Aerovox—Mallory—Sprague, compact, non-inductive wound, sealed in wax impregnated paper tubes with wax filled ends and bare wire leads. Standard quality throughout. Specify make wanted, adding to the stock number A for Aerovox—M for Mallory—S for Sprague.

600-Volt			400-Volt			Mallory 1600-Volt Oil Impregnated Wax Filled		
Mfd. No.	Each		Mfd. No.	Each		Mfd. No.	Each	
.0001	15A304	14c	.05	15A326	16c	.0005	15A341	32c
.00025	15A305	14c	.1	15A327	19c	.001	15A342	32c
.0005	15A306	14c	.2	15A328	22c	.002	15A343	32c
.001	15A307	14c	.25	15A329	25c	.004	15A344	32c
.002	15A308	14c	.5	15A330	31c	.005	15A345	32c
.003	15A309	14c	1.	15A331	48c	.006	15A346	32c
.004	15A310	14c	1000-Volt			.007	15A347	32c
.005	15A311	14c	.001	15A332	27c	.008	15A348	35c
.006	15A312	14c	.002	15A333	27c	.01	15A349	35c
.01	15A313	16c	.005	15A334	27c	.015	15A350	35c
.015	15A314	16c	.006	15A335	27c	.02	15A351	35c
.02	15A315	16c	.01	15A336	27c	.03	15A352	35c
.025	15A316	19c	.02	15A337	27c	.05	15A353	41c
.03	15A317	19c	.05	15A338	31c			
.04	15A318	19c	.1	15A339	37c			
.05	15A319	22c						
.06	15A320	22c						
.1	15A321	25c						
.25	15A322	29c						
.5	15A323	42c						
1.	15A324	66c						

Oil impregnated, wax filled and metal cased oil filled tubulars in column at right.

TYPE "68P" SPRAGUE



MIDGET TUBULARS

Extra small paper tubulars especially designed for miniature radios, hearing aids or any application where space is limited. New design, will stand humidity. Sizes range 1/4 x 11/16" to 3/8 x 1 1/8".

Cap. Mfd.	Wkg. Volts	Stock No.	Net Each	Cap. Mfd.	Wkg. Volts	Stock No.	Net Each
.001	600	15A94	21c	.002	400	15A102	21c
.002	600	15A95	21c	.005	200	15A103	21c
.005	600	15A96	24c	.01	200	15A104	24c
.01	600	15A97	27c	.02	200	15A105	27c
.02	600	15A98	29c	.05	200	15A106	29c
.05	600	15A99	32c	.1	200	15A107	35c
.1	600	15A100	41c	.25	100	15A108	41c
.001	400	15A101	21c	.5	100	15A109	47c

MIDGET MICA CONDENSERS

Built of selected mica and foil; molded bakelite casing impervious to moisture, heat or mechanical damage. Type "A" is 25/32" square, "B" 11/16x7/16" for both standard or silver micas. Standard Type 1000-Volt DC test—500 Working.

Type 1467 "A"			Type 1468 "B"		
Mfd. No.	Each		Mfd. No.	Each	
.002	15A14	24c	.00004	15A2	12c
.003	15A15	29c	.00005	15A4	12c
.004*	15A16	32c	.0001	15A6	12c
.005*	15A17	35c	.00015	15A8	12c
.006*	15A18	44c	.00025	15A10	15c
.01*	15A19	71c	.0005	15A12	18c

*600-Volt Test, 300-Volt DC Working.

AEROVOX SILVER MICAS

Type 1469 (Fig. B)			Type 1464 (Fig. "A")		
Mfd. No.	Each		Mfd. No.	Each	
.000005	15A69	\$3.22	.00015	15A77	\$0.27
.00001	15A70	.24	.0002	15A78	.27
.000025	15A71	.24	.00025	15A79	.27
.00004	15A72	.24	.0003	15A80	.32
.00005	15A73	.24	.00035	15A81	.35
.00007	15A74	.24	.0004	15A82	.38
.000075	15A75	.24	.0005	15A83	.41
.0001	15A76	.24			

*600 V. Test, 300 Wkg.

SPRAGUE TYPE AP HIGH VOLTAGE Can Types. 600 V. Wkg. 800 V. Peak

Specially popular for P.A., theater and other applications where voltage is high and surges run over 600 V. Cap. Stock Mfd. No. Size Your Cost

8 mfd., 800 volts DC working, in rectangular metal can 4 1/2" H, 1 1/2" Sq., with mtg. flange and insulated leads from bottom. SPRAGUE No. RC 88. No. 15A289. Net Each \$3.23

FINEST QUALITY, Mica Condensers at RIDICULOUS PRICES

.00025 mfd. 2500 test volts.	18A614	\$3.50
.02 mfd. 2500 test volts.	18A118	\$8.50
.005 mfd. 5000 test volts.	18A121	\$6.50
.01 mfd. 5000 test volts.	18A615	\$8.50
.001 mfd. 5000 test volts.	18A870	\$5.00
.002 mfd. 2500 test volts.	15A46	\$4.30
.0005 mfd. 2500 test volts.	15A44	\$3.50

Our Large Sales Volume Assures Fast Turnover and so FRESH CONDENSERS for you — Always at B-A.

MALLORY Replacement Volume Controls

NEW MIDGETROL



Only 15/16" diameter with new type contact giving very smooth and quiet operation. New type flat shaft easily cut to any length. Clips supplied with each control to permit use of set screw, push-on or knurled knobs.

Stk. No.	Type	Res.	Taper
14A719	U-12	5M	1
14A720	U-14	5M	4
14A721	U-18	10M	1
14A722	U-19	10M	2
14A723	U-20	10M	4
14A724	U-21	15M	1
14A725	U-22	15M	2
14A726	U-24	20M	1
14A727	U-28	25M	2
14A728	U-29	25M	4
14A729	U-33	50M	1
14A730	U-34	50M	2
14A731	U-35	50M	4
14A732	U-36	75M	1
14A733	U-39	100M	1
14A734	U-40	100M	2
14A735	U-41	100M	4
14A736	U-42	150M	1
14A737	U-43	200M	4
14A738	U-44	250M	1
14A739	U-45	250M	2
14A740	U-46	250M	4
14A741	U-48	500M	1
14A742	U-50	500M	4
14A743	U-51	750M	1
14A744	U-53	1 Meg	1
14A745	U-54	1 Meg	4
14A746	U-55	2 Meg	1
14A747	U-57	3 Meg	1
14A748	U-65	5 Meg	1

Any of Above Less Switch. **73c**
EACH.....
 Stk. No. Type Res. Tap
 14A749 UT-420 250M 50M
 14A750 UT-425 350M 70M
 14A751 UT-427 500M 100M
 14A752 UT-431 500M 225M
 14A753 UT-443 1 Meg 450M
 14A754 UT-450 2 Meg 125M
 14A755 UT-448 2 Meg 250M
 14A756 UT-454 2 Meg 400M
 14A757 UT-451 2 Meg 900M
 Any of Above Less Switch. **\$1.09**
EACH.....
 4" extension shaft for above controls. Furnished with two self tapping screws. No. 14A758. Type UE50. **15c**
EACH.....

STANDARD

WIRE WOUND CONTROLS

Nominal rating, 4 watts. Fixed channel shaft 3" long with inset to fit all types of knobs. 1 1/2" Diameter; 2 to 20M Ohms.

Stock No.	Mallory Type	Ohms Res.	Taper No.
14A31	Q	2	4
14A32	R	6	4
14A33	S	10	4
14A34	T	20	4
14A35	U	30	4
14A36	V	60	4
14A37	W	100	4
14A38	X	200	4
14A39	A400P	400	4
14A40	A	600	1
14A41	A660P	650	4
14A43	B	1000	1
14A43	UC600	1000	2
14A44	A1MP	1000	4
14A46	*C12	2000	1
14A46	*C	2000	2
14A47	*A2MP	2000	4
14A48	*D12	3000	1
14A49	*D	3000	2
14A50	*A3MP	3000	4
14A51	*D7	3000	7
14A52	*E	6000	2
14A53	*A5MP	6000	4
14A54	*E7	6000	7
14A55	*F	7500	2
14A56	*F7	7500	7
14A57	*G	10000	2
14A58	*A10MP	10000	4
14A59	*G7	10000	7
14A60	*H	15000	2
14A61	*H7	15000	7
14A62	*A20MP	20000	4

Any of the above, Less Switch, Each **73c**

"MR" MIDGET CONTROLS



1 1/2" Dia. with 3" Flatted Shaft

Stock No.	Mallory Type	Ohms Res.	Taper No.
14A63	*MR14	5M	4A
14A64	*MR18	10M	1
14A65	*MR19	10M	2
14A66	*MR20	10M	4
14A67	*MR21	15M	1
14A68	*MR22	15M	2
14A69	*MR24	20M	1
14A70	*MR28	25M	2
14A71	*MR29	25M	4
14A72	MR33	50M	1
14A73	*MR34	60M	2
14A74	MR35	60M	4
14A75	MR36	75M	1
14A76	MR39	100M	1
14A77	MR40	100M	2
14A78	MR41	100M	4
14A79	MR42	150M	1
14A80	MR44	250M	1
14A81	MR45	250M	2
14A82	MR48	500M	1
14A83	MR50	500M	4
14A84	MR51	760M	1
14A85	MR53	1 Meg.	1
14A86	MR55	2 Meg.	1
14A87	MR57	3 Meg.	1

Any of the above, Less Switch, Each **73c**

"UM" Universal Plug-In Shaft Midget Controls (1 1/2" Diameter)

*External adj. res. inc.

Stock No.	Mallory Type	Ohms Res.	Taper No.
14A88	*UM114	5M	4A
14A89	*UM118	10M	1
14A90	*UM119	10M	2
14A91	*UM120	10M	4
14A92	*UM121	15M	1
14A93	*UM122	15M	2
14A94	*UM128	25M	2
14A95	*UM129	25M	4
14A96	*UM133	60M	1
14A97	*UM134	60M	2
14A98	UM135	60M	4
14A99	UM140	100M	1
14A100	UM141	100M	2
14A101	UM142	100M	4
14A102	UM144	150M	1
14A103	UM147	250M	1
14A104	UM149	250M	4
14A105	UM154	600M	1
14A106	UM156	600M	4
14A107	UM158	750M	1
14A108	UM161	1 Meg.	1

Any of the above, Less Switch, Each **73c**

Attachable Switches for All Types of Mallory Controls

Stock No.	Mallory Type	Switch Action	Net Ea.
14A109	6-9	S.P.S.T.	\$.35
14A110	*6T	S.P.S.T.	.41
14A111	7	D.P.S.T.	.44
14A112	8	S.P.D.T.	.41
14A113	13	*3P.S.T.	.41
14A114	14	*4P.S.T.	.41
*Dummy term. **Shorting type.			
Switches for 1 1/2" Dia. Controls.			
Stock No.	Mallory Type	Switch Action	Net Ea.
14A115	M26	S.P.S.T.	\$.35
14A116	*M26T	S.P.S.T.	.41
14A117	M27	D.P.S.T.	.44
14A118	M28	S.P.D.T.	.41
14A119	*M23-24	4P.S.T.	.44
*Dummy term. **Shorting type.			

MIDGETROL SWITCHES

Stk. No.	Type	Action	Each
14A759	US26	S.P.S.T.	35c
14A760	*US26T	S.P.S.T.	44c
14A761	US27	D.P.S.T.	44c
14A762	US28	S.P.D.T.	44c
14A763	**US23	4P.S.T.	44c

*Dummy Term. **Shorting Type.



Heavy Duty Type "M" Wire Wound Rheostats and Potentiometers

Dissipate 4-watts, insulated contact arm. 2810 effective electrical rotation. Use type 395 dial plate.

Stock No.	Mallory Type	Ohms Res.	Amps. Cap.
14A120	MOSR	1/2	2.80
14A121	M1R	1	2.00
14A122	M2R	2	1.40
14A123	M3R	3	1.15
14A124	M4R	4	1.00
14A125	M6R	6	.82
14A126	M10R	10	.63
14A127	M15R	15	.62
14A128	M20R	20	.45
14A129	M25R	25	.40
14A130	M30R	30	.37
14A131	M40R	40	.32
14A132	M50R	50	.28
14A133	M60R	60	.26
14A134	M75R	75	.23
14A135	M100R	100	.20

Any of the above Type "M" Rheostats, Net Each **59c**

TYPE "M" POTENTIOMETERS

Stock No.	Mallory Type	Ohms Res.	M.A. Cap.
14A136	M15P	15	520
14A137	M20P	20	460
14A138	M25P	25	400
14A139	M30P	30	370
14A140	M40P	40	320
14A141	M50P	50	280
14A142	M60P	60	260
14A143	M75P	75	230
14A144	M100P	100	200
14A145	M200P	200	140
14A146	M400P	400	100
14A147	M500P	500	90
14A148	M600P	600	82

Any of the above Type "M" Potentiometers, NET EACH **73c**

Potentiometers, NET EACH **82c**

Any of the above Type "M" Potentiometers, NET EACH **97c**

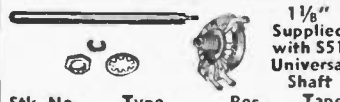
The above Type "M" Potentiometers, NET EA. **\$1.15**

Etched Dial Plates
 Calibrated 0-10 in proper degrees matching rotation of various volume controls and rheostats.

No. 14A160: Type 395 for use with "M" and "WW" controls.
 No. 14A161: Type 396 for use with "WW" when switch is used.
 No. 14A162: Type 397 for use with carbon controls.
 No. 14A163: Type 398 for carbon controls with switch.
 Your Choice, Each **15c**

NEW! 6TH EDITION
MALLORY RADIO SERVICE ENCYCLOPEDIA
 THE ONLY COMPLETE SERVICING REFERENCE ON ALL PRE-WAR and POST-WAR RECEIVERS
 Gives you accurate complete up-to-the-minute facts on volume and tone controls, capacitors, and vibrators... circuit information, servicing hints, installation notes, IF peaks, tube complements and number of tubes... and in addition cross-index to Rider by volume and page number.
 No other book gives you all this information.
16A339. Your Cost, Each \$2.00

TM TAPPED CONTROLS



Stk. No.	Type	Res.	Taper
14A173	TM220	250M	50M
14A764	TM221	250M	110M
14A174	TM227	500M	100M
14A765	TM234	1 Meg	65M
14A175	TM240	1 Meg	200M
14A766	TM246	2 Meg	15M
14A176	TM248	2 Meg	250M
14A767	TM254	2 Meg	400M

Any of Above, Less Switch. **\$1.09**
EACH.....
 14A176. TRP609 Fader control 1 Meg. tapped at 500,000 ohms. 1 1/2" Diameter. **\$1.09**
EACH.....

UNIVERSAL REPLACEMENT PLUG-IN SHAFTS (TM-UM)

No. 14A177. Type SS1, replaces any 1/4" round, 1/32" or 3/32" flatted shafts to 4" long.
 No. 14A178. Type SS16, replaces any 1/4" shaft to 10 1/2" long.
 No. 14A179. Type SS25, replaces any standard knurled shaft from 3/4" to 4" long.
 No. 14A180. Type SS2, replaces any 3/16" diameter shaft to 4" long.
YOUR CHOICE OF THE ABOVE, EACH 18c
 No. 14A181. Type SS3, replaces any 3/32" slotted shaft to 2" long.
 No. 14A182. Type SS11, replaces any 3/32" slotted shaft 2" to 4" long.
 No. 14A183. Type SS15, replaces any 3/32" slotted shaft 4" to 6" long.
YOUR CHOICE OF THE ABOVE, EACH 26c

VOLUME CONTROL FITTINGS

No. 14A184; Mallory 178, wrench.
 No. 14A185; Mallory RB248, 1 1/4" centers mounting bracket.
 No. 14A186; Mallory RB249; 2 1/4" centers mounting bracket.
ANY OF THE ABOVE, NET EACH 15c
 No. 14A187; Mallory A11260/2, hex shoulder nut for thick panels. 3/4" long.
NET EACH 18c
 No. 14A188; Mallory A11260/12, 1/2" long hex shoulder nut.
EACH 15c

EXTENSION SHAFTS

No. 14A189; Mallory RS242, 1/2"x4" with 1/8" flat.
 No. 14A190; Mallory RS243; 1/2"x4" with 1/8" flat.
 No. 14A191; Mallory RS244, 1/2"x4" with 1/64" flat.
ANY OF THE ABOVE, NET EACH 24c

EXPLANATION OF TAPERS

No. 1—Modified logarithmic left hand — Antenna and Audio.
 No. 2—R. H. logarithmic — Cathode voltage control.
 No. 3—Comb. left and right hand — shunt and series circuit.
 No. 4—Linear.
 No. 7—Left hand — Antenna shunt plus bias control.
NOTE: Please specify our stock numbers on your order to eliminate errors.

New Midgetrol Deal
 An assortment of 15 of the fastest moving new 15/16" Midgetrol controls and 9 AC switches. Supplied in an all metal cabinet with 15 spaces for controls and drawer for other items. You pay for controls and switches only. Cabinet plus 4 extension shafts, 5 extra U clips, 5 extra spring clips, and 2 idler pulleys are furnished at no cost to you. Contents: 4 U48, 3 U53, 2 U50, 2 U44, 1 U18, 1 U55, 1 U39, 1 U41 controls and 9 U526 Switches. Mallory No. U-1485. Complete as described.
 No. 31A91.
YOUR COST..... \$14.55

IRC CENTURY LINE 1 1/8" Dia. CONTROLS FILL EVERY SERVICE NEED

The popular "Century Line" of IRC. The controls, as listed below, will meet over 90% of all replacement needs. They feature metalized resistance elements with five fingered knee action contactor and special connector insuring smooth, silent operation. Size 1 1/8" x 17/32".



UNIVERSAL TYPE "D" TAP-IN SHAFT
Complete with double flatted shaft for push-on or set screw knobs. Additional special shafts as listed below.

Stock No.	IRC Type	Ohms Res.	Taper No.
14A416	D11-103	500	A
14A417	D11-108	1M	A
14A418	D11-110	2M	A
14A419	D11-112	3M	A
14A420	D11-113	4M	A
14A421	D11-114	5M	A
14A422	D13-114	5M	C
14A423	D14-114	5M*	D
14A424	D11-115	7500	A
14A425	D11-116	10M*	A
14A426	D13-116	10M	C
14A427	D14-116	10M*	D
14A428	D16-116	10M*	F
14A429	D14-118	15M*	D
14A430	D16-118	15M*	F
14A431	D16-119	20M*	F
14A432	D11-120	25M	A
14A433	D14-120	25M*	F
14A434	D16-120	25M	F
14A435	D11-123	50M	A
14A436	D13-123	50M	C
14A437	D14-123	50M*	D
14A438	D13-125	75M	C
14A439	D14-125	75M*	D
14A440	D11-128	100M	A
14A441	D13-128	100M	C
14A442	D11-129	200M	A
14A443	D14-129	200M*	D
14A444	D11-130	250M	A
14A445	D13-130	250M	C
14A447	D14-130	250M*	D
14A449	D13-132	350M	C
14A451	D11-133	500M	A
14A452	D13-133	500M	C
14A454	D14-133	500M	D
14A456	D11-137	1 Meg.	A
14A457	D13-137	1 Meg.	C
14A463	D13-139	2 Meg.	C
14A469	D13-140	3 Meg.	C
14A470	D11-141	5 Meg.	A
14A471	D11-143	10 Meg.	A

*270 Ohm, 1/2 watt Res. included.
Your Choice of above, **73c**
Net Each

TYPE "D" TAPPED CONTROLS

Stock No.	IRC Type	Ohms Res.	Taper No.
14A446	D13-130X	250M	125M Sp.
14A448	D18-130X	250M	60M H
14A450	D18-132X	350M	75M H
14A453	D13-133X	500M	125M H
14A455	D18-133X	500M	50M Sp.
14A458	D13-137X	1 Meg.	250M H
14A459	D17-137X	1 Meg.	35M Sp.
14A460	D18-137X	1 Meg.	100M Sp.
14A461	D19-137X	1 Meg.	100M Sp.
14A462	DVC-539X	1 Meg.	500M Sp.
14A464	D13-139X	2 Mg.	500M H
14A465	D17-139X	2 Mg.	150M Sp.
14A466	D18-139X	2 Mg.	1 Mg. Sp.
14A467	D18-139XX	2 Mg.	(250M 2-Taps (500M Sp.
14A468	D19-139X	2 Mg.	50M Sp.



Tap-In Shafts for All Above Controls

Stock No.	IRC Type	Description	Net Each
14A500	B	3-Piece Slotted	26c
14A503	E	Knurled Slotted	18c
14A504	F	Solid 4" Round	18c
14A505	G	Auto Radio	18c



UNIVERSAL TYPE "DS" FIXED SHAFT CONTROLS
(All are 1 1/8" x 17/32" thick.)

Stock No.	IRC Type	Ohms Res.	Taper No.
14A400	DS11-116	10M	A
14A401	DS14-116	10M*	D
14A402	DS14-120	25M*	D
14A403	DS11-123	50M	A
14A404	DS11-123	100M	A
14A405	DS13-128	100M	C
14A406	DS11-180	250M	A
14A407	DS13-130	250M	C
14A410	DS13-133	500M	C
14A412	DS13-137	1 Mg.	C
14A414	DS13-139	2 Mg.	C

*270-Ohm, 1/2 Watt Res. Included.
Type "DS" Controls, **73c**
Net Each

TYPE "DS" TAPPED CONTROLS

Stock No.	IRC Type	Ohms Res.	Taper No.
14A408	DS13-130X	250M	125M Sp.
14A409	DS18-130X	250M	60M H
14A411	DS13-133X	500M	125M H
14A413	DS13-137X	1 Mg.	250M H
14A415	DS13-139X	2 Mg.	500M H

Type "DS" Tapped Controls, **\$1.09**
Net Each

SWITCHES FOR "D" AND "DS"

Stock No.	IRC Type	NET EACH
14A508	41 S.P.S.T.	.36
14A507	42 D.P.S.T.	.44
14A508	43 S.P.D.T.	.44
14A509	45 Four Point	.44
14A510	47 *S.P.S.T.	.44

(*With dummy lug.)



Clutch-Type "DC" Controls
With friction clutch drive for auto radio use.

Stock No.	IRC Type	Ohms Res.	Res. to Tap
14A472	DC13-130	250M	....
14A473	DC18-130X	250M	50M
14A474	DC13-133	500M	....
14A475	DC13-133X	500M	125M
14A476	DC13-137	1 Meg.	....
14A477	DC13-137X	1 Meg.	250M
14A478	DC13-139	2 Meg.	....
14A479	DC13-139X	2 Meg.	500M

"DC" Controls, **\$1.09**
Your Choice, Net Each

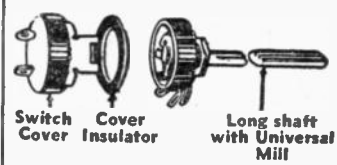


Dual Controls
Specially selected to cover most needs. Size, 1 1/4" x 1 1/4". Attachable switches as listed below.

Stock No.	IRC Type	Unit	Res.	Ohms Taper
14A482	35-1620	Panel	10M	C
		Rear	25M	E
14A483	61-1623	Panel	10M	F
14A484	33-2828	Panel	100M	A
		Rear	100M	C
14A485	33-3030	Panel	250M	C
		Rear	250M	C
14A486	33-3333	Panel	500M	C
		Rear	500M	C
14A487	33-3737	Panel	1.0 Meg.	C
		Rear	1.0 Meg.	C
14A488	33-3939	Panel	2.0 Meg.	C
		Rear	2.0 Meg.	C

Choice of above, **\$1.82**
Net Each
14A511, No. 21 S.P.S.T.
Sw. Net **35c**

Centralab "RADIOHM" VOLUME CONTROLS For All Service Needs



STANDARD and MIDGET RADIOHMS as listed below all have attached 2 1/2" shaft, flatted, and with universal mill full length. STANDARD RADIOHMS are 1 7/16" in diameter, 9/16" deep overall; MIDGET RADIOHMS are 1 3/32" in diameter. Attachable switches for Standard or Midget Radiohms available, as listed below.


Ohms Resistance	(Un-Tapped) Usual Circuit	CRL Curve	Standard Fact. No.	Stock No.	Midget Fact. No.	Stock No.
500	Voltage Divider	1	A-100	14A274	N-157	14A214
1,000	Voltage Divider	1	A-101	14A275	N-158	14A215
2,000	Voltage Divider	1	A-102	14A276	N-159	14A216
3,000	Voltage Divider	1	A-103	14A277	N-160	14A217
4,000	Voltage Divider	1	A-104	14A278	N-161	14A218
5,000	Antenna Shunt	6	A-106	14A279	N-162	14A219
7,500	Voltage Divider	1	A-107	14A280	N-163	14A220
10,000	Antenna, C-Bias	1	A-108	14A200	N-107	14A221
10,000	Antenna, C-Bias	4	A-110	14A281	N-108	14A222
10,000	Antenna Shunt	6	A-111	14A282	N-109	14A223
15,000	Antenna, C-Bias	3	A-112	14A283	N-110	14A224
25,000	Voltage Divider	1	A-115	14A201	N-113	14A225
25,000	C-Bias	4	A-116	14A284	N-114	14A226
50,000	Voltage Divider	1	A-118	14A202	N-114	14A227
50,000	Tone Control	6	A-119	14A203	N-115	14A228
75,000	C-Bias	4	A-121	14A285	N-116	14A229
100,000	Voltage Divider	1	A-122	14A204	N-116	14A230
100,000	AF Grid or Tone	6	A-123	14A205	N-117	14A231
200,000	AF Grid or Tone	1	A-125	14A206	N-168	14A232
200,000	C-Bias	4	A-126	14A286	N-169	14A233
250,000	AF Grid or Tone	6	A-127	14A207	N-102	14A234
500,000	Voltage Divider	1	A-128	14A208	N-118	14A235
500,000	Series in RF Plate	4	A-129	14A287	N-170	14A236
500,000	AF Grid or Tone	6	A-130	14A209	N-103	14A237
750,000	AF Grid or Tone	6	A-131	14A210	N-171	14A238
1 Meg.	AF Grid or Tone	6	A-132	14A211	N-104	14A239
2 Megs.	AF Grid or Tone	6	A-133	14A212	N-155	14A240
3 Megs.	AF Grid or Tone	6	A-134	14A213	N-156	14A241

YOUR CHOICE of the above un-tapped STANDARD or MIDGET RADIOHMS, Net Each **73c**

TAPPED MIDGET RADIOHMS

Fact. No.	Stock No.	Resistance Max. Ohms	Tapped at Ohms	Usual Circuit	Location
NT-147	14A242	250,000	125,000	Tapped Audio Grid	
NT-148	14A254	350,000	75,000	Tapped Audio Grid	
NT-149	14A243	500,000	250,000	Tapped Audio Grid	
NT-150	14A244	1 Meg.	200,000	Tapped Audio Grid	
NT-152	14A255	2 Megs.	400,000	Tapped Audio Grid	
NT-153	14A245	2 Megs.	1 Meg.	Tapped Audio Grid	

YOUR CHOICE of the above tapped Midget Radiohms, NET EACH **\$1.09**



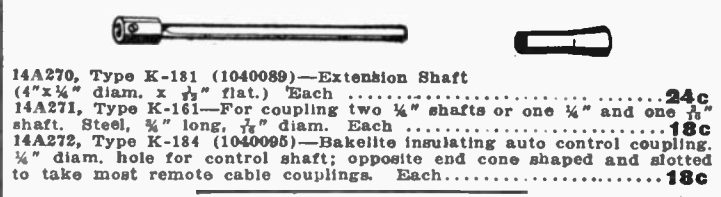
Midget Radiohms with Split Knurl Shafts
For sets with knobs that won't fit other type shafts. Shafts are 2 3/16" long; can be cut to desired length.

Resistance	Ohms Curve	Type	Factory Number	Stock No.	Net Each
25M	4	Plain	NK-137	14A246	\$0.73
50M	6	Plain	NK-138	14A247	.73
250M	6	Plain	NK-139	14A248	.73
500M	6	Plain	NK-140	14A249	.73
1 Meg.	6	Plain	NK-141	14A250	.73
2 Megs.	6	Plain	NK-142	14A251	.73
500M		Tapped @ 150M	NK-143	14A252	1.09
1 Meg.		Tapped @ 300M	NK-144	14A253	1.09

ATTACHABLE SWITCHES

FOR STANDARD CONTROLS				FOR MIDGET CONTROLS			
Fact. No.	Stock No.	Net Each		Fact. No.	Stock No.	Net Each	
K-10	14A261	S.P.S.T.	.35c	K-155	14A266	S.P.S.T.	.35c
K-11	14A262	S.P.D.T.	.44c	K-156	14A267	S.P.D.T.	.44c
K-12	14A263	D.P.S.T.	.44c	K-157	14A268	D.P.S.T.	.44c
K-15	14A264	Four Point	.44c	K-158	14A269	Four Point	.44c
K-16	14A265	S.P.D.T.	.44c				

"RADIOHM" EXTENSION SHAFTS AND COUPLERS



14A270, Type K-181 (1040089)—Extension Shaft (4"x 1/4" diam. x 1/2" flat.) Each **24c**
14A271, Type K-161—For coupling two 1/4" shafts or one 1/4" and one 1/2" shaft. Steel, 1/2" long, 1/4" diam. Each **18c**
14A272, Type K-184 (1040095)—Bakelite insulating auto control coupling. 1/2" diam. hole for control shaft; opposite end cone shaped and slotted to take most remote cable couplings. Each **18c**

EXPLANATION OF CENTRALAB TAPERS
"1" Voltage divider. "3" Antenna "C" Bias "4" "C" Bias "6" Audio grid or Tone.

CENTRALAB CONTROL GUIDE
No. 14A294. NEW 11th Edition. Each **10c**

LATEST IRC VOLUME CONTROL GUIDE
No. 16A172. Your Cost, Each **25c**

Quality Yet Low Price is a combination that is common at **BA**

SAVE UP TO ONE-HALF ON TUBULAR DRY ELECTROLYTICS METAL ENCASED

Guaranteed Top Quality WE INVITE YOU

to tear these apart and COMPARE the construction, the quality and amount of material with ANY MAKE of the same type of condenser for which you usually pay up to twice as much. No, Sir!—they are not seconds or old stock! They are positively new and regular in every way! Every one UNCONDITIONALLY GUARANTEED FOR ONE YEAR!



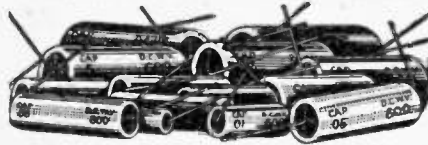
These quality built compact capacitors are hermetically sealed in aluminum tubes with insulating jacket of kraftboard. Long finned copper leads securely anchored. Dual units have common negative and have a mounting strap.

IN CAPACITIES USED MOST OFTEN

450 Working Volts D.C.				150 Working Volts D.C. Duals					
Cat. No.	Cap. Mfd.	Size	Your Cost Each	10 at	Cat. No.	Cap. Mfd.	Size	Your Cost Each	10 at
15A408	8	3/4x1 9/16	.36	.34	15A414	20-20	3/4x1 9/16	.47	.45
15A409	16	7/8x2 1/16	.50	.48	15A415	30-30	7/8x1 9/16	.53	.51
15A410	20	1x2 1/16	.56	.54	15A416	40-40	7/8x2 1/16	.59	.57
					15A417	50-30	7/8x2 1/16	.69	.57

150 Working Volts D.C.				
Cat. No.	Cap. Mfd.	Size	Your Cost Each	10 at
15A411	20	5/8x1 9/16	.38	.36
15A412	30	3/4x1 9/16	.40	.38
15A413	40	3/4x2 1/16	.44	.42

LOW, LOW PRICES ON STANDARD QUALITY PAPER TUBULAR CONDENSERS. STOCK UP NOW!



CAPACITIES YOU USE EVERY DAY
600 WORKING VOLTS D.C.

Cat. No.	Cap. Mfd.	Size	Your Cost Each	10 at
15A420	.001	3/8x1"	.08	.07
15A421	.002	3/8x1"	.08	.07
15A422	.005	3/8x1 3/16"	.09	.08
15A423	.01	7/16x1 3/16"	.09	.08
15A424	.02	7/16x1 3/8"	.10	.09
15A425	.05	1/2x1 3/8"	.11	.10
15A426	.1	9/16x2 1/8"	.13	.12

Save on Handy Kits of Paper Tubulars. Popular Sizes

Kit of 18 CONDENSERS
Contains 2 Each .001-.002-.005 and 3 Each .01-.02-.05-.1. All 600 Volt top quality paper tubulars.
No. 15A388. YOUR COST **\$1.53**

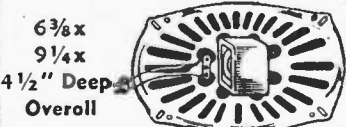
Kit of 36 CONDENSERS
Contains 4 Each .001-.002-.005 and 6 Each .01-.02-.05-.1. All 600 Volt top quality paper tubulars.
No. 15A389. YOUR COST **\$2.85**

"Re-Mote" REAR SEAT CAR RADIO SPEAKER



Easy to install in a few minutes—no cutting of holes required. Furnished complete with 17 ft. wire, fittings, resistor to match speaker to any standard Auto Radio and complete instructions. Consist of 5" quality PM speaker in beautiful marbled french gray plastic case, volume control built in.
No. 14A650.
Your Cost, Each **\$6.37**

A SMASHING VALUE! HEAVY DUTY OVAL P.M.



Has heavy slug to handle high output. Voice Coil 3.2 ohms. Just fit for Auto Radio Speaker replacements and other applications where space is limited and a heavy duty speaker is desirable.
14A651. Case of 4 **\$2.95** Case of 4 **\$10.95**

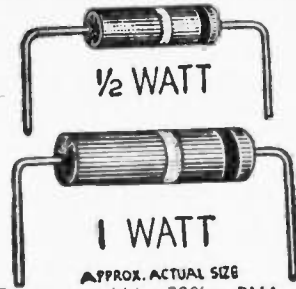
SAVE ONE-HALF ON SYLVANIA TUBES!

A special purchase from an overstocked set manufacturer makes these ridiculous Low Prices possible. Brand New guaranteed perfect—the identical Sylvania tube that would cost you up to Double our price—except they are bulk packed as set manufacturers buy them. Popular Locktall types.

Type	Stock No.	Each	25 Lots
14A7	21T3993	69c	62c
14Q7	21T3994	59c	53c
14B6	21T3995	59c	53c
35Y4	21T3996	59c	53c
50A5	21T3997	69c	62c

One of Each Type as Listed
No. 21T3998. Per Kit **\$2.95**
10 Kits. Per Kit **\$2.75**

QUALITY Yet LOW PRICES on Ceramic Insulated CARBON RESISTORS



APPROX. ACTUAL SIZE

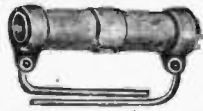
Tolerance within 20%. RMA color coded. In all popular capacities, up to 20 Meg. State size wanted.
1/2 Watt 100
12A654. Ea. 4c Lots..... 3c
1 Watt 100
12A655. Ea. 5c Lots..... 4c



HANDY ASSORTMENTS AT BIG SAVINGS

Contains all most popular capacities. 100 assorted, 50 each 1/2 and 1 watt.
18A74. Per Assortment **\$1.95**
100 assorted, 50—1/2 watt, 25—1 watt, 25—2 watt.
18A75. Per Assortment **\$2.25**
200 assorted, 100—1/2 watt, 75—1 watt, 25—2 watt.
18A786. Per Assortment **\$3.95**

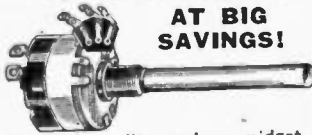
10-WATT VITREOUS ENAMELED Wire Wound Resistors



Rugged—dependable—accurate. Wire wound over a special ceramic tube, then covered with superior vitreous enamel. For every purpose—none finer. Have finned wire pig tail leads anchored to lug ends.

Available in ohmages as follows: 15, 20, 25, 50, 100, 150, 200, 250, 300, 400, 500, 600, 800, 1,000, 1,250, 1,500, 1,750, 2,000, 2,500, 5,000, 6,000, 7,500, 8,000, 10,000, 12,500, 15,000, 17,500, 20,000, 25,000. **33c**
No. 12A657. Specify Value When Ordering. EACH

VOLUME CONTROLS AT BIG SAVINGS!



Standard quality makes, midjet all-purpose type with 1 1/4" round shafts.
500,000 ohm Less Switch.
No. 19A1208. Lots of 29c 10. Each 27c
Each.....
500,000 ohm With Switch.
No. 17A446. Lots of 39c 10. Each 37c
Each.....
500,000 ohm DPST Switch, the popular control for battery sets.
No. 14A772. Lots of 49c 10. Each 47c
Each.....
1 MEC. CONTROLS Less Switch
No. 14A773. Lots of 29c 10. Each 27c
Each.....
With DPST Switch
No. 18A1002. Lots of 49c 10. Each 47c
Each.....

A BIG BARGAIN!



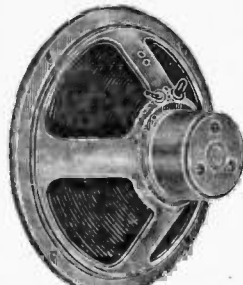
Replacement For 8-8 Mfd. Electrolytic Condensers 800-V. Peak 600-V. DC Wkg.

Paper-wound in standard inverted aluminum can, size 1 1/2x4 1/2" and 6" wire leads. A quality replacement for 8-8 mfd. Electrolytics, especially where excessive surges are encountered. No polarity to be observed. Well known quality make, priced at less than 1/2 its usual price. Buy plenty—paper condensers won't deteriorate in stock.

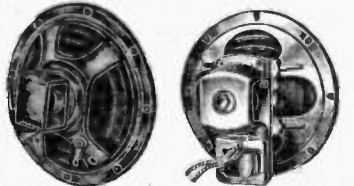
No. 17A365. Lots of 95c 10. Each 70c
Special, Each

OUTSTANDING SPEAKER VALUES!

For Low Power "PA" or Console Radio Replacement 12-Inch P.M.



8 to 10-Watt 12" P.M.
1" voice coil; 6 to 8 ohms impedance; weight, 5 1/2 lbs. A pair will work fine with a 15 or 20-watt amplifier—crystal clear voice or music reproduction.
No. 30A123. Special, Each **\$4.95**
10 to 13-Watt 12" P.M.
1" voice coil; 6 to 8 ohms impedance; weight, 7 lbs. Two of these will handle the average 25-watt amplifier—will deliver Top Quality Voice or Music Reproduction.
No. 30A122. Special, Each **\$5.95**



P.M. WITH ALNICO V. MAG.
5" P.M., a size you use most for AC-DC sets, record players, intercoms, etc. Quality make.
No. 14A649. Special, Each **\$1.45**
Per Case of 24. **\$29.95**
ONLY
6" P.M. with heavy enclosed slug.
No. 14A654. Special, Each **\$1.95**
Special, Each.....
3 1/2" P.M., Square mounting, heavy magnet. Ideal for small sets, intercoms, etc. Requires only 2" behind mounting panel.
No. 14A653. Special, Each **\$1.45**
Electro Dynamics 450 Ohm Field 4" With Output Transformer for 50L6 and similar tubes.
No. 14A645. Special, Each **\$1.85**
5" With Output Transformer for 50L6 and similar tubes.
No. 14A652. Special, Each **\$1.99**

NEEDED in EVERYDAY SERVICING

SPRAGUE Interference Filters

New filter units designed for installations at the noise source. Small self-contained and easily applied to any electrical device within their current and voltage ratings.



IF types. For connection across the power line, motor brushes, contacts, etc., have maximum rating of 220 volt AC or DC, and are provided with a mounting strap and two wire leads.

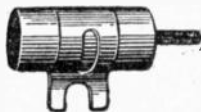
IF-15. A filter for all small motor operated devices, mixers, fans, vacuum cleaners, etc. Length 2 3/4", Dia. 1".
No. 19A75. Net Each... **\$1.11**

IF-21. Dual type for use across brushes of fractional horsepower motors, also across line terminals of motors with can grounded to motor frame. Length 2 3/4", Dia. 1".
No. 19A76. Net Each... **89c**

IF-11. Dual high capacity filter for use on large motors over 1 horsepower and up to 220 V. AC or DC. Also used on high current arcing or sparking devices such as projectors, arc-welders, etc. Length 5 1/2", Dia. 1 1/2".
No. 19A77. Net Each... **\$2.56**

IF-S1. For use across make and break contacts, such as thermostats, circuit breakers, door-bells, buzzers, relays, etc. Length 2 3/4", Dia. 1".
No. 19A78. Net Each... **66c**

Type IF-37 For Fluorescent Lamps



Especially designed for single lamp fixtures. Also very effective on make-and-break governor-type motors, such as those used on adding machines and typewriters. Small compact unit, 2 7/16" long, 1" dia.

No. 19A79. Net Each... **88c**

SPRAGUE FILTEROLS



For series connection to power line with casing grounded to the frame of the offending device. For very severe interference it may be necessary to install a Filterol in each side of the power line, though one unit usually is sufficient. Filterols are provided with mounting tabs or flanges and two solder-on screw terminals. All are safely insulated for at least 115 volt AC or DC. Selection of types 1, 2 and 3 should be based entirely on current rating. Type 4 incorporates a Sprague Hy-pass Capacitor and provides exceptionally high attenuation at frequencies above 5 MC and is effective up to 150 MC or more. Type 4 is rated at 220 Volt AC or DC.

Stock No.	Type	Amps	Size	Net Ea.
19A80	1	2 1/4	3/8 x 1 1/4"	\$2.79
19A81	2	10	3 1/2 x 1 1/2 x 2"	5.73
19A82	3	35	3 1/2 x 1 1/2 x 3 1/2"	7.35
19A83	4	20	2 1/4" L x 1" D.	1.60

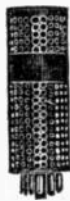
HEAVY DUTY Appliance Filter



Recommended for use where severe noise is encountered and a portable filter is desired. Plugs in light socket ahead of appliance. Has provision for ground lead when needed.

No. 19A74. Net Each... **\$6.61**

JFD Adjustable AC-DC Ballasts



Just 3 Types Replace Over 2500 Exact Duplicates

Easily adjusted to the correct resistance. Housed in air-cooled perforated shell. Types A and B have octal base, type C, 4 prongs. Type A replaces all ballasts beginning with letter K, L, M, BK, BL, or BM, with numbers including 6 through 42, ending with letters A, B, C, D, F, G, or H. Specify Stock No. 15A2009. Type B replaces those beginning with K, L, M, BK, BL, or BM, with numbers including 45 through 105, ending with letters A, B, C, D, F, G, H, S1, S2 or S3. No. 15A2010. Type C replaces all 4-prong ballasts numbered 80 through 350, ending with the letter R, R4, R8, L, L4, or L8. No. 15A2011. Your Choice Type A, B, C, Ea. **88c**

SERVICEMAN'S KIT

Contains 5 adjustable ballasts: 2 type A, 2 Type B, and 1 Type C with complete instructions for replacing over 2500 exact duplicates.

15A2012. Per Kit... **\$4.41**

JFD A.C.-D.C. Ballast Manual

Information on how to adapt adjustable ballasts to all service jobs. FREE when requested with order. 16A317.

RESISTOR CORDS



For AC-DC Sets

Flexible, sturdy, 6 ft. cords with trim bakelite plug and three well insulated color coded leads. End terminals are tinned.

Ohms	Stock No.	Ohms	Stock No.
135	15A2015	290	15A2013
160	15A2014	300	16A451
180	15A2020	330	15A2016
200	16A450	350	15A2017
220	15A2019	390	16A452
250	15A2018		

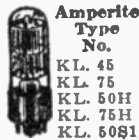
CHOICE EACH... **69c**

High Resistance Line Cords. 450 Ohms, Stock No. 16A453. 560 Ohms—For 3-way portable radios. Stock No. 15A2022. 960 Ohms—For sets using 4523 rectifier. Stock No. 15A2025. Choice High Resistance Cords, Each... **\$1.01**

MOTOROLA LINE CORD For Models 41D, 51D, 52D, 41H. Contains 1,100 ohm and 280 ohm resistors. 8 ft. long. Stk. No. 16A454. Net Ea. **\$1.21**

UNIVERSAL A.C.-D.C. LINE CORD Adjustable 22 to 330 ohms. 15A2021. Each... **88c**

Amperite Ballast Tubes for AC-DC Sets



Amperite Type No.	Stock No.	Replaces Ballast Tubes Starting With Letter	Numbered From	Ending in the Letter
KL 45	15A2000	K, L, M, or BK	86 to 67	A, B, C, or D
KL 75	15A2001	BL or BM	67 to 105	A, B, C, or D
KL 50H	15A2002	K, L, M, or BK	36 to 67	F, G, or H
KL 75H	15A2003	K, L, M, or BK	67 to 105	F, G, or H
KL 60S1	15A2004	K or L	40 to 100	S1

Exceptions to Above Chart— For BK49B, order Stock No. 15A2005, and for L55B order No. 15A2006. 4P-45, 4-prong base, Stock No. 15A2024 replaces any of the following.

Stock No.	Replaces	Stock No.	Replaces
140R4	60X3T	40A2	185L8
140R8	165R8	40B2	185L44
140R44	165R44	185R4	60D2
140L4	165L4	185R8	300R4
140L8	165L8	185R44	320R4
140L44	165L44	185L4	KX42B
			KX49B

200R, Stock No. 15A2007. 250R, Stock No. 15A2008. All Types Net Each... **73c**

Fluorescent Lighting Radio Noise Suppressor



Approved by Underwriters Lab. Easy to Install.

Designed especially to suppress noises caused by Fluorescent Lamps. One of the most frequently needed suppressors now with the general acceptance of Fluorescent Lighting. Also may be used for correcting interference caused by electrically operated machines and appliances. After installed, requires no further attention. No. 19A72. Net Each... **73c**

AEROVOX Radio Noise Suppressor



For electric razors and small appliances. Plugs in light socket ahead of appliance used. 19A73. Net Each... **94c**

RADIO NOISE FILTER MALLORY TYPE X-6

Plugs into power receptacle ahead of interfering device. Recommended for electric razors, and other small devices. In attractive brown plastic case, size 1 1/4 x 2 1/16 x 1". Rated at 125 V. A.C.-D.C., 15 A.



No. 19A1209. Your Cost, Each... **94c**

CENTER TAP-INSULATED WIRE WOUNDS



Bakelite encased for high temperature. Ideal to balance circuits in sets and transmitters. 2 1/2" long, 5 watts. No. 15A1081. 10, 20, 50, 100 or 200 ohm. Specify ohmage wanted. 21c

IRC RESIST-O-GUIDE A handy calculator on waxed cardboard. No. 16A116. Each... **10c**

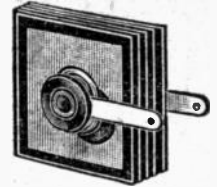
CENTRALAB ECONOMY AMPLIFIER CONTROLS



Designed primarily for inexpensive sound equipment, fading and mixing systems. Non-rubbing contact for smooth, quiet operation. Will dissipate 1 watt. All units 1 3/8" diameter, 9/16" deep, with 2 1/4" shaft and 3/8" bushing.

Stock No.	CRL Number	Resistance	Description	Net Each
14A288	M-141	500M	Gain Control	\$1.03
14A289	M-142	1 Meg.	Gain Control	1.03
14A290	MT-144	500M	Straight Fader	1.18
14A291	MT-145	1 Meg.	Straight Fader	1.18
14A292	MX-147	200	"Delta-T" Pad	2.06
14A293	MX-148	500	"Delta-T" Pad	2.06

MIDGET SELENIUM RECTIFIERS



For 115 V., 100 or 250 MA maximum. An advanced selenium disc type rectifier with aluminum fins. It starts instantly, runs cool, and has long life. Especially recommended for rectifier replacement in 115 V. A.C.-D.C. radios and amplifiers. May also be used in a simple bias supply or to furnish D.C. for operating relays, etc. 100 MA size 1 1/2 x 1 1/8". No. 14A635. Net Each... **\$1.09**

Lots of 6, Net Each... **96c**

250 MA size 1 1/2 x 1 1/2 x 7/8". Stock No. 19A253. Net Each... **\$1.58**

Lots of 6, Net Each... **\$1.50**

CENTRALAB "HI KAPS"



Ceramic By-Pass Coupling Condensers 6000 wkg. Volts DC 1000V. Flash Test Moisture proof and puncture proof, will not short or become intermittent. Very compact, higher voltage and higher capacitance in less space. Non-inductive, low power factor.

Cap. Mfd.	Stock No.	Net Ea.
.000050	15A84	
.000100	15A85	
.000150	15A86	
.000250	15A87	
.000500	15A88	15c
.000750	15A89	
.001000	15A90	
.002000	15A91	
.005000	15A92	18c
.010000	15A93	

Continental Carbon X-Type Precision Resistors

Accuracy, Plus or Minus, 1%

"X-1" 1-watt with metallic resistance film formed on surface of low-loss ceramic tubes. Hermetically sealed with smooth, uniform vitreous enamel coating capable of withstanding temperatures to 400° F. Negligible noise characteristics. 1 1/2" tinned copper wire leads. Size, 9/32 x 1 1/2".



Ohms	Ohms	Ohms	Ohms	Ohms
1	1000	10,000	75,000	750,000
10	1450	15,000	90,000	1.0 Meg.
25	2000	20,000	100,000	1.5 Meg.
50	2950	25,000	150,000	2.0 Meg.
100	4450	30,000	200,000	2.5 Meg.
200	5000	40,000	250,000	3.0 Meg.
400	7450	50,000	300,000	
500	9950	60,000	500,000	

No. 15A110. Specify Values Desired. EACH... **59c**

SPRAGUE TYPE "TM"



600-VOLT MOLDED TUBULARS Highly heat and moisture resistant. Non-inflammable, Rugged, Completely insulated. Small. Fine for auto radios and small sets that get hot.

Mfd.	Size	No.	Each
.0001	3/8 x 1 1/8	15A451	15c
.00025	3/8 x 1 1/8	15A452	15c
.0005	3/8 x 1 1/8	15A453	15c
.001	1/2 x 1	15A454	15c
.002	1/2 x 1	15A455	15c
.005	3/8 x 1 1/4	15A456	15c
.006	3/8 x 1 1/4	15A457	15c
.01	3/8 x 1 1/4	15A458	18c
.02	1/2 x 1 1/4	15A459	18c
.05	1 1/2 x 1 1/2	15A460	24c
.1	5/8 x 1 3/8	15A461	26c
.25	1 1/2 x 2 1/2	15A462	29c
.5	7/8 x 2 1/2	15A463	42c

IF Transformers — Antenna and RF Coils — Wave Traps

PLASTIC I.F. TRANSFORMERS



Air Core Type — Minimum space with maximum performance! Only 1 1/4" square and 2 1/2" high — 1-piece molded plastic trimmer base and coil form. Universal type windings of LITZ WIRE. Wide, stable, frequency range — double tuned — immune to temperature, vibration, or humidity effects.

Input Inter. Output	Stk. No.	Mels. No.	Net Ea.
	16A204	16-6658	82c
	16A205	16-6659	82c
	16A206	16-6660	82c
	175 KC		
Input	16A201	16-6649	82c
Inter.	16A202	16-6650	82c
Output	16A203	16-6651	82c

SMALL "PLASTIC" I.F.'s

Air core, similar to larger type above. Shield size 1 1/8" square, 2 1/2" high. For 456 KC Stk. No. Mels. No. Net Ea. Input 17A1125 16-6666 82c Output 17A1126 16-6667 82c

FERROCART "PLASTIC" I.F.'s

IRON CORE with unusually HIGH GAIN and superior selectivity curves for improving performance of compact and auto sets having only a single I.F. stage. Not recommended for 2-stage systems. Size 1 1/4" square, 2 1/2" high. For 456 KC Stk. No. Mels. No. Net Ea. Input 16A207 16-6662 1.23 Output 16A208 16-6663 1.23

456 KC Midget I.F. Trans.

The same as used in the popular "Carry" type sets and compact AC-DC models. "Battery" types are high gain. "AC-DC" type is designed for use as input or output. With Hi Q powdered iron cores and compression type trimmers. Shield size 3/4" square 2" long.

Stk. No.	Mels. No.	Type	Price
17A1179	16-6668	Bat. Input	\$1.03
17A1180	16-6669	Bat. Output	1.03
17A1181	16-6678	AC-DC Univ.	1.03

F.M. I.F. TRANSFORMER

Permeability tuned; for use on newly assigned F.M. band. Mounted in shield, size 1 7/16" x 1 29/32" high. Tuned to 10.7 MC. No. 17A1139. Type 16-6665. Price Each \$1.73

Discriminator Transformer

Mounted in same size can as IF above. Permeability tuned to 10.7 MC. No. 17A1140. Type 17-3484. Price Each \$2.29

AM-FM I.F. Transformer

Composite 456 KC AM and 10.7 MC FM input or output. Each circuit tuned by a separate Hi Q powdered iron core. Can size 1 3/8" square, 2 1/2" high. Has space bolt mounting and solder terminals. Type 16-6675. \$2.35 No. 17B1144. Price Each

FM Ratio Detector Coil

Companion to No. 17B1144 or may be used with straight 10.7 MC I.F. transformer to make popular "FM" converters. Iron core tuning. Shield size 1 3/8" square, 2 1/2" high. Type 17-3487. No. 17B1145. Price Each \$2.26

BROADCAST WAVE TRAPS

For elimination of interference caused by strong broadcast stations. Fully shielded and moisture protected. Has brackets for mounting and instructions for either retractor or by-pass arrangement. Size 1 3/8" square, 1 7/8" high.

Stock No.	Type	Frequency Range	Price Each
17A1165	15-8479	400-700 KC	88c
17A1167	15-8480	650-1000 KC	88c
17A1168	15-8481	950-1600 KC	88c

"Ferrocart"

IRON CORE I.F.'s

HIGH "Q" Ferrocart powdered iron core provides increased selectivity and gain for many "commercial" receivers with only a single stage I.F. channel. Compact (only 1 3/8" square and 3" high); double tuned with ceramic base, mica-dielectric trimmers, with windings of impregnated Litz wire. R.M.A. color coded leads.

Input	Stk. No.	Mels. No.	Net Ea.
	16A198	16-5740	\$1.65
Output	16A200	16-5742	1.65
	456 KC		
Input	16A214	16-5728	1.65
Output	16A216	16-5730	1.65

STANDARD I.F. TRANS.

Popular for general replacement needs. All are double-tuned with ceramic base mica-dielectric trimmers. Windings of high grade Litz wire are fully impregnated. Black crackle finish can 1 3/8" square, 3" high.

Input	Stk. No.	Mels. No.	Net Ea.
	16A211	16-5712	1.23
Inter.	16A212	16-6133	1.23
Output	16A213	16-5714	1.23
Out CT.	17A1124	16-3736	1.23
	175 KC		
Input	16A209	16-5700	\$1.23
Output	16A210	16-5702	1.23
Out CT.	17A1123	16-3731	1.23

"TWEET" FILTER OUTPUT I.F.

For replacement in late model receivers that have a "tweet" filter enclosed in I.F. shield. "Plastic" air core construction. Shield 1 1/4" square, 2 1/2" high. Stock No. 17A1127. Type 16-6670. Price \$1.32

Replacement I.F. Windings

For repairing "midget" receivers. 3/8" diameter x 1 3/4" long; wound on wood dowels—coupling adjusted by sliding primary coil. "Standard" types for input, interstage, or output; center-tapped for full wave diode circuits. 456 KC Standard Type 16-6601. No. 16A237. Net Each 50c 456 KC Center Tapped Type 16-6603. No. 16A239. Net Each 65c 175 KC Standard Type 16-6600. No. 16A236. Net Each 50c 175 KC Center Tapped Type 16-6602. No. 16A238. Net Each 65c

"CARTWHEEL" I.F.

1-piece, molded plastic trimmer base, 456 KC dual trimmer unit only 1 3/8" x 1 1/32" x 1 1/4" high. Output or Input I.F. replacement for AC-DC sets. No. 16A233. Type 16-6661 82c

Majestic Replacement

Exact duplicate of original. Coil only, no can or trimmer. Used in 2nd I.F. No. 10253 or 11014 of Maj. Mod. 460. 16A235. Type 20-3457 82c

B.F.O. COIL

For use with standard I.F.'s in supers. Supplies the "beat" note necessary to reception of CW, aids in tuning and locating weak stations. Mica trimmed. Freq. Range 290-650 KC. Peaked at 456 KC. In 1 3/8" sq. x 3 1/2" can with knob for pitch control. 16A218. Type 17-6753. Each \$1.44

Universal Adjustable Coils

Permit EXACT duplication of defective R.F., Ant., or Osc. coils in the broadcast or short wave band of ANY receiver! Inductance variable over wide range for "tracking" — screw driver adjustment for exact matching of inductance of old coil. Osc. Coils adjustable for I.F. frequencies from 175 to 520 k.c. may be used in either "cut plate" tuning condenser, or padded circuits. Shields 1 3/4" square x 2 1/2".

Antenna	Stk. No.	Mels. No.	Price
	16A230	14-1026	\$1.03
R.F. Coil	16A232	14-1027	1.03
Osc. Coil	16A231	14-1028	1.03

Antenna	Stk. No.	Mels. No.	Price
	16A227	14-7413	1.65
R.F. Coil	16A229	14-7558	1.65
Osc. Coil	16A228	14-7560	1.65

Antenna	Stk. No.	Mels. No.	Price
	17A1128	14-1041	1.03
R.F. Coil	17A1129	14-1042	1.03
Osc. Coil	17A1130	14-1043	1.03

Antenna	Stk. No.	Mels. No.	Price
	17A1131	14-1044	1.03
R.F. Coil	17A1132	14-1045	1.03
Osc. Coil	17A1133	14-1046	1.03

Antenna	Stk. No.	Mels. No.	Price
	16A221	14-1010	\$0.56
R.F. Coil	16A223	14-1011	.56

Antenna	Stk. No.	Mels. No.	Price
	16A222	14-1024	.73
R.F. Coil	16A224	14-1025	.73

Antenna	Stk. No.	Mels. No.	Price
	17A1163	14-1022	50c
RF Coil	17A1164	14-1023	50c

Compact impregnated coils that will cover 195 to 410 KC with 365 mmfd. condenser. Ant. coil works with loop or straight wire antenna. Osc. coil requires 325-100 m m f d. padder. Shield size 1 1/2" dia., 1 3/4" high, black crackle finish.

Ant. Coil	Stk. No.	Mels. No.	Price
	17A1141	14-1030	\$2.26
Mixer	17A1142	14-1031	2.26
Osc. Coil	17A1143	14-1032	1.65

To replace burned out primaries in high impedance antenna coils. Universal wound on 1/2" dia. x 1/2" long dowels, moisture protected. Inductance 1700 uh. Type 14-6865. 16A234. Each 24c

Easy and economical replacement for burned-out primaries on all types of R.F. and antenna coils. High impedance windings. *Sizes below are for outside dia. of old coil.

Stk. No.	Mels. No.	*O.D.	Net Ea.
16A240	14-6850	1 1/4	\$2.24
16A241	14-6852	1	.21
16A242	14-6854	7/8	.21
16A243	14-6856	3/4	.21
16A244	14-8418	1/2	.18

Standard Oscillator Coils

High quality broadcast band oscillator coils requiring 365 mmfd. condenser. Range, 545 to 1580 KC. Mounted on bakelite base and thoroughly impregnated. Shielded types are 1 1/2" dia., 1 3/4" high. Black crackle finish.

IF Freq.	Stk. No.	Mels. No.	Price
175KC	17A1134	14-3732	\$1.62
456KC	16A225	14-4034	.62

175KC	Stk. No.	Mels. No.	Price
	17A1135	14-4242	.79
456KC	16A226	14-4243	.79

High quality, broadcast band, unshielded. No. 16A215. Type 14-1033. Tapped, for use with 420 mmfd. condenser and padder. EACH 50c No. 17A1182. Type 14-1053. For use with 162 mmfd. "Cut" section condenser. EACH 50c

Universal Oscillator Coil

Unshielded, for general replacement in sets using 456 KC IF. Will work with almost any tube. Stock No. 17A1136. Type 14-1040. Price Each \$1.18

Phono-Osc. Coil

For easy building of EITHER "Wireless" or "Direct Connected" Phono Osc. unit for record playing through radio sets. Compact coil (1 3/8" sq. and 3 1/2" high). Installs in either radio or record player. Knob adjusts for clear frequency in B.C. band. With instructions. 16A217. Type 17-9373 . . . \$1.65

ECONOMY ADJUSTABLE COILS

Inexpensive, efficient and compact replacement for the broadcast and short wave bands of practically any receiver. Inductance is adjustable by means of a Hi Q powdered iron core. Ant. and RF coils have high impedance primaries and litz wire secondaries. BC oscillator is of the two winding type; SW oscillator coils are tapped for 6SA7 type tubes. BC coils 7/16x2", SW coils 7/16x1 1/8". All types unshielded.

Stock No.	Mels. No.	ANT.	PRICE
17A1169	14-1056	ANT.	85c
17A1170	14-1057	R.F.	85c
17A1171	14-1058	OSC.	85c

17A1172	14-1061	ANT.	79c
17A1173	14-1062	R.F.	79c
17A1174	14-1063	OSC.	79c

17A1175	14-1064	ANT.	79c
17A1176	14-1065	R.F.	79c
17A1177	14-1066	OSC.	79c

UNIVERSAL TYPE Oscillator Coil 456 KC. Can be used with 25 different type tubes. Type 14-1060. No. 17A1178. EACH . . . \$1.03

455 KC N.B. DISCRIMINATOR COIL

For use in adapters for converting regular communications receivers with 455 KC I.F. systems for reception of NBFM on amateur bands or for use in construction of complete FM receivers for ham use. Shield size 1 3/8" square, 2 1/2" high. Type 17-3486. No. 17A1165. Price Each . \$1.91

455 KC MINIATURE I.F. TRANSFORMERS

Permeability tuned, and only 3/4" square by 2" high! With plastic frame, molded-in silver mica padding condensers, adjustable iron core tuning slugs, and overall aluminum shield with mounting clips and solder terminals at bottom. No. 19A1206. 455 KC input Miller Type 12-C1. No. 19A1205. 455 KC output Miller Type 12-C2. Choice, Each \$1.18

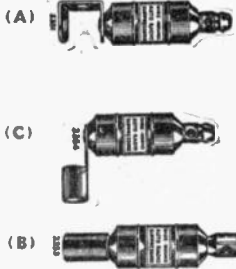
AUTO RADIO NEEDS

For DISTRIBUTOR and SPARK PLUGS NOISE SUPPRESSION



- (1) No. 19A204. Standard Spark Plugs.
 - (2) No. 19A205. Standard Distributor.
 - (3) No. 12A401. Universal for Spark Plugs and Distributor. Is inserted by means of screws to cut cable ends.
 - (4) No. 12A400. Universal for Spark Plugs or Distributor. Fitting at elbow fits terminal at Distributor or Spark Plug, other end screws to cut cable end.
 - (5) No. 19A206. Universal Screw type for Ford V-8 Spark Plugs.
 - (6) No. 19A207. Distributor for Ford V-8, 1936 to 1940.
 - (7) No. 19A208. Snap-on Spark Plug.
 - (8) No. 17A248. For Spark Plug or Distributor. Wire spring makes a connection that won't shake loose. Mounts to cut cable end with a secure screw connection.
 - (9) No. 17A247. Like above, elbow type.
- Your Choice Any of Above. **14c**
 Net Each.....
- Lots of 10. Each..... **12c**

WIRE WOUND SUPPRESSORS



LOW RESISTANCE, 30 Ohms D.C. Due to this extremely low D.C. resistance they definitely do not affect the intensity of the Ignition spark or cut down the speed of the car. The Inductance of the winding offers a high resistance to the ignition noise frequencies and EFFECTIVELY SUPPRESSES ALL INTERFERENCE! Each sealed in a moisture-proof, heat-resisting, insulated casing to fit all makes of spark plugs and cars. Ideal for quiet, noise-free auto radio reception.

(A) No. 19A200. Bracket Type for plugs.
 (B) No. 19A201. For Distributor.
 (C) No. 19A202. Slip-on for plugs.

YOUR COST, **35c** 10 Lots, **32c**
 EACH.....

MASTER DISTRIBUTOR NOISE SUPPRESSOR



For use on late type cars where only one Suppressor is needed. Hermetically sealed to prevent change in resistances under any condition. Impervious to heat, oil and moisture. The master is guaranteed to eliminate all motor noises, eliminating the use of individual suppressors. List Each 75c.

No. 19A203. Lots of **38c**
 Your Cost, Ea. **41c** 10. Each



Hub Cap Wheel Static Eliminator

Eliminates static noise in front wheel of car. Spring has metal point for sure contact.

No. 19A197. Each **7c**

CHROME PLATED KNOBS

Brass, durable, good-looking replacement knobs. Perfect replacement for lost or broken, or thread-stripped knobs. A necessity in every serviceman's kit.

No. 19A198. For 3/16" shaft. **18c**
 No. 19A199. For 1/4" shaft. **12c**
 Net Each..... **\$1.95** For...

ICA SUPPRESSOR SETS

For Noise-Free Auto Radio Reception In Handy Kits, the needed condensers, suppressors, etc., for a complete installation. Easy to follow instructions included.

19A171. For 8-Cyl. Cars (except Fords). Per Kit..... **\$1.89**
 19A172. For 6-Cyl. Cars (except Fords). Per Kit..... **\$1.69**
 19A173. For Ford Cars, 1939 to present. Per Kit..... **\$1.89**

GC ANTI-STATIC Wheel Powder

Reduces interference caused by rotation of car wheels and tires. Easy to apply through valve stem and lasts as long as tire tube.

No. 14A298. Kit with injector and Powder Packet sufficient for 5 tires. **\$1.47**
 Per Kit.....
 No. 14A299. **59c**
 Powder Packet for 5 Tires.....



AUTO RADIO SHAFT & CASING ASSEMBLY

24" long to fit nearly any installation. Equipped one end with 3/8"-20 casing nut and spade shaft tip to fit Crowe Controls. Other end plain to attach whatever fittings needed.

16A177. Each..... **82c**
 Without Fittings on Either End
 16A178—Length 18"..... **50c**
 16A179—Length 24"..... **58c**
 16A180—Length 30"..... **69c**

Auto Radio By-Pass



Its flat shape makes it ideal as a replacement by-pass or hash filter, where standard tubular types are too large. 200 Volts D.C.

No. 18A620. .2 mfd. Each **15c**
 No. 18A624. .5 mfd. Each **25c**

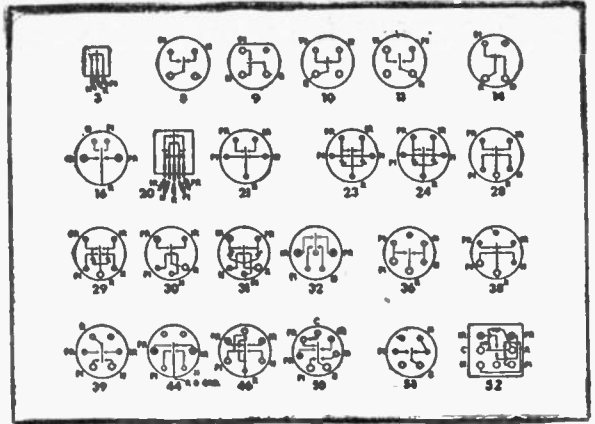
GENERATOR FILTER

FOR AUTO RADIO .5 Mfd., metal encased condenser for Auto radio etc.

17A246. Each..... **29c**
 Lots of 10. Each..... **25c**

MALLORY

THE OUTSTANDING IN VIBRATORS



THESE MALLORY VIBRATORS MEET 95% OF YOUR REPLACEMENT NEEDS

Listed here are the most popular of the new simplified line of Mallory replacement vibrators. Of these 12 basic types (marked *) will cover 90% of your replacement needs. Complete data in Mallory Vibrator Guide FREE with ANY ORDER FOR VIBRATORS. Specify No. 19A26.

No.	Type	Diag.	Each	No.	Type	Diag.	Each
19A1	222	20	\$4.50	19A15	725C	32	\$4.60
19A2	*245	21	4.06	19A64	742	32	4.06
19A3	245A	21	4.06	19A65	743	38	4.06
19A4	245C	28	4.06	19A66	748	44	4.06
19A5	*246	38	4.06	19A16	825C	8	3.68
19A55	246A	38	4.06	19A67	826C	8	3.23
19A56	247	46	4.06	19A17	839	8	2.82
19A7	*248	44	4.06	19A18	*852	14	2.41
19A8	*249	32	4.06	19A19	853	10	2.41
19A57	270B	23	4.88	19A20	*854	11	2.41
19A9	*273C	29	4.50	19A21	*859	8	2.41
19A58	273D	31	4.50	19A68	860	14	2.41
19A59	292	3	2.82	19A22	*870	14	2.41
19A10	*294	8	2.41	19A23	901M	8	2.03
19A60	298	51	3.23	19A69	952W	16	4.06
19A13	505P	8	2.03	19A70	953W	16	4.06
19A61	506P	36	3.23	19A71	954	39	4.06
19A63	514	30	4.06	19A24	*1100	8	2.41
19A14	*716	30	4.06	14A295	1501	53	2.41

FREE CABINET! VIBRATOR DEAL



Deal consists of Six most popular Vibrators and Twelve buffer condensers to cover 75% of your replacement needs—PLUS an attractive and useful metal stock cabinet that has 12 compartments and a drawer that provides space for additional small parts. You pay only for the vibrators and condensers at regular prices. With the "Deal" the cabinet comes FREE.

Stock No. 33B86. **\$23.99**
 Your Cost, Per Deal....

Mallory Vibrator Data Book

A complete Technical manual on the operation, selection, and application of vibrators and vibrator power supply design.

No. 16A197. Net Each **\$1.00**

New 6th Edition Mallory RADIO SERVICE ENCYCLOPEDIA

No. 16A339. **\$2.00**
 YOUR COST. EACH....

2-VOLT VIBRATORS

FOR G.E., ETC., PORTABLES For G.E. Models 250 and 260, use vibrator type 4002, diagram 52.

No. 14A296. **\$5.70**
 Net Each.....

For G.E. Models LB530 and 530X; RCA 65R89, use type T4003, diagram 50.

No. 14A297. **\$5.23**
 Net Each.....

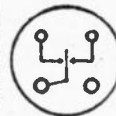
BUFFER CONDENSERS

Housed in hermetically sealed leak-proof metal tubes. Externally insulated. Supplied with removable mounting strap. Ideal for vibrator buffers and high voltage coupling.

1600-Volt Oil Filled		
.002	15A356	71c
.003	15A357	71c
.005	15A358	71c
.008	15A359	71c
.01	15A360	71c
.015	15A361	73c
.02	15A362	76c
2000-Volt Oil Filled		
.005	15A363	73c
.0075	15A364	73c
.01	15A365	73c
.02	15A366	79c

An Outstanding Vibrator Bargain!

Well known quality made secured by Special Purchase. BRAND NEW — PERFECT.



Non-Sync.
 4 Contacts—
 4 Prongs
 (Standard)
 Fits Many
 Popular
 Auto Radios

19A25. Special, Each... **\$1.19**
 10 Lots. Each..... **99c**

WARD AERIALS

UNIVERSAL SIDE MOUNT



SC-6 MOUNTED

SC-6 "AIR KING"—3 Sections 66" Side Cowl, two stanchion mount. Ceramic insulators smartly designed with chrome caps. List Price \$4.95. No. 38A31. Net Each **\$2.91**

SC-8 "LONG RANGER"—4 Section 100"

Like above except for its additional length which makes it a favorite in low signal areas where it provides much improved reception. List Price \$6.95. No. 38A32. Net Each **\$4.09**
12 Lots, Each **\$3.58**
Conversion parts are included in models SC-6 and SC-8 for vertical position mounting on cars with extreme body contours.



DCF-3 MOUNTED

TOP COWL or FENDER

DCF-3 "PHANTOM"—3 Sec. A disappearing antenna (telescopes from only 31 1/2 to 56"). Gives that smart built-in appearance. 100% shielded from engine noises and completely water sealed. Easy to install, universal split ball design with universal bracket for sturdy mounting. List Price, \$6.95. No. 38A40. Net Ea. **\$4.09**

TCF-3 "EIGHT BALL"—3 Sec. Telescopes to 56", a smart universal top cowl or fender type. Easy to mount for perfect and secure fit on any car. List \$5.35. No. 38A48. Net Ea. **\$3.15**



A 36-IN. COAXIAL LEAD IS INCLUDED WITH EACH WARD AUTO AERIAL

Low loss high "Q" coaxial lead cable insulated with polyethylene, 100% shielded with wire braid and protected with vinylite jacket oil and abrasion proof. Finest quality fittings attached and a bayonet adaptor for pin plug is included. If extra leads are needed for replacement, etc. No. 38B35. Net Each **88c**

LEAD EXTENSION

A 12" lead extension must be attached to the 36" lead furnished when aerial is to be mounted on fender. No. 38A41. Net Each **44c**

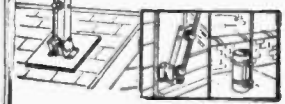
PROFIT BUILDER DISPLAY

A striking 3 dimensional display to catch the eye of every customer. Comes completely assembled ready to place on your counter. You Pay Only for these Four Fast Moving Models—CF-6, SC-6, TCF-3, DCF-3. The Display is FREE.
No. 38A50. Your cost for the 4 aerials and display **\$13.35**

Ward House Mast

Easy to Attach to Roof Top, Window Frame or Soil Pipe.

4 sections, 12 foot, collapsible to 47 inches. Universal mtg. brackets, heavy weather-proof Cadmium plating. Built-in lightning arrester. Comes complete with installation fittings; 60' lead-in wire, ground clamps, screws, nail-on knobs, lead-in tube and straps, soil pipe straps. No. 38A38. Net Complete **\$4.38**



WINDOW ANTENNA

3 SECTION, 8 Foot, collapsible to 42". Simple 3 point, 3 minute installation for apts., homes, office bldgs. Two-way mtg. bracket, 12" lead-in strap. Heavy weather-

proof cadmium plated. No. 38A47. Net Each **\$1.91**

ANTENNA HARDWARE For Auto Aerials



A handy and complete kit of parts, hardware, etc., for use with all makes of aerials having 5/16" dia. tubing. **STRAIGHT SIDE COWL MOUNTING** No. 11A160. List Price \$1.25. Complete Kit, Each **73c**
SLOPING COWL MOUNTING No. 15A232. List Price \$1.25. Complete Kit, Each **73c**

Ward Special Communication Antennas Universal Swivel Mount

A short wave and FM antenna to withstand hardest mobile use. Components are sold separately so you can make up the antenna best suited for your special need. Cast iron SWIVEL BASE for mounting at any point desired. No. 38A42. Net Each **\$7.79**

SHOCK MOUNTING SPRING for fullest protection against impact damage. No. 38A43. Net Each **\$4.65**

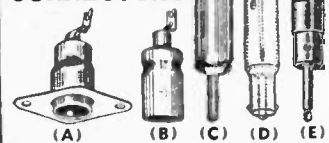
WHIP ROD of maximum resilience and durability. No. 38A44. Single Rod 84". Net Each **\$6.76**
No. 38A45. Adjustable Rod 103". Net Each **\$13.23**

MOBILE ROOF TOP MOUNT

21-inch rod for inter-communications on 140-165 MC. Band. Simple installation. Comes with attached 12-inch Coax lead cable.

Model SPP-18, List Price \$6.60. No. 38A46. Net Each **\$3.88**

ANTENNA CONNECTORS



(A) Shielded Jack with sturdy steel flange and can be mounted with screws or rivets. Solder coated shell, fits antenna plug (C).

No. 12A1404. 11c Lots of 10. Each 10c

(B) Like above, except no flange. May be soldered in position. No. 12A1405. 7c Lots of 10. Each 6c

(C) Antenna plug. Pin extends 17/32" from cad. plated split shell. Makes positive grounded connection when inserted in either above Jacks. No. 12A1406. 7c Lots of 10. Each 6c

(D) Adapter shell converts Motorola Ant. plug like above to Delco bayonet type receptacle. No. 12A1525. 6c Lots of 10. Each 5c

(E) Adapter converts Delco fitting (D) to Motorola type pin plug like (C) above. No. 12B1524. 18c Lots of 10. Each 16c

24-INCH LEADS

Often required to extend antenna leads, particularly when aerials are mounted on fenders. 38B36. 24" Antenna Lead. Each **65c**

Auto Body Plug

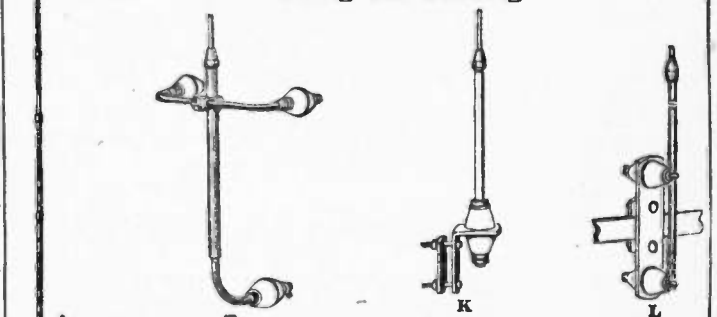
Attractively covers aerial holes in auto tops, cowls, etc. Brass, chrome plated, large flat-head screw with lock washer, rubber spacer and nut.

No. 11A161. For 3/8" Hole. Choice **21c**
No. 12A1407. For 1/2" Hole. Choice **21c**

ANTENNA CONNECTOR

Handy for connection of auto antenna to set. Also has many other uses as a general insulated connector. No. 12A1399. Net Each 7c; 10 for **60c**

PREMAX Police Car Antenna For Receiving and Sending



Type A solid steel rod, joined securely and permanently into a single graduated length which provides high flexibility, minimum wind resistance and indefinite life. .001" cadmium plate finish gives adequate protection against corrosion in all ordinary atmosphere. Will withstand stress of most any obstruction. Where ordinary antennas bend or break, these merely flex and return to original position. Rod is priced separately. Order base preferred from illustrations shown. Type A rod is supplied in 96" length and can be cut for desired frequency. 38A22. 96" Type A rod **\$2.74**
Type T Mounting, attaches to trunk or car body. Lower support in solid brass rod securely joined

to 12" brass tube carrying antenna. Upper support is 24" brass rod and has adjustable lock permitting proper fitting to contour of car. Insulators are high tension, white glazed ceramic 1 1/4" high. Antenna tube provides max. 10" adjustment in antenna height. All metal parts heavily cadmium plated. 38A23. Type T. Net **\$10.94**

Type K Mounting. Mounts on bumper. Has 1 1/4" high tension insulator and socket tube to permit 10" adjustment in antenna height. 38A24. Net Ea. **\$4.26**

Type L Mounting. Is similar to type K in adjusting feature. Has 6" spacing between insulators, giving extra base support. 38A25. Net Ea. **\$6.08**

FORD and BUICK REPLACEMENTS

(A) Ford Replacement Tube and Rod Assembly Part No. 51A-18813-A1. For closed Car Roof Antenna. Replaces the sliding mast for the Ford-Mercury Roof Antenna of 1941-42-46-47 that operates from behind dividing post of the windshield. Supplied with operating knob and set screw. No. 38B33. Net Ea. **\$1.35**

Lots of 12, Each **\$1.22**

(B) Buick Replacement Antenna Mast Section for No. 980-688. Standard Buick Roof Aerial. Fits Buick models 1940 through 1948. Replacement is quick and easy by the mere loosening of a set screw. Has four sections; an exact replacement for original Buick equipment. No. 38B34. Net Ea. **\$1.65**

(A) (B) Lots of 12, Each **\$1.49**

WARD FM and TELEVISION Antennas



Note These WARD Features

- Adjustable all angle mounting.
- Universal base for any roof or wall angle.
- Supplied with 60 ft. 300 ohm Polyethylene transmission line.
- Low-loss rubber stand-offs to guide transmission line down mast.
- Six Plastic stand-offs to guide transmission line to receiver.
- Ring for attachment of guy wires.
- Antenna can be revolved after mounting for best pick-up.
- Element constructed of aluminum. Other parts weather-proofed.

STRAIGHT DIPOLES

For FM, Frequency Range 88-106 MC. No. 38A52. Ward Type FM-50. Net Each..... **\$5.29**
 For Television, Channels 1-6, 44-88 MC. No. 38A53. Ward Type TV-88. Net Each..... **\$7.35**

FOLDED DIPOLES

For FM, Frequency Range 88-106 MC. No. 38A54. Ward Type FM-55. Net Each..... **\$6.44**
 For Television, Channels 1-6, 44-88 MC. No. 38A55. Ward Type TV-94. Net Each..... **\$8.53**

REFLECTOR KIT for Maximum Directional Gain

Consists of a weather-proof cross member and reflector di-pole. Mounts on same mast as straight or folded di-pole and provides maximum signal strength and less interfering signal reflections.

FM Reflector Kit. No. 38A56. Net Each..... **\$3.09**
 Television Reflector Kit. No. 38A57. Net Each..... **\$3.79**

TELEVISION HIGH BAND ADAPTER

Easily added to above Ward antennas. Covers television channels 7-13, 174-216 MC. Consists of a folded dipole with reflector and a 5-ft. metal mast that mounts on top of other antenna and connects to same transmission line. No. 38B19. Ward Type TV-28. Net Each..... **\$5.59**

MAST EXTENSIONS

A 5 ft. weather-proofed extension to increase height of vertical mast supplied with di-pole antennas. No. 38A58. Net Each..... **\$1.53**

EXTRA INSULATORS

A plastic stand-off of unique design. Holds line firmly without distorting shape or changing line impedance. Mounts with single screw. No. 17A1039. Net Each..... **9c**

NON-DIRECTIONAL FM ANTENNAS

Frequency Range 88-108 MC. Designed to pick up FM stations from all directions with equal high efficiency. Requires absolutely no orienting for maximum performance. Engineered for easy installation and supplied with a 5-ft. vertical weather-proof mast and hardware for mounting, including a universal, adjustable angle base. Transmission line is standard 300-ohm type, 60 feet long. Type FMT-61 STRAIGHT FM TURNSTILE. Has signal pickup equivalent to a good folded dipole, but in all directions. No. 38A68. Net Each..... **\$9.11**
 Type FMT-56 FOLDED FM TURNSTILE. Somewhat improved performance as compared to straight FM Turnstile. Recommended where signal levels are generally low. No. 38B26. Net Each..... **\$10.88**

AMPHENOL TELEVISION ANTENNA

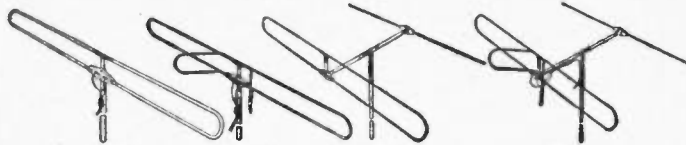
For brilliant reception on all channels in both television bands. Unique design provides the high gain coverage of a separate folded dipole and a reflector for each band, with a minimum number of elements. Definite single direction pickup and rejection of reflected signals helps eliminate "ghosts". Elements and cross-members are aluminum. Mast is steel, 5 ft. high, with swivel base and adjustable guy wire clamps. Supplied with 75-ft. 300-ohm low-loss twin lead, stand-off insulators and instructions. No. 38A69. Amphentel Type 114-005. Net Each..... **\$16.17**

GENERAL ELECTRIC DELUXE 300-OHM LINE

Conductors are heavier and spacing wider than regular 300-ohm line. Oval cross-section shape minimizes moisture effect. For long transmission lines and amateur service. No. 2A179. Per Foot..... **10c**

JFD TELEVISION and FM Antennas

Every JFD antenna measures up to the highest standards for performance, quality of materials and mechanical construction. Every screw, nut and bolt is right in place, minimizing complicated and time consuming assembly on the job. Antenna elements are 1/2" O.D. aluminum alloy tubing. Masts and cross-members are 1" O.D. aluminum 1/16" thick. Element insulators are low-loss polystyrene. Fundamental design of all models provides proper impedance match for standard 300-ohm twin lead. Each antenna is supplied with an "all-angle" mounting bracket and full installation instructions.



TA103 TA106 TA104 TA107

FOLDED DIPOLE. Provides excellent bi-directional pickup. Recommended where full signal is obtainable without interference of tall buildings, hilly terrain, etc., and where receiving location is well within the service area covered by the transmitting stations.

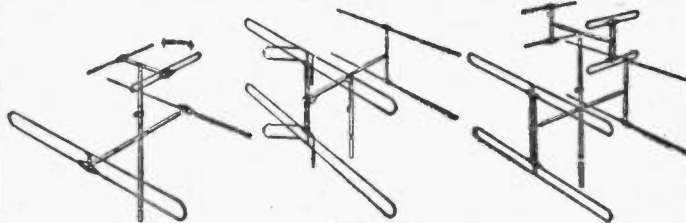
MODEL TA103. Folded Dipole. For TV channels 1-6 and FM Frequency range 44-108 MC. Stock No. 38B73. NET EACH..... **\$6.17**

MODEL TA106. Multi-Folded Dipole. For all TV channels 1-13 and FM Frequency range 44-216 MC. Stock No. 38A79. NET EACH..... **\$8.53**

FOLDED DIPOLE WITH REFLECTOR. To be used where reception on all channels is in the same direction. Improves performance in areas where full signal is not obtainable and where directivity is needed because of minor traffic noise or ghost effects.

MODEL TA104. Folded Dipole with Reflector. For TV channels 1-6 and FM Frequency range 44-108 MC. Stock No. 38A74. NET EACH..... **\$9.70**

MODEL TA107. Multi-Folded Dipole with Reflector. For all TV channels 1-13 and FM Frequency range 44-216 MC. Stock No. 38A75. NET EACH..... **\$12.05**



TA115 TA105 TA116

STACKED MULTI-FOLDED DIPOLES WITH REFLECTORS

MODEL TA105 FOR ALL TV CHANNELS 1-13 AND FM Frequency Range 44-216 MC. For use in "fringe areas" and "dead spots" where signal strength is low and where reception on all channels is in the same direction. Designed for high rejection of side, bottom and rear noise signals and reflections. Gives tremendously improved signal as compared to other antenna types and will often provide the difference between satisfaction and little or no reception. Stock No. 38A76. NET EACH..... **\$22.05**

DOUBLE SECTION ALL CHANNEL ANTENNAS—Frequency Range 44-216 MC—TV and FM. Normally used where reception on all channels is not in the same direction but where maximum signal, maximum directivity and exceptional interference rejection are required to overcome ghosts, etc. Large, lower section covers TV channels 1-6 and FM (44-108 MC) and rotates with mast. Upper, smaller section covers TV channels 7-13 (174-216 MC) and can be rotated with its own short, top mast for best reception after the lower section has been properly oriented. Requires only one 300-ohm transmission line, but individual 300-ohm transmission lines can be used from each section if desired.

MODEL TA115. Double Section, Folded Dipoles with Reflectors. For all except most severe conditions. Stock No. 38A77. NET EACH..... **\$13.82**

MODEL TA116. Double Section, Stacked Folded Dipoles with Reflectors. Recommended for "fringe areas". Stock No. 38A78. NET EACH..... **\$27.93**

ANTENNA MOUNTING ACCESSORIES

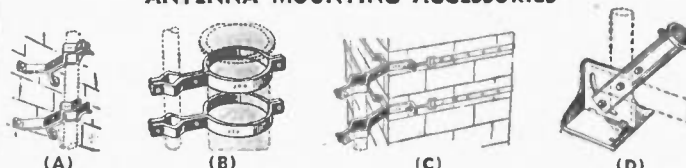


FIG. A. JFD MODEL BR10 Vertical Wall Bracket. Holds antenna mast securely, 6" from wall. Heavy galvanized steel. No. 37A55. NET PER PAIR..... **\$2.35**

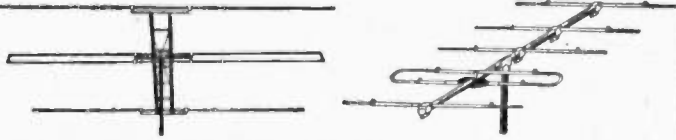
FIG. B. JFD MODEL BR9 Vent Pipe Bracket. Fits snugly around vent pipes, rounded-shaped timbers, etc. Made of galvanized steel. No. 37A56. NET PER PAIR..... **\$3.82**

FIG. C. JFD MODEL BR7 Chimney Mount. Very easy to install. Brackets are made of aluminum alloy; adjustable bands, of galvanized steel. No. 37A57. NET PER PAIR..... **\$4.91**

LINSTEAD UNIVERSAL TV AND FM ANTENNA BASE
FIG. D. Mounts on roof, sidewall, etc., at any angle. Adjusts to exact perpendicular after mounting. Holds pipe or mast up to 1 1/4" dia. Made of strongly reinforced cast aluminum. Hardware parts cadmium plated steel. Base size 4 1/2"x5", 9 3/4" high. Mounts with 4 lag screws furnished. Stock No. 37A58. NET EACH..... **\$3.96**

TRANSMITTING ANTENNAS and ACCESSORIES

ELINCOR BEAM ANTENNA KITS



10-METER 3-ELEMENT—MODEL 400-EA. Uses broad band folded dipole driven element, .1 wave length spacing for director and .15 wave length spacing for reflector, allowing direct feed with 52-ohm coaxial cable. Elements are 3/4" aluminum tubing telescoping to 5/8", adjustable from 14 to 18 ft., and supported on 2 1/2" steelite stand-offs. Furnished complete with 8 ft. 4" long x 13" wide ladder constructed of 1" aluminum angle. Shipped knocked down, neatly packed with hardware and complete assembly instructions. Less mast and transmission line. Weight assembled, approximately 17 lbs.

No. 38B1. YOUR COST..... \$30.58

10-METER 3-ELEMENT—MODEL 400-RA. Same all-aluminum construction and element spacing as model 400-EA above, except driven element is straight dipole. Designed for 1/4-wave matching stub using 52-ohm coax and 300-ohm twin lead transmission line. Shipped knocked down, with ladder, hardware and instructions. Less mast, matching stub and transmission line. Weight assembled, approximately 16 lbs.

No. 38B2. YOUR COST..... \$26.46

6-METER 5-ELEMENT—MODEL 300-EA. A high-gain, broad-band array using a folded dipole driven element, .15 wave length spaced reflector and three .1 wave length spaced directors. Designed for 52-ohm coaxial feed line. Boom is 1" dia. aluminum tubing. Elements are 5/8" aluminum telescoping to 1/2", adjustable from 50 to 54 MC. Furnished with swivel bracket for vertical or horizontal plane mtg. Shipped knocked down with instructions. Less mast and transmission line. Shpg. wt., 12 lbs.

No. 38B71. YOUR COST..... \$24.40

2-METER 5-ELEMENT—MODEL 200-EA. Pre-cut for middle of 144-148 MC band. Elements are 3/8" dia. aluminum tubing. Design otherwise same as Model 300-EA with folded dipole driven element. Matched for 52-ohm coaxial feed line. Furnished with swivel mounting bracket. Shipped knocked down, with instructions. Less mast and transmission line. Wt., 3 lbs.

No. 38B70. YOUR COST..... \$8.23

MAST FOR 6-METER AND 2-METER BEAMS. Five ft. heavily enameled steel tube. Machined to fit swivel bracket on Antenna.

No. 38B72. YOUR COST..... \$2.06

WORKSHOP ASSOCIATES BEAM KITS

10-Meter 3-Element—Model 29. A thoroughly engineered 10-11 meter broad band antenna having very neat appearance and exceptional mechanical rigidity to withstand wind and icing. Elements are multi-section 3/4", 5/8" and 1/2" telescoping aluminum alloy tubing, adjustable from 130" to 214" and sealed at ends. Boom is weather-proofed steel tubing. A plastic head insulates driven element and provides weather-proof connection to coax feed line. Element spacing is adjustable and dimensions are given for matching 72-ohm and 52-ohm coax line for low standing wave ratio over entire band. Cast aluminum mounting clamp fits 1 1/4" mast such as Model AM listed below. Complete with all hardware and instructions.

10-METER BEAM

Stock No. 38A60. Less Mast and Feed Line. YOUR COST..... \$39.50

6-METER 3-ELEMENT—MODEL 29-AS. Uses aluminum alloy elements and a weather-proofed steel boom with a durable plastic head to insulate driven element and secure boom to any 1 1/4" dia. mast. Standing wave ratio 1.1 with 72-ohm coax and 1.4 with 52-ohm, over entire band. With all hardware. Less mast and feed line.

Stock No. 38A61. YOUR COST..... \$9.00

2-METER 6-ELEMENT—MODEL 146-AB. Two 3-element arrays spaced 1/2 wave length and fed in phase. Very sturdy constructed of 3/8" to 1/2" telescoping aluminum elements sealed at ends with spherical tips and supported by two heavy-duty plastic heads. Power gain is 6 (7.8 db.). Matched for 52-ohm coax feed line. Mounts on any 1 1/4" dia. mast. With all hardware, less mast and feed line.

Stock No. 38A62. YOUR COST..... \$21.50

MAST AND MOUNT—MODEL AM. Consists of two 1 1/4" dia. 4 ft. long tubular steel sections and universal hardware for fixed mounting to the side of building or tower.

Stock No. 38A63. YOUR COST, EACH..... \$8.25

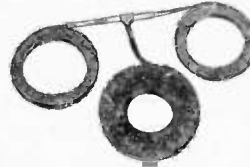
EXTENSION MAST SECTIONS—MODEL AMI. 4-ft. steel tubes that telescope together for increasing height of above model AM mast.

Stock No. 38A64. YOUR COST, EACH..... \$1.30

MANUAL ROTATING ACCESSORIES—MODEL AM2. Converts model AM mast and mount into simple hand rotating device. Used with extension mast sections where necessary.

Stock No. 38A65. YOUR COST, EACH..... \$5.00

AMPHENOL FOLDED DIPOLE ANTENNAS



Real DX Antennas, pre-cut to the amateur bands. Radiating section is 300-ohm twin-lead made with copper-clad steel conductors for greater strength...proof against high winds, ice loading, etc. Each antenna supplied with 75-ft. lead-in of 300-ohm standard twin-lead, attached to antenna with a weather-proof molded polyethylene "T" junction. Instructions furnished for trimming to operating frequency. End insulators not included.

Stk. No.	Band	Net Each	Stk. No.	Band	Net Each
31A82	10 Meters	\$4.53	31A84	40 Meters	\$ 7.94
31A83	20 Meters	5.64	31A85	80 Meters	12.20

AMPHENOL TWIN LEAD TRANSMISSION LINE

300 OHMS—Standard Type. For FM and Television receivers, also low power transmitters.

No. 2A157. Per Ft..... 2 1/2¢ 100 Ft..... \$2.29

300 OHMS—Copper Clad. Conductors are size 16 copper clad steel. Desirable for flat top portion of amateur antennas and long transmission lines where considerable strength is required.

No. 2A193. Per Ft..... 7 1/2¢ 100 Ft..... \$7.06

300 OHMS—New Tubular Design. Conductors are supported in wall of hollow tube of polyethylene. Tubular shape eliminates flutter and minimizes effects of moisture. Conductors are 7 strands No. 26 copper wire. Rated at full kilowatt at 30 MC.

No. 2A192. Per Ft..... 7 1/2¢ 100 Ft..... \$7.06

GORDON ROTARY BEAM CALCULATOR

For the amateur who has a beam or contemplates one, or the professional engineer interested in antennas. Covers range of 10 to 30 MC. Eliminates mathematics or computations in figuring element lengths, boom lengths, etc. In addition there are scales showing all values of capacity and inductance for resonance between 5 and 60 MC. Size 13" long, 5" wide, double faced.

No. 16B376. Your Cost, Each..... \$1.50

FM RECEIVING ANTENNAS



BELDEN FM ANTENNA SYSTEMS

FM Dipole Kit. Scientifically engineered and amazingly simple to install. Has excellent pickup over entire FM Band. Kit consists of aluminum folded dipole element, porcelain junction block and 65 ft. of Belden 300-ohm transmission line, all factory assembled for proper "match" and positive weather-proof connections, 5-ft. aluminum mast, 2 stand-off insulators, 2 mounting straps and instructions.

No. 38A66. Belden 8320. Net Each..... \$5.10

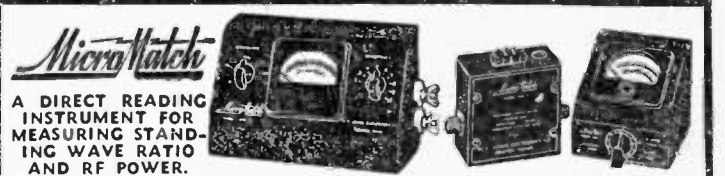
FM Reflector Kit. For use with dipole kit for greater signal strength, less interference and generally improved performance, especially when far removed from station or in poor location. Illustration shows dipole and reflector completely assembled. Kit contains aluminum reflector element, and cross-member, porcelain junction block and instructions.

No. 38A67. Belden 8321. Net Each..... \$2.06

FLEXIBLE FM ANTENNA

Made of 300-Ohm Twin Lead for use indoors under rug or on molding as well as outdoors. Flexible folded dipole antenna element has flat insulators at ends and 10-ft. twin lead transmission line connected at center.

No. 31A62. Net Each..... \$1.15



A DIRECT READING INSTRUMENT FOR MEASURING STANDING WAVE RATIO AND RF POWER.

This amazing little instrument, when connected in a transmission line at any point will read standing wave ratio and when its terminals are reversed will read RF power in the line. An indispensable aid in adjusting beam antennas, and matching systems and for measuring R.F. resistance of an unknown load. Model MMI for open wire lines, 70 to 300 ohms. Range 3 to 30 MC. 10 to 1,000 watts.

Stock No. 33A81. Net Each..... \$29.50

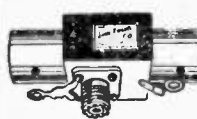
Model MM2 and coupler for 52 ohm coax line. Coupler unit can be placed in transmission line at any point, with indicator unit on operating desk or built into transmitter panel. Frequency range, 3 to 162 MC, 10 to 500 watts.

Stock No. 33A99. MM2 and coax coupler. Net Each..... \$37.45

Coax Coupler Only. For 52 ohm coax line as described above. Supplied with easy-to-follow instructions and calibration curves for building an indicator using any 0-1 MA. meter.

Stock No. 33A100. Coax Coupler. Net Each..... \$19.95

James Knight 1BC-3 IMPEDACOUPLER



Makes a secure and weather-proof junction between coax line and any current

fed antenna or array. Made of solid Mykroy machined to 7/8" dia. Can be turned on a lathe to smaller diameter. Ends are drilled to take screws for clamping tubing, or wire loops when used with doublet or open wire lines. Equipped with Amphenol 83-1R coax fitting.

No. 17A1075. Net Each..... \$3.50

Direction Indicator POTENTIOMETER



Provides a simple, accurate means of remotely indicating position of a rotary beam antenna, wind vane, or other device. Must be mounted to rotate with device and requires 6-volt battery and 0-1 MA. meter

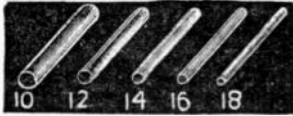
with marked scale as direction Indicator. Dia. 2 5/16", 1 3/8" deep. Can be rotated continuously in either direction. Total resistance, 600 ohms. Instructions included.

No. 17A574. Ohmite RB2. Net Each..... \$4.78

ANTENNA WIRE - INSULATORS - ACCESSORIES



BELDEN
Stranded or
Solid Copper
Wire for
Aerials, Etc.,
Enamelled
or Tinned



Note: Illustrations are approximately exact size.

STRANDED BARE COPPER

14-Gauge, 7x22 Stranded

Stock No.	Feet Per Coil	Wt. Lb.	Your Cost Each 10 Lots
18A49	75'	1.05	\$0.86 71c
18A50	100'	1.4	1.17 92c
2A14	1000' Sp.	14	8.65

16-Gauge, 7x24 Stranded

18A51	75'	.064	\$0.61 51c
18A52	100'	.085	.80 65c
2A15	1000' Sp.	8.5	5.85

STRANDED ENAMELED COPPER

12-Gauge, 7x20 Stranded

2A16.	100-Ft. Coil	\$2.45
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SOLID BRIGHT TINNED COPPER

High quality wire excellent as busbar hookup.

Ca. No.	25-Ft. Coils Each	100-Ft. Coils Each
18	18A36 20c	18A37 \$0.45
16	18A38 29c	18A39 .83
14	18A40 36c	18A41 1.13
12	18A42 53c	2A10 1.71
10	18A43 58c	2A11 1.83

SOLID ENAMELED COPPER

Low-Loss Wire used for permanent aerials and for coils in Transmitters, Receivers, etc.

Ca. No.	25-Ft. Coils Each	100-Ft. Coils Each
14	18A44 36c	18A45 \$1.13
12	18A46 49c	2A12 1.73

Solid tinned and solid enamelled available in continuous lengths over 100 ft. Add "C" to Stock No. and base price on 100-Ft. Coils Above.

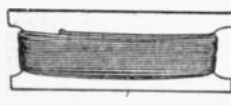
ENAMELED COPPERWELD Antenna Wire



Being three times the strength of ordinary copper wire, it does not stretch nor sag. Copper coating provides low RF resistance, and enamel prevents corrosion. Available in continuous lengths of 100 ft. and over. Quantities up to 500 ft. based on 100-ft. price. No. 14 supplied bare copper only.

Cat. No.	B & S Gauge	25-Ft. Per Lb.	Per 100 Ft.	Per 500 Ft.
2A160	10	34 1/2	\$2.62	\$12.05
2A161	12	54	1.71	7.83
2A162	14	85	1.01	4.56

ANTENNA HANKS Indoor Aerial Wire EXTRA FLEXIBLE



13 x 36 stranded tinned copper. .010 wall of chrome, vinyl plastic insulation.

17A290.	25-Ft. Coil	\$0.17
18A18.	100-Ft. Coil	.63
2A1.	500-Ft. Coil	1.93

Antenna Loop

Replaces antenna coil on most any type set. Good pick-up and selectivity. No. 16A246. Special, Ea. ... 45c

AMPHENOL TWIN TRANSMISSION LINE

Highly efficient weather resistant line with polyethylene dielectric of full thickness edge-to-edge design. RECEIVING and LOW POWER TRANSMITTING 300 OHMS—For FM and Television receivers, also low power transmitters.

No. 2A157.	Per Ft.	2 1/2c	100 Ft.	\$2.29
150 OHMS—For experimental applications.				
No. 2A158.	Per Ft.	2 1/2c	100 Ft.	\$2.12
75 OHMS—For applications requiring low impedance. Matches dipoles of 72 ohms.				
No. 2A159.	Per Ft.	2 1/2c	100 Ft.	\$1.94

TRANSMITTING

75 OHMS—For Amateur transmitting antenna systems. Handles a full kilowatt.

New! 300 OHMS—Conductors supported in wall of hollow tube of polyethylene. Tubular shape eliminates wind flutter and minimizes effects of moisture. Conductors are 7 strands No. 26 copper wire. Rated at full kilowatt at 30 Mc.

No. 2A192. Per Ft. 7 1/2c 100 Ft. \$7.06
Copper Clad 300 OHMS—Flat type with two size 16 copper clad conductors. Desirable for flat top portion of amateur antenna and long down leads or other requirements where strength is needed.

No. 2A193. Per Ft. 7 1/2c 100 Ft. \$7.06

AMPHENOL SILICONE COMPOUND

For moisture proofing twin lead. Minimizes impedance changes. Lasts indefinitely.

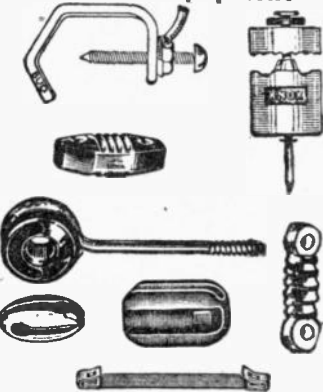
Stock No. 17A1074. Per 1 Oz. Tube \$1.18



Screw-Eye Stand-Off INSULATORS

For supporting Amphenol Twin-Lead or Coax Cable. Has slotted Polyethylene insert to hold the cable, which can be put in place after the screw-eyes are mounted. Shank is size 14 wood screw, threaded 1". For Round Cables up to 1/2" for Flat Type Twin Leads. 17A566. 3 " Ea. .09c 17A567. 3 " Ea. .09c 17A1183. 7 1/2 " Ea. .10c 17A1184. 7 1/2 " Ea. .10c

Antenna Equipment



"Grip Tite" Ground Clamp.

Fits pipe up to 1 1/2". 18A53—Ea. .8c 10 Lots, Ea. .7c "Nail-It" Knobs" Standard Type.

18A54—Ea. .4c Per 100... \$3.00

Aerial Insulator. White Porcelain.

2 1/2" Long, 1" Dia. 18A55—Ea. .4c Per 100... \$3.00

Screw Eye Insulators

18A56—3-inch, Ea. 6c 10 for 50c

18A57—7-inch, Ea. 7c 10 for 60c

Glass Aerial Insulators, 3" L.

18A58—Ea. .7c 10 for .60c

Airplane Type Insulator

Low Loss, Over-All Length 1 1/2". 18A59—Ea. .5c 10 for .45c

Type 500 Insulator

Will Take Heavy Strain. 18A60—Ea. .9c 10 for .85c

Lead-In Strips, Insulated 12"

Clip Terminal Each End. 18A64—Ea. .6c 25 for \$1.00

Xmitting Insulators GENUINE PYREX

No. 18A66. Type 67017. Length 7 1/2". Net Each \$1.66

No. 2A17. Type 67021. Length 12 1/4". Net Each \$2.94

Low-loss Isolantite strain insulator. 1 1/4" L. x 3/4" dia. 18A68. Each 30c



BELDEN QUALITY MAGNET WIRE

Exact B-S gauge, best quality, uniform insulation. Continuous length on each spool. You are safe with Belden for any need. 1/2-Lb. Spools (*1/4-Lb.)

Size	Bare Enamel No.	Each	Covered Enamel No.	Each
16	19A601	42c	19A271	\$1.50
18	19A602	42c	19A272	.53
20	19A603	44c	19A273	.57
22	19A604	44c	19A274	.60
24	19A605	45c	19A275	.68
26	19A606	48c	19A276*	.41
28	19A607	53c	19A277*	.47
30	19A608	59c	19A278*	.56

*1/4-Lb. Spools Only

32 19A609* 35c 19A279* .65

34 19A610* 39c 19A280* .84

36 19A611* 47c 19A281* 1.01

38 19A612* 57c

40 19A613* 81c

SINGLE NYLTEX COVERED ENAMEL

1/2-Lb. Spools

22 19A282 66c 24 19A283 \$7.74

1/4-Lb. Spools

26 19A284 47c 32 19A287 .78

28 19A285 54c 34 19A288 .95

30 19A286 66c 36 19A289 1.41

The table below tells the number of feet per lb. of standard magnet wire.

Size	Enamel	S.C.E.	S.N.E.
14	80	78	.....
16	134	122	.....
18	200	194	.....
20	320	308	.....
22	500	482	496
24	800	752	780
26	1276	1180	1236
28	2020	1832	1948
30	3220	2840	3080
32	5080	4360	4808
34	8060	6424	7568
36	12800	9700	11416
38	20280	.....	.....
40	32200	.....	.....

Saturated Sleeving Kit

24-8" lengths assorted sizes saturated sleeving and varnished insulating tubing. A size for any need.

BARGAIN PRICED!

No. 19A653. Per Kit 20c

R.C.A. Lightning Arrester

For FM or TV 300 ohm twin lead. Requires no cutting or splicing. Eliminates mismatch. Positive contact made by screw cap which forces lead down on four prongs piercing the insulation.

Mounts on any size water pipe with flexible strap. No. 17B241.

Each 73c

AUTO RADIO LEAD-IN

Consist of size 28 tinned steel solid conductor; cellulose yarn braid; polyethylene insulation, tinned copper braid shield; and black vinyl plastic jacket over-all. Nominal capacitance 15 mmf. per foot.

No. 2A133. 100 Ft. \$6.03

Per Ft. 8c

SHIELDED PRIMARY WIRE

For use on battery leads, auto radio and other installations which must be shielded from high tension system radiations. Conductor is tinned copper stranded; cellulose wrapped and rubber insulated. Cotton braid; lacquer coating; and tinned copper braid shield over-all.

No. 2A131. 100 Ft. \$3.82

Per Ft. 6c

Antenna Wire Bargain

100 FOOT COILS. Stranded aerial wire. 3 strands copper tinned, 4 strands monel metal. Great tensile strength—will not sag.

strength—will not sag. No. 3A85. 12 Coils for \$1.95

INSULATOR FOR TWIN LEAD

Securely locks lead in place in all adverse weather. Made of plastic. Screw is countersunk to avoid shorting.

No. 15A2054. EACH 9c

Turn-Buckles

Eliminate Sagging Antennas. Aircraft quality, brass barrels, high tensile strength steel forks and eyes. A surplus purchase permits prices below market.

19A655. 1600-Lb. Tension. Each 10c

19A656. 2100-Lb. Tension. Each 15c

19A657. 4600-Lb. Tension. Each 25c

Turbo-Spaghetti-Flexible

Extremely Long Lasting

Ideal All-Purpose Insulation

← 21A1000—1MM, Black or Yellow. Per Length .10c 10 for .90c

← 21A1001—2MM, Black or Yellow. Per Length .12c 10 for \$1.10

← 21A1002—3MM, Black or Yellow. Per Length .15c 10 for \$1.35

← 21A1003—5MM, Black or Yellow. Per Length .24c 10 for \$2.25

← 21A1004—10MM, Black or Yellow. Per Length .51c 10 for \$4.95

Illustrations are exact diameters—42-inch lengths.

Spaghetti, Assorted

A neat bundle of 20 pieces, each 9" long, varnished high grade tubing in assorted popular sizes.

18A69.

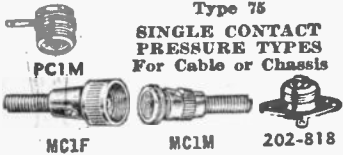
Per Assortment 15c

Mike Connectors · Phone Plugs · Jacks, etc.

AMPHENOL Connectors for Microphones

Type 75

SINGLE CONTACT PRESSURE TYPES
For Cable or Chassis



For Attaching to Cable

MC1F Female, MC1M Male single contact made by pressing together and tightening coupling ring. Brass chrome plated.

12A311. MC1F Female, **32c**
Net
12A312. MC1M Male, **26c**
Net

For Chassis Mounting

PC1M, mounts in .385" hole to ground to chassis or 1/2" hole when two circuits are desired independent of chassis. Furnished with insulating washers, solder lug and lock nut.

12A313. PC1M. Net **19c**
SP-PC1M, identical to above PC1M but has heavy coil spring which pushes center contact forward. 12A314. Net **26c**

15A1159. 75-202 same as 12A314 except with bakelite mtg. plate. Net **27c**

CL-PC1M Closed Circuit Type. Same as PC1M but circuit closes when cable connector is removed, eliminating open circuit grid howls. Contact is spring actuated. 12A315. Net **26c**

15A1160. 75-818 same as 12A315 except with bakelite mtg. plate. Net **27c**

Handy Fittings for Use With Above Connectors.



MC1S All Chrome Plated

MC1S Microphone Switch

Attaches between male and female of any of the above connectors. Push to talk or slide switch for permanent connection. No. 12A316. Net Each. **65c**

MC1F-A Angle Connector

Right angle female cable connector for use with any above male types. 12A317. Net Ea. **39c**

MC1P Phone Plug Adaptor

Makes a standard phone plug out of MC1F or MC1FA connectors. 12A318. Net Ea. **29c**

CCC-1 Cap and Chain

To seal chassis units when not in use. Keep dust out. Fit either types 75 or 80. 12A319. Net Ea. **32c**

Base Mounting Sockets

One-piece solid bakelite sockets for surface mounting, 1 3/8" mounting centers.

No. 12A152—4-Prong. **24c**
No. 12A153—5-Prong. **27c**
No. 12A154—6-Prong. **27c**
No. 12A155—7-Prong. **29c**
No. 12A156—Octal. **29c**

BARGAIN IN PL55 PLUGS



Fits all standard Jacks. Quality built to "take it" for hard use. Tenite shell 1000-volt insulation, overall length 2 13/16". No. 17A262. 10 Lots. **19c**
EACH. **17c**



Type 80
2-CONTACT PLUG-IN TYPES
For Cable or Chassis



For Attaching to Cable

2 contact of the sleeve and prong type, with screw type coupling ring to prevent accidental disconnection. Spring cord connector takes cables to 1/8". Brass chrome plated. 12A320. 2 Con. Male MC2M. **52c**
12A321. 2 Con. Female MC2F. **52c**

For Chassis Mounting

A shielded chassis connector for 1/4" hole. With lock nut and washer. 12A322. 2 Con. Male SPMC2M. **58c**
12A323. 2 Con. Female PC2F. **29c**



Type 91
3 and 4 CONTACT CONNECTORS
For Cable or Chassis

Can also be screwed into microphone having standard 3/8"-27 thread, by removing spring cord connector and cap. Shells are polarized. 3 contact connectors take cables up to 1/4" dia.; 4 contact to 3/8" dia.

Indicates connector has coupling ring, all others have threaded shell. 12A324. 3 Con. Male MC3M. **65c**
12A325. 3 Con. Female MC3F. **65c**
12A326*. 4 Con. Male MC4M. **71c**
12A327. 4 Con. Female MC4F. **71c**

For Chassis Mounting

Mounts in 1/4" hole in panels or chassis up to 1/4" thick. 12A328*. 3 Con. Male SPPC3M. **65c**
12A329. 3 Con. Female PC3F. **32c**
12A330*. 4 Con. Male SPPC4M. **71c**
12A331. 4 Con. Female PC4F. **35c**
12A332. Cap and chain to fit above chassis units **32c**

STAND CONNECTORS



Chrome plated, 3/8"-27 threads.

A—Screws on top of stand to permit easy removal of mike.



12A333. 3 Con. **65c**
12A334. 4 Con. **71c**



B—For use between mike and stand, providing cable outlet at side, so it is not necessary to run cable thru stand. 12A335. Net Ea. **48c**

Handy Mike Connectors



Mate with connectors shown on this page. Various combinations can be made up with these.

(A) "Y" CONNECTOR

2 male and 1 female—for use where more than one mike or speaker is wanted from single circuit. No. 12A307. Net Each. **\$1.03**

(B) DOUBLE MALE CONNECTOR

Solid silver plated contacts. No. 12A308. Net Each. **38c**

(C) DOUBLE FEMALE CONNECTOR

With two coupling nuts. Ideal for extra cable connectors. No. 12A309. Net Each. **44c**

Double Female Coupling Ring. Used for joining two standard male microphone cable connectors or for converting male connector to female type. No. 17A1070. Ea. **15c**

MALLORY Phone Plugs and Jacks



2 way phone plug, bakelite shell. 12A361. Type 75 Net **38c**
2 way plug, shielded metal shell. 12A362. Type 75N Net **59c**
3 way Microphone plug, bakelite. 12A363. Type 76 Net **59c**
2 way plug, shielded metal shell like 75N above, except has built-in cable clamp. 12A364. Type 75A Net **97c**
Extension Jack, 2 way, fibre shell. 12A365. Type 100 Net **76c**

Long Frame Jacks

See diagram below A1, A2, and A2A. 12A366. No. 1. Open Circuit. **38c**
12A367. No. 2. Circuit Closing. **47c**
12A368. No. 2A. Closed Circuit **47c**

Mallory Jacks



MIDGET JUNIOR

Diagram below list types available in each; Midget and Junior Jacks. JUNIOR JACKS. Neat, small mounting in 3/8" panel hole. Extends 1 1/2" back of panel.

MIDGET JACKS. Extremely compact. Mount in 3/8" hole. Special metal assures finest spring action.

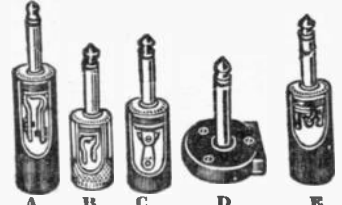
Type	Cat. No.	Ea.
Midget A1	12A361	\$.18
Junior 701	12A369	.32
Midget A2	12A362	.29
Junior 702	12A370	.44
Midget A2A	12A363	.32
Junior 702A	12A371	.44
Junior 702B — 3 circuit Micro.	12A379	Each 44c
Junior 703 — Single circuit Filament Control.	12A372	Each 50c
Junior 703A—Circuit reversing.	12A373	Each 50c
Junior 703B — 3 Circuit Micro, one Circuit Closing.	12A380	Each. 50c
Junior 703C—Double Circuit.	12A374	Each 50c
Junior 704—Interstage.	12A375	Each 59c
Junior 704A — Two Circuit Filament Control.	12A376	Each 59c
Junior 704B — Two Circuit Filament Lighting.	12A377	Each 68c
Junior 706 — Interstage Filament Control.	12A378	Each 74c



Signal Corps Jacks

JK34A, same spring arrangement as A1 in diagram above. Fits standard plugs. 12A384, Each **32c**
JK33A, spring arrangement like 702B in above diagram. For plugs WE109, PL46, PL68, PL168, etc. 12A385, Each **38c**

SPECIAL VALUE PLUGS



(A) Two-Way Standard Model. Bakelite, barrel size 1/8"x1 1/8". 12A386. Net Ea. **27c**; 10 @ **24c**
Metal, barrel size 1/8"x2 1/4". 12A387. Net Ea. **49c**; 10 @ **45c**

(B) Stubby Metal Barrel. Two way type, barrel 1/8"x1". 12A388. Net Ea. **42c**; 10 @ **37c**

(C) Midget Phone Plugs. Bakelite, barrel size 1/8"x1". Solder lug connections. 12A389. Net Ea. **29c**; 10 @ **26c**

Metal, barrel size 1/8"x1". Solder lug connections. 12A390. Net Ea. **41c**; 10 @ **37c**

(D) Flat Phone Plug. Bakelite, 1/8" dia., 1/4" thick. Stay-cord anchor. 12A391. Net Ea. **65c**; 10 @ **59c**

(E) 3 Way Mike Plug. Barrel size 3/8"x1 1/8". Bakelite **55c** Metal **72c**
12A392. . 12A393. **72c**

Portable Type Jacks

Single Open Circuit. Will fit all standard plugs. Ideal to make up extension cords for phones, speakers, etc. Barrel 1/8"x2 1/4". Bakelite **41c** Metal **73c**
12A394

Midget Short Jacks

Small compact. Quality bakelite insulation. Mount in 3/8" hole on panels up to 3/8" thick. Fit standard size phone plugs. 12A396. Open Circuit **24c**
12A397. Single Closed Circuit. **27c**
12A398. 3-Way for Mike Plugs. **29c**

Miniature Plug & Jack

Two conductor precision cord connectors. Molded plastic case cements together gripping cord securely. 3/8 x 1/2 x 3/8" long. No. 17A1071. Plug Type PL-291. **24c**
No. 17A1072 Jack Type JK-48. **24c**

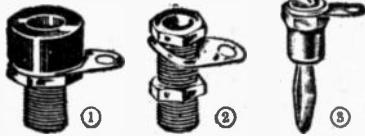
AMPHENOL SHIELDED MINIATURE CONNECTORS



(A) (B) (C) (D) (E)
Shells are cadmium plated brass, 11/16" dia. Inserts are bakelite, easily removed for wiring. Male cable types A and B will mate with female cable types C and D or chassis type E. (A) Short male cable plug 13/16" long. No. 12A142. 3-pin. Net Each. **.21c**
No. 12A143. 4-pin. Net Each. **.24c**
(B) Long male cable plug. Ltg. 1 3/16". No. 12A146. 3-pin. Net Each. **.21c**
No. 12A147. 4-pin. Net Each. **.24c**
(C) 1 3/16" long. Flanged female cable plug. Used with male A or B for fully shielded connection. Male shield telescopes inside female shield. No. 12A148. 3-hole. Net Each. **.21c**
No. 12A149. 4-hole. Net Each. **.24c**
(D) Short female cable plug. Ltg. 11". No. 12A144. 3-hole. Net Each. **.21c**
No. 12A145. 4-hole. Net Each. **.24c**
(E) Chassis type female receptacle. With grounding fingers for cable plug shield. No. 12A150. 3-hole. Net Each. **.21c**
No. 12A151. 4-hole. Net Each. **.21c**

Plugs - Jacks - Clips - Test Prods - Etc.

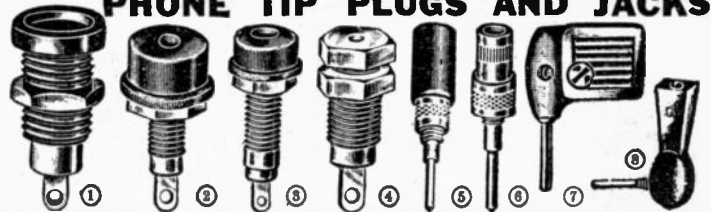
BANANA PLUGS AND JACKS



- ① Insulated Head Jack. Mounts in 1/4" hole on panels up to 3/8" thick. Specify Red or Black. 12A1048, Ea.....9c 10 For.....81c
- ② All Metal Jack. Brass Nickel plated. Mounts in 1/4" hole. 12A1047, Ea.....4c 10 For.....36c
- ③ Bronze Spring Plug. Nickel plated. Has hex shank, removable 6-32 screw and lugs. 12A1046, Ea.....7c 10 For.....60c
- ④ Insulated Spring Plug. Solderless, side screw connection. Overall length 1 11/16". Red or Black. 12A1042, Ea.....12c 10 For.....\$1.08
- ⑤ All Metal Spring Plug. Brass nickel plated. 1/2", 6-32 threaded shank. Overall length 1 3/16". 12A1044, Ea.....7c 10 For.....60c
- ⑥ Insulated Split Plug. Prong split in center for spring action. Set screw connection length 1 7/16". Red or Black. 12A1043, Ea.....12c 10 For.....\$1.08
- ⑦ All Metal Split Plug. 6-32 threaded hex shank. Overall length 1 1/4". 12A1045, Ea.....7c 10 For.....63c

For Quantities of 100 or More deduct 10% From 10 Lot Price.

PHONE TIP PLUGS AND JACKS



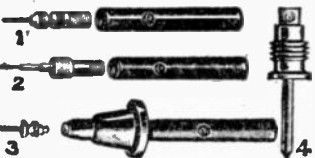
- ① All Insulated Jack 1/2" head countersunk for snug fit. Phosphor bronze contacts. 3/4" overall. Mounts in panels up to 3/8" thick. Red or Black. 12A1059, Ea.....9c 10 For.....80c
- ② Insulated Jack. Phosphor bronze contacts. Fits 1/4" hole in panels up to 1/4" thick. Red or Black. 12A1058, Ea.....9c 10 For.....80c
- ③ Insulated Combination Jack. Takes either phone or banana tips. Fits 1/4" hole in panels up to 3/8" thick. Red or Black. 12A1049, Ea.....11c 10 For.....99c
- ④ All Metal Jack. Phosphor bronze contacts. Fits 1/4" hole in panels up to 3/8" thick. 12A1057, Ea.....6c 10 For.....54c
- ⑤ Insulated Plug. Perfect solderless connection by tightening knurled collar. Overall length 2 3/16". Red or Black. 12A1050, Ea.....10c 10 For.....90c
- ⑥ All Metal Plug. Brass nickel plated. Solderless connection. Overall length 1 5/8". 12A1052, Ea.....6c 10 For.....54c
- ⑦ Grip-Rite Insulated Plug. Supplied with nut and bolt assembly. 12A1055, Ea.....29c 10 For.....\$2.61
- ⑧ Streamlined Right Angle Plug. Solderless connection made by screwing tip in securely. Red or Black. 12A1056, Ea.....24c 10 For.....\$2.16

For Quantities of 100 or More deduct 10% From 10 Lot Price.

INSULATED ALLIGATOR CLIP WITH PHONE TIP JACK

Has phone tip jack in shank. Overall length 2 3/8". Red or Black. 12A1020, Ea.....25c 10 For.....\$2.25

TEST LEAD PRODS

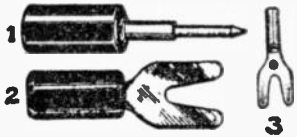


- (1) Phono Needle Type—Tapped removable chuck holds standard phono needles. Red or Black Tenolite handle. 11A173. 5" long.....24c
- (2) Solderless Type—Tapped Removable solderless plug holds wire securely by means of knurled collar. Red or Black. 11A176. 5" long.....24c
- (3) Heavy Duty Type—For high voltage needs. Has finger guard ring, minimum of metal exposed. 11A178. 6" long.....67c

THREADED PHONE TIP CHUCK

(4) Threaded to fit all test prods. 12A1037, Ea.....9c 10 For.....81c

PLUGS AND TERMINALS WITH SHANKS TO FIT BANANA TYPE PLUGS



Ideal for use with test leads, etc. which have banana plugs.

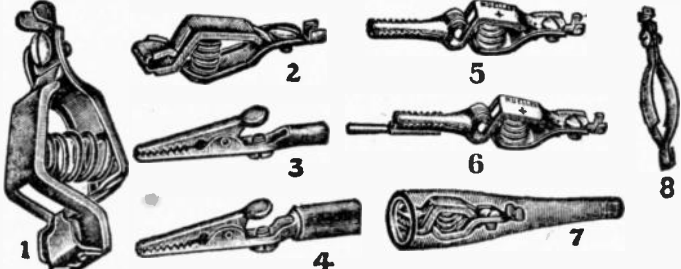
- ① Insulated Phone Tip Type. 12A1038, Red or Black. Ea.....10c
- ② Insulated Spade Terminal Type. 12A1039, Red or Black. Ea.....10c
- ③ All Metal Spade Terminal Type. 12A1040, Doz.....44c 100.....\$3.28

TEST LEAD WIRE

Non-kink, flexible test lead wire. Consists of very fine tinned stranded copper wire with heavy wall of live rubber insulation.

25 Ft. Coil, Red or Black. 47c
 No. 22A15, Each.....
 100 Ft. Coil, Red or Black. \$1.55
 No. 22A16, Each.....

Mueller UNIVERSAL CLIPS & FLEXIBLE INSULATORS



Finest made. A type for every need. Screw or lug connections—no solder needed. Types marked with asterisks (*) are Copper. Others are of steel with bright finish. Standard packages of 10 clips; 5 marked + and 5 plain.

Stk. No.	Mfrs. Type	Amps.	Over-all Length	Jaw Spread	Net Each	Box of 10
11A162	24A	25	2 1/2"	1"	11c	\$.83
11A163	21A	50	4"	1 1/2"	15c	1.27
12A1000	45	5	1 1/2"	3/8"	6c	\$.40
12A1001	*45C	10	1 1/2"	3/8"	8c	.59
12A1002	48B	10	2"	1/2"	6c	.44
12A1003	*27	10	2 7/16"	3/8"	8c	.68
12A1004	*127C	40	2 7/16"	3/8"	13c	1.17
12A1005	182	10	2"	1/2"	12c	.98

† Needle Between Jaws For Piercing Insulated Wires
 ‡ Meshing Teeth on All 3 Sides of Jaws

Stk. No.	Type	Over-all Length	Ea. For	10 For
12A1006	60S	2"	7c	49c
12A1007	*60CS	2"	8c	69c

Stk. No.	Type	Over-all Length	Ea. For	10 For
12A1008	60HS	2 1/4"	10c	78c
12A1009	*60CHS	2 1/4"	12c	98c

Stk. No.	Type	Net Ea.	10 For
12A1014	45, 45C	11c	\$.73
12A1015	48B, 82	11c	.73
11A164	24A	23c	1.57
11A165	21A	32c	2.25
12A1016	27, 27C	17c	1.18
12A1017	85, 85T	10c	.65
12A1013	88	6c	.34

HEAVY DUTY ALLIGATOR CLIPS

For use where extra strong grip is desired.

Insulated red or black handle. 2 1/2" long, loop in barrel for large wire. 12A1019, Ea. 12c For \$1.10

TWIN-CLIP No. 22
 WITH JAWS ON BOTH ENDS
 Something new and different—far countless electrical and mechanical applications. A squeeze in center opens both jaws at once, or a squeeze on either end opens only one jaw without disturbing the other. Cadmium plated steel, 2" long 3/8" wide. Jaw spread 1/2". Screw connection.

No. 15A124
 Your Cost Each..... 10c 10 Lots Each..... 7c

Phone Tip Twin Jacks



(A)* Sure contact. Flush mounting. Nickel tip jacks mounted in bakelite strip, 2" long, 1 1/16" wide, mounting hole 1 1/16" centers. 12A1061—Net Ea. 9c 10 @.....8c

(B) Insulated head jacks mounted on a bakelite strip, 1/2" wide, 2" long, 3/4" apart. 12A1062—Net Ea.....20c

PHONE TIPS

Standard Type.	Doz.	100
12A1085—	14c	
Easy to Solder Type.		
12A1086—	23c	
100		
		for \$1.75

Pin Plugs and Jacks

For recording units, receivers and many makes Auto Radios. No. 12A1047—Pin Plug. Ea.....5c
 No. 12A1088—Socket & Shield....8c

Double Phono Jack
 2 positive grip phono jacks mounted on 1/16" bakelite panel with 1 3/16" mounting centers. Brass shell and contacts solder coated for fast, easy soldering. 17A1069. Net Ea. 10c

SHIELDED EXTENSION JACK

Fits pin plug above for extending and connecting leads in record players, auto radios, recording equipment, etc. Length 2 7/16". No. 14A716. Each..... 15c

EBY BINDING POST
 Non-removable bakelite top 7/16" dia. Has hole for phone tip and 6-32 stud 7/16" long. No. 17A385 10 For..... 70c

Genuine

AMPHENOL

Sockets * PLUGS * Fittings

MINIATURE TUBE SOCKETS and SHIELDS



BAKELITE — STEATITE SOCKETS

Seven pin types mount in 3/8" hole; mounting centers 7/8"; screw holes 1/8". Nine pin types mount in 3/4" hole; mounting centers 1 1/8"; screw holes .095".

(A) Bottom Mount—No Shield Base
 Stk. No. Pins Dielectric Net Ea.
 17A768 7 Black Bakelite 14c
 17A769 7 Steatite 30c
 17A770 9 Black Bakelite 22c
 17A771 9 Mica-Filled 24c

(B) Top Mount—With Shield Base
 17A772 7 Black Bakelite 23c
 17A773 7 Mica-Filled 24c
 17A774 7 Steatite 37c
 17A775 9 Black Bakelite 33c
 17A776 9 Mica-Filled 34c

ZIP-IN ETHYLON-A SOCKETS

Molded of high dielectric material. Seven pin types mount in 27/32" hole; Nine pin, in 15/16" hole. Mounting plate holes, .136" dia. on 15/16" centers. Fig. C without tube shield base; Fig. D with tube shield base.

7 Pin. Without tube shield base. No. 17A777. Each.....13c
 7 Pin. With tube shield base. No. 17A778. Each.....16c
 9 Pin. Without tube shield base. No. 17A1061. Each.....30c
 9 Pin. With tube shield base. No. 17A1062. Each.....36c

(E) Shields and Springs

To be used with bakelite, steatite and zip-in miniature sockets equipped with tube shield base. Fits types B and D above.

1 3/8" high. Fits 7 pin sockets. No. 17A779. Each.....8c
 1 3/4" high. Fits 7 pin sockets. No. 17A780. Each.....8c
 1 1/2" high. Fits 9 pin sockets. No. 17A1065. Each.....12c
 1 15/16" high. Fits 9 pin sockets. No. 17A1064. Each.....14c
 2 3/8" high. Fits 9 pin sockets. No. 17A1063. Each.....14c

MINIATURE SOCKETS AND PLUGS



RETAINER RING MOUNTED

Mount in 5/8" dia. hole with push-on ring. Male plugs can be chassis mounted or attached to cable and will mate with corresponding miniature socket or Fig. C and D shielded female plugs listed page 60. 5 and 6 hole sockets also fit amphenol miniature coil forms. 7 hole sockets fit standard 7 pin miniature tubes. Black Bakelite unless otherwise noted.

Stk. No. Description Net Ea.
 12A140 3 hole 10c
 12A141 4 hole 10c
 12A125 5 hole 12c
 19A131 5 hole (mica filled) 16c
 12A118 6 hole 13c
 19A132 6 hole (mica filled) 16c
 12A123 7 hole 12c
 17A783 7 hole (mica filled) 17c
 12A127 7 hole (polystyrene) 25c

FIG. B PLUGS
 12A138 3-prong 10c
 12A139 4-prong 10c
 17A781 5-prong 12c
 17A782 6-prong 12c

BULB TESTER SOCKET

"S" type combination large and small seven-prong socket with center receptacle for testing screw or bayonet miniature lamps. Mounts in 1 21/64" hole with retainer ring. No. 12A136. Net Each.....31c

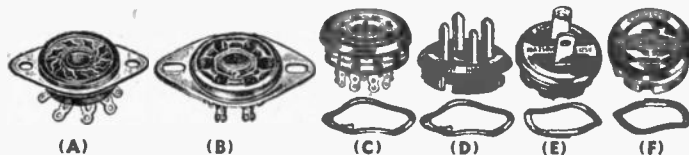


FIG. A "MIP" SOCKETS

Mounting plate permanently molded in body of high dielectric black bakelite. Mounts in 1 5/32" dia. hole. Plate has 5/32" holes on 1 1/2" centers. 12A97 and 12A1523 mount in 1 9/32" diameter hole.

Contacts Stk. No.
 4 12A93 Choice, Net Each...7c
 5 12A94
 6 12A95
 7 Small 12A96
 7 Large 12A97 Choice, Net Each...8c
 8 Octal 12A98
 9 12A1440 11c
 11 12A1441 14c
 12 12A1442 18c
 20 12A1523 36c

Polystyrene UHF Sockets
 Octal 12A102.....28c
 Loctal 12A103.....32c

Midget MIP Sockets

Identical to MIP sockets above except more compact (1 15/16" mounting centers) mount in 1 1/16" hole.

Octal 12A100.....8c
 Loctal 12A101.....12c

FIG. C "S" SOCKETS

High dielectric black bakelite bodies with retainer ring for mounting in material from 19 ga. (.044") to 16 ga. (.062"). All require 1 11/64" dia. hole and fit mounting plates and above and below surface mountings listed at right except 7 large and 7 comb. which mount in 1 21/64" hole.

Contacts Stk. No.
 4 12A48 Choice, Net Each...8c
 5 12A49
 6 12A50
 7 Small 12A51
 7 Large 12A52
 7 Comb. 12A53 10c
 8 Octal 12A54 10c
 8 Loctal 12A55 12c
 9 12A56 12c
 11 12A57 17c

FIG. F AC RECEPTACLE

Same specifications and mounting as Fig. E plug. No. 12A122. Net Each.....18c

Shielded Cable Connectors

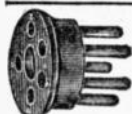


Type PF-PM, made of "S" sockets and "CP" plugs snugly covered by a steel cap 1" in height. A rubber grommet protects cable from abrasion. Small, sturdy, easy to take apart for assembly. Accommodates cables up to 7/16" diameter. Black japanned.

Contacts Male Female Net Ea.
 4 12A72 12A80 19c
 5 12A73 12A81 19c
 6 12A74 12A82 19c
 7 Small 12A75 12A83 19c
 7 Large 12A76 12A84 19c
 8 12A77 12A85 21c
 9 12A78 12A86 23c
 11 12A79 12A87 28c
 20 17A784 53c

SPECIAL "MIP" STYLE SOCKETS

Fit 9, 11 and 20-prong male plugs above. Not shielded.
 No. 12A1440. 9-prong.....11c
 No. 12A1441. 11-prong.....14c
 No. 12A1523. 20-prong.....36c



Speaker Plugs Fit Corresponding Standard Sockets

One-piece molded bakelite body, prongs securely riveted. Deep molded holes for wire.

No. Prongs Each No. Prongs Each
 12A128 4 12A132 8 10c
 12A129 5 12A133 9 12c
 12A130 6 12A134 12 18c
 12A131 7 12A135 20 36c

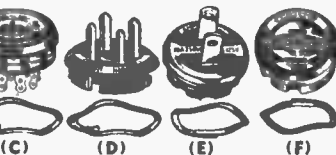


FIG. B "RS" BAKELITE SOCKETS

High dielectric black bakelite body assembled with dielectric retainer ring to steel mounting plate with slotted holes to fit mounting centers 1 1/2" to 1 7/8". Mounts with plate in 1 1/4" dia. hole, or without plate using retainer ring only in 1 11/64" dia. hole. Numbers 12A108, 12A109 and 12A116 mount with plate in 1 3/8" hole or with retainer in 1 21/64" hole.

Contacts Stk. No.
 4 12A104 Choice, Net Each...8c
 5 12A105
 6 12A106
 7 Small 12A107
 7 Large 12A108
 7 Comb. 12A109 11c
 8 Octal 12A110 11c
 8 Loctal 12A111 13c

FIG. B "RSS" STEATITE SOCKETS

Identical to "RS" Bakelite type above except all steatite body.

Contacts Stk. No.
 4 12A112 Choice, Net Each...28c
 5 12A113
 6 12A114
 7 Small 12A115
 7 Large 12A116 36c
 8 Octal 12A117 17c

FIG. D "CP" PLUGS

Same specifications and mounting sizes as "S" sockets above.

Contacts Stk. No.
 4 12A58 Choice, Net Each...8c
 5 12A59
 6 12A60
 7 Small 12A61
 7 Large 12A62
 8 Octal 12A63 10c
 9 12A64 12c
 11 12A65 17c

FIG. E AC PLUG

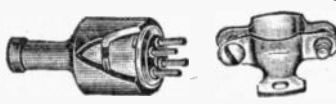
Molded of high dielectric black bakelite. Mount with retainer ring in material from 19 ga. (.044") to 16 ga. (.062") and fit mounting plates and above and below surface mountings listed at right. Require 1 11/64" dia. hole. Rated 15 amp, 110-volt or 10 amp, 250-volt. Screw terminals. No. 12A121. Net Each.....18c

Shielded AC Connectors



Most practical of all for use on AC. Assembled from the same molded bakelite units as listed above, encased in drawn steel shells, making them unbreakable and fully shielded. Rubber grommet protects cable. Accommodates up to 7/16" diameter cable. Easy to take apart.

No. 12A89. Plug, Each.....28c
 No. 12A90. Receptacle, Each.....28c



RUBBER HANDLE

For use with above shielded connectors. No. 12A88. Each.....11c
 CABLE CLAMP. Replaces rubber grommet in shielded connectors above. Grips cord securely. No. 12A91. Each.....7c

Mountings for "S" Sockets, "CP" Plugs and AC Units



(A) Fits AC units and all except 7 Large and 7 Comb. plugs and sockets. Steel Mounting Plate. Slotted mounting hole centers 1 1/2" to 1 7/8". No. 12A66. 10 For.....7c
 (B) Above Surface Mount. Raises connector top 13/16" above surface. Reverses for sub-surface mount. Has 4 side knock outs. Dia. 1 3/4". No. 12A67. Net Each.....7c
 (C) Below Surface Mount. Lowers connector bottom 1 3/16" below surface. Mounts in 1 7/16" hole. Has two 5/32" screw holes on 3/4" centers. No. 12A70. Net Each.....11c
 ADAPTER SHELL (not illus.). Metal sleeve. Ends take "S" sockets or "CP" plugs except 7 Large and 7 Comb. Makes adapters as needed. No. 12A120. Net Each.....14c

Cathode Ray & Television Tube Connectors



(A) BAKELITE SOCKETS
 Molded of high quality bakelite. With efficient creepage barriers and removable bakelite cap for shock hazard and wiring protection.

Opening for lead wire harness can be positioned in any of 6 locations. Duodecal Socket. Amphenol Type 59-402. For 12 pins on circle dia. of 1.063". Fits 2BP, 5TP/UP, 10BP/EP, 12JP, 15AP and 20BP series tubes. No. 17A785. Net Each.....92c
 Small Diheptal Socket. Amphenol Type 59-415. Fits 14-pin tubes with pin circle dia. 1.75" and tube base dia. 2.05". Fits 2P23 and 5655 type tubes. No. 17A786. Net Each.....98c
 Medium Diheptal Socket. Amphenol Type 59-417. Fits 14-pin tubes with pin circle dia. 1.75" and tube base dia. 2.25". Fits 3AP/BP/JP/MP, 5CP/MP/RP/SP, 7GP/JP, 12GP and 5527 series tubes. No. 17A787. Net Each.....98c

(B) MAGNAL STEATITE SOCKET

Amphenol Type 49-5511L. For 11-pin tubes with 1 1/16" dia. pin circle. Mounts in 1 5/8" hole with retainer ring. Fits 2AP, 3CP/KP, 5BP/HP/JP/LP and 7EP series tubes. No. 12A572. Net Each.....71c

(C) SECOND ANODE CONNECTOR

Silver plated snap button type plug well insulated by 1 1/2" dia. rubber protective cap. With 12" wire lead. No. 15A126. Net Each.....53c

(D) SECOND ANODE CONNECTOR

Cadmium plated brass contact surrounded by rubber insulator. Snaps over .096" dia. prong on side of most diheptal tubes. No. 15A125. Net Each.....79c

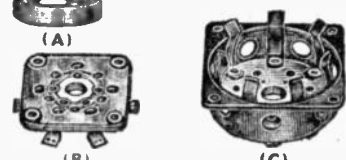
Cinch Miniature Sockets



(A) Sub-Miniature. For hearing aid type tubes. Molded mica-filled bakelite with silver plated beryllium copper contacts. 4-prong tubes will fit 5-prong socket. No. 17A1056. 5-prong. Net Each...22c
 No. 17A1057. 6-prong. Net Each...23c
 No. 17A1058. 7-prong. Net Each...24c
 Fig. (B) 7-Prong Miniature. For mounting through bottom of chassis in 3/4" dia. hole. Mounting centers 1 1/8". Fits standard miniature tubes. Molded black low-loss bakelite. No. 17A1060. Net Each.....13c
 Fig. (C) 7-Prong Miniature. Same as Fig. B except top mounting. No. 15A129. Net Each.....13c

Tube Sockets ★ JONES PLUGS ★ Coil Forms

JOHNSON TUBE SOCKETS



Bayonet Sockets (ILLUS. A)
Clear white glazed porcelain base, with heavy phosphor bronze side wiping contacts, and screw and solder lug terminals.

Type 123-209 4 prong "UX" base, for 866 and other high voltage rect. and trans. tubes. Shell and contacts well spaced.

No. 12A174, Net Each..... 88c

Type 123-211 Standard "50 watt" socket for "jumbo 4 pin" tubes, 203A, 211, 805, 810, 872, 250-450 TH/TL, HK 354, etc.

No. 12A175, Net Each... \$1.09

Type 123-216 Giant 5 pin, for 803, RK28, etc.

No. 17A1110, Net Each... \$1.76

Jumbo Wafers (ILLUS. B)
Steatite transmitting tube sockets of superior construction. Contacts are brass with steel reinforcing springs, all cadmium plated and designed to carry high currents.

Type 122-244 Super Jumbo 4 pin, for 8008, 5C22 Tubes, etc.

No. 17A1111, Net Each... \$1.18

Type 122-275 Giant 5 pin, for 4-125A, 4-250A, RK28, RK48, 803, etc. Adequate ventilation is provided by five 1/4" holes spaced between contacts.

No. 12A571, Net Each... \$1.03

Type 122-237 Giant 7 pin, for 3D22, 4E27, 813, 8001, HK257, etc.

No. 12A173, Net Each... 65c

Type 122-247 Wafer 7 pin, for 4-65A, 829, 832 RK4D32, etc. Supplied with etched aluminum base shield.

No. 20A773, Net Each... 74c

Special Sockets (ILLUS. C)
Type 122-101 Wafer 7 pin with base shield. Especially recommended for UHF gear using 826, 829 or 832 tubes. Has silver plated contacts, isolated grid terminals and provisions for mounting button mica by-pass condensers.

No. 20A774, Net Each... \$1.76

Type 124-212 (Not Illus.) for 833 or 833A tubes. Consists of filament contacts mounted on steatite base and 2 five-inch laminated phosphor bronze grid and plate leads with screw clamps of heat-radiating construction.

No. 12A420, Net Each... \$5.88

JOHNSON Miniature Sockets and Shields



(A) Designed for use with the 9000 series and miniature series tubes, including 154, 155, 1T4, etc. Contacts are Phosphor Bronze, heavily silver plated and are self-aligning. Designed to permit a minimum amount of capacity between contacts. Ceramic low-loss construction. Type 267.

No. 12A566, Net Each... 29c

(B) 277B-Steatite base with metal mtg. ring extending upward to form a shield.

No. 12A567, Net Each... 44c

(C) Shield for 277B or 277S.

No. 12A569, 1 3/4" Shield... 9c

No. 12A570, 1 3/4" Shield... 12c

CHOICE, Your Cost, Each... 807 TUBE SHIELD

Helps prevent oscillation. Also OK for RK20, RK39 and 804 tubes. Size 2 1/4" dia. x 3" high.

No. 17A575, Each... 35c

JONES PLUGS AND SOCKETS

300 Series. Small polarized connectors with phosphor bronze contacts, 5/32" wide, 3/16" thick and black molded bakelite body. Rating, up to 45 V. at 5 A. Cable type has black crystal finished metal shell and cable clamp. Two contact plugs and sockets are round; all others rectangular.

CABLE TYPE WITH CLAMP

Male (Fig. A)				Female (Fig. B)			
Contacts	Stk. No.	Jones No.	Price	Contacts	Stk. No.	Jones No.	Price
2	12A336	P302CCT	31c	2	12A343	S302CCT	32c
3	12A337	P303CCT	34c	3	12A344	S303CCT	34c
4	12A338	P304CCT	36c	4	12A345	S304CCT	37c
6	12A339	P306CCT	40c	6	12A346	S306CCT	42c
8	12A340	P308CCT	44c	8	12A347	S308CCT	49c
10	12A341	P310CCT	49c	10	12A348	S310CCT	55c
12	12A342	P312CCT	54c	12	12A349	S312CCT	62c

CHASSIS TYPE WITH ANGLE BRACKETS

Male (Fig. C)				Female (Fig. D)			
Contacts	Stk. No.	Jones No.	Price	Contacts	Stk. No.	Jones No.	Price
2	12A559	P302AB	14c	2	12A350	S302AB	15c
3	12A560	P303AB	17c	3	12A351	S303AB	18c
4	12A561	P304AB	19c	4	12A352	S304AB	20c
6	12A562	P306AB	23c	6	12A353	S306AB	25c
8	12A563	P308AB	26c	8	12A556	S308AB	30c
10	12A564	P310AB	30c	10	12A557	S310AB	36c
12	12A565	P312AB	34c	12	12A558	S312AB	42c

400 Series. Same general construction as "300 series" above, but heavier. Contacts are 1/4" wide, 1/16" thick. Two-contact type S402AB has mtg. plate instead of angle brackets. Rating up to 110 V. at 10 A.

CABLE TYPE WITH CLAMP

Male (Fig. A Above)				Female (Fig. B Above)			
Contacts	Stk. No.	Jones No.	Price	Contacts	Stk. No.	Jones No.	Price
2	19A107	P402CCT	52c	2	19A113	S402CCT	57c
4	19A108	P404CCT	64c	4	19A114	S404CCT	72c
6	19A109	P406CCT	74c	6	19A115	S406CCT	86c
8	19A110	P408CCT	85c	8	19A116	S408CCT	1.01
10	19A111	P410CCT	96c	10	19A117	S410CCT	1.16
12	19A112	P412CCT	1.08	12	19A118	S412CCT	1.30

CHASSIS TYPE WITH ANGLE BRACKETS

Male (Fig. C Above)				Female (Fig. D Above)			
Contacts	Stk. No.	Jones No.	Price	Contacts	Stk. No.	Jones No.	Price
2	19A119	P402AB	33c	2	19A125	S402AB	37c
4	19A120	P404AB	40c	4	19A126	S404AB	49c
6	19A121	P406AB	49c	6	19A127	S406AB	60c
8	19A122	P408AB	58c	8	19A128	S408AB	71c
10	19A123	P410AB	64c	10	19A129	S410AB	82c
12	19A124	P412AB	71c	12	19A130	S412AB	93c

NATIONAL SOCKETS NEW SOCKETS AND SHIELDS FOR 7 PIN MINIATURES



Sockets molded of mica filled natural color bakelite with beryllium copper, silver plated contacts that correctly grip the tube pins close to the base of tube. Axial (XOA) and radial (XOR) contacts are interchangeable and can be used in combination on same socket for shortest leads or minimum size. Sockets can be used with or without shield. Shield base and top are nickel plated brass. Studs on base secure socket and base to chassis. Top locks on base holding tube in place with phosphor bronze spring. Type XOS-1 fits 6AK5, XOS-2 fits 6C4, XOS-3 fits OA2. Mtg. centers .875".

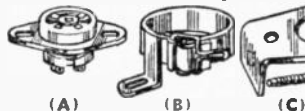
Model	Description	Price
12A1422	Type XOA with axial contacts. Each.....	50c
12A1423	Type XOR with radial contacts. Each.....	50c

Model	Description	Price
12A1424	Type XOS-1, for tubes 1 3/16" high. Each....	48c
12A1425	Type XOS-2, for tubes 1 1/2" high. Each.....	48c
12A1426	Type XOS-3, for tubes 2" high. Each.....	48c
15A2058	New 9 pin Ceramic XOA-C-9 Axial type contacts. Mounting centers 1 1/8", chassis cutout 1 3/16". Net Each.....	57c
15A2059	New 9 pin Ceramic XOR-C-9 Radial type contacts. Same mounting as above. Net Each.	57c

U.H.F. TIP JACK
Fits .080" phone tip. Mounts in 5/8" hole with retainer ring.

No. 17A1066, Net Each... 18c

Millen Tube Sockets and Clamps



With steatite body of deep construction for long flash-over path to chassis and steatite barriers between contacts. Metal mtg. ring is removable.

Stk. No.	Prongs	Millen No.	Net Ea.
12A1412	4	33004	30c
12A1413	5	33005	30c
12A1414	6	33006	30c
12A1415	7	33007	34c
12A1416	8	33008	30c

12A1417. Type 33888 shield for use with No. 12A1416 socket to isolate input and output. Each..... 18c

Millen Tube Clamps
(Fig. B) For standard 3/8" dia. base tubes.

No. 12A1418. Type 33087. Ea. 30c
(Fig. C) For small metal tubes.

No. 12A1419. Type 33088. Ea. 24c
(Fig. C) For large metal tubes (6L6).

No. 12A1420. Type 33089. Ea. 30c

Double Contact Bayonet Socket
Bakelite insulated DC bayonet candelabra receptacle for type 991 VR tube or neon lamps. Also fits standard auto lamps. No. 12A1421. Type 33991. Ea. 45c

Type CIR National Sockets

Has low-loss steatite insulation, positive contacts. Mounting 1 27/32" centers, hole size 1 1/2". Octal mounts 1 1/2" centers, 1 1/4" hole.

No.	Prongs	No.	Prongs
12A166	4	12A169	7L
12A167	5	12A170	7S
12A168	6	12A171	8 octal

Net Each... 30c

RADIO TUBE SHIELDS



(A) A four-piece, snug fitting shield for battery tubes with T-9 size bulb such as 1A7GT/G-1H5GT/G, etc., where grid cap shielding is necessary. 3 3/4 inches over all. Complete as illustrated.

No. 19A254, Net Each... 15c

(B) Four-piece shield for same tubes as above except it has no grid shield. Over-all height, 3 1/6 inches. Complete as illustrated.

No. 19A255, Net Each... 15c

(C) Single shell type shield for all GT or Octal tubes with metal bases such as 12K7GT-607GT-1A7GT-1A6-7A8-7B8, etc. Vertical grooves provide flexible positive fit. Shield grounds thru metal base of the tube. Open top for grid connection. Over-all height, 2 1/16 inches. Base dia., 1.165".

No. 19A256, Net Each... 7c

(D) Same as above with larger base. Diameter 1.218 inches.

No. 19A257, Net Each... 7c

(D) Shields for miniature tubes. A two-piece shield which will fit all miniature type tubes. Easy to install. Length over-all, 1 7/8 inches. Complete with base clip as illustrated.

No. 19A258, Net Each... 15c

Metal Tube Shield. Fits over top of the tube providing complete shielding for grid. Has slot to fit over the grid lead. Cadmium plated.

No. 12A1348, Net Each... 10c

GLASS OR METAL TUBE GRID CAPS



Grid caps for all applications. Size 3/8" fits standard glass tubes, 1/4" fits metal or GT types, 9/16" for 865 and other transmitting tubes and 3/8" for Type 807, etc.

Stock No.	Size	Fig.	Net Each
12A1342	3/8" Standard	1	1c
12A1349	3/8" National	2	3c
12A1350	1/4" National	3	3c
12A1351	9/16" Ins. Lead	4	18c
12A1352	Comb. 1/4" to 3/8"	5	24c
12A1353	3/8" Standard	6	1c
12A1354	1/4" Metal GT	6	1c
12A1355	Comb. with Lead 7	23c	
12A1356	9/16" Ins. Millen	8	21c
17A1041	3/8" Ins. Millen	8	21c
12A1357	Comb. 3/8-1/4"	9	11c
12A1358	3/8" Ins. Lead	10	12c

Bakelite Wafer Sockets

For glass or metal tubes. Positive grip contacts in laminated bakelite. 1 1/2" mtg. centers.

No.	Prongs	Ea.
12A157	4	7c
12A158	5	7c
12A159	6	8c
12A160	7 Small	8c
12A161	Octal	8c
17A1055	Local 8c	

7 PIN WAFER MINIATURE
With center shield. Mtg centers 7/8".

Stock No. 17A1059, Net Each... 12c

QUALITY RADIO and ELECTRICAL SWITCHES for MOST ANY NEED

H & H Switches



Underwriters' approved; 3 amp., 125v.; 1 amp. 250v. For controlling radio sets, small motors, lamps, meters, etc. Mounting sleeves all $\frac{1}{8}$ " diameter and $\frac{1}{2}$ " length. Two locknuts included. Very rugged. Best quality. Laminated bakelite or fibre insulation. Solder lug connections. Nickel finish on mounting nuts and covers.

Single Pole—Single Throw, 2 Lugs Makes and breaks a single circuit, standard "on" and "off" switch.
 12A770 Toggle } Chc. Ea. 25c
 12A771 Bat Hand. } 10 at ... 23c
 Single Pole—Double Throw, 3 Lugs Can also be used as 3 way.
 12A772 Toggle } Chc. Ea. 30c
 12A773 Bat Hand. } 10 at ... 27c
 Double Pole—Single Throw, 4 Lugs Cuts two circuits in and out or "on" and "off" for two circuits.
 12A774 Toggle } Chc. Ea. 45c
 12A775 Bat Hand. } 10 at ... 43c
 Double Pole—Double Throw, 6 Lugs Feeds two circuits into either one or two pairs circuits.
 12A776 Toggle } Chc. Ea. 51c
 12A777 Bat Hand. } 10 at ... 46c

H & H Hi-Power Type



Double Pole—Single Throw Rated 12 Amps at 125 Volts Push Button Type. Normally Open. When used in racks, it will break primary circuit when door is opened. Size $1\frac{1}{4}$ " long, $\frac{3}{4}$ " wide, $\frac{3}{4}$ " high, $7/16$ " shank.
 12A778. Net Each. 97c
 Toggle Type. DPST, 12 A., 125 V. Same dim. as above.
 12A779. Net Each. 73c

Extra Heavy Duty Power Type D.P.D.T. with Neutral Center An extra large heavy duty Double Pole, Double Throw Switch with neutral position in the center for use in heavy current circuits such as transmitters, amplifiers, motors, etc. Contacts are "fast-break" type. Rated 10 amps. at 125 volts. Size 2" long, 1" high, $1\frac{1}{4}$ " wide. Mounting sleeve diam. $\frac{1}{2}$ ".
 12A780. Net Each. \$2.62

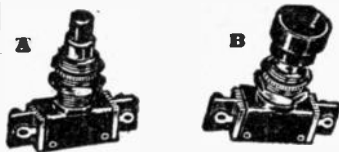
H & H Rotary Switches

For knob operation. 3-250 volts. Mounting sleeve— $\frac{3}{8}$ " diam., sleeve length $\frac{1}{2}$ ". Knob shafts extend 1" beyond threaded sleeve.
 Single Pole—Single Throw, 2 Lugs 12A781. Each. 28c 10 at ... 26c
 Single Pole—Double Throw, 3 Lugs 12A782. Each. 32c 10 at ... 29c
 Double Pole—Single Throw, 4 Lugs 12A783. Each. 51c 10 at ... 48c
 Double Pole—Double Throw, 6 Lugs 12A784. Each. 56c 10 at ... 52c

Rotary Switches S.P.S.T. rotary type canopy switch. Has $\frac{1}{4}$ " shank, brown bakelite knob and 6" leads. 1 Amp., 250 V. A. C.
 12A725. Each 18c; 10 for \$1.62

S.P.S.T. Miniature Toggle Switch Screw terminals and tiny bakelite handle. Light duty service for model aircraft, trains, etc. Size 9/16" W., $\frac{3}{16}$ " L, 7/16" D. $1\frac{1}{2}$ " mtg centers.
 15A1082. Each. 18c
 10 Lots 16c

H & H Two-Circuit Push Switches



In normal position, with plunger up, one circuit is "on" and the other "off". When plunger is depressed, circuits are reversed. Slow make, quick break momentary contacts. Rated 1 amp. at 125-volt A.C. Bushing $15/32$ " diameter, $\frac{3}{8}$ " long.
 (A) Metal Plunger 12A720. Each. 41c 10 at ... 38c
 (A) Bakelite Tip 12A721. Red } Each 49c
 12A722. Black } 10 at 44c
 (B) Bakelite Button 12A723. Red } Each 46c
 12A724. Black } 10 at 42c

Carling Toggle Switches

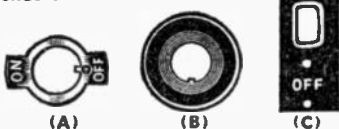
For general purpose use. $\frac{1}{2}$ " mounting sleeves. Rated 3 amps. at 125 V., A. C. With 2 mtg. nuts.
 Cat. No. Type Each 10 @
 12A786 SPST 23c 21c
 12A787 SPDT 27c 25c
 12A788 DPST 33c 30c
 12A789 DPDT 49c 44c
 12A790. SPST with $\frac{7}{8}$ " shank. 27c
 Each. 30c 10 at ...
 12A791. SPST with off position in center. 30c
 Each. 33c 10 at ... 30c
 15A2044. DPDT with off position in center. 51c
 Each. 56c 10 at ... 51c

Carling Momentary Plunger Type Switches Handy for Countless Needs

Double-Pole, Double Throw 6 lug switch suitable for testers, meter panels, etc. Makes DP, ST by using 4 lugs. 1 amp. 125 volts AC only. $15/32$ " shank, $\frac{1}{4}$ " long.
 12A792. Each 53c; 10 at ... 48c
 Single-Pole, Two Circuit 4 lug switch. 1 amp. 125 volts AC only. $15/32$ " shank, $\frac{1}{4}$ " long.
 12A793. Each 35c; 10 at 32c

Carling Hi-Power Toggle Switch 20 amp., 125 volts; 10 amp., 250 volts. $\frac{1}{2}$ " dia. shank $\frac{1}{2}$ " long. Bat handle, bakelite base, SPST.
 12A794. Each 52c
 10 at 47c

Switch Plates For Standard Toggle and Slide Switches.



(A) For toggle switches. N.P. steel. No. 12A785. Ea. 2c, 10 at $1\frac{1}{2}$ c
 (B) Circular type for toggle switches. Etched, polished aluminum with black background.
 No. 17A1013 Off-On } Choice Each
 No. 17A1014 Micro-Phono } 12c
 No. 17A1015 Phono-Radio }
 (C) For slide type switches with $1\frac{1}{8}$ " mtg. hole centers. Antique finish. Size $2\frac{1}{2}$ " x $\frac{3}{8}$ ".
 No. 17A1016 Phono-Radio } Choice Each
 No. 17A1017 On-Off } 15c

Acro Switches



The wide application of this type switch is familiar to most all who use switches. Case is of plastic $1\frac{1}{2}$ " x $\frac{1}{2}$ " x $27/32$ ", drilled for mounting two $6/32$ screws on 1" centers. Type 1P mounts through panel, $\frac{1}{8}$ " sleeve. Rated 10 amps. at 15 volts; 5 amps. at 230 V. AC.
 Movement Differential: Type 1A—.005"; Type 5L—.030"; Type 1P—.003".
 Operating Pressure: Type 1A=2-3 oz.; 5L= $1\frac{1}{2}$ -2 $\frac{1}{2}$ oz.; 1P=8-10 oz.
 1A—Pin Type
 Mfrs. Stock Net
 Circuit Code No. Ea.
 NO. XO-1A 12A800 .93
 N.C. XC-1A 12A801 .93
 D.T. XD-1A 12A802 1.12
 5L—Leaf Type
 Mfrs. Stock Net
 Circuit Code No. Ea.
 XO-5L 12A803 1.02
 XC-5L 12A804 1.02
 XD-5L 12A805 1.21
 1P—Panel Type
 Mfrs. Stock Net
 Code No. Ea.
 RO-1P 12A806 1.96
 RC-1P 12A807 1.96
 RD-1P 12A808 2.16



The Acro Miniac Switch

Small, fully enclosed, only $1\frac{1}{32}$ " long, $13/16$ " wide, $\frac{1}{4}$ " thick. 4 mtg. holes $3/32$ " dia. Well adapted for stacking in multiple assemblies. All parts non-corrosive, stainless steel pin actuator and fine silver contacts. Operating pressure 6 to 9 oz., movement differential .003-.006. Rated at 15 amps., 115 volts AC.
 12A809. Type 2M01-1A—N.O. 1.18
 12A810. Type 2M01-1A—N.C. 1.18
 12A811. Type 2MD1-1A—D.T. 1.18

Bakelite Knife Type Bakelite base, contacts and blades N. P. For panel or base mounting.
 12A795. SPST $\frac{1}{2}$ " x $1\frac{1}{4}$ " 21c
 12A796. SPDT $\frac{1}{2}$ " x $1\frac{1}{4}$ " 35c
 12A797. DPST $1\frac{1}{2}$ " x $1\frac{1}{4}$ " 41c
 12A798. DPDT $1\frac{1}{2}$ " x $1\frac{1}{4}$ " 44c

Porcelain Knife Type Porcelain base compact knife switches. Screw terminals.
 12A550. SPST Size $1\frac{1}{2}$ x $1\frac{1}{2}$ " 13c
 12A551. SPDT Size $1\frac{1}{2}$ x $2\frac{1}{2}$ " 16c
 12A552. DPST Size $1\frac{1}{2}$ x $1\frac{3}{4}$ " 23c
 12A553. DPDT Size $1\frac{1}{2}$ x $2\frac{1}{2}$ " 27c

Nut Type Acro Switch Push-button type, compact, $29/32$ " dia. x $1\frac{1}{2}$ " overall height. For panel mounting. Bakelite plunger. Rating is 15 amps. at 115 volts AC. Ideal for DC loads because of double break feature.
 12A812. Type 3N05-5P—N.O. 1.47
 12A813. Type 3NC5-5P—N.C. 1.47

Slide Switches For any need where a small switch is wanted—mike current, tone control, low power supplies, etc. All contacts are silver plated. Ratings, S.P. $\frac{3}{4}$ A., D.P. $\frac{1}{2}$ amp. at 125 volt AC or DC. $35/64$ " x $13/32$ ". $1\frac{1}{8}$ " mtg. centers.
 No. 12A799. S.P.S.T. Net Each. 16c
 No. 12A768. S.P.D.T. Net Each. 19c
 No. 17A1040. D.P.S.T. Net Each. 22c
 No. 12A769. D.P.D.T. Net Each. 28c

Toggle Switch With Wire Leads Carling S.P.S.T. toggle switch rating 3 amps. 110 volts. $5/16$ " shank with two knurled nuts. Attached 6 inch leads provide easy installation.
 17A307. Ea. 30c
 Lots of 10. Ea. 27c

TERRIFIC SWITCH BARGAIN G.E. SPST TOGGLE SWITCH Rated 3 amp. 250 V., 6 amp. 125 V. Bakelite enclosed $1\frac{1}{4}$ " x $\frac{1}{2}$ " x $\frac{1}{2}$ " with $15/32$ " dia. mounting sleeve $13/32$ " long. Nickel finished. Complete with mtg. nuts.
 No. 15A1157. Special, Each 20c
 10 Lots. 18c 100 Lots. 16c
 EACH. 18c EACH. 16c

ILLUMINATED Switch Light A translucent plastic switch plate that is permanently "lit up" from a built-in miniature neon lamp. Current consumption about one cent per year. Replaces old switch plates or for new construction. Complete ivory' plate, 1 a m p, connecting wires, mtg. screws and instructions. For 110 Volts AC or DC.
 No. 20A124. 59c 10 @. 53c

PERMALITE ILLUMINATED Switch Light

Switch For F.M. Tuners, Phonos, Record Players, Etc. Used to quickly connect Record Players, F. M. Attachments, Mikes and similar devices into the audio amplifier of existing radio sets. Provides changeover from radio to record player. Enables the suppression of the radio on the "phono" position.
 12A554. Net Ea. \$1.19

Special Purpose Switches (A) Push Pull, heavy duty off-on switch with bakelite knob. Mounting $\frac{3}{8}$ " sleeve. For 110 volt A.C. or D.C. circuits up to 3 amps. Also for 5 volt automobile circuits such as lights, radios, etc. Has screw connecting terminals. No soldering necessary.
 No. 12A1411. Price Each ... 47c
 (B) Wirt Rotary, quick break, positive contact switch. Diameter $1\frac{1}{8}$ ", depth $\frac{1}{2}$ ", bushing $\frac{3}{8}$ x $\frac{3}{8}$ ", steel shaft length $\frac{5}{8}$ " from end of bushing.
 No. 12A1408. SPST. Price Each. 29c
 No. 12A1409. SPDT. Price Each. 32c
 (C) Metal Knob Push-Pull Type "off-on" switch. Mounting sleeve $\frac{3}{8}$ inch. For 110 V. A.C. or D.C. circuits. Up to 3 amps and for automotive auxiliary lights, etc. Screw mounting lugs eliminate soldering.
 No. 12A1410. Price Each ... 25c

PERMALITE ILLUMINATED Switch Light

PANEL METERS - PHOTO RELAYS

TRIPLETT PANEL METERS

In round or square flush-mounting bakelite cases, completely dust-proofed. D.C. instruments are the D'Arsonval type; A.C. instruments of moving iron repulsion type, air damped. All incorporate jeweled bearings, aluminum pointer, white metal dial with easy-to-read scale, and zero adjustment screw on front. Accurate within 2%. Mtg. hole, 2-inch models, 2 13/64"; 3-inch models, 2 3/4".



2-INCH D.C. MILLIAMMETERS

Range MA	Mod. 221-T Round	Mod. 227-T Square	Price Each
0-1	19A1155	19A1169	\$6.76
0-5	19A1156	19A1170	5.68
0-10	19A1157	19A1171	5.68
0-15	19A1158	19A1172	5.68
0-25	19A1159	19A1173	5.68

0-50	19A1160	19A1174	5.68
0-100	19A1161	19A1175	5.68
0-150	19A1162	19A1176	5.68
0-200	19A1163	19A1177	5.68
0-250	19A1164	19A1178	5.68
0-300	19A1165	19A1179	5.68
0-500	19A1166	19A1180	5.68
0-750	19A1167	19A1181	5.68
0-1000	19A1168	19A1182	5.68

3-INCH D.C. MILLIAMMETERS

Range MA	Mod. 321-T Round	Mod. 327-T Square	Price Each
0-1	19A1183	20A813	\$7.74
0-5	19A1184	19A1197	6.66
0-10	19A1185	19A1198	6.66
0-15	19A1186	20A814	6.66
0-25	19A1187	19A1199	6.66

0-50	19A1188	20A815	6.66
0-100	19A1189	20A816	6.66
0-150	19A1190	19A1200	6.66
0-200	19A1191	20A817	6.66
0-250	19A1192	19A1201	6.66
0-300	19A1193	20A818	6.66
0-500	19A1194	20A819	6.66
0-750	19A1195	19A1202	6.66
0-1000	19A1196	19A1203	6.66

3-INCH D.C. MICROAMMETERS

Range Micro A	Mod. 321-T Round	Mod. 327-T Square	Price Each
0-100	19A1138	20A823	\$15.68
0-200	19A1139	20A824	12.54

3-INCH D.C. AMMETERS

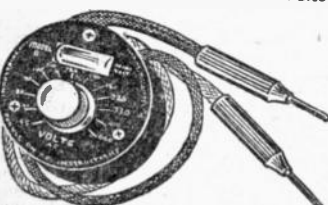
Range Amps.	Mod. 321-T Round	Mod. 327-T Square	Price Each
0-1	19A1131	20A820	\$6.66
0-5	19A1132	19A1136	6.66
0-10	19A1133	20A821	6.66
0-25	19A1134	20A822	6.66
0-50	19A1135	19A1137	6.66

3-INCH D.C. VOLTMETERS (125 Ohms Per Volt)

Range Volts	Mod. 321-T Round	Mod. 327-T Square	Price Each
0-5	19A1140	19A1147	\$6.66
0-10	19A1141	20A835	6.66
0-25	19A1142	19A1148	6.66
0-50	19A1143	20A836	6.66
0-100	19A1144	20A837	6.66
0-150	19A1145	20A838	8.43
0-500	19A1146	20A839	9.51

Neon Glow Voltmeter

Reads A.C. or D.C. 65 to 660 Volts



Just rotate the knob until glow lamp goes out and read voltage direct from the calibrated scale. A handy, portable instrument that can stand knocking around. Resistance approx. 1/2 megohm. Neon indicator good for 10,000 hours actual operation. Has 12" flexible leads and test prods. Bakelite case dia. 2".
No. 17A572. Net Each... **\$1.68**

3-INCH D.C. VOLTMETERS (1000 Ohms Per Volt)

Range Volts	Mod. 321-T Round	Mod. 327-T Square	Price Each
0-10	19A1149	19A1152	\$9.21
0-150	19A1150	19A1153	9.51
0-300	19A1151	19A1154	11.56

2-INCH A.C. VOLTMETERS

Range Volts	Mod. 231-S Round	Mod. 237-S Square	Price Each
0-5	19A1111	19A1117	\$5.68
0-10	19A1112	19A1118	5.68
0-15	19A1113	19A1119	5.68
0-50	19A1114	19A1120	5.68
0-100	19A1115	19A1121	6.76
0-150	19A1116	19A1122	8.33

3-INCH A.C. VOLTMETERS

Range Volts	Mod. 331-S Round	Mod. 337-S Square	Price Each
0-5	19A1123	20A828	\$6.66
0-10	19A1124	20A829	6.66
0-15	19A1125	19A1129	6.66
0-50	19A1126	19A1130	6.66
0-150	19A1127	20A830	7.74
0-300	19A1128	20A831	9.31

3-INCH R.F. AMMETERS (With Internal Couple)

Range Amps.	Mod. 341-T Round	Mod. 347-T Square	Price Each
0-1	19A1092	20A825	\$7.74
0-2.5	19A1093	20A826	7.74
0-5	19A1094	20A827	7.74

2-INCH A.C. AMMETERS

Range Amps.	Mod. 231-S Round	Mod. 237-S Square	Price Each
0-1	19A1095	19A1100	\$5.68
0-3	19A1096	19A1101	5.68
0-10	19A1097	19A1102	5.68
0-25	19A1098	19A1103	5.68
0-50	19A1099	19A1104	5.68

3-INCH A.C. AMMETERS

Range Amps.	Mod. 331-S Round	Mod. 337-S Square	Price Each
0-1	19A1105	19A1110	\$6.66
0-3	19A1106	20A832	6.66
0-10	19A1107	20A833	6.66
0-25	19A1108	20A834	6.66
0-50	19A1109	19A1204	6.66

NOTE: We can supply on special order, at regular prices, all other types of Triplett panel meters.

"CONANT" INSTRUMENT RECTIFIERS

For applications requiring DC output current for meters, relays or other apparatus where frequency of AC source extends into audio range.
Type M-Series 500; Full Wave Bridge Rectifier Output 10 V. 30 MA.
No. 14A629. Net Each **\$2.06**
Type H-Series 500; Half Wave Rectifier Output 5 V. 30 MA.
No. 14A631. Net Each **88c**
Type B-Series 160; For applications requiring good frequency response over entire commercial and audio range. Full Wave Bridge type. Output 10 V. 5 MA.
No. 14A630. Net Each **\$2.06**

"Eby" Photo-Electric Cell 4-Prong plug in type.

Sensitive, long life for ALL photo-electric circuits, 1 1/4" dia. and 3/4" high.
No. 17A571.
Net Each... **\$2.94**



SHURITE PANEL METERS



Attractive, well-made, dependable instruments, accurate within 5%. D.C. meters are polarized-vane solenoid type; A.C. meters are double vane repulsion type. All have white metal dial with black scale calibrated for use in non-magnetic panel. Cases are black enameled brass, and mount in 2 5/32" dia. hole. Model 950 round flush case instruments are supplied with a 2 3/4" dia. flange adapter ring for optional flush or flange mounting as illustrated above. Model 950 case is 2 5/8" square.

D.C. MILLIAMMETERS

Range MA	Model 550 (with Flange Ring) Square	Model 950 Square	Price Each
0-10	19A209	19A216	\$1.89
0-15	19A210	19A217	1.49
0-25	19A211	19A218	1.45
0-50	19A212	19A219	1.45
0-100	19A213	19A220	1.45
0-200	19A214	19A221	1.45
0-300	19A215	19A222	1.45

D.C. AMMETERS

Range Amps (with Flange Ring) Square	Model 550 Square	Model 950 Square	Price Each
0-5	19A223	19A227	\$1.45
0-15	19A224	19A228	1.45
10-0-10	19A225	19A229	1.45
30-0-30	19A226	19A230	1.94

D.C. VOLTMETERS

Range Volts (with Flange Ring) Square	Model 550 Square	Model 950 Square	Price Each
0-3	19A231	19A235	\$1.45
0-10	19A232	19A236	1.50
0-25	19A233	19A237	1.45
0-150	19A234	19A238	1.83

A.C. AMMETERS

Range Amps (with Flange Ring) Square	Model 550 Square	Model 950 Square	Price Each
0-3	19A239	19A242	\$2.48
0-10	19A240	19A243	2.48
0-30	19A241	19A244	2.63

A.C. VOLTMETERS

Range Volts (with Flange Ring) Square	Model 550 Square	Model 950 Square	Price Each
0-15	19A245	19A248	\$2.48
0-150	19A246	19A249	3.21
0-300	19A247	19A250	3.80

RESISTANCE METERS

Direct reading volt-ohmmeter with 4 1/2 V. D.C. and 10,000 ohm scales. Requires three 1 1/2 V. cells of any type for resistance measurement. Model 550 with round flush case is supplied with flange ring adapter. Model 950 has square flange case.
Stock No. Model 19A251 550 Round } Chc. **\$1.94**
19A252 950 Square } Each

SPECO-RHEIN INDUSTRIAL PHOTO RELAY



For use in countless industrial applications involving protection to operators of hazardous machines, counting, sorting, opening and closing doors, alarm systems, etc. where the interruption of a beam of light sets the relay into operation. Has built-in SPDT relay rated at 5 amps, non-inductive load, and sensitivity control for optimum operation up to 35 ft. from light source. There are no hair-trigger adjustments. Operation is positive and thoroughly dependable. Operation speed, 1/20 second to close relay, 1/4 second for release. Case is cast aluminum, wrinkle finished, and strong enough for protection against accidental shock damage. Small in size, 3x3 1/2 x 5" high. Mounts on standard 1/2" electrical conduit which also serves as protection for wiring to and from unit. Supplied with type 921 photo tube and 2D21 thyatron. For use on 115 V. 50/60 cy. A.C.
No. 36A16. Type R-010 Photo Relay less light source. Net Ea. **\$41.16**

SPECO-RHEIN 2-IN-1 PHOTO RELAY-COUNTER

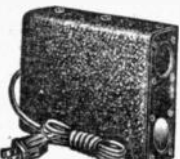
A sensitive light operated photo relay and an electrically operated digit counter combined into one compact unit. Counting mechanism is completely enclosed; virtually tamper proof. Face is visible from rear of case. Has sensitivity control for best operation at various distances from light source. Used with light source L-010, the operating range is 25 ft. maximum. Operating speed 400 per minute. Case is cast aluminum, size 3x3 1/2 x 5" high with base to mount directly on standard 1/2-inch electrical conduit. Supplied with type 921 photo tube and 2D21 thyatron. For use on 115V. 50/60 cy. A.C.
No. 36A17. Type C-010 Photo Relay counter less light source. Net Each **\$51.45**

SPECO-RHEIN LIGHT SOURCE

Recommended for use with type R-010 and C-010 units above. Self-contained in cast aluminum case identical in size to photo relay units and also mounts on 1/2" conduit. Has 2-inch dia. prefocused lens. Uses 21 C.P. single contact automobile lamp, and operates from 115 V. 50/60 cy. A.C.
No. 36A18. Type L-010 Light Source. Net Each **\$8.82**
Infra-Red Filter. Mounts on light source to make light beam invisible. Reduces operating range approximately one-third.
No. 36A19. Type F-010 Filter. Net Each **\$1.03**
Lens Shield. For use on Photo Relay units to exclude direct sunlight when used out of doors.
No. 36A20. Type L-010A Lens Shield. Net Each **\$1.47**

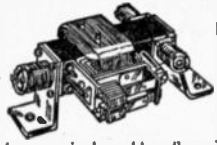
WORNER FOTOELECTRIC ANNOUNCER

Designed to project a beam of light across entrance to a building, office, home, etc. Breaking of this beam by person entering, operates built-in relay, and supplies 6-volt AC to NuTone chime furnished with unit. The light source and photocell equipment are mounted in crackle finished metal case, with mirror for reflecting light back into photo-cell window when placed up to 10 ft. from unit. Size 10 3/4 x 7 1/2 x 2 3/4". Operates on 115-volt 60-cycle AC.
Stock No. 36A15. Model 61 Announcer. With Chime. Net Each **\$18.38**



RELAYS FOR EVERY PURPOSE

PRICE COAXIAL RELAY



For switching a 52 ohm coax antenna transmission line from transmitter to receiver during stand-by periods. Handles 750 watts RF power with very low loss. Requires three PL-259 coax plugs for connections. Relay coil operates on 115 V. 60 cy. A.C.

No. 19A85. Type 6350. **\$10.00**
Net Each

Coax Relay as above with two auxiliary sets SPST contacts for ECO and receiver switching, rated at 300 V. D.C. 250 MA.

No. 19A86. Type 6351. **\$11.00**
Net Each

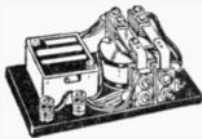
D.P.D.T. Antenna Relay



For any RF or power circuit requiring a high quality well insulated relay. Contacts are 1/4" pure silver. Base plate and contact carrying bar are mycalex. Operates quietly on 110 V. A.C. Size over-all, 3 9/16x 2 13/16x1 11/16".

Stock No. 17A731. Auto Elec. Mfg. Type R51. **\$4.70**
Net Each

ADVANCE Time Delay Relay



A complete 110 V. A.C. operated DPDT relay with thermostatic control for pre-heating tube filaments. Delay interval adjustable from 10 seconds to 1 minute. Relay has 1/4" silver contacts.

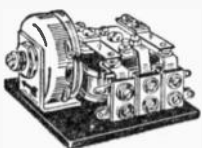
Stock No. 19A166. Type 304B. Net Each **\$5.00**

THERMOSTAT FOR TIME DELAY RELAY

Same as used in type 304B assembly above. Operates from 110 V. A.C. Adjustable from 10 seconds to 1 minute. Mounted on steatite base.

Stock No. 19A167. Net Each **\$1.18**

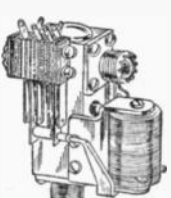
ADVANCE Adjustable Underload Relay



For use in transmitters as a protective device to turn off class "B" modulators when plate current of class "C" stages falls below desired value. Has potentiometer for varying operating point between 150 and 300 MA. Contacts are DPST.

19A260. Type 800A. Each **\$5.97**

COAXIAL RELAYS



For use with 52 or 75 ohm RG Coax Cable. Has 1/4" pure silver SPDT internal contacts supported directly from cable connectors. Housing is aluminum, with end inspection port. Connectors are standard Amphenol 83-R. Max. rating 880 watts at 100 MC. Operates on 110 V. 60 cy. A.C. Size 1 3/8x2 7/8x3 1/2".

No. 19A268. Advance type 7200. Net Each **\$7.35**

No. 19A269. Advance Type 7204 with auxiliary 3/16" DPDT external contacts. Net Each **\$9.11**

GUARDIAN UNIVERSAL RELAYS

Series "200" with Interchangeable Coils and Contacts

Select a Standard or Midget Contact Assembly, either SPDT or DPDT and coil of any Standard voltage as listed. Takes only a few seconds to assemble and requires no adjustment. The interchangeability of the coils makes it possible for you to change from one voltage to another by just buying the required coil instead of the complete relay. Contact points are of fine silver, rated at 8 amps. at 115 volts 60 cycle, non-inductive load, except type 200-4 which is rated at 12.5 amps. Relay size using Standard Contact Assemblies is 1 3/4x2 1/16x1 1/8" thick; with Midget Contact Assemblies, size is 1 1/2x2 1/16x1 1/8" thick.

STANDARD SIZE		MIDGET SIZE	
No. 19A40. Type 200-1 SPDT.	\$1.08	No. 14A301. 200-M1 SPDT.	\$1.00
No. 19A41. Type 200-2 DPDT.	1.47	No. 14A302. 200-M2 DPDT.	1.32
No. 14A303. Type 200-4 DPDT.	1.71		

60-CYCLE AC COILS		DC COILS	
No. 19A31... 6 Volts	\$1.32	No. 19A35... 6 Volts	\$1.32
No. 19A32... 12 Volts		No. 19A36... 12 Volts	
No. 19A33... 24 Volts		No. 19A37... 24 Volts	
No. 19A34. 115 Volts		No. 19A38... 32 Volts	
		No. 19A39. 110 Volts	\$1.65
		No. 14A300. 5000 Ohms	1.71

BUILD YOUR OWN CONTACT COMBINATION

A complete contact parts kit to make up any contact combination up to 4 P.D.T. for above type 200 relays, also for dozens of other applications requiring blade switches. Shipped with complete wiring information and all necessary hardware.

No. 19A42. COMPLETE KIT, AT ONLY **\$1.09**

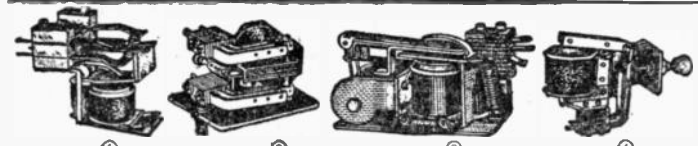
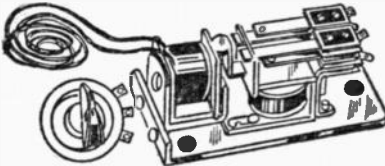
GUARDIAN KEYING RELAY



Will follow key or bug at high speed. Double break S.P. contacts can handle up to 5000 watts, non-inductive load. Will key center tap of any stage using up to 2000 volts or grid controlled rectifiers handling up to 3000 volts. Coil operates on 6 V. A.C. Size 3x1 1/2x1 15/16" high. Stock No. 19A157. Guardian K-320. Each **\$2.65**

ADJUSTABLE OVERLOAD RELAY WITH ELECTRICAL RESET

Operating current can be adjusted from 250 to 750 MA by front panel control potentiometer. Voltage drop across coil is never more than 10 V. Coil insulation to ground 3000 V. Has S.P.S.T. contacts for breaking power circuit to transformer primary and S.P.D.T. auxiliary contacts for pilot light indicators. Reset coil is energized momentarily from 110 V. A.C. to restore power circuit. Size 4 3/4x1 15/16x 2" high. Stock No. 19A158. Guardian X-300-ER. Each **\$5.44**



"Guardian" High Freq. Relays—Aisimag Insulated

- ① For use in R.F. or high voltage circuits where leakage and loss must be kept at minimum. Large silver contacts handle 1 kw. at frequencies up to 28 MC. 110-volt AC coils. Type R-100—SPST. **\$2.32**
No. 19A48. YOUR COST. **\$2.32**
- ② DPDT large silver contacts handle 1,500 watts. Coil for 110-volt AC. Bakelite insulation. No. 19A52. NET EACH **\$6.32**
- ③ Heavy 1/4" Silver Contacts. Coils for 110-volt AC. Coil circuits need to be energized only long enough to close armature; contacts lock automatically — each impulse reverses position of contacts. Contacts carry 1,500 watts non-inductive or 1,000 watts inductive loads. Type RC-100AR — Four-pole, single throw. No. 19A53. YOUR COST. **\$4.21**
- ④ Type RC-100BR—Three-pole with one pole D.T. and two poles S.T. No. 19A54. YOUR COST. **\$4.61**

Guardian Impulse Relay

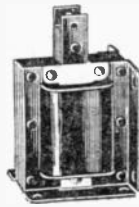
③ Heavy 1/4" Silver Contacts. Coils for 110-volt AC. Coil circuits need to be energized only long enough to close armature; contacts lock automatically — each impulse reverses position of contacts. Contacts carry 1,500 watts non-inductive or 1,000 watts inductive loads. Type RC-100AR — Four-pole, single throw. No. 19A53. YOUR COST. **\$4.21**

X100 Overload Relay

④ Contacts rated 1 kw. on inductive loads. Mounts on rear of panel with reset button extending through. Adjustable, to operate at loads of 150 to 650 MA. No. 19A51. NET EACH **\$8.40**

GUARDIAN 115-VOLT 60-CYCLE AC SOLENOIDS

- For countless experimental and industrial applications requiring electro-mechanical actuation. Plunger has slotted end with 1/8" diameter hole for coupling. Type 2 Solenoid. Plunger stroke 1"; lift approximately 5 oz.; coil res. 82.4 ohms; coil amps. .39. Frame size, 1 7/16x1 9/16" long. No. 17B401. YOUR COST. **\$2.06**
- Type 14 Solenoid. Laminated construction. Plunger stroke 1 1/4"; lift approx. 64 oz.; coil res. 12.5 ohms; 1 amp. coil current. Frame size 1 7/8x2 1/16x2 7/16" long. No. 17B402. YOUR COST. **\$3.97**



POTTER and BRUMFIELD RELAYS

Heavy Duty Power Relays—Type PR With Coils for 110 V. 60 Cy. A.C.



For power circuits, motors, lights, heaters, etc. Double break types PR3A and PR4A rated at 20 amps. All others, 15 amps. continuous duty. Contacts are 5/16" dia. silver, self-wiping, mounted on floating carrier. Metal parts are heavily plated. Operating coil requires approx. 5 watts, continuous duty, and operates without hum or chatter. Has screw terminals for all connections. Max. size, 2 9/16x2 9/16" by 2 1/4" high. NO—normally open, NC—normally closed, DB—double break.

No.	Type	Contacts	Net Each
16A181	PR3A	SPSTDB-NO	\$3.10
16A182	PR4A	SPSTDB-NC	3.15
16A183	PR5A	SPDT	3.20
16A184	PR7A	DPST-NO	3.65
19A159	PR8A	DPST-NC	3.85
19A160	PR11A	DPDT	4.90



Medium Duty Power Relays Type MR

Very compact. Has full floating locked-on armature for fast, positive action without hum, chatter or sticking. Coils require approx. 4 watts, continuous duty. Contacts are 7/32" dia. silver, rated at 8 amps. on 110 V. A.C. non-inductive load. Wiping motion keeps contacts clean. Max. size 2 15/16x2 7/8x1 7/8" high.

No.	Type	Contacts	Coil-V.	Each
16A185	MR5A	SPDT	6AC	2.15
16A186	MR5A	SPDT	110AC	2.15
16A187	MR11A	DPDT	6AC	2.80
16A188	MR11A	DPDT	110AC	2.80
16A189	MR5D	SPDT	6DC	2.15
16A190	MR11D	DPDT	6DC	2.80

Plate Circuit Relays

Sensitive relays with adjustable spring tension, adjustable release screw, and 3/16" dia. silver contacts rated at 5 amps. on 110 V. A.C. circuits. Min. MA is lowest coil current for satisfactory operation.

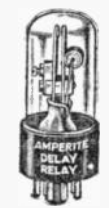
Stock No.	Type	Coil Res.	Min. Ma.	Net Each
16A191	Type LM-5 S.P.D.T.	2,500	2.4	\$2.30
16A192		5,000	1.7	2.55
19A161		10,000	1.2	2.95

Stock No.	Type	Coil Res.	Min. Ma.	Net Each
19A162	Type LM-11 D.P.D.T.	2,500	5.3	\$3.40
19A163		5,000	3.7	3.65
19A164		10,000	2.7	4.05

Similar to LM series above but less sensitive. Factory adjusted for optimum performance. Has insulated mtg. base.

Stock No.	Type	Coil Res.	Min. Ma.	Net Each
16A193	Type LS-5 S.P.D.T.	2,500	6	\$1.90
16A194		5,000	4.3	2.20

AMPERITE Relay Tube

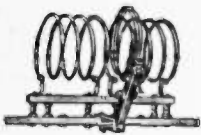


Consists of a SPST normally open contact arrangement mounted on a bimetal strip with heater element to operate from 6.3 V. A.C. or D.C., all hermetically sealed in a glass tube envelope with standard octal base. Delay time, after heater voltage is applied, before contacts close, is approx. 40 seconds, but can be increased approx. 50% by decreasing heater voltage slightly. The heater can be operated continuously. Contact rating 3A, 115 V. A.C. Heater rating 2 watts. Stock No. 19A165. Net Each **\$2.35**

Stock No. 14A307. As above except for 2.5-volt, 60-sec. delay. Net Each **\$2.35**

TRANSMITTING and RECEIVING COILS for EVERY NEED

BARKER WILLIAMSON PLUG-IN COILS



Have steatite base and plug-in jack mounting. The variable link type is usually good for stages where variable loading is desirable and may be adjusted for matching impedance of 72 ohms. Couplings can be adjusted from the panel for optimum results.



FOR UP TO 150 WATTS INPUT

Band	*Cap. Mmfd.	Stock No.	Net Ea.
10	21	17A628	\$2.41
15	21	17A717	2.48
20	33	17A629	2.48
40	36	17A600	2.83
80	36	17A601	3.16

*Capacity is total needed for resonance at low end.

FOR UP TO 500 WATTS INPUT

Band	*Cap. Mmfd.	Stock No.	Net Ea.
10	20	17A602	\$2.41
15	21	17A718	2.48
20	34	17A603	2.48
40	37	17A604	2.83
80	39	17A605	3.16

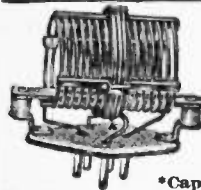
17A636, Steatite jack bar assembly for type BEL and BCL inductors. Ea. **\$5c**

17A611, Base assembly and variable link for type BVL inductors **\$3.44**

FOR UP TO 1,000 WATTS INPUT

Band	*Cap. Mmfd.	Stock No.	Net Ea.
10	20	17A637	\$5.85
15	20	17A722	6.54
20	20	17A638	6.54
40	20	17A639	6.88
80	34	17A640	7.56

17A645, Jack Bar assembly for type HDCL inductors. Ea. **\$1.75**



B & W Juniors 75 Watt Rating

Fitted with standard 5-prong steatite base. Compact, rugged, may be used in the oscillator, buffer or final stage with input power up to 75 watts. Any type may be used in capacity coupled circuits by omitting connections to the links. Steatite or equivalent sockets should be used.

*Cap. to resonance on Low-Freq. end of band.

Band	*Cap. Mmfd.	Type JEL End Link Cat. No.	Type JCL Cent. L. Cat. No.	Type JUL Var. L. Cat. No.
6	15	17A711	17A713	17A715
10	22	17A615	17A619	17A623
15	22	17A712	17A714	17A716
20	34	17A616	17A620	17A624
40	47	17A617	17A621	17A625
80	60	17A618	17A622	17A626

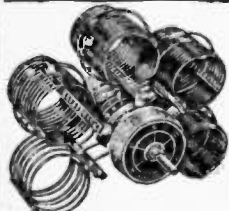
Your Cost, Any Above—Net Each **\$1.38**

B & W BABY INDUCTORS

Same as above, except smaller size. Only 1 1/4" dia. x 1 1/2" long. For circuits up to 35 watts.

Band	*Cap. Mmfd.	Type "M" No Link Cat. No.	Type MC Center Tap No Link Cat. No.	Type MEL End Link Cat. No.	Type MCL Center Link Cat. No.
10	30	19A137	19A141	19A145	19A149
20	35	19A138	19A142	19A146	19A150
40	35	19A139	19A143	19A147	19A151
80	50	19A140	19A144	19A148	19A152

Your Cost, any of above. Net Each **\$1.04**



B & W 5-Band Turrets—For 10-15-20-40-80 Meters

Provides simple, efficient band switching in circuits up to 75 watts. Center or end link types for either push-pull or single ended circuits. Capacity coupling can be used by omitting link connections. Mounts thru panel with single 3/8" hole. 5 position dial plates listed below.

Stock No.	Mfg's. Type	Link Center End	Price
32A258	3810-JTCL	Center	\$9.38
32A259	3811-JTEL	End	9.38

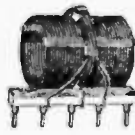
5-BAND BABY TURRETS

Same as above except coils are smaller in size for use up to 35 watts.

32A260	3817-BTCL	Center	8.44
32A261	3816-BTEL	End	8.44

Calibrated 2 1/4" dial plate for use with all turrets above and the band hopper at right. **25c**

BUD AIR-WOUND PLUG-IN COILS



Precision built coils firmly supported on a steatite strip fitted with banana plugs. All coils are center tapped.

Adjustable link, (illus. B) provides the efficiency of link adjustment at no additional cost.

Variable link, (illus. A) has link winding on mounting base into which coils are plugged. One link serves all bands. Shaft may be extended for panel control. *Capacity for resonance at low frequency end.



RCL 150-Watt—Adj. Center Link

Stock No.	Band	*Cap. Mmfd.	Net Ea.
17A294	80	68	\$3.09
17A295	40	36	2.77
17A296	20	27	2.44
17A705	15	27	2.44
17A297	10	25	2.35
17A298	Mtg. base for above		.83

RLS 150-Watt—Variable Link

Stock No.	Band	*Cap. Mmfd.	Net Ea.
17A299	80	78	\$2.53
17A300	40	38	2.20
17A301	20	30	1.94
17A706	15	30	1.94
17A302	10	28	1.85
17A303	Mtg. base and link		2.94

VCL 500-Watt—Adj. Center Link

Stock No.	Band	*Cap. Mmfd.	Net Ea.
17A322	80	71	3.58
17A323	40	26	3.23
17A324	20	21	2.94
17A707	15	23	2.91
17A325	10	26	2.82
17A326	Mtg. base for above		1.03

VLS 500-Watt—Variable Link

Stock No.	Band	*Cap. Mmfd.	Net Ea.
17A332	80	70	2.85
17A333	40	36	2.53
17A334	20	28	2.20
17A708	15	25	2.20
17A335	10	25	2.16
17A315	Mtg. base and link		4.88

MCL 1,000-Watt—Adj. Center Link

Stock No.	Band	*Cap. Mmfd.	Net Ea.
17A327	80	67	7.41
17A328	40	38	6.73
17A329	20	23	6.41
17A709	15	30	6.41
17A330	10	25	5.73
17A331	Mtg. base for above		1.37

MLS 1,000-Watt—Variable Link

Stock No.	Band	*Cap. Mmfd.	Net Ea.
17A316	80	65	6.03
17A317	40	37	5.38
17A318	20	33	5.08
17A710	15	30	5.06
17A319	10	25	4.35
17A320	Mtg. base and link		5.88



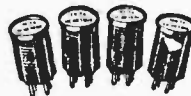
BUD 75-WATT PLUG-IN COILS

The finest air-inductions. Uniform windings of enameled copper wire rigidly mounted on ceramic 5-prong base which will fit standard 5-prong tube socket. Only center linked coils have main coil center tapped. The end link coil has new variable link feature.

*Capacity necessary to tune to low end of band.

Band	Ctr. Link	Adj. End L	Adj. Ctr. L	*Cap. Mmfd.	Price
80	17A151	17A156	17A161	75	\$1.27
40	17A152	17A157	17A162	52	1.22
20	17A153	17A158	17A163	40	1.22
10	17A154	17A159	17A164	25	1.18
6	17A155	17A160	.....	17	.98

Short Wave & Broadcast



Plug-In Coil Kits

Space wound on 1 3/4" dia. ribbed bakelite forms that plug into standard 4-prong tube sockets. Windings are standard for regenerative circuits and tune with 140 or 150 mmfd. condenser.

Set of Four Short Wave Coils. Tune 9 1/2 to 217 meters. **\$1.85**

Set of Two Broadcast Coils. Tune 190 to 550 meters. **\$1.47**

Bud 50-Watt Band Switching Coil Assembly



For oscillator and buffer stages where capacity coupling is used. Covers 10-15-20-40 and 80 meter bands. Positive contact ceramic switch. Complete with 5-position dial plate. Mounts on front panel with a single 3/8" hole. Coils are arranged to take minimum vertical space behind the panel. Size over-all of unit 5 1/2" wide, 2 1/2" high, and 3" deep.

Stock No. 17A321. Net Each **\$4.65**



B & W "BAND HOPPER" Type 2A

Provides a compact panel controlled unit to use for interstage coupling between two beam power tubes or between beam power tubes and triodes. Covers 80, 40, 20, 15 and 10 meter bands. A 50 mmfd. tuning capacitor is recommended for use with it. NOTE: Actual condenser cap. will be smaller by the sum of the tube output and the wiring capacities, generally between 5 and 20 mmfd. No. 17A627. Your Cost, Net Each **\$4.81**

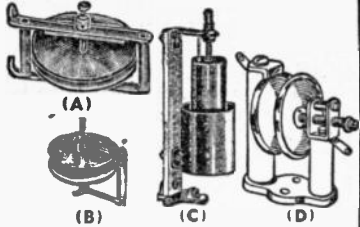
B & W MINIDUCTORS

Very Neat Miniature Coils, 1/2" to 3/4" dia., 2" long; also 1" dia., 3" long. "Air-Wound" construction for very efficient operation as tank coils, RF chokes, etc. Easily cut to required length. Can be slit lengthwise and flattened to make excellent Faraday shields.

Stock No.	Turns Per Inch	Coil Dia.	Price	Stock No.	Turns Per Inch	Coil Dia.	Price
17A1076	4	1/2".....	31c	17A1084	4	3/4"	44c
17A1077	8			17A1085	8		
17A1078	16			17A1086	16		
17A1079	32	5/8".....	37c	17A1087	32	1"	50c
17A1080	4			17A1088	4		
17A1081	8			17A1089	8		
17A1082	16			17A1090	16		
17A1083	32			17A1091	32		

Neutralizing, Padder and Trimmer CONDENSERS - CRYSTALS

Neutralizing Condensers



(A) **BUD NC-1002.** For large transmitting tubes. Max. capacity 27 mmfd., min. 6 mmfd. Plate dia. 4 3/4". Aluminum and steatite construction. No. 17A576. Net Each.....**\$4.46**

(B) **NATIONAL NC-75.** For 75T, 80B, 811, 812, and similar tubes. Aluminum discs, isolantite insulation. No. 17A577. Net Each.....**\$3.60**

(C) **JOHNSON TYPE N.** Extremely high voltage rating in proportion to size. "Plates" are aluminum cups mounted concentrically on steatite and aluminum frame. Spacing uniform over entire range.

Stock No.	Type	MMFD	Spac-	Net Each
		Max. Min. In.	ing	
17A578	N125	11 1.1	.125	\$3.82
17A579	N250	10.6 1.4	.250	4.41
17A580	N375	10.7 1.7	.375	5.59

(D) **NEW HAMMARLUND NZ 10 Condenser.** A compact neutralizing capacitor providing fine micrometer adjustment and positive locking. 2.3 to 10 mmfd. range for such tubes as 812's, 811's, 8005's, T40's, etc. Smooth rounded aluminum plates, steatite insulators on aluminum base. Stock No. 17A1154. Net Each **\$3.16**

NATIONAL NC 600

Small neutralizing condenser for use with 6L6's and similar beam power output tubes. Capacity adjustable from .5 to 4 mmfd. Isolantite insulation. Spg. wt. 6 oz. No. 17A97. Your Cost, Each.....**\$2c**

MILLEN 15001
Capacity range 0.7-4.3, very compact. Use ultra low loss quartz Q as a dielectric. No. 17A703. Your Cost, Each... **\$1.20**

BUD FEED-THRU TYPE

Bud NC 852 feed-thru type condenser convenient for Neutralizing 6L6 and other beam type tubes with grid connection at the base. One-inch plate diameter. Capacitance .5 to 6 mmfd. Mounts 5/16" hole. No. 17A96. Each... **71c**

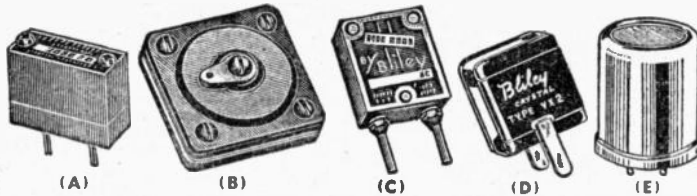
NATIONAL NC800A

Disc type for high voltage. Micrometer adjustment with lock nut. Low-loss Isolantite insulation. Three-hole mtg. bracket. For type 800 and similar tubes. No. 17A98. Each..... **\$3.00**

NATIONAL "UMC" Ultra Midget

For every ultra H.F. use. Isolantite insulation. Rear shaft extension. No. 17A118. 15 mmfd..... **\$1.02**
No. 17A119. 35 mmfd..... **1.15**
No. 17A120. 50 mmfd..... **1.25**
No. 17A121. 75 mmfd..... **1.46**

For Other Condensers... See Pages 110 and 111.



(A) **TYPE AX2 PLATED CRYSTALS. FIRST FOR AMATEUR FREQUENCIES**
Primary electrodes consist of a micro-thin metal film deposited—almost chemically bonded—directly on major crystal surfaces. Secondary electrodes merely clamp crystal in position and help dissipate heat. Acid etched to frequency to prevent frequency shift with aging. Calibration accuracy within .002%, temperature stability better than .02% between -10° and 60°C. Holder is moisture resistant phenolic with neoprene gasket. Pins are stainless steel spaced 1/2" apart. Size 1 3/8 x 1 3/8 x 23/32".
No. 17A1001. 3,500—4,000KC, within 2KC. Each..... **\$2.80**
No. 17A1000. 7,000—7,425KC, within 2KC. Each..... **2.80**
No. 17A1002. 14,000—14,850KC, within 30KC. Each..... **3.95**

(B) **TYPE AX2 11 METER MULTIPLIER**
15A1095. 13,580-13,715 KC within 30 KC of specified frequency. Each. **\$3.95**

(C) **TYPE AX3 OVERTONE CRYSTALS**
A new Bliley development. Operates at third overtone for crystal control in 6 and 2 meter bands. Calibration accuracy .003% with drift less than .002% per degree. Crystal is plated and holder is similar to AX2 type. Recommended for use with Bliley CCO-2A oscillator. Furnished within 5KC of your specified frequency.
15A1096. 6 Meter Multiplier 25,000-25,500 KC. Choice, Each..... **\$3.95**
15A1097. 2 Meter Multiplier 24,000-24,333 KC. Choice, Each..... **3.95**

(D) **Type SMC-100. Dual frequency crystal provides 100 KC or 1000 KC source, for use in frequency standards. The 1000 KC frequency is correct within 5% and the 100 KC can be adjusted to zero beat. Ideal for alignment of radio receivers. Size 1 3/8 x 1 3/8 x 23/32".**
17A1003. Your Cost, Each..... **\$8.75**

(E) **Type MC9-3105 KC for private aircraft. Accuracy within .02% between 0° and 50° C. Plug-in type holder gasket is sealed against moisture.**
Stock No. 19A169. Your Cost, Each..... **\$5.50**

(F) **Type VX2-3105 KC for private aircraft where space is at a premium. Same accuracy as type MC9. Solder lug connections and gasket sealed holder.**
Stock No. 19A170. Your Cost, Each..... **\$5.00**

(G) **TYPE KV3 100 KC FREQUENCY STANDARD. Crystal is silver plated and spring mounted between supports soldered to plated surfaces. Assembled in metal cased holder that plugs into standard octal socket. Supplied with diagram for constructing a receiver calibration oscillator useful up to 40 MC.**
Stock No. 19A168. Your Cost..... **\$6.95**

(H) **Crystals for Broadcast. Marine, police and aircraft service can be supplied on special order to the factory. Write us for literature and price quotations stating your requirements.**

MILLEN Ceramic Crystal Holder
17A729. 3/4" Spacing .125 pins... **30c**
17A730. .487 Spacing .095 pins... **30c**

MOSLEY CRYSTAL HOLDER ADAPTERS
Made of low loss plastic with brass pins.
No. 17A728. Adapter 1/2" holder to 3/4" spacing..... **35c**
No. 17A738. Adapter for 3/4" holder to 1/2" spacing..... **35c**

MILLEN HIGH VOLTAGE SAFETY TERMINAL

Black bakelite insulated bushing extends through chassis. Single conductor fully enclosed. Easily mounted in 1/2" round hole. Millen No. 37001. No. 17A1067. Price..... **40c**

MILLEN STEATITE TERMINAL STRIPS

For RF, AC or DC connections to equipment requiring better than average insulation. Each terminal is feed-thru-type with solder studs and 6-32 screw connections. Has holes for surface mounting.
Stk. No. Terminals Type Price Each
15A1105 2 37302 **\$0.80**
15A1106 3 37303 **.70**
15A1107 4 37304 **.80**
15A1108 5 37305 **.90**
15A1109 6 37306 **1.00**

MALLORY GRID BIAS CELLS AND MOUNTINGS

Especially for biasing first audio in high gain amplifiers. Supplies 1-volt plus or minus 10%. Circuit identical to "C" battery. Adjustable, where current does not exceed one microampere.
No. 12A1139. 1 -Volt Cell. **24c**
No. 12A1140. 1 1/2-Volt Cell. Choice..... **24c**
No. 12A1141. CB11A—Mounting for Single Cell. **9c**

LEACH TYPE 1127 DPDT RELAY—BARGAIN PRICED

Coil operates on 115-volt, 50-60 cycle AC. Ruggedly built for industrial use and highly recommended for transmitter control. Has 3/16" silver contacts. All circuits are insulated from metal frame. Operates quietly. Will follow keying. Coil resistance 530 ohms. Overall size, 9 9/16 x 1 1/2 x 1 3/8" high. No. 18B828. SPECIAL, EACH..... **\$1.39**

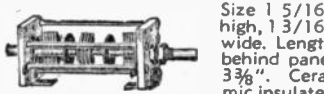
JOHNSON MINIATURE VARIABLE



Sub-midget size. Alsmag end plate only 5/8 x 3/4". Depth behind panel 45/64" to 1 1/16". All have 3/16" dia. slotted shaft extending 1/4" from bushing and mount in 1/4" hole. Bushing length 7/32". Has beryllium upper rotor contact and rigidly soldered rotor and stator assemblies. Plate spacing .017, rating 750-Volt R.M.S.

Stock No.	Mfg. No.	Cap. MMFD.		Net Each
		Min.	Max.	
14A311	160-102	1.5	5.1	\$0.94
14A312	160-104	1.7	8.7	1.00
14A313	160-107	2.1	14.6	1.09
14A314	160-110	2.6	19.7	1.18
BUTTERFLY				
14A315	160-203	1.7	3.3	1.35
14A316	160-205	2.1	5.3	1.47
14A317	160-208	2.7	8.5	1.71
14A318	160-211	3.2	11.0	1.88

NEW BUD THREE-GANG TINY MITE CONDENSERS



Size 1 5/16" high, 1 3/16" wide. Length behind panel 3 3/8". Ceramic insulated for stable high frequency use. Has solid brass plates, spring rotor ground connections and 1/4" shaft. Mounts single hole through panel or on end plate brackets.

Stock No.	Cap. Max. Min.	Per Sec.	Mfg. No.	Net Each
14A309	17	5	LC1846	2.81
14A310	25	6	LC1847	3.09

MICA TRIMMER AND PADDER CONDENSERS

With low loss ceramic base and clear India Ruby mica dielectric. Solder lugs can be bent to any position desired.

Stock No.	MMFD.		Net Each
	Max.	Min.	
17A77	30	3	18c
15A1527	180	9	24c
15A1524	280	25	26c
15A1526	480	70	32c
15A1525	780	150	41c

Dual Ceramic, mica insulated type with steatite base. Plates are phosphor bronze, tin plated. Size 1 5/16" square.

15A1514. 85-60 Mmf. Each... **41c**
15A1515. 185-120 Mmf. Each... **44c**
15A1516. 200-170 Mmf. Each... **44c**
15A1517. 350-275 Mmf. Each... **47c**

Padder type adjustable mica condensers. Ceramic base, shaped to protect edges of mica dielectric. Bright plated phosphor bronze adjusting plates. Single hole mounting, adjustable from top or bottom.

Stock No.	Mmf.		Net Each
	Max.	Min.	
15A1521	115	20	29c
15A1522	315	85	32c
15A1523	1050	280	41c

JOHNSON NEUT. OR TUNING CONDENSER

.045 spacing 9 to 52 MMF. 1 5/32" long. 1/4" shaft has 1 1/8" front and 3/8" rear extension. Single hole mounting, steatite insulation. 14A679. Special, Ea. **99c**

Frequency Converters and Meters

TRIPLETT ABSORPTION FREQUENCY METER



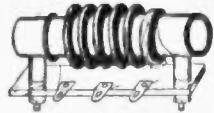
COVERS 80-10 METERS BAND SWITCHING
A highly sensitive instrument with built-in indicating meter and germanium crystal rectifier. Enables positive identification of resonant frequency of transmitter stages. Makes a handy phone monitor. Size including coil 7 1/2 x 2 1/2 x 2 1/4".
No. 19A264, Model 3256
Frequency Meter **\$14.45**

THE BUD "GIMIX"



A low-cost, general utility instrument for RF identification and signal monitoring. Can be used as an absorption wavemeter covering 80, 40, 20, 15 and 10 meter bands; as a phone monitor, field strength meter, neutralizing indicator and carrier shift indicator. Has built-in resonance indicator and jack for headphone or meter. Size 6 x 2 x 3/4".

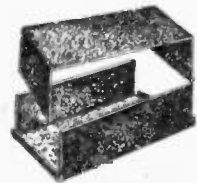
Stock No. 17A565. Your Cost **\$8.13**



R.F. POWER SUPPLY COIL

High Voltage R.F. Power Supply transformer. A high Q coil wound on low-loss form with plastic terminal strip having well separated solder lug terminals. Two-hole mounting. Overall size 2 7/8" long x 1 7/8" high. Solves the high voltage supply problem at a low cost, for television and cathode ray tubes. For use with a 6V6 oscillator and 8016 rectifier. With complete diagram and instructions.
No. 16A421. Net Each **\$2.91**

ALUMINUM BOX CHASSIS



Features simple interlocking design, which eliminates hard to get at places. Slips together easily making a sturdy finished box requiring only two fastening

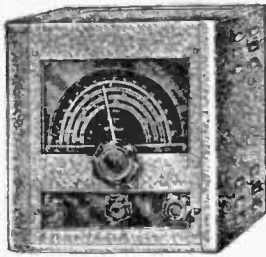
screws. Made of 18-gauge aluminum. Ideally suited for building preamps, oscillators, junction boxes, etc. Black wrinkle or brushed natural metal finish.
Stk. No. Size Finish Net
20A129 4 x 2 1/2 x 1 5/8 Black 44c
20A130 5 x 2 1/4 x 2 1/4 Black 62c
20A131 5 1/4 x 3 x 2 1/2 Black 74c
20A132 4 x 2 1/8 x 1 5/8 Natural 44c
20A133 5 x 2 1/4 x 2 1/4 Natural 42c
20A134 5 1/4 x 3 x 2 1/8 Natural 74c

BLILEY CCO—Model 2A CRYSTAL CONTROLLED OSCILLATOR FOR 2-6-10-11 METERS

With this basic oscillator employing a 6AC7 tube, the advantages of VHF crystal control are easily achieved. Has direct output on 6-10-11 meters and ample output to drive tripler stage on 2 meters. Single tuning control, bandswitch, and crystal socket are mounted on outside of painted metal subchassis with power and output terminals at back. Uses Bliley AX2 20-meter crystals for output on 10 and 11 meters, new Bliley AX3 crystals for 6 and 2 meter operation. Ideal as nucleus for new construction or conversion of existing equipment. Model CCO-2A, less tube and crystal.
No. 36A21 Each **\$9.95**



RME VHF 152 CONVERTER



When used with a communications receiver it provides superior performance on 2, 6, 10 and 11 meters using a double conversion system. Sensitivity is two microvolts on all bands with images practically non-existent. Has individual 300-ohm antenna connections for each band, front panel antenna switching, band change, tuning control and line switch. Output 7 MC. Uses 6AK5 and 6J6. Built-in power supply uses 5Y3GT rectifier and VR150 regulator. Cabinet matches RME45. Size 11" high, 12" wide, 11" deep. Complete with tubes and instructions.
Stock No. 31A53. YOUR COST **\$86.60**

Same Converter described above in cabinet to match RME84. Size 9 1/2" high, 10 1/4" wide, 10 1/4" deep.
Stock No. 36A45. COMPLETE. YOUR COST **\$86.60**

RME HF-10-20 CONVERTER COVERS 10, 11, 15 AND 20 METERS

For use with all-wave or communications receivers that do not give satisfactory gain or image rejection on the 10 and 20 meter bands, or do not cover these bands. Supplied with tubes, 6BA6 RF Amp., 6J6 Mixer, 5Y3GT Rectifier and VR-150 Regulator. Standard HF-10-20 in Cabinet to Match RME-45.
Stock No. 36A43. YOUR COST **\$77.00**
Special HF-10-20 in Cabinet to Match RME-84.
Stock No. 36A44. YOUR COST **\$77.00**

RME DB22A PRESELECTOR

Range .54 to 44 MC in four bands switched from front panel. Greatly improves sensitivity and image rejection when used with any communications receiver. Panel controls include an antenna change-over switch and gain control. Operates on 110 volts, 60 cycles AC. Cabinet matches RME-45 receiver. Size 11" high, 12" wide, 11" deep.
Stock No. 31B54. Your Cost, Net Each **\$66.00**
Special DB22A in cabinet to match RME-84. Size 9 1/8 x 10 1/4" wide, 10 1/4" deep.
Stock No. 36A42. Your Cost, Net Each **\$66.00**

RME NBF-4 FM CONVERTER

A highly sensitive ratio detector for proper reception of NBFM when using an RME-45 receiver. Entire unit containing 1—6BA6 and 2—6AL5 miniature tubes plugs into the 7A6 tube socket of the RME-45. The 7A6 is not used. Has front panel control for switching from FM to AM. Maximum FM band width 8 KC without distortion. AM sensitivity of the receiver is not affected.
Stock No. 36A41. NBF-4 Converter. Your Cost **\$19.50**

SIMPSON ALL BAND WAVEMETER AND MODULATION INDICATOR

Accurate wavemeter covering all ham bands with individual hand-drawn calibration curves and a 0-100 microammeter resonance indicator. Separate coils for 10, 20, 40, 80 meters and flexible antenna operating as quarter wave length for 144, 235, 420 MC. Extremely sensitive field strength meter calibrated in relative power output to obtain accurate antenna adjustment and as a continuous monitor for your transmitted signal. Has push-button for increasing sensitivity. Percentage Modulation indicator directly calibrated 0-110%. The most useful and accurate ham instrument yet produced. Compact sizes 2x2 1/2 x 5 1/4" completely shielded in attractive aluminum case for long dependable service.
Stock No. 35A92. Model 380 with 4 Coils **\$37.09**
and Flexible Antenna. Your Cost **\$6.61**
Stock No. 35A93. Leatherette Covered Hinged Lid case, compartmented for instrument and coils

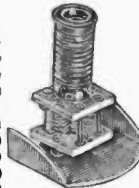


MILLEN MIDGET ABSORPTION FREQUENCY METERS

These handy instruments can be poked into small shield compartments, coil cans, etc., to check harmonics, parasites, tank tuning, etc. An easy way to determine the resonant frequency of doubler multiplier circuits all the way up to the UHF range. Ruggedly constructed. Dials are calibrated directly in frequency.

Stock No.	Millen No.	Range	Net Each
17A764	90605	3 to 10 MC	\$4.50
17A765	90606	9 to 23 MC	4.50
17A766	90607	23 to 60 MC	4.50
17A767	90608	60 to 140 MC	4.50

Complete set of four Frequency Meters as described above, supplied with convenient carrying and storage case.
Stock No. 17A763. Millen No. 90600. Complete **\$18.00**

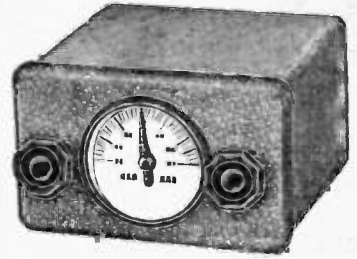


TINY 8000-OHM HEADPHONES



Highly sensitive. Very compact, light weight, and equipped with ear fitting rubber cushions designed to shut out outside noises. Phone units are precision built and small, similar to those used on hearing aids. Metal headband can be shaped to comfortably fit contour of head. Furnished complete as shown with Y-shaped, flexible, rubber-covered head-set cord, spring clip clothing fastener, high impedance transformer and 6-ft. 2 conductor rubber covered extension with PL 55 plug. Priced at a small fraction of original government cost. Every one brand new.
No. 17A420. Per Pair **\$1.29**

GON-SET CONVERTERS



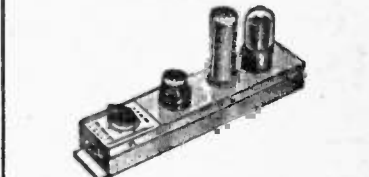
● FOR FIXED OR MOBILE USE
● BUILT-IN PRE-SELECTION 10-11 METER CONVERTER
To be used with broadcast, auto or communication receivers for unexcelled 10-11 meter reception. Just the thing for use with BC-348 or similar surplus receivers. Tubes used: 6AK5 RF, 6AK5 Mixer, 6C4 Osc. OB2 V. Reg. Has band-spread 8-1 ratio illuminated vernier dial. Output frequency 1,500-2,000 KC. Weight 2 lbs. Supplied complete with tubes and connecting cable.
Stk. No. 33A59, 10-11 Meter Converter. Each **\$39.95**

6 METER CONVERTERS
As above except covers amateur 6 meter band. Output frequency 1,500-2,000 KC.
Stock No. 36A26. 6 Meter Converter with tubes and connecting cable. Each **\$39.95**

GON-SET CLIPPER NOISE SILENCER
To aid in reduction of interference from ignition noise, power leaks, motors, etc. Especially recommended for mobile receivers. Very small size, 2x 4x 1 1/2". Complete with instructions and connecting cables.
Stock No. 33A60. Clipper, Net Each **\$8.25**

SPERTI WALKIE-TALKIE
A hand held transmitter-receiver for amateur operation in the 144 MC band. Output 2 watts, batteries give 40 hours intermittent service. Uses 2 No. 467 Bs and two standard flashlight cells. Comes with tubes, less batteries.
No. 36A22. Net Each **\$34.50**

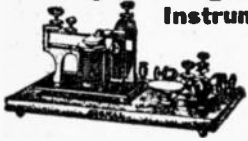
ELECTRO-VOICE SPEECH CLIPPER



A very desirable addition for Amateur or voice communication. Higher power levels at the same percentage modulation is achieved and your voice is clearer, more intelligible, especially in the presence of high QRM and QRN conditions. Consists of a peak limiting pre-amplifier that clips the tops and bottoms from speech frequencies which rise above a preset value, and a pi low-pass filter attenuating 24 db/octave above 3,000 cps. and reduces the lows below 200 cps. Connects between any high impedance mike and the input of a conventional amplifier. Has off-on switch for normal or clipper operation. Gain is unity at average clipper value so no overload will occur. Requires 150 volts at 5 ma and 6.3 volts at .6 amp. from main amplifier. Size 10 1/4 x 2 x 4 1/2" high. Complete with 6SC7 and 6H6 tubes.
No. 16A459 **\$14.41**

Code Keys * SENDERS * and Oscillators

Signal Telegraph Instruments



Type M-110
4 Ohm.

Sounder and Key
On private and short lines learners will find this instrument easy to handle. Clear, distinct tone. Bar frame and key base, black enamel, bridge is brass, sounding bar is aluminum with steel sounder plate. Key lever nickel plated. Sounder and key mounted on mahogany finish wood base.

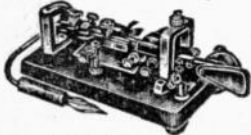
17A8, NET, Each **\$5.62**

Sounder Only—For Use With Any Key

Correctly designed for tone quality and instant action. All adjustments simple and accurate. Bar frame is black enamel, aluminum sounding bar, brass bridge, and steel sounder plate. Mounted on mahogany finished wood base with binding posts.

17A9, **\$3.75** 17A10 **\$3.93**
4 ohm 20 ohm

"Original" Vibroplex



For all types of communications work where speed and perfect Morse are essential. Single lever. Two pairs of contact points; one for dots, other for dashes. Easy to adjust. Has unlimited sending possibilities. Polished parts with black base. Comes complete with cord and wedge.

17A18, Each **\$15.95**

"Champion" Vibroplex



Has all features of model above at a low price. Black crystal finish, metal base with parts in bright finish.

17A19, Each **\$9.95**

CARRYING CASE



For Keys, etc. Exactly fit Vibroplex. Plush lined case, finished in black morocco. Reinforced covers. Flexible leather handle. Has lock and key. Inside dimensions 6 3/4" L., 3 3/4" W., 4 1/4" high.

17A36, Each **\$5.50**

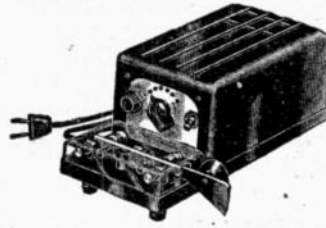
BUD CODE PRACTICE OSCILLATOR 4" PM SPEAKER BUILT-IN



Will operate up to 20 Earphones. A volume and pitch control permit adjustments to individual requirements. Any number of keys may be connected in parallel to the oscillator for group practice. An external speaker may be plugged in without use of output transformer. Controls are in front and jacks in rear of metal cabinet size 6 1/2 high, 5 1/2 wide, 3 1/2 deep. Finished in black enamel.

No. 37A48, Net Each.. **\$12.25**

THE KEY TO FLAWLESS CW Electronic MONITOR and Sending Key "MON-KEY" EASY TO LEARN EASY TO USE



Get on the air with a MON-KEY—Listen to them say: "Wat U usin, OM? Sounds Like A Tape."

Flawless CW—Smooth, rhythmic as a tape—can be quickly achieved by anyone who uses the new MON-KEY. It's easy because the MON-KEY is an electro-timed automatic key that makes dashes—as well as dots—both spaced in proportion to their length. **Simple to Operate**—A pleasure to read . . . the MON-KEY is a real short cut to flawless CW.

FEATURES

- Automatic dots and dashes.
- Dashes equal to 3 dots in duration.
- Speed approx. 8 to 45 words per minute.
- Speed changed instantly with new dial setting.
- No weights to adjust.
- 3 Tubes—2 12AU7, 1 35W4.
- Built in monitor with volume control.
- Operation, 115-volt AC or DC.

Has transparent plastic cover over key mechanism. Size 11x4 1/2x4" high. Black wrinkle finish. **No. 14A662. YOUR COST \$29.95**

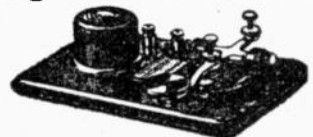
LINGUAPHONE Code Lesson Records For International Morse Code.



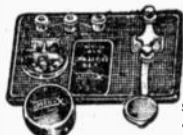
Learn code this easy way at your own convenience. Slow or fast on your phono as you progress. Operates on any phono or record player.

Includes text book and 6 double faced 10" discs in album. 17A13, Per Set **\$12.95**

Signal R68 Practice Set



Designed for those who want a well made instrument to learn the code. Set consists of a key and high frequency buzzer mounted on a mahogany finished wood base equipped with binding posts. The code is printed on a plate and fastened to the base between the key and buzzer. Buzzer is adjustable. 17A6, YOUR COST **\$3.82**



Speed-X Code Practice Set

Consists of a constant frequency adjustable buzzer and a standard hand key with 1/8" silver contacts, all on brown bakelite base 4x6". No. 17A6, Your Cost **\$2.65**

Signal High Freq. Buzzer



Adjustable with standard resistance of 2 ohms. Finish of black crystallized lacquer. 17A7, Type R60, Each **\$1.32**

AT A FRACTION OF ITS REGULAR VALUE! THE POPULAR J37



Heavy Duty Sending Key 1/8" silver contacts, frame of solid bakelite, phosphor bronze key lever, spring steel lever spring, brass hardware.

No. 17A414, A Terrific Value **49c**



"ULTRA-MIKES" WIRELESS MICROPHONE TRANSMITS THRU ANY RADIO NO WIRES TO CONNECT

The life of a Party. Consists of a microphone with a built-in midjet radio transmitter. Play thru any Radio within 75 feet. Requires no technical knowledge — no wires to connect. Merely tune your radio to any clear channel, then tune the knob on side of the Ultra-Mike to same channel—and you are ready for fun—as a mystery voice, etc., from your radio. Handy also to pick up noise or calls from any room you desire—nursery, sick room, etc.

BATTERY MODEL

Uses one 45-volt miniature B battery and one flashlight cell. Low drain 1L4 or 1T4 tube assures long battery life. List Price, \$9.95.

No. 37A49, Complete with Tube & Batteries, Net Each **\$6.63**

AC-DC MODEL

Same as above but operates from regular 110-volt AC or DC electric outlet. Merely plug in and it's ready to operate like the battery model above. No. 37A51, List, \$12.50. Complete with Tube, Each **\$8.33**

A TERRIFIC VALUE!

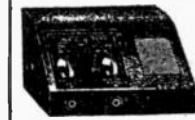


A top quality (\$5.00 List Value) Code practice key, priced at a fraction of original cost. Mounted on triple X bakelite base, 1/4" thick, 4 1/2" long and 3" wide. Binding post and contacts insulated with bakelite washers. Fully adjustable, well balanced operating lever. All tension and adjusting screws are knurled. Has positive contact shorting spring. Contacts are of high grade tungsten securely fastened to eliminate any chance of becoming loose in operation. Ideal for keying amateur transmitters.

No. 17A38, Every One BRAND NEW in Original Factory Cartons. **49c** Special, Each

Extra Key Knobs

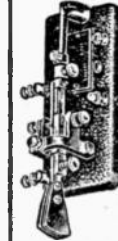
12A1, Navy type knobs, Ea. **18c**
12A2, Standard knobs, Ea. **12c**
12A3, Paddle for high speed keys **15c**



ICA DeLuxe Signa-tone Code Practice Set. Keying

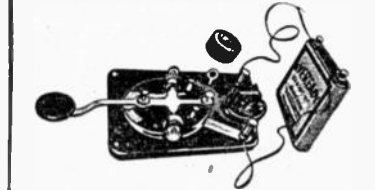
Monitor. Speaker Built In
An audio oscillator with 3 output frequencies and variable volume control. Produces signal like that of commercial CW station. For use as (1) Code Practice Set—with facilities for keys and phones for multiple code instruction; (2) Keying Monitor—will follow "bug" at all speeds; (3) Modulation Signal—for adjusting the modulation level of a transmitter; (4) Signal Tracer—locates defects when fed into audio stage of amplifier. With tube and built-in speaker. 7 1/2" x 4 1/2" x 4". For 110 volts AC or DC. 17A14, Each **\$11.76**

AMATEUR MODEL 515 HI-SPEED KEY



Steel Base 6 1/4 x 3 x 3/8". Die Cast Frame finished in Baked black wrinkle enamel, hardware chrome plated. Heavy brass connector strips, adjustable weight and trunnion screws. Two sets 1/8" silver contacts, circuit closing switch and two adjustable paddles. No. 17B11, Ea. **\$7.35** Cord and Plug for above. No. 17A41, Each. **88c**

CODE PRACTICE SET



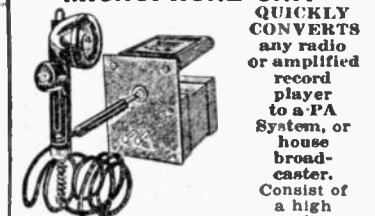
Consists of a top quality key and a Signal high frequency adjustable buzzer mounted on a bakelite base, equipped with binding posts ready for quick and simple connection to the 4 1/2 V battery included. It's complete ready to use, Nothing Else to Buy. **COMPLETE ONLY \$2.95** Ready to Use, No. 5A145

Code Practice Oscillator



OPERATES FROM 110 Volts AC or DC. Plenty of Volume from Quality Midget Speaker. Complete with tube, high grade key, cord and plug — ready to operate — NOTHING ELSE TO BUY. No. 5A146, ONLY **\$8.95**

MICROPHONE UNIT



QUICKLY CONVERTS any radio or amplified record player to a PA System, or house broadcaster. Consist of a high quality carbon mike, with built-in "press-to-talk" switch, and transformer and battery unit completely wired. Simple connecting instructions furnished. Complete ready to use. NOTHING ELSE TO BUY. No. 5A147, ONLY **\$5.95**

Headphones - Kits - Crystal Sets - etc

BRUSH HUSHATONE



Pillow speaker for use under pillow on bed, couch or chair. Enjoy that favorite radio program without disturbing others. Works with any receiver, high sensitivity and GOOD TONE QUALITY. Molded plastic case with chrome trim. Industrials write for discount.

No. 20A848. Model BA-303 with 10-ft. cord. **\$9.75**
Net Each.....

Brush Crystal Phones



Type A. high impedance, response 60 to 10,000 cycles. Light in weight, 6 oz., very sensitive to weak signals. Ideal for measuring work, etc. Molded plastic case, shaped for maximum comfort.

17A30. Double Headset **\$7.06**
Pair....

17A31. Single with cord and headband. Each.... **\$3.79**

Lorgnette Type Phones



BRUSH. Consists of above type A single crystal phone attached to telescoping handle, adjustable from 12" to 17". Designed for use in group hearing aid systems, etc. Comfortable, easy to handle. With 5-foot cord. List \$9.75.

No. 14A785. Ea. **\$5.73**

TRIMM "Featherweight" Lorgnette Type Phone

Small, Light. Hearing unit only 2 1/8" dia. x 3/4" thick, weighs only 1/4 oz. but durably constructed of black plastic material. Hi-impedance 9000 ohms, DC resistance 2000 ohms. Ideal for large installations using 500 ohm lines. With 6-ft. cord.

No. 14A784. Net Each.... **\$4.41**

TRIMM Outlet Box



With Volume Control. Combines in a single unit volume control phone jack and terminal strip for incoming circuit. Brown wrinkle finish 3 3/4 x 2 1/8". Control is 10,000 ohms for use with above phones.

No. 14A782. Each **\$2.36**

TRIMM Phone Plug

Flat type non-protruding. Body of black plastic. Set screw recessed openings for pin tips with stay cord anchorage. Fits standard phone jacks.

No. 14A783. Net Each.... **38c**

1N34 CRYSTAL DIODE



This is the most popular of the Sylvania germanium rectifiers. Has pig-tail leads for soldering in place. Rated at 22.5 MA max. current, 50 V. max. up to 100 MC. Size 7/32" dia., 3/4" long.

No. 12A450. Net Each... **\$1.20**

PL55 PLUG AND CORD



PL55 phone plug with 40' rubber, spiral wound long-wearing cord attached.

No. 17A263. Special, Each... **35c**

THE BEST IN HEAD PHONES



TRIMM "FEATHERWEIGHTS"
World famous as a quality headset. Weighs only 4 1/2 oz. 5 ft. moisture-proof, wear-resisting cord and adjustable nickel plated steel head band. Bakelite shell and cap. Magnet of highest quality 36% cobalt steel alloy. Pole pieces of finest magnetic iron. Coils especially impregnated. A custom built phone throughout.

17A20. 4000 ohm for general purpose use. **\$5.88**
Per Pair.....
17A21. 24000 ohm for short wave work, amateurs, etc. Pair..... **\$5.88**

TRIMM "PROFESSIONALS"
Forged magnet of chrome steel, impregnated coils, 5 ft. moisture-proof, wear-resisting cord, entirely concealed terminals. Fabric covered wire headband. Bakelite cap and shells.

17A23. 2000 ohms. Pair. **\$2.94**

TRIMM "ACME". A superior headset in the light weight, low price field. Cap and shell of molded bakelite, chrome steel magnets, weighs only six ounces complete with two units. 4 1/2 ft. cord and metal headband.

17A25. Double Headset — 2000 ohms D.C. **\$1.76**
resistance.....

17A26. Single Headset — **\$1.02**
1000 ohms D.C. resistance

BRANDES SUPERIOR. A favorite for years. Ruggedly built, outside terminal type, with metal cases and bakelite caps. Diaphragm diameter 2 1/8". Has double coils, two in each receiver; adjustable flexible metal split headband. 4 1/2 ft. cord. Magnets of high retentivity are 1/4" square. Resistance 2000 ohms per pair.

17A27. Per Pair..... **\$2.03**

BRANDES ADMIRAL. Similar to above, but with terminals inside case. Have metal caps, bakelite caps, double coil magnets. Sturdy and light weight.

17A28. 2000 ohms... **\$2.13**

CANNON BALL "DIXIE". A good quality phone at a low price. Cases are metal with bakelite caps. Diaphragm diameter 2 1/16". Double coils, two in each unit; magnets of heavy bar magnet steel 1/4" square. 4 1/2 ft. cords.

17A29. 2000 ohm. Pair. **\$1.73**

Headphone Cords

Copper tinsel inner conductor covered with closely woven cotton braid. Single cord 4 feet, double 4 1/2 feet.

17A32. Single cord, pin tips one end, spade tips other... **29c**

17A33. Double cord, tips on both ends... **39c**

17A34. Double cord tips on one end, spade lugs other... **39c**

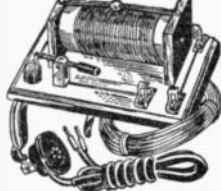
Rubber Phone Cushions



Designed for comfort and to fit most any make of headphone. Widely used by airlines.

17A35. Per Pair..... **65c**

"Atomic Giant" Crystal Set Kit



Easily assembled in a few minutes into a crystal radio. Complete kit. All parts included: crystal, factory wound coil, headphone, mtg. board, 25 ft. antenna wire, and hardware. Only tool necessary is a screwdriver. With instructions.

No. 36A2. Special, Each **\$1.25**

Case lots of 12. 1 set wired in each case. Special, per case **\$12.00**

No. 19A1217. Extra Headphone (Single) with headband and cord as in above kit. Finest quality, sensitive. **75c**

Special Each

SOUND-POWERED TELEPHONE HANDSET

No Batteries—No Power Supply Needed

Has remarkable speech fidelity. Operates over two conductor or single wire ground return circuit. 12 handsets can be used in multiple for group conversation.

Ideal for Television installers, Linesmen, construction workers, etc., or for home use. Durably constructed of molded black phenolic, with 3 1/2-ft. rubber cable and rubber insulated clips for quick connection to line for satisfactory operation for over 20 miles.

No. 37A50. YOUR COST EACH..... **\$8.57**



CRYSTAL DETECTORS and ACCESSORIES



(A) No. 17A143. Fixed Crystal Detector. Will give renewed action to reflex or crystal sets. Meter tested for sensitivity, and permanently fixed. Made to withstand high voltage. Compact, in bakelite case. Net Each..... **48c**

(B) No. 17A144. Open Type Crystal Detector. Universal joint on swivel arm provides quick accurate adjustment on any point of crystal. (Less Crystal.) Net Each..... **12c**

(C) No. 12A1401. Super Sensitive Crystals. Made from finest galena ore. Net Each..... **8c 10 for 70c**

(D) No. 17A144. Spring Cat Whiskers. Universal for all crystal sets. Best Quality. Per Pkg. of Three..... **9c 10 Pkgs. for 80c**

(E) No. 17A145. Glass Enclosed Crystal Detector. A very high-grade dust-proof glass enclosed detector. Complete with super-sensitive crystal. Easily adjusted. Net Each..... **30c**

Telex Pillow Speaker



Listen in comfort—without disturbing others. An extremely rugged magnetic unit designed to give "dynamic speaker" results when placed under a pillow, or as a personal radio soft speaker. Ideal for use anywhere without disturbing others near you. Easy to connect to radio—it is compact and durable. Comes complete with 10 ft. cord, plug, jack and easy-to-follow instruction sheet. List \$12.00.

No. 19A194. (Model B2465). Your Cost..... **\$7.06**

Telex Monoset STETHOSCOPE TYPE



The New Modern Under-chin Headphone. You wear it under the chin instead of over the head. More comfort—less cumbersome than the older style headband types. Featherweight: Only 1.2 oz. No ear fatigue. Excellent fidelity. Clear natural reception of sound. Covers every application where headphones are needed. Made of tough, durable tenite plastic with removable clear plastic eartips. Supplied complete with 5 ft. cord and phone plug. Impedance 2000 ohms.

No. 19A195. (2568). List \$12.50. Net, Pair... **\$7.35**

No. 19A196. (2841). Has volume control mounted in cord. Ideal for use in group hearing systems or other applications where more than one Monoset is used on the same line. List Price \$16.50.

Net Pair..... **\$9.70**

Little Wonder Crystal Set



Small in size, but big in results. Will receive stations within 25 miles when used with suitable aerial and headphones.

No. 17A45. Net Each..... **97c**

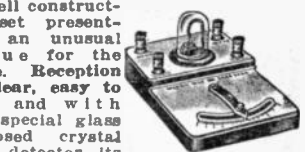
"Supertone" Crystal Set



A well constructed set presenting an unusual value for the price. Reception is clear, easy to tune and with the special glass enclosed crystal and detector its sensitivity is assured for a long time. Entire assembly mounted in attractive bakelite case.

No. 17A336. Net Each... **\$1.26**

3-IN-1 TUNER



As an Antenna Tuner, it increases signal strength. As a Wave Trap, it separates interfering stations. As an Aerial Eliminator, it makes out-door aeriels unnecessary. Easy to install. No. 17A205. Your Cost, Each..... **59c**

SEE PAGE 113 FOR MANY MORE OUTSTANDING VALUES IN HEADPHONES

PICT-O-GRAPH KITS

Designed for increasing knowledge of electronics by actual construction of useful apparatus. Kits can be assembled successfully without previous radio experience, and without the use of technical diagrams and symbols. Each kit is furnished with "Pict-O-Graph" charts taken from actual photos of working models, plus detailed step-by-step instructions and all necessary parts including tubes, but less wire and solder. Highly recommended for school class use.



(A) ONE-TUBE AC-DC RADIO KIT (FIG. A)

Tunes regular broadcast stations and will operate one or two pairs of headphones. Plugs into 110-volt AC-DC socket. With 6SL7 tube. **No. 37A62. Less Headphones. Your Cost \$5.83**

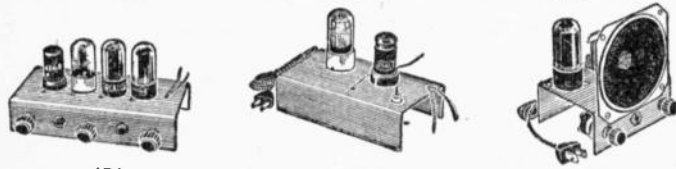
(B) TWO-TUBE AC-DC RADIO KIT (FIG. B)

Similar to One-Tube Radio but more advanced design and circuit. Dial is marked for regular broadcast band. Will operate several pairs of headphones. With two 6SL7 tubes and permeability tuning assembly. **No. 37A63. Less Headphones. Your Cost \$7.79**

(C) FIVE-TUBE AC-DC SUPERHET RADIO KIT (FIG. C)

Well engineered for high selectivity and sensitivity. Employs a loop antenna. When properly assembled, only minor adjustments, without service instruments, are required for peak performance. Tunes 540 KC-1600 KC. Complete with tubes and PM speaker, less cabinet. **No. 37A64. Your Cost \$15.58**

Black Plastic Cabinet. Fits above superhet radio. 9 1/2 x 5 1/2 x 6" high. No. 37A65. Your Cost \$2.94



(D) FOUR-TUBE AC-DC AMPLIFIER KIT (FIG. D)

Will play a crystal phono pickup or microphone clearly and with plenty volume through a loud speaker. Fine for electric phono amplifier. Equipped with tone control and separate volume controls for mike and phono. Supplied with 12SJ7, 12SQ7, 50L6 and 35Z5 tubes. Less speaker. **No. 37A66. Your Cost \$8.77**

(E) WIRELESS PHONO OSCILLATOR KIT (FIG. E)

Works with any radio and crystal phono pickup to play records without actual wire connections to radio. Effective over a distance of 100 ft. With 6SA7 and 6SK7 tubes. Plugs into 110-volt AC or DC socket. **No. 37A67. Your Cost \$4.70**

(F) CODE PRACTICE OSCILLATOR KIT (FIG. F)

Produces clear rich tone through its own speaker. Will also operate headphones, either singly or in large numbers for class room use. Equipped with volume control and tone control to vary note from low to high (600 to 1500 cycles). For use on 110-volt AC or DC. Supplied with 117L7 tube and PM dynamic speaker, less headphones. **No. 37A68. Your Cost \$7.79**



RADIO SET KITS



(A)

BROADCAST SUPERHET KIT (Fig. A). Tunes 540 to 1600 KC. Very simple to build, yet performs excellently. Uses 12SA7, 12SK7, 12SQ7, 50L6GT and 35Z5CT tubes. Kit contains all parts, tubes, speaker and loop antenna, plus fully illustrated diagrams and instructions. Assembly requires only simple hand tools. Operates on 110-volt AC or DC. Less cabinet. **Stock No. 36A1. NET PER KIT \$20.20**

IVORY CABINET. Fits 5-tube Superhet Radio above. Stock No. 33B68. NET EACH \$2.40

(B)

TWO-BAND SUPERHET KIT (Not illustrated). Covers broadcast band, 550 to 1600 KC and short wave, 6 to 18 MC. Well designed circuit provides high sensitivity and selectivity plus automatic volume control for uniform performance. Uses 12SK7 RF amp., 12SA7 osc. converter, 12SK7 IF, 12SQ7 det. AVC and 1st audio, 35L6GT power output and 35Z5GT rectifier. Chassis size, 12 1/4 x 7 x 5 3/4" high. Kit includes all parts, tubes and speaker, plus pictorial and schematic diagrams for easy assembly. Operates on 110-volt AC or DC. Less cabinet. **Stock No. 31A60. NET PER KIT \$24.70**

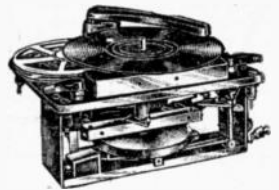
THREE-TUBE AC-DC KIT (Fig. B). Designed for beginners. Uses regenerative circuit and is capable of real long distance reception. Plug-in coil for broadcast band included with kit. Requires three type 76 tubes and headphones. Operates on 110-volt AC or DC. **No. 36A3. Kit, with instructions, less tubes and headphones. Each \$6.03**

PLUG-IN COILS FOR SHORT WAVE BANDS. For use with above 3-Tube Radio. **No. 36A4. 70 to 200 Meters. No. 36A5. 35 to 70 Meters. CHOICE, EACH \$0.50**

Last Minute Selections!

New! MAGNETONE TWIN-TRAX Tape Recorder Chassis

Ultra modern and precision built! Records and plays back for a full hour on a single 7" standard reel of 1/4" recording tape! Can be used with any amplifier with minor changes for recording or playback or a special amplifier can be constructed from any one of the designs furnished with the unit.



FEATURES: Attainable frequency response, 50 to 9,000 cps. within 3 db. Two sound tracks, one forward and one reverse, together with automatic reversal of tape travel, provide a continuous hour of recording or playback. Playing both forward and reverse eliminates much waste rewind time. Tape threads easily, directly from one reel to the other. Tape travel is maintained constant at 7 1/2" per second, without slippage, flutter or wow, by heavy duty motor that will not over-heat. Motor is dynamically and electrically balanced, and the entire mechanism is unbelievably quiet. Twin electronic erase heads provide complete supersonic or DC erasure. One tape channel can be used for compression-expansion control. Can also be used for twin-channel stereophonic recording. Optional turntable with any standard phono pickup, enable use of unit for standard 78 RPM disc playback and for copying records onto tape. Chassis size, 13 1/2" long, 10 1/8" wide, extends 5" below and 1 1/2" above panel. For operation on 110-volt, 60-cycle AC. Shipping weight, 19 1/2 lbs. **No. 34A174. Model 808 Chassis with empty tape reel and 32-page instruction book. NET EACH \$89.50**

OPTIONAL TURNTABLE and pickup arm bracket for playing standard 78 RPM recordings on Model 808 Chassis. Bracket will accommodate all standard phono pickup arms. No. 20A789. Each \$1.75

No. 20A790. Paper Base Magnetic Recording Tape on Reel. Plays 1 hour on Twin-Trax Recorder. NET EACH \$3.00

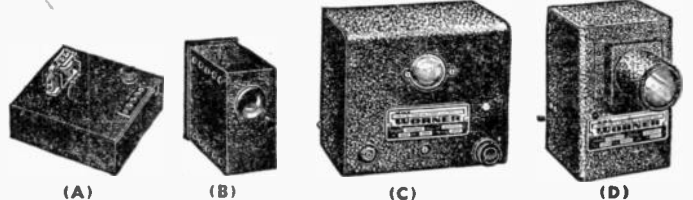
10-TUBE TWIN-TRAX AMPLIFIER. Especially for use with above chassis for magnetic recording and playback. With 50 KC supersonic erase and bias oscillator. Same as supplied with Complete Twin-Trax recorder on page 15. **No. 34A182. NET EACH with Tubes \$149.50**

LIVINGSTON UNIVERSAL PICK-UP ARM WITH ADJUSTABLE COUNTER-WEIGHTS

For the new Columbia Micro-Groove "LP" records, when equipped with proper cartridge. Will also handle conventional 12" and 16" recordings with excellent tracking, due to curved construction, ball bearing pivots and two adjustable, removable counter-weights. Stylus pressures range from 6 to 30 grams for the majority of cartridges. Will accommodate G.E., Pickering and other cartridges with 1/2" mounting centers. Height of pivot assembly is adjustable. Finished in durable gray. **No. 32B210. YOUR COST \$14.95**



WORNER PHOTO-CELL EQUIPMENT



MODEL 69 PHOTO-ELECTRIC KIT (Fig. A). Practical experimental equipment designed for teachers, students and hobbyists. Complete instructions, diagrams and parts are supplied for easy assembly of an AC operated photo cell amplifier that will actuate a control relay merely through a change of light intensity. Kit includes photo cell and SPDT relay having contacts rated at 2 amps. Black wrinkle finished, size 5 1/8 x 5 1/4 x 2". **Stock No. 37A69. NET EACH \$9.85**

MODEL 39 LIGHT SOURCE KIT (Fig. B). Assembles easily into a companion unit for Model 69 Kit. Contains a special 50-watt bulb and an optical system to project a beam 25 feet. With cord and plug. Black wrinkle finished, size 4 3/8 x 4 3/4 x 2 1/2". **Stock No. 37A70. NET EACH \$5.88**

MODEL 62-R PHOTO CELL AMPLIFIER (Fig. C). Engineered for industrial applications requiring long dependable service. Completely assembled and ready to operate at any distance up to 75 ft. from light source. Unit contains a SPDT control relay rated at 4 amps. Capable of operating up to 300 times a minute. Recommended for such applications as counting and sorting large objects, limit controls, start and stop operations, light density, fire detection, and opening doors, as well as sentinel duty, at windows, entrances, etc. For 110-volt, 60-cy. AC, 35 watts. Metal case, 7 x 6 1/4 x 4 1/2". **Stock No. 37A71. NET EACH \$42.63**

MODEL 62-L LIGHT SOURCE (Fig. D). Companion unit for Model 62-R amplifier. Contains a special 2,000-hour lamp and optical system and a 6-volt step-down transformer. For 110-volt AC. Metal case, 7 x 6 1/4 x 4 1/4". **Stock No. 37A72. NET EACH \$13.23**

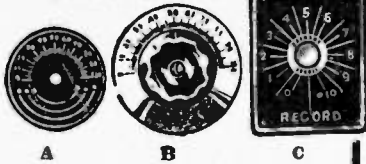
NEW! RCA ISOLATION TRANSFORMER

Primary and secondary are completely isolated, eliminating shock hazard when servicing AC-DC sets. Also speeds up servicing by having a source of high line voltage—to show up unstable capacitors and other causes of intermittents; normal voltage to service sets at rated circuit voltages; low voltage to check oscillator action. Primary line voltage range, 105-130 volt; six-position rotary switch provides adjustment in 5-volt steps. Output connections are made through three standard receptacles, providing 105, 117 and 130 volts. Continuous rating, 100 watts, 10% regulation. Intermittent rating 150 watts. Size 4 3/8 x 4 1/4 x 5 7/16" high. With 5 ft. primary cord. Wt., 6 1/2 lbs. **Stock No. 13B265. NET EACH \$8.77**



RADIO DIALS, KNOBS AND INDICATORS

DIAL PLATES



Supplied Less Knobs. For choice of knobs to use with these, see knobs at right.

(A) **BLACK SATIN FINISH** Plates Made of brass, black finish with etched silver lines and Nos. Calibrated 0-100.

Stock No.	Diameter	Degrees	YOUR COST
12A1201	2"	180	\$.27
12A1202	2"	325	.27
12A1203	3 1/2"	180	.36
12A1204	3 1/2"	325	.36

(B) **CHROME FINISH PLATES** Grain satin finish with black etched engraving on chrome silver background. Calibrated 0 to 100.

Stock No.	Diameter	Degrees	YOUR COST
12A1205	2"	180	\$.47
12A1206	2"	325	.47
12A1207	3 1/2"	180	.73
12A1208	3 1/2"	325	.73
12A1209	4"	180	.82
12A1210	4"	325	.82

(C) **RECTANGULAR TYPES** Made of brass, black finish with etched silver markings. Size 1 1/2" x 2 1/4", calibrated for 300° rotation. Marked 1 to 10. 3/8" hole.

No.	Marking	Choice
12A1213	Record	Each
12A1214	Microphone	18c
12A1215	Gain	
12A1216	Tone	

12A1217—Plain, calibrated but no words.

1-Inch Name Plates

12A1218 "Microphone"	Choice Each
12A1219 "Phono"	
12A1220. On-Off.	12c

NAME PLATES

Size 1 1/2" x 3/4"
Made of brass—characters and border chrome; background etched dark black. Available in all commonly used markings—state on order your needs. Stocked with 125 different letterings.

No. 21A1007. Choice, Each. 9c

FLEXIBLE COUPLINGS

All Fit 1/4" Shafts
National TX10, very compact 1 1/2" dia., canvas Bakelite insulated coupling free from backlash. 12A1361. Each. 40c

National TX9, 1" dia., Steatite insulation. 12A1362, Ea. 75c

Johnson No. 250, 1 1/8" dia., Steatite with phosphor bronze spring. 12A1360. Each. 47c

Johnson No. 251A, like above, 2 1/4" diameter. No. 12A1403. Each. 82c

MILLEN Flexible Coupling

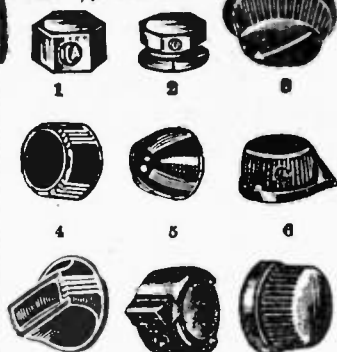
Has universal joint. Designed for applications where high torque is desired. 18A652. Each. 36c

STEATITE INSULATED universal joint No. 39001. Similar to above but insulated. Couples 1/4" shafts. No. 15A2057. Net Each. 36c

YOU CAN DEPEND ON B-A FOR THE "LITTLE THINGS" AS WELL AS THE BIG . . . B-A IS TRULY A "ONE-STOP" SOURCE OF SUPPLY.

BAKELITE AND FLUTED KNOBS

SET SCREW TYPE FITS 1/4" SHAFTS



Type	Stk. No.	Dia.	Color	Net
1	12A1221	1"	Wal.	12c
2	12A1222	3/4"	Wal.	9c
3	12A1223	1 1/4"	Blk.	14c
4	12A1224	1 1/2"	Wal.	11c
4	12A1225	1"	Wal.	11c
5	12A1226	3/4"	Wal.	11c
6	12A1227	1 1/2"	Blk.	8c
6	12A1228	1 1/2"	Whi.	9c
6	12A1229	1 1/2"	Bwn.	9c
7	12A1230	1"	Blk.	12c
7	12A1231	1"	Wal.	12c
8	12A1232	1"	Wal.	10c
9	12A1233	1 1/2"	Wal.	9c
9	12A1234	1 1/2"	Iv.	9c
9	12A1235	1 1/2"	Red	9c
9	12A1236	1 1/2"	Blk.	9c

KNOBS FOR FLAT SHAFTS

Spring clamp type for "D" type shafts. Choice of 2 sizes and colors.

12A1240 Walnut	3/4" Dia.	Choice Ea.	11c
12A1241 Ivory	1" Dia.		
12A1243 Walnut	1" Dia.	Choice Ea.	11c
12A1244 Ivory	1" Dia.		

KNOBS FOR KNURLED SHAFTS

12A1246 Walnut	3/4" Dia.	Choice Ea.	10c
12A1247 White	1" Dia.		

EXTENDED SHAFT KNOBS

(A) With 1/2" Shank Extension	Choice, Each. 10c
12A667 Brown } 15/16" Dia.	
12A668 Ivory } Choice, Each. 10c	
(B) With 3/8" Shank Extension	Choice, Each. 10c
12A669 Brown } 3/4" Dia.	
12A670 Ivory } Choice, Each. 10c	

AUTO RADIO KNOBS

Chrome Plated Brass, durable and good looking.
No. 19A198. For 3/8" Shaft. Each. 18c
No. 19A199. For 1/4" Shaft. Each. 18c
ASSORTMENT OF SIX. Includes chrome plated brass, and plastic with chrome trim for 3/16" and 1/4" shafts.
No. 16A597. Per Ass't. 89c

SHAFT LOCK

Instantly converts any plain 1/4" shaft, Volume Control, Condenser, etc., from "plain" to "shaft locked type". Easy to mount in place of regular mounting nut.
Brass N.P. No. 12A1496. SPEC. EA. 24c

Quality black bakelite. Attractive, professional in appearance. Fluted rim for good grip. All for 1/4" shafts. Brass bushed.

Less Pointer	
12A34—1 1/8"	Net. 18c
12A35—1 5/8"	Net. 24c
12A36—2 3/8"	Net. 35c
With Pointer	
12A37—1 1/8"	Net. 33c
12A38—1 5/8"	Net. 38c
12A39—2 3/8"	Net. 52c
Flange Type	
12A40—2 1/2"	Net. 41c
12A41—3"	Net. 52c

BAR KNOBS

Fit 1/4" shafts. Recessed set screws.

(A) 2"	Red	12A42	Choice	10c
2"	Black	12A43		
1 1/2"	Red	12A44	8c	
1 1/2"	Black	12A45		
(B) 2 1/2"	Black	12A46	11c	
1 1/2"	Black	12A47		

CRONAME BAR KNOBS

Smartly designed, serviceable, streamlined and colorful knobs, for test equipment, PA systems and the like where appearance and eye appeal are factors. With brass insert for 1/4" shaft and slotted head set screws.

Fig.	Size	Black	Red	Net Ea.
A	1 1/4"	17A1042	17A1050	18c
A	2 1/4"	17A1043	17A1051	27c
B	1 1/8"	17A1045	17A1053	18c
B	2"	17A1044	17A1052	27c

Style "C", Black only. Dia., 1 1/16" with 19/32" recess to clear nut for close panel mounting.
No. 17A1054. Net Each. 21c

Pendulum Knob

Molded bakelite knob with Brass insert for 1/4" shaft, with set screw. 1 1/4" over all, 5/8" thick.
No. 12A99. Walnut. 18c

Bakelite Knob Assortment

10 Assorted, Brown, Black, Ivory. Bakelite knobs, push-on type to fit standard 1/4" knurled shafts as used on most makes of sets.
No. 17A286. Per Ass't. of 10. 39c
25 Assorted, includes types as above and others.
No. 18A850. Per Ass't. of 25. 79c

SHAFT COUPLINGS

Johnson Steatite solid Coupling. Features long leakage path and accurate alignment of hubs. For 1/4" shaft.
12A1402, Ea. 53c
Johnson Compression Coupling. Ideal for coupling together 1/4" shafts where they need shafts. Not to be insulated. Will not burr shafts.
12A1109, Ea. 11c

SHAFT FITTINGS



To increase or reduce shaft diameters of volume controls, condensers, etc., for ganging units, or to extend shaft lengths even of different diameters. Available in insulated or brass.

COUPLINGS

Hole Size	Stock No.	Insulated	Brass	Net Ea.
1/4" - 1/4"	12A1181	12A1184		12c
3/8" - 3/8"	12A1182	12A1185		10 for \$1.10
1/2" - 1/2"	12A1183	12A1186		

EXTENDERS (Shaft 3/8" Long)

Hole Shaft Size	Stock No.	Brass	Ea.
1/4" x 1/4"	12A1187	12A1190	14c
3/8" x 3/8"	12A1188	12A1191	10 for \$1.30
1/2" x 1/2"	12A1189	12A1192	

EXTENDERS (Shaft 1 1/4" Long)

Hole Shaft Size	Stock No.	Brass	Ea.
1/4" x 1/4"	12A1193	12A1196	15c
3/8" x 3/8"	12A1194	12A1197	10 for \$1.40
1/2" x 1/2"	12A1195	12A1198	

BRASS OR INSULATED SHAFTS

No.	Kind	Dia.	Length	Each
12A4	Brass	1/4"	6"	13c
12A5	Brass	1/4"	12"	18c
12A6	Insulated	1/4"	6"	13c
12A7	Insulated	1/4"	12"	18c
12A8	Insulated	3/8"	12"	18c

SPLIT BUSHING

To reduce dial holes from 1/4" to 3/8" or to increase 3/8" shafts to 1/2" dia. 5/8" long.
No. 12A1200. Each. 6c
10 For. 54c

FLEXIBLE SHAFTS

Phosphor bronze. When used with suitable couplings, control of units at angles up to 90 degrees with the panel is permitted.
No. 12A1200. Each. 6c
10 For. 54c

PANEL BEARINGS

Cadmium plated brass for panels up to 3/8" thick. Furnished separately or with 3" or 6" cadmium plated brass shafts.
12A1359—Bearing Only. 10c
12A9—With 3" shaft. 24c
12A10—With 6" shaft. 29c

Adjustable Slip Clutch

To protect condensers, volume controls, etc., from excessive torque loads. Attaches to either end of shaft and adjusts to slip at any torque desired. Prevents damage if knob is turned too fast or too far. Lgth. 1 9/32". Couples 1/4" to 1/4".
17A1033. Net Each. \$1.00

Planetary Drive

Mounts on end plate of condenser, on back of front of panel to provide 5 to 1 ratio. Has 3/8" threaded sleeve with nut to carry dial plate or pointer. Has 1/4" dia. shaft and hub.
17A1032. Net Each. \$3.38

TUNING DRIVE SHAFT

For cable connected drive using drum on condenser shaft. Mounts 3/8" hole. Overall length 1 5/8", shaft 1/4" diameter.
No. 17A583. Net Each. 21c

DIALS, KNOBS AND TUNING ASSEMBLIES

POPULAR DIALS

All Fit 1/4" Shafts



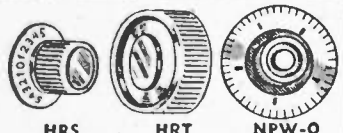
Miniature Type—1 3/8" Diameter
(A) NATIONAL TYPE R — Neat etched silver dial as used on HRO receivers. Marked 0-10 over 180° clockwise. **12A13. Net Each... 60c**
BAR KNOB—HRP-P, as used on HRO dial. 1 1/4 x 1/2" with pointer.
12A14. Net Each... 24c
(B) ICA. Chrome silver dial with black etched numerals. With finger grip black knob. Marked 10-0-180°. **12A15. Net Each... 50c**



3 1/2" Diameter for 1/4" Shafts
(A) NATIONAL TYPE O. Attractive circular-grained Nickel Silver. Reads 0-100 over 180° cc. Large fluted finger grip knob.
12A16. Net Each... \$1.00
(B) MILLEN Heavy Gauge Nickel-Silver 0 to 100 cc. Large bakelite hub insulates metal scale from shaft.
12A17. Net Each... \$1.00



ICA VERNIER DIALS
 Beautiful chrome silver. Etcho—Engraved with black numerals and calibrations. With finger grip, flanged knob, marker and hardware. 0 to 100-180°.
12A18. 2 3/4". Net Each... \$1.23
12A19. 4". Net Each... \$1.62



HRS **HRT** **NPW-O**
 National Type HRS control knobs. Grey plastic with 1 3/8" dia. chrome plated skirt. All for 1/4" shaft.
15A1099. "ON" "OFF", 30° rotation.
15A1100. 5-0-5, 180° rotation.
15A1101. 0-10, 300° rotation.
Choice Each Above... 50c
 National Type HRT tuning knob. Grey plastic with bright trim circle. Dia. 2 1/8". Fits 1/4" shaft.
15A1098. Each... 75c
 National Type NPW-O Micrometer dial and gear drive unit reading direct to one part in 500. Division lines approx. 1/4" apart. Condenser drive is at right angles to panel. Tuning ratio 20 to 1. Supplied with flex coupling for 1/4" shaft. Dial is grey and matches other new knobs.
19A266. Each... \$9.00



CROFLEX SLIDE-RULE DIALS
BRONZE ESCUTCHEONS, BEAUTIFUL EDGE LIGHTED GLASS SCALES
 The most flexible tuning arrangement yet devised.

The knob can be located at either end of the dial escutcheon or most any place along the lower edge. Your variable condenser may be above or below center, to the left or right. The condenser drive pulley furnished with each tuner is connected to the rest of the mechanism only by drive cable which can be adjusted for clockwise or counter-clockwise rotation. Tuning ratios range from approximately 12 to 1 for No. 230 to 23 to 1 for No. 234. All types extend 1 1/2" behind panel and are furnished with scales for horizontal installation with double channel calibrations for AM Broadcast and Short Wave.

Stk. No.	Type	Escutcheon Size	Scale Lgth.	Each
17A690	230	2 3/8" x 4 3/8"	3 1/2"	\$2.50
17A691	231	2 1/8" x 4 3/8"	3 1/2"	2.79
17A592	232	2 1/8" x 6 1/8"	4 1/2"	2.94
17A593	233	3 3/8" x 6 1/8"	5 1/2"	3.15
17A594	234	3 3/8" x 8 1/8"	6 1/2"	3.53

UNIVERSAL DIAL SCALES FOR ABOVE

Calibrated 0-100 with two blank channels for marking with pencil or ink to show station call letters, frequencies, etc.
 For Dial No. **231** **232** **233** **234** **NET EACH 44c**
 Vertical **17A1187** **17A1188** **17A1189** **17A1190**
 Horizontal **17A596** **17A597** **17A598** **17A599**

PERMEABILITY TUNERS FOR SUPERHET CIRCUITS

TUNING RANGE 540 TO 1600 KC

A complete slug-tuned broadcast band R.F. and oscillator coil assembly with dial attached. To be used in place of variable condensers, coils and tuning dial in a superhet circuit. **Completely Assembled and pretracked at factory.** Supplied with diagrams and complete instructions. Dial face finished in gold, buff and brown, with red pointers. For 456 KC IF. Airplane Dial Tuner. Entire assembly 3 1/4" wide, 5" high, extends 1 1/2" behind panel. Requires panel cut-out of approximately 3 3/4" square.

Stock No. 17A584. Type A230 Tuner. Net Each... **\$2.79**

SLIDE-RULE DIAL TUNER
 Size over all 6" wide, 4 7/16" high, extends 1 1/2" behind panel. Pointer travel 4 3/4". Dial face finished in gold, buff and brown, with red pointers. Supplied with clear acetate window requiring cut-out of approximately 1 1/2" x 4 3/8". For 456 KC IF.
 Type A210 Tuner. Net Ea... **\$3.97**

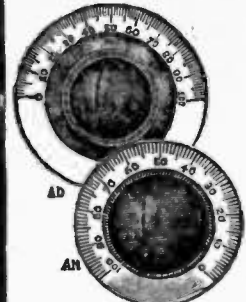
REGENERATIVE-TUNER 540-1600 KC
 A slick permeability type tuner to take the place of a single gang condenser, coil and tuning dial. Well suited for the experimenter who does not wish to tackle the more complex superhet circuits. Has attractive gold and brown dial and red pointer. Over all size 3 1/4" wide, 4 3/8" high, extends 1 1/2" behind panel. Supplied complete with instructions and diagram.
 Stock No. 17A582.
 Type A260 Tuner. Net Each... **\$1.41**

SLIDE-RULE TUNER for SUPERHET VARIABLE CONDENSER
 Supplied with clear acetate window, dial cable, spring and condenser drum. Dial face attractively finished in gold, buff and brown. Pointer travel approximately 5". Over all size 6" wide x 4 7/16" high. For 456 KC IF.
 Stock No. 17A568.
 Type A-185 Tuner. Net Each... **\$1.62**

CHASSIS FOR PERMEABILITY UNITS
 Punched for proper mounting of A-230 and A-260 tuners. Has five 1" socket holes and other holes for mounting circuit components. Over-all size 8" long, 4" wide, 1 1/16" deep.
 Choice Each
 No. 17A581. For A-230 or A-260 Tuners. **44c**
 No. 17A410. For A-210 or A-185 Tuners. **44c**

F.M. TUNER KIT
 Now you can build an F.M. tuner for use on your own radio set and have true static-free reception.
 F.M. Dia-Tuner consists of a slug tuned coil assembly with attached dial mechanism, pointer, and attractive gold, buff and brown dial face. High frequency circuits are factory aligned and cover 88 to 108 MC. Furnished with easy-to-build instructions for completing kit.
 Stock No. 19A261. Type A275 FM-Dia-Tuner. **NET EACH... \$4.09**
 Kit of Matched F.M. Coils—To use with Dia-Tuner. Includes High quality F.M. Ratio Discriminator and 2 I.F. transformers, all for 10.7 MC I.F. channel, plus 88-108 MC antenna coupler coil and 4 1/2 micro henry VHF choke—all matched for easy assembly and alignment.
\$8.20
 Stock No. 19A262. Kit F.M. Coils.
73c
 Chassis for FM Dia-Tuner—Punched and drilled for tubes, coil mounts, tuning assembly, etc. Size 8x6 1/2".
 Stock No. 19A263. F.M. Kit Chassis Only.

NATIONAL DIALS



The original Velvet Vernier drive unit adapted to a 3" or 4" metal skirted dial. Tuning ratio 5 to 1. Both sizes calibrated 100-0 in 180°, increase Fits 1/4" shaft.

when rotated clockwise.
 No. 17A569. Type AM, 3" Dial. Net Each... **\$2.25**
 No. 17A570. Type AD, 4" Dial. Net Each... **\$3.00**

GORDON Hand Wheels
 Bakelite wheel with pointer. Fits all 1/4" shafts. Tuning controls that will add to the appearance of your equipment.

Hand Wheels with Pointer and 180° Scale Complete

No.	Wh. Dia.	Scale	Net Ea.
12A23	1 1/8"	2 1/8"	\$1.08
12A24	1 5/8"	3 3/8"	1.15
12A25	2 1/4"	3 3/8"	1.47
12A26	3 1/4"	5 1/4"	2.06
12A27	1 1/8" wheel and pointer with 270° scale for gain control.		\$1.08

Net Each... **\$1.08**

Hand Wheels With Pointer Only

12A28	1 1/8", less scale		53c
12A29	1 5/8", less scale		65c
12A30	2 1/4", less scale		82c
12A31	3 1/4", less scale		94c

DIAL POINTERS

Dial pointers finished in beautiful red enamel.
 ① 17A1036—2 1/16" long fits 1/4" shaft. Each... **15c**
 ② 17A1034—2" long, for slide rule dial. Each... **9c**
 ③ 17A1037—1 3/8" long fits 1/4" shaft. Each... **9c**
 ④ 17A1035—3 1/4" long, for slide rule dial. Each... **12c**

DIAL POINTER ASST.
 10 assorted pointers for replacement needs on many make sets.
12A1171. Per Asst. 50c

CROWE PANEL INDICATOR PLATES

Black figures on a silver anodized aluminum plate 2 3/16" high x 2 5/8" wide. Choice, Each... **24c**

Stock No.	Description	Stock No.	Description
17A1018	No Title 0-10	17A1025	Mike 2, 0-10
17A1019	Tone 0-10	17A1026	Record Mike 5-0-5
17A1020	Gain 0-10	17A1027	Volume 0-10
17A1021	Master Gain 0-10	17A1028	Fader 5-0-5
17A1022	Record 0-10	17A1029	Bass 5-0-5
17A1023	Mike 0-10	17A1030	Treble 5-0-5
17A1024	Mike 1, 0-10	17A1031	Expansion 0-10

TUNING EYE ASSEMBLY
 For adapting "Magic Eye" tubes to sets, test equipment and apparatus. Includes tube socket, 22" cable, adjustable mounting bracket, bronze escutcheon and hardware. Tube Not Furnished.
17A759. Assembly for 6-prong tube... 89c
17A760. Assembly for Octal tube... 89c

MAGIC EYE ESCUTCHEONS
 Hood type, large size for mounting over panel or cabinet hole. Bronze finished.
 No. 17A761. For Single Eye Tube. Ea... **18c**
 Full vision type. For use with octal base tubes. Bronze Finished. **21c**
 No. 17A762. Net Each

IF COILS, CHOKES, DIALS and COIL FORMS

MILLEN IF Transformers



De Luxe type as used in MilLEN factory built equipment. Feature heavy molded end terminal boards, seatite coil forms, rigidly located "down leads", etc. The large size heavy wall extruded aluminum shield cans, high Q condensers and coils result in the over-all Q of all transformers being extremely high for their particular type. BFO Units contain the grid condenser and grid leak inside the shield.

AIR TRIMMED IRON CORE
 17A692 1600 Interstage ... **\$4.50**
 17A693 1600 Diode ... **4.50**
 17A694 1600 BFO AIR CORE **4.50**

PERMEABILITY TUNED
 17A695 456 Interstage ... **\$2.85**
 17A696 456 Diode ... **2.85**
 17A697 456 BFO ... **2.85**

MILLEN Tunable Coil Form

Standard octal base of low-loss mica - filled Bakelite, polystyrene 1/8" dia. coil form, heavy aluminum shield, iron tuning slug of high frequency type, suitable for use up to 35 mc. Adjusting screw protrudes thru center hole of standard octal socket.

17A698, With Iron Core ... **\$1.85**
 17A699, Less Iron Core ... **\$1.50**

MILLEN SLUG TUNED UHF COIL FORM

A seatite form 7/16" dia., 1/4" long with tuning slug adjustable from top or bottom. Mounts in 5/16" hole.
 No. 15A1110.
 MilLEN Type 69041. Each **75c**

455 KC MINIATURE IF TRANSFORMERS

Permeability tuned, and only 3/4" square by 2" high! For experimental use and general replacement in "personal" radio receivers using miniature or standard battery or AC tubes. With plastic frame, molded-in silver mica padding condensers, adjustable iron core tuning slugs, and over-all aluminum shield with mounting clips and solder terminals at bottom.

No. 19A1206. 455 KC Input Miller Type 12-C1.
 No. 19A1205. 455 KC output Miller Type 12-C2.
 Choice, Each ... **\$1.18**

MORRIS Coil Winder



Winds honey combs, spiderwebs, solenoids, etc., in various widths, diameters and gauges of wire. Recorder and pointer show number of turns.
 16A245. Net Ea. ... **\$4.95**

Transfer Type Title Plates

For marking controls on transmitters, receivers, amplifiers, etc. Each sheet contains approx. 145 separate markers for amateur and laboratory needs. Lettering is jet black on rich gold background. Will adhere to any clean surface. Durable and waterproof.
 No. 17A739. Series 1 Techniplate, Per Sheet ... **60c**

NATIONAL TYPE ACN



An ideal instrument dial for test and lab needs. Uses Velvet Vernier drive unit, with 3 blank removable scales. Holes in pointer for making calibration points. Size 3x7 1/4".
 No. 12A21. Net Each ... **\$3.30**

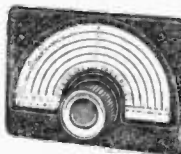
TYPE SCN

Essentially the same as ACN dial but smaller size, 4 7/16x6 1/4" and has new HRT knob.
 No. 14A776. Net Each ... **\$3.00**

TYPE MCN

Scaled down from the SCN to 2 3/4" high x 3 7/8" wide. On rear side the mechanism extends 1/4" below dial frame. Mounts nicely on 3 1/2" rack panel.
 No. 14A777. NET EACH. **\$2.70**

TYPE ICN DIAL



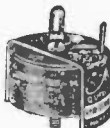
Provides even illumination on all bands by means of special dial window and two pilot lamps. Scales are same as used on ACN dial. Size overall 5 1/8x7 1/4".
 No. 14A778.
 Net Each ... **\$6.00**



Tekni-Cal Panel Marking Sets

Provides set builders, amateurs and manufacturers with a permanent inexpensive means of marking panels with titles and dials. Each set contains over 1,000 markings for its particular group. All are white except a group of gold ones in receiver and television sets.

Stk. No. 20B72 Oscilloscope Set }
 20B73 Audio Set } Choice
 20B74 Television Set } Each
 20B75 Dials Set } **\$1.35**
 20B76 Transmitter Set }
 20B77 Receiver Set }



MEISSNER DELUXE R.F. CHOKES AIR CORE (UNSHIELDED)

Coils wound on specially treated dowels mounted on bakelite base and thoroughly moisture proofed. Single hole mounting.

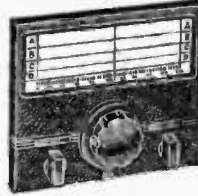
Stock No.	Meissner No.	Ind.	Net Ea.
12A1431	19-1994	2.5MH	\$38
12A184	19-4551	5MH	.30
12A1432	19-2078	8 MH	.41
12A185	19-8770	10 MH	.44
12A186	19-1995	16 MH	.50
12A187	19-2330	30 MH	.53
12A1433	19-3247	60 MH	.62
12A188	19-2709	80 MH	.65

IRON CORE (UNSHIELDED)

Accurately wound and moisture-proofed. Genuine Ferrocarr iron-cores allow maximum inductance and lower DC resistance. Single hole mtg.

Stock No.	Meissner No.	Ind.	Net Ea.
12A1434	19-6834	2.5MH	\$.56
12A1435	19-6840	10 MH	.71
12A1436	19-6842	30 MH	.82
12A1437	19-6844	60 MH	.94
12A1438	19-6846	80 MH	1.06
12A1439	19-6848	125MH	1.35

MILLEN Panel Dial



A combination panel dial. Drive ratio 8-1. Escutcheon size 8 1/4 x 6 1/2". Holes may be drilled to add two small controls as illustrated.

No. 17A702.
 Your Cost, Each ... **\$6.00**

MILLEN MIDGET DIAL



Type 10039. Calibrated 0-100 plus 5 blank scales, size only 4x3 1/4". Has completely enclosed 8 to 1 ratio tuning mechanism and attractive dull black enamel finish.

No. 17A646.
 Your Cost, Each ... **\$2.70**

MILLEN Panel Marking Kit

Kit consists of 1/8" block letters and special solution for easy transfer to smooth or wrinkle finish panels or chassis. Ample supply of every conceivable word or marking.

17A701. White Letter Kit ... **\$1.25**
 14A779. Black Letter Kit ... **1.25**

Famous National Chokes

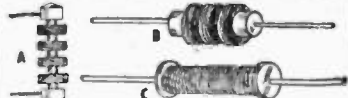


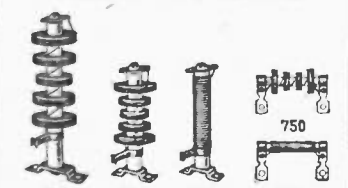
Fig. A. Type R100 RF Choke. Ideal for high freq. circuits. Widely used in receivers and low power stages of transmitters. Has continuous 4-section universal winding on Isolantite form. Distributed capacity is only 1 mmf. 2 1/2 mh., 125 ma., 50 ohm. D.C. inductance.

12A189. Each **35c**
 Type R100U. As above but on small stand-off insulator for vertical mounting; has pigtail terminals.
 12A190. Each **42c**
 Type R300. Similar to R100. 1 mh., 300 ma., 10 ohm D. C. resistance.
 12A191. Each **38c**

Fig. B. Type R-50. Small size, 1x 15/32", 50 MA., 4 section with coaxial leads.
 12A1427 1/2 MH } Choice
 12A1428 2 1/2 MH } Each
 12A1429 10 MH } **35c**

Fig. C. Type R-60. For UHF circuits up to 500 MA. Single layer winding 4 microhenries inductance. Size 1 1/8 x 5/16".
 12A1430. Each ... **35c**

Johnson R.F. Chokes



Highly effective chokes made of enameled, silk-covered wire wound on seatite forms and impregnated with high-grade R.F. lacquer. Current ratings may be exceeded for intermittent use. For 1.7 to 30MC except No. 17A1158 and No. 17A1159, which are for UHF.

Stock No.	Type	Ma.	Lgth.	Net Each
17A1155	750	150	1 1/2"	\$1.03
17A1156	752	500	2 1/8"	1.47
17A1157	754	750	4 1/8"	1.76
17A1158	760	250	1 1/2"	.35
17A1159	762	1500	2 1/8"	.68

Ribbed Coil Forms

Molded of amber colored, low loss bakelite. Ribbed shape holds winding away from form and increases efficiency of coil. Winding space approx. 2 1/2". 1 1/2" forms have shoulder inside for mounting APC type padder. All have flanged top and pins to fit standard tube sockets.



Diam. 4 Prong 5 Prong 6 Prong Each
 1 3/8" 12A197 12A198 12A199 **27c**
 1 1/2" 12A194 12A195 12A196 **35c**

MILLEN COIL FORMS

① Made of low loss mica base phenolic. Supplied less prongs for permanent mounting or with prongs to fit standard tube sockets. Dia. 1x1 5/8" long.
 No. 17A1107. Less prongs. 45000 **35c**
 No. 17A1108. 4-prong. 45004 **45c**
 No. 17A1109. 5-prong. 45005 **45c**
 ② Isolantite plug base for mounting air wound coils.
 15A127. 4-prong base. 40104 ... **30c**
 15A128. 5-prong base. 40105 ... **30c**

AMPHENOL COIL FORMS



Made from Amphnol 912 "A" Polystyrene. Losses are practically zero. Coils wound on these forms are superior to air wound coils because dirt cannot get between windings and lower "Q" of coil.

"A"—1 1/4" dia. x 2 1/4" long plug-in forms to fit standard tube sockets.
 12A201. 4 Prong ... **36c**
 12A202. 5 Prong ... **39c**
 12A203. 6 Prong ... **43c**

"B"—Miniature plug-in forms (3/4" dia. x 1 9/16" long) for use with No. 19A131 and No. 19A132 sockets listed below.

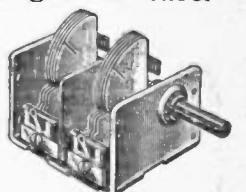
12A204. 5 Prong ... **28c**
 12A205. 6 Prong ... **28c**
 "C"—Miniature form for mtg. directly on wave band switch, tuning condenser or chassis. Has raised hole in center of base for self-tapping screw.
 12A200. Each ... **11c**

Liquid "912" Coil Dope To impregnate wound coils, etc.
 12A206. 4 oz. bottle ... **38c**

MICA FILLED SOCKETS For miniature plug-in coil form above.
 19A131. 78-55ST, 5-prong ... **16c**
 19A132. 78-56ST, 6-prong ... **16c**

Semi-Midget Condenser

Latest mechanical design with ball bearing rotors, heavy brass rotor contact springs, and 1/4" dia. shaft. Precision made throughout.

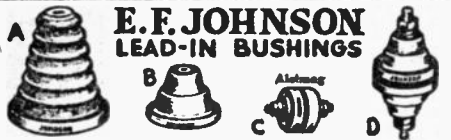


SINGLE GANG (3 3/16" W., 2 3/4" H., 2 7/16" L.)
 Stock No. Capacity EACH
 19A1211 135 Mmfd. **\$1.76**
 19A1212 365 Mmfd. **1.78**

TWO GANG (1 13/16" W., 2" H., 3 3/16" L.)
 Stock No. Cap. Each Sect. EACH
 19A1213 135 Mmfd. **\$2.06**
 19A1214 365 Mmfd. **2.06**

THREE GANG (1 13/16" W., 2" H., 4 3/16" L.)
 Stock No. Cap. Each Sect. EACH
 19A1215 135 Mmfd. **\$2.65**
 19A1216 365 Mmfd. **2.65**

Stand-Off INSULATORS and fittings



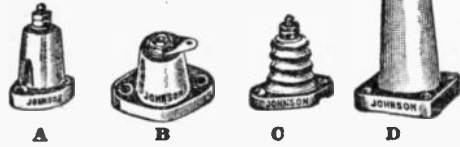
E.F. JOHNSON LEAD-IN BUSHINGS

Have many applications in transmitter and antenna installations. Types 50 and 55 are Steatite; others are white glaze porcelain. Types 50, 51, 52 and 55 have nickeled brass rod and nuts.

Stk. No.	Type	Hgt.	Dia.	Panel Hole	NET
12A243	50	D	3/4"	3/4"	21c
12A244	51	D	1 1/8"	1 1/8"	29c
12A245	52	D	1 3/8"	1 3/8"	47c
12A246	53	B	1 1/2"	1 1/2"	18c
12A247	54	A	4"	2 1/2"	44c
12A248	55	C	1 1/2"	1 1/2"	18c
12A304	Mtg. Flange for Type 53 (B)				21c
12A305	Mtg. Flange for Type 54 (A)				41c

STAND-OFF INSULATORS

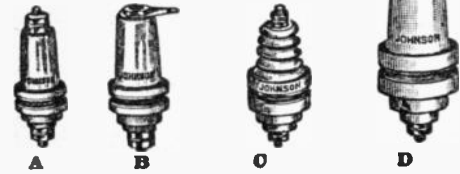
Of white glazed porcelain with hdwe. as indicated in listing.



Types	Stk. No.	Type	Hgt.	Dia.	Panel Hole	NET
65	20	A	1 1/8"	1 1/8"	10-32	12c
66	20J	B	1 1/8"	1 1/8"	74J	15c
67	22	A	1"	1"	8-32	11c
67J	22J	B	1"	1"	74J	14c
65C	60	C	4 1/2"	4 1/2"	1/4-20	53c
65D	63	C	2 1/2"	2 1/2"	1/4-20	29c
65E	65	D	1 1/2"	1 1/2"	10-32	15c
65F	65J	D	1 1/2"	1 1/2"	74J	21c
65G	66	D	2 1/2"	2 1/2"	1/4-20	41c
65H	66J	D	2 1/2"	2 1/2"	76J	53c
65I	67	D	4 1/2"	4 1/2"	1/4-20	50c
65J	67J	D	4 1/2"	4 1/2"	76J	65c

THRU-PANEL TYPE

Of white glazed porcelain. Have high mechanical strength and long leakage path. Flat mounting surfaces, cushion washers. "J" indicates jack type insulator.



Types	Stk. No.	Type	Hgt.	Dia.	Panel Hole	NET
12A262	40	A	1 1/4"	1 1/4"	10-32	21c
12A263	40J	B	1 1/4"	1 1/4"	74J	27c
12A264	42	A	1 1/2"	1 1/2"	10-32	18c
12A265	42J	B	1 1/2"	1 1/2"	74J	24c
12A266	44	A	1 3/4"	1 3/4"	6-32	15c
12A267	45	C	1 1/2"	1 1/2"	10-32	28c
12A268	45J	C	1 1/2"	1 1/2"	74J	35c
12A269	46	D	2 1/4"	2 1/4"	1/4-20	59c
12A270	47	D	4 1/2"	4 1/2"	1/4-20	82c

Each of the above furnished with hardware for panels up to 1/2" thick. Longer rods for the larger types are shown below.

ULTRA-STEATITE CONES

Made of high grade, white glaze, low absorption steatite, which is far superior electrically at high frequencies. Threads are tapped directly into the ceramic. Furnished with machine screws and brass washers top and bottom and with cushion washers. One hole mounting.

Types	Stk. No.	Type	Hgt.	Dia.	Panel Hole	NET
12A271	500	%	1 1/8"	1 1/8"	6-32	18c
12A272	501	1	1 1/2"	1 1/2"	8-32	21c
12A274	502	1 1/2	1 3/4"	1 3/4"	8-32	38c
12A276	503	2	2 1/4"	2 1/4"	10-32	44c
12A277	504	2 1/2	3 1/8"	3 1/8"	10-32	85c

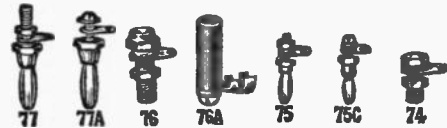
THREADED BRASS RODS

12A279—1/4x20 Brass Rod, 8" long. Each...29c
12A280—1/4x20 Brass Rod, 10" long. Each...35c

MILLEN QUARTZ "Q"
Sheet Size 3x8x1".
No. 17A700. Each...45c

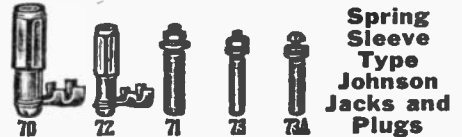
Millen Quartz Q Coil Dope
For cementing coils to forms. Very low-loss, even at high frequency.
No. 17A704. 2-Oz. Bottle...50c

JOHNSON PLUGS AND JACKS



BANANA SPRING TYPE. Nickel silver springs and nickel-plated brass screw machine parts with accurate threads and milled nuts. Studs extend full length for added support. Types 77, 77A plugs are .300" dia., and fit jacks 76, 76A. 75, 75C plugs are .170" dia., and fit type 74 jack.

Type	Stk. No.	Price	Type	Stk. No.	Price
77	12A1071	18c	75	12A1075	7c
77A	12A1072	21c	75C	12A1076	8c
76	12A1073	21c	74	12A1077	7c
76A	12A1074	18c			



INSULATED BANANA PLUGS

Black or Red Plastic Handle.
12A1078—1 3/8" long, fits type 74 jack. Ea. .24c
12A1079—1 3/4" long, fits 76, 76A jack. Ea. .29c
Have max. current-carrying capacity, minimum resistance, great mechanical strength and snug fit. Wiping action of spring on insertion insures good electrical contact. Tension is maintained by phosphor bronze "spring sleeves." Type 71 plug, 1/2" dia., fits type 70 jack. Types 73, 73A plugs, 3/8" dia., fit type 72 jack. All are nickel plated.
70 12A1080 29c 73 12A1083 9c
72 12A1081 21c 73A 12A1084 9c
71 12A1082 15c

JOHNSON FEEDER SPREADERS

Finest silicone impregnated porcelain low-loss insulators. All have 1/2x3/8 cross section.
14A769 Type 136-122. Length 2". Net Each...10c
14A770 Type 136-124. Length 4". Net Each...14c
14A771 Type 136-126. Length 6". Net Each...18c

Ultra Low-Loss Stand-Offs

912A Polystyrene, for indoor or outdoor use. Strong, not brittle like ceramic and glass. Wire held in place by screw or solder lug.
12A281 1 3/8" High. 1/2" Dia. Net Ea. \$.36
12A282 2 1/8" High. 1/2" Dia. Net Ea. .43
12A283 2 1/8" High. 3/4" Dia. Net Ea. .78
12A284 4 1/8" High. 3/4" Dia. Net Ea. .96
12A285 6" High. 3/4" Dia. Net Ea. 1.08

"LUCITE" Transparent Insulators

Have extremely low losses at radio frequencies, are water clear with highly polished surfaces.

FEEED THRU TYPE
Ideal for bringing high freq. leads thru chassis, panel or shield. The 1/2" have 6-32 hdwe., the 3/4", 10-32.
Stock No. Diam. Lgth. Hole Your Cost
12A286 1/2" 1 1/2" 1/4" 24c
12A287 3/4" 1 1/2" 1/4" 27c
12A288 1/2" 1 1/2" 1/4" 31c
12A289 3/4" 2" 1/4" 54c
12A290 1/2" 2 1/2" 1/4" 64c

STAND-OFF TYPE
Pillar type. Single-hole base mounting with n.p. brass hdwe. for attaching wire or parts. The ideal for HF and RF.
No. Hgt. Diam. Hdwe. Cost
12A291 1 1/4" 1/2" 6-32 24c
12A292 2 3/8" 1/2" 6-32 34c
12A293 2 1/2" 3/4" 10-32 41c
12A294 4 1/4" 3/4" 10-32 59c
12A295 6 3/4" 3/4" 10-32 82c

"LUCITE" FEEDER SPREADERS
Furnished with locking screws to clamp wire in place. All are 3/4" dia., drilled for No. 12 to 18 wire.
12A296—2" spacing...20c
12A297—4" spacing...25c
12A298—5" spacing...29c
12A299—6" spacing...32c

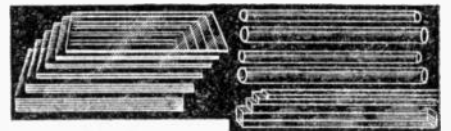
Clear Polystyrene Window Pane

This high dielectric plastic sheet ends broken glass hazard for window lead-in. Easy to cut or drill, fits into place of glass window pane.
No. 5A47. 3/32x12x16". Each...\$2.18
No. 5A48. 1/4x12x16". Each...2.72

Amphenol "Polystyrene 912 A" and "Acrylic 912 B" Sheets, Rods, Tubing, Etc.

912 A Polystyrene is the popular thermoplastic, unexcelled for low-loss insulation, in high frequency radio and other electrical circuits. Power factor at 1 MC. .00001.

912 B Acrylic is a crystal clear tough thermoplastic. Useful for light conduction, meter faces, dials. Has high dielectric strength, used for electrical insulation where no R.F. is involved. Power factor at 1 MC. .015.



912 "A" SHEETS					
Thick-ness	Size	Net Each	Size	Net Each	
1/8"	12A208	12c	4"x8"	17A753	16c
3/16"	12A210	14c	4"x8"	17A754	20c
1/4"	12A209	16c	4"x8"	17A755	24c
5/16"	12A211	19c	4"x8"	17A756	29c
3/8"	12A212	25c	4"x8"	17A757	38c

TUBING 12" LONG					
912 "A"	Net Ea.	912 "B"	Net Ea.		
1/8" Wall	07c	1/4" Wall	12A213	1 1/2"	\$1.41
12A742	11c	12A214	1 3/4"	1.68	
12A743	14c	12A215	2"	1.88	
12A744	22c	12A216	2 1/2"	2.21	
12A745	31c	12A217	3"	2.53	
12A746					

RODS 12" LONG					
No.	Dia.	Net	No.	Dia.	Net
17A747	1/8"	\$.08	12A218	1/2"	\$.26
17A748	3/16"	.17	12A219	3/4"	.44
17A749	1/4"	.31	12A220	5/8"	.68
17A752	5/16"	.48	12A221	3/4"	.94
17A750	3/8"	.68	12A222	7/8"	1.26
17A751	1"	1.26	12A223	1"	1.68

12" LONG 912 "B" STRIPS					
Width Strip	1/2" Thick	Net	1/2" Thick	Net	1/2" Thick
12A224	12c	12A224	14c	12A224	14c
12A225	18c	12A229	22c	12A233	26c
12A226	25c	12A230	29c	12A234	37c
12A227	31c	12A231	38c	12A235	46c

912 CEMENT, COIL DOPE
Actually fuses parts together instead of merely gluing them. Unexcelled for U.H.F. coil dope.
12A236—2 oz. bottle. Your Cost...\$.29
12A206—4 oz. bottle. Your Cost...\$.38
6A132—Quart Bottle. Your Cost...2.35
12A237—2 oz. Thinner. Your Cost...\$.15
17A738—4 oz. Thinner. Your Cost...\$.21
6A143—Quart Thinner. Your Cost...\$.47

Ceramic Stand-Off Insulators

Have 6/32" threads in each end. Ideal for mounting coils, condensers, etc.
12A241—1/2" dia. x 1 1/2" long. Each...17c
12A242—1/2" dia. x 3" long. Each...24c

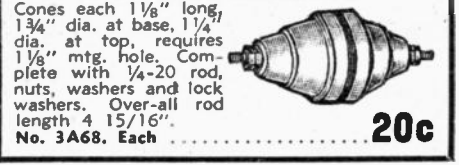
BARGAINS in Stand-Off Insulators

Finest quality ceramic insulators, tapped each end for mounting with standard machine screw.
19A1054. 3/8" dia. x 1 1/2" long, tapped for 6-32. Each...5c
19A1027. 3/4" dia. x 3" long, tapped for 10-32. Each...13c
19A1058. 1" dia. x 1 1/2" long, tapped for 1/4-20. Each...10c

25 Insulator Assortment

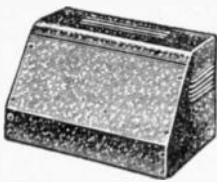
Ideal for mounting coils, condensers, etc. Finest grade Steatite, Alsimag and Porcelain. A variety of sizes, square and round, tapped for various size machine screws, also included are several sizes of Steatite bushings.
No. 19A978. Per Asst. of 25...50c

Feed Thru Insulators
Cones each 1 1/8" long, 1 3/4" dia. at base, 1 1/4" dia. at top, requires 1 1/8" mtg. hole. Complete with 1/4-20 rod, nuts, washers and lock washers. Over-all rod length 4 15/16".
No. 3A68. Each...20c



Racks·Chassis·Cabinets·Panels·Accessories

De Luxe Sloping Panel Cabinets



Beautiful Marine Gray Rippled finish steel cabinet. Chrome side ventilators. Smooth round corners. Provides professional appearance to your amplifier, test instrument, etc. Front panel may be attached to chassis and removed as a unit.

Stock No.	Size	Price	Requires Chassis
5A138	8x8x8	\$3.88	5A60
5A137	8x10x8	4.26	5A62
5A100	8x14x8	5.59	5A68
5A49	12x18x8	7.50	5A84

HINGE LID CABINET



Heavy auto body steel. Finished in black wrinkle enamel.

Cat. No.	Size L. D. H.	YOUR COST	Requires Chassis No.
5A1	9"x5"x6"	\$2.35	5A51
5A2	10"x8"x7"	2.94	5A63
5A3	12"x8"x7"	3.38	5A65
5A4	12"x11"x8"	4.03	5A67
5A5	14"x8"x7"	4.03	5A69
5A6	18"x12"x9"	5.08	5A89

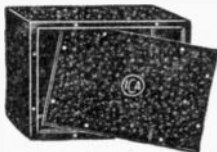
DE LUXE UTILITY CABINETS



Heavy steel, rounded corners, piano hinged lid in top. Side and back louvre. Cable openings. Marine grey ripple finish.

Cat. No.	Size L. W. D.	YOUR COST	Requires Chassis No.
5A30	8"x10"x8"	\$2.94	5A60
5A31	8"x12"x8"	3.23	5A62
5A32	8"x14"x8"	4.12	5A64
5A33	12"x20"x12"	7.64	5A58

HEAVY STEEL CABINET



Removable front and back. Spot welded corners. Finished in black wrinkle enamel.

Cat. No.	Size L. D. H.	YOUR COST
5A130	4" 2" 4"	\$0.78
5A131	4" 3" 5"	.84
5A7	6" 6" 6"	.97
5A8	9" 6" 6"	1.50
5A9	10" 8" 7"	1.89
5A10	10" 8" 10"	2.35
5A11	12" 11" 8"	2.53

PORTABLE STEEL CABINET



Welded steel cabinet with leather handle. Removable front and back panels fastened with self-tapping screws. Black ripple enamel finish. For Oscillators, transceivers, etc.

Cat. No.	Size L. W. D.	Wt.	Net Ea.
5A19	13" 7 3/4" 7"	9 lbs.	\$2.50
5A13	15" 7 3/4" 7"	11 lbs.	2.91

Midget Speaker Cases

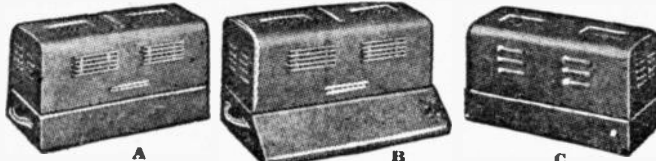


Ideal for 2" and 3" speakers. Size 4"x4"x4 1/2", finished in black crackle.

5A126	For 2" Speakers	\$1.12
5A126	For 3" Speakers	\$1.12

AMPLIFIER FOUNDATION CABINETS

Top-notch quality "Professional" type amplifier chassis units. Pleasing rounded top corners—raised screen openings in tops. Louvre ventilators in sides and ends. Units "A" and "B" have Chrome plated ventilators with red striped chrome moldings and handles to match. Marine Grey Ripple.



UNIT "A" — De Luxe Amplifier Foundation Chassis; all units are 9" high; chassis, 3" high. Gives De Luxe "Commercial" appearance to custom built equipment.

UNIT "B" — De Luxe Sloping Chassis Amplifier Unit. Chassis bottoms are 10x17"; 13x14", and 13x17", in order listed. All chassis 3" high with 4" sloping front. Units all 9 1/2" high. DeLuxe through-

UNIT "C"—LOW COST Standard Amplifier Foundation Unit; identical to DeLuxe units except chrome trimmings eliminated. All units are 9" high; chassis 3"

No.	Size	Net, Ea.	No.	Size	Net, Ea.
5A34	5 1/2"x10"	\$3.62	5A42	5 1/2"x10"	\$2.20
5A35	8x12"	4.70	5A43	8x12"	3.23
5A36	7x17"	4.85	5A44	7x17"	3.38
5A37	10x14"	5.29	5A45	10x14"	3.68
5A38	10x17"	5.59	5A46	10x17"	3.80

"HI-QUALITY" METAL CHASSIS BASES



Solidly constructed 1-piece steel chassis bases for receivers, transmitters, amplifiers, etc.—folded over on the bottom (except the 2 smallest sizes) for additional strength. All sizes from 5 1/2"x10" drilled for attaching bottom plates listed opposite chassis.

Size, Inches	CHASSIS BASES		Net Each	Bottom Plates No.	Net Each
	Cadmium No.	Blk. No.			
4 1/2"x8 1/2"x1 1/2"	5A50	5A51	.63		
5 1/2"x9 1/2"x1 1/2"	5A52	5A53	.66		
5 1/2"x9 1/2"x3"	5A54	5A55	.85	5A101	.390
5 1/2"x10x3"	5A56	5A57	.91	5A102	45c
5 1/2"x13x3"	5A58	5A59	1.03	5A103	48c
7x7x2"	5A60	5A61	.82	5A104	48c
7x9x2"	5A62	5A63	.88	5A105	48c
7x11x2"	5A64	5A65	.97	5A106	54c
7x12x3"	5A66	5A67	1.15	5A107	57c
7x13x2"	5A68	5A69	1.06	5A108	57c
7x15x3"	5A70	5A71	1.26	5A109	63c
7x17x3"	5A72	5A73	1.28	5A110	66c
8x12x3"	5A74	5A75	1.26	5A111	66c
8x17x3"	5A76	5A77	1.44	5A112	69c
10x12x3"	5A80	5A81	1.38	5A114	69c
10x14x3"	5A82	5A83	1.44	5A115	75c
10x17x3"	5A84	5A85	1.29	5A116	82c
10x23x3"	5A86	5A87	1.94	5A117	\$1.06
11x17x3"	5A88	5A89	1.94	5A118	82c
12x17x3"	5A90	5A91	1.94	5A119	88c
13x17x3"	5A92	5A93	2.44	5A120	1.06
10x17x4"	5A94	5A95	2.06	5A116	82c
13x17x4"	5A96	5A97	2.76	5A120	1.06

(NOTE:—*Denotes 18 gauge steel. All others 20 gauge.)

Chassis Mounting Brackets. Fits on panels 7" high and over.	Per Pair
5A99. For 8" Chassis base. Black.	\$0.73
5A98. For 11" Chassis base. Black.	1.12
4A30. For 13" Chassis base. Black.	1.20

STANDARD RELAY RACK PANELS

Regular 19" length. Standard amateur rack notching. Steel are 1/8" for rugged strength. Masonite are 3/16", tough, non magnetic, work nicely with wood tools. Aluminum are 1/8". Combining strength with light weight. Easily worked. Supplied in baked on Black Ripple. For Gray Ripple add C to Stock number of size desired.

Size	1/8" Steel		3/16" Masonite		1/8" Aluminum	
	Stock No.	Price	Stock No.	Price	Stock No.	Price
1 3/4"	5A21	\$0.66	4A15	\$0.50	5A289	\$0.79
3 1/4"	5A22	.75	4A16	.85	5A290	1.26
5 1/4"	5A23	.85	4A17	.85	5A291	1.71
7"	5A24	.91	4A18	.94	5A292	1.97
8 3/4"	5A25	1.15	4A19	1.18	5A293	2.41
10 1/2"	5A26	1.29	4A20	1.32	5A294	3.12
12 1/4"	5A27	1.59	4A21	1.47	5A295	3.65
14"	5A28	1.82	4A22	1.65	5A296	4.17
15 3/4"	5A29	2.12	4A23	1.82	5A297	4.65
17 1/2"	4A27	2.26	4A24	2.12	5A298	4.94
19 1/4"	4A28	2.44	4A25	2.35	5A299	5.53
21"	4A29	2.76	4A26	2.56	5A300	6.82

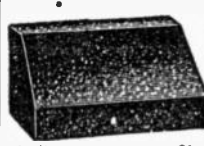
DeLuxe Meter Cases



Steel, finished in Marine Gray Rippled Enamel. Rounded top. Red striped chrome band. Size 4 1/2" deep, 4 1/8" wide, 4 1/2" high.

5A123	— 2 3/16" meter hole	\$1.32
5A124	— 2 13/16" meter hole	\$1.32

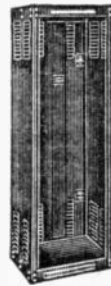
Sloping Front Cabinet



Black crackle steel utility case. Good size for building Micro-Match units, Field strength meter, Volt ohm meter and similar apparatus. Size, 4 1/4" high, 7" wide, 4" deep.

Stock No. 5A14.	Your Cost.	\$1.42
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BUD DeLuxe Streamlined Professional Relay and Cabinet Racks



Floor Model Racks are beautiful gray crackle finish. Chrome bottom strip. Welded construction of 16 ga. steel, well ventilated. Slip-hinge, rear door with snap catches. Recessed panel supports give smooth round front corner design. Hole spacing takes either amateur or W.E. notched panels, tapped 10/32. Bottom is designed to take casters listed separately below. Shipped K.D. *Table Models have recessed hinge top door with snap catch. Three larger models only have rear door. All types are 22" wide x 17 1/2" deep.

Stock No.	Overall Height	Panel Space	Net Each
40A42	42 1/2"	36 3/4"	\$29.40
40A43	47 1/2"	42"	35.52
40A44	66 1/2"	61 1/4"	43.61
40A45	82 1/2"	77"	50.72
*40A46	10 1/2"	8 3/4"	10.14
*40A47	14 1/2"	12 1/4"	12.00
*40A48	15 1/2"	14"	14.88
*40A49	19 1/2"	17 1/2"	16.43
*40A57	28 1/2"	26 1/2"	18.93
*40A58	36 1/2"	35"	21.14

Heavy duty ball bearing truck casters, composition wheel. Fits all floor model racks above. 2 1/2" high.

Stock No. 5A139. Net Each... **88c**

Aluminum Chassis

Excellently made, heavy-duty bases formed of first grade aluminum, almost 1/16" thick and electronically welded at the corners for additional strength. The material is type 35—1/4 hard, but much easier to drill and cut than steel, and of course, lighter in weight. Highly recommended for transmitters, receivers, etc., where RF circuit components must lie close to the chassis.

Stk. No.	Size	Price
4A32	4x8x1 1/2"	\$0.65
4A33	5x9 1/2x3"	.97
4A34	5x13x3"	1.06
4A35	7x9x2"	.94
4A36	7x9x2"	1.06
4A37	7x12x3"	1.29
4A38	7x15x3"	1.47
4A39	7x17x3"	1.66
4A40	8x12x3"	1.50
4A41	10x12x3"	1.88
4A42	10x17x3"	1.85
4A43	12x17x3"	2.32
4A44	13x17x3"	2.85

Streamlined Multi-Purpose Cabinets

For the many uses in making up various Electronic equipment. Grey crackle enamel finish with rubber feet on bottoms.

4 1/2" high x 3 1/2" overall depth.	
5A121. 3 3/4" wide. Net Ea.	\$1.35
5A122. 7 1/4" wide. Net Ea.	\$1.73

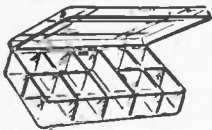


Panels 1/16" Thick Steel

Cat. No.	Size	Net Each
5A15	7"x10"	48c
5A16	7"x14"	71c
5A17	7"x18"	88c
5A18	8"x14"	79c
5A19	8"x18"	84c

Cabinets-Racks-Misc. Needed Small Parts

Clear Plastic Utility Box



Here it is, just the thing for keeping those screws, nuts, lugs, and other small parts separated and easy to find. Ideal for the work bench and for carrying parts on out-of-the-shop jobs. Hinge covered and with partitions. Available in two sizes. 16A398. 8 1/4 x 4 1/4 x 1 1/4". Ea. \$1.25 16A399. 7 x 3 1/2 x 1 3/16". Ea. .95

STEEL STOCK CABINET



Ideal steel drawer type cabinet for radio parts, etc. Made so cabinets can be stacked on top of each other. Size, 13 1/2" long, 6" wide, 4" high. No. 36A51. Each. \$1.47

STEEL RACK



An excellent steel rack to hold small jars. Keeps your radio chemicals, hardware and small parts in a neat handy to reach place. 20 inches long, shelves 2 1/4" wide. No. 32B208. Each. \$1.47 2-oz. Glass Jars for Above, complete with caps. Rack holds 20 of this size. No. 32B209. Each. 8c for 70c

Bushings, Spacers



Available in Insulated or Brass. Quite the thing for raising condensers, transformers, sub-panels, etc.

Insulated	Mgt.	Brass	Each	10 for
12A1449	1/4"	12A1459	3c	20c
12A1450	3/8"	12A1460	3c	21c
12A1451	1/2"	12A1461	3c	22c
12A1452	3/4"	12A1462	4c	29c
12A1453	1"	12A1463	4c	32c

SMALL PARTS CABINET



A sturdily built bass wood cabinet ideal for storage of hardware, resistors, condensers and other small parts. Has 6 drawers with 4 compartments each. Overall size 9x7x5 5/8". Polished Varnish finish.

No. 36A8. Net Each. \$3.95

FAHNESTOCK CONNECTORS



(A)	(B)	(C)	(D) Max.	(E)	(F)
Stock No.	Fig.	Type	Length	Width	Mtg. Hole
12A1089	A	2	1"	3/8"	10
12A1090	A	10	3/4"	1/4"	14
12A1091	B	5	1 1/2"	3/8"	10
*12A1092	B	15	3/4"	1/4"	16
12A1093	C	3	1 1/2"	3/8"	10
12A1094	D	45	3/4"	1/4"	12
12A1095	E	9	2 1/2"	3/8"	10
12A1096	E	18	1 1/2"	3/8"	14
*12A1097	F	36	1 5/8"	3/8"	10

*Bronze. All others are Brass. For Quantities of 1,000 or more deduct 10% from 100 Lot Price. FAHNESTOCK SPRING CLIP Assortment—various types and sizes. No. 17A267. SPECIAL, PER ASSORTMENT OF 25, ONLY. 19c

Angle Mounting Brackets



Hardened brass, N. P. width 3/4". No. Style Size Each 10 for 12A1314 A 1/2 x 1/2 1 1/2c 10c 12A1315 B 5/8 x 5/8 2c 17c 12A1316 C 1 x 1 3c 25c 12A1317 D 5/8 x 2 1/4 5c 41c 12A1318 E 7/8 x 1 3/4 3c 22c

WITH TAPPED HOLES Designed for assembly of metal cabinets, chassis, cover plates, etc. 8-32 tapped hole and 3/8" plain hole. Heavily plated.

12A1319 1/2 x 1/2. Ea. 4c 10 for 32c 12A1320 1/2 x 5/8. Ea. 5c 10 for 38c 12A1321 1/2 x 3/4. Ea. 5c 10 for 43c 18A7. 25 Assorted Brackets, as above and other useful types. Per Asst. 35c For Quantities of 100 or more deduct 10% from 10 Lot price.

MOUNTING NUTS STEEL-NICKEL PLATED

Standard sizes for switches, volume controls, etc. Rotary Switch type is 7/16" wide. All others are 9/16" wide. No. Type Thread Each 10 for 15A2045 Rot. Sw. 3/8-32 2c 16c 15A2046 Vol. Con. 3/8-32 1 1/2c 12c 15A2047 Pil. Lite 1/4-27 3c 26c 15A2048 Tog. Sw. 1/8-32 4c 31c

ROUND RING NUT

15A2049 Tog. Sw. 1/8-32 3c 23c 19A979. 15 Assorted. Per Asst. 24c For quantities of 100 or more deduct 10% from 10 Lot price.

Snap Button Hole Plugs

A round, flat head, metal button with spring flanges which snap right into the hole. Holds securely, yet easily removed. Used to seal adjustments, cover unused holes, etc. No. Hole Diam. Each 10 for 12A1335 3/8" 3c 24c 12A1336 1/2" 4c 30c 12A1337 5/8" 5c 39c 12A1338 3/4" 5c 39c 12A1339 7/8" 7c 59c 12A1340 1" 7c 59c

Assortment of 10 hole plugs. 18A10. Special, Per Asst. 29c

"C" WASHER ASST.

50 assorted. Handy for servicing volume controls, etc. 19A905. Per Asst. 24c

Jones Terminal Strips



Type 140 has 3/8" W x 1/2" high bakelite base; 3/8" term. centers. 141 is 1 1/2 x 1/2", has 1/4" centers. Type 141 No. Each 14A547 18c 15A2052 25c 14A548 31c 15A2053 38c 14A549 45c 14A544 45c 14A550 58c 14A545 58c 14A551 72c 14A546 68c 14A552 84c

Term No.	Each	No.	Each
1	14A541 14c	6	15A1165 54c
2	15A2050 20c	7	15A1166 71c
3	14A542 24c	8	15A1167 87c
4	14A543 34c	9	15A1168 1.04
5	15A2051 30c	10	
6	14A544 34c	11	
7	14A545 45c	12	
8	14A544 45c		
9	14A545 58c		
10	14A545 58c		
11	14A546 68c		
12	14A546 68c		

National Terminal Assembly



A low-loss binding post for high frequency use. Mounts solidly on any thickness panel. Posts take banana plugs at top and guy wire through holes at bottom simultaneously if desired. National type FWH. Stock No. 17A1068. Each. 66c

Rubber Mounts

For chassis or any place where cushioning is desired against vibration or microphonic disturbances. No. Dia. Thick Ea. 10 Lots 12A1491 1 1/4" 1/8" .06 .05 12A1492 1 1/2" 1/8" .05 .04 12A1493 1 3/4" 1/8" .05 .04 12A1494 2" 1/8" .04 .03 12A1495. Flat washer type, without shoulder. 1" dia., 1/8" thick, size 8 hole. Net Ea. 3c 10 Lots, Ea. 2c 18A23. Assortment of 20 rubber mounts, grommets, etc. Asst. 39c

BINDING POSTS



(A) Single Post. 12A1026. Each. 7c (B) Heavy Duty for high amperage work. Approximately 1" high. 12A1028. Each. 12c (C) Combination. Takes a banana plug through the top and a phone tip or wire through hole in stem. Red or black composition. 10 for \$1.35 12A1029. Each. 15c (D) Eby Ensign No. 38—Non-removable top. Has insulated shoulder for centering and mounting in 11/32" hole. 12A1030. Each. 23c (E) Eby Ensign No. 39—Non-removable top. Dowel in base for keeping post secure. 12A1031. Each. 23c (F) Bakelite head. Red or Black Single Post. 12A1032. Each. 11c

WISE-GRIP BINDING POST

When cap is tightened, a flat slide closes down across full inserted length of wire. Will not shear off fine connecting leads. Dia. 1/2", length, 1". Bottom is threaded for 6-32 mounting screw. No. 12B1374. Each. 35c

PLAIN AND GUM RUBBER GROMMETS

Mtg. Hole I.D. Plain Doz. 100 For 3/8" 1/8" 12A1483 21c \$1.57 1/2" 1/8" 12A1484 21c 1.57 3/8" 3/8" 12A1485 21c 1.57 5/8" 3/8" 12A1486 26c 1.95 15 ASSORTED. No. 18A21. SPECIAL, Per Asst. 24c GUM RUBBER 3/8" 1/8" 12A1487 21c 1.57 1/2" 1/8" 12A1488 21c 1.57 15 ASSORTED. No. 18A22. SPECIAL, Per Asst. 24c

Insulated	Mgt.	Brass	Each	10 for
12A1454	1/4"	12A1464	3c	25c
12A1455	3/8"	12A1465	4c	27c
12A1456	1/2"	12A1466	4c	30c
12A1457	3/4"	12A1467	5c	34c
12A1458	1"	12A1468	5c	40c

THREADED TYPE BRASS

Threaded on the inside to take a 6-32 screw. All are 1/4" diameter. No. Length Each 10 for 12A1469 1 1/2" 3c 25c 12A1470 1 3/8" 4c 29c 12A1471 1 1/2" 4c 32c 12A1472 1 3/4" 5c 43c 12A1473 1 3/4" 7c 54c

Bushing and Spacer Assortment 25 Assorted threaded and plain, various lengths and dia. 18A20. Per Asst. of 25. 39c

SUPER QUALITY BINDING POST

Fine for laboratory equipment. Rating, 30 A., 1000 V. Mounts with insulating molded bakelite collars having brass inserts, on any material up to 5/16" thick. Has cross hole to take up to size 12 wire, and center hole for standard banana plug. Cap can be tightened by hand or with 1/2" socket wrench. Height above panel 7/8". Dia., 5/8". With two 10-32 brass nuts. Stock No. 15A1102. Each 39c 10 lots, Each. 34c

THREADED BRASS RODS

Ideal for making your own long screws by cutting to any desired length. Supplied in 12" lengths. No. Lrth. Each 10 @ 12A1474 6-32 \$0.22 20c 12A1475 8-32 .22 20c 12A1476 10-32 .28 26c

Felt and Rubber Bumpers

(A) Felt attached to metal base in which is embedded a 6-32 screw for attaching where desired. 12A1443. Ea. 3c Per Doz. 23c (B) Rubber with recessed cavity for No. 6 or 8 screws. 12A1444. 5/8" dia., 3/8" high. Dz. 25c (C) Felt covered tack bumper, 3/8" dia. Can be tacked or pushed in. 12A1446. Pkg. of 25. Per Pkg. 29c (D) Flat felt, fasten with glue. 12A1447. Pkg. of 100. 35c

For Cushioning

Condensers and transformers to give them floating effect. Usually 3 sets are mounted on a condenser. 12A1448. Ea. 5c 10 Lots, Ea. 4c

Ventilating Plug

For amplifiers, racks, transmitters, etc. Just snap in a 1" hole. No. 12A402. Per Env. of FOUR 24c



Service Aids for the KIT, SHOP or LAB

RADIO CEMENTS



SERVICE CEMENT

Especially suitable for replacing and repairing speaker cones. Also used on glass, to seal adjustments, hold wires in place, etc. Dependable, Vibration - proof, water-proof, and fast-drying.

No. 11A38. In Handy Tubes...**25c**
SOLVENT THINNER FOR ABOVE
 Also ideal for loosening old cement, cleaning switch points, controls, etc.
 11A35. 2 Oz. **24c** 11A36. 6 Oz. **44c**
 No. 16A498. 1 Pt. **73c**

CEMENT-SOLVENT KIT

Consists of a bottle each of cement and solvent in a kit to carry on job.

11A37. Per Kit...**38c**

RUBBER CEMENT

Best quality for general use on paper, cloth, rubber, etc. A necessity in every shop.

11A12. Per 4 Oz. Can...**29c**

FILM SPLICING CEMENT

For Splicing Motion Picture films or similar material. Makes splice as strong as film itself.

11A64. 1-Ounce Bottle...**21c**

BAKELITE CEMENT

Made especially for cementing bakelite to bakelite or to other materials. Produces bond as strong as material itself. Ideal for cabinets, knobs, dials.

11A39. 2 Oz. Price **35c**

PLASTIC CEMENT

Poryxilyn cement for cementing all types of plastics.

11A40. 2 Oz. Bottle, Ea...**35c**

VINYLITE CEMENT

Specially made for cementing vinylite materials. Has excellent adhesion, high tackiness, and extreme flexibility. Also can be used for cementing metals, plastics, paper, leather, etc., and as a thermoplastic cement for non-porous materials.

No. 16A441. 2 Oz. Bottle, Ea...**29c**

LUCITE CEMENT

For cementing Lucite, Plexiglass, etc. Fast drying.

No. 16A575. 2 Oz. Bottle...**29c**

RUBBER TO METAL CEMENT

Cements rubber dial drives to metal shafts, rubber mtgs. to chassis, etc.

No. 11A76. 2 Oz., Price...**29c**

FABRIC TO METAL CEMENT

For cementing cloth and felt to metal. Ideal for cementing felt to turntables, grille cloth to metal cases, etc.

No. 16A442. 4 Oz., Price...**29c**

GRILLE CLOTH FABRIC CEMENT

For cementing grille cloth, luggage fabric, leather, etc., to metal or wood.

No. 11A11. 1/2 Pt. Can...**53c**

ELECTRICAL and RESISTOR CEMENT

Heat-proof, hardens like porcelain. Same as used on resistors, Irons, Electrical appliances, etc.

No. 16A574. 2 Oz. Bottle...**35c**

WOOD CABINET GLUE

Finest quality, fast drying. Will not injure finest of cabinets. Holds fast.

No. 11A41. 4 Oz. Bottle...**38c**

INSULATING and DIPPING VARNISH

Clear, amber colored insulating varnish. Produces smooth, tough film, waterproof, oilproof, non-corrosive. For field coils, buzzing or noisy transformers and choke coils. Dip or apply with brush. Requires no baking, dries in air. Protects, insulates.

11A27. 1/2 Pint...**59c**
 11A28. Full Pint...**\$1.03**

CHROME PAINT

Fast drying ready mixed aluminum paint leaves chrome-like finish. For P.A., Speakers, Chassis, etc.

11A289. 4 Oz...**44c**
 11A290. 8 Oz...**73c**

RADIO - REFRIGERATOR CABINET REPAIRS



(A) **DE LUXE CABINET REPAIR KIT**
 FOR WOOD, PLASTIC OR BAKELITE RADIO CABINETS

A complete professional kit in a handy grey metal case. Contains 9 shades of shellac sticks, bottles of light and dark oil stain, metal shading lacquer, polish, scratch remover, alcohol lamp, spatula, brushes, steel wool, sandpaper, etc. Everything to do a professional repair job on any type or color cabinet, knobs, etc. No special skill required.

No. 11A2. Complete Kit...**\$2.91**

(B) **PORCELAIN CABINET REPAIR KIT**

For Refrigerator, Stove, Washing Machine or other porcelain cabinets. Kit contains lacquer enamel, tinting colors, glazing compound, solvent, spatula, steel wool, sandpaper, mixing tins, brushes, etc. Everything to do a perfect job.

No. 11A1. Complete Kit...**\$2.32**

(C) **CABINET TOUCH-UP KIT**
 Includes light and dark stain, brushes, zipping cloth and scratch filler. To service scratches and dents on the job.

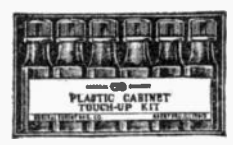
No. 11A18. Complete Kit...**59c**



FRENCH VARNISH KIT

Contains French Varnish, Emulsion, Polishing Pad and directions to blend cabinet repairs with old finish.

No. 11A10. Per Kit...**73c**



PLASTIC TOUCH-UP KIT

Contains six shades of lacquer enamel and brushes. Easy to touch up scratches and nicks in plastic cabinets.

11A63. Per Kit...**73c**



SCRATCH REMOVER KIT

Kit contains 6 Stain Crayon fillers and 2 bottles of scratch fluid. For light and dark shades of wood.

11A58. Per Kit...**73c**

VARNISH, STAINS, ETC. FOR CABINET REPAIRS

FRENCH VARNISH
 Blends the repaired part with the original. Easy to apply and dries fast.

11A13. 4-Oz. Bottle...**41c**

PENETRATING STAIN
 Spirit Type. To cover scratches and nicks on cabinets, furniture, pianos, etc. Penetrates, darkens the corners.

11A9. 1/2-Pt. Bot. Walnut shade...**73c**

SPIRIT VARNISH STAIN
 Fast drying, durable varnish with the finishing stain in it. Walnut shade.

11A14. Per 1/4 Pint...**44c**

PORCELAIN GLAZE
 Easily fills in those nicks on porcelain. Use on refrigerators, washers, etc. Merely fill in the nick and smooth over top.

11A16. Per 2 Oz. Bottle...**44c**

SCRATCH STICK
 Contains filler and scratch polish in one. Handy for tool kit or pocket.

11A17. Each...**21c**

SCRATCH REMOVER POLISH
 Contains proper stains to eliminate surface scratches on cabinets.

Size Dark Shade Light Shade Ea.

2 Oz. 11A59 16A437 15c

8 Oz. 11A60 16A438 27c

LEMON OIL POLISH
 Polish sets after repair for customer good will. Fast working. Low cost.

11A7. 16 Oz. Bottle...**32c**

RUBBING OIL
 For rubbing down newly finished cabinets or furniture. Takes off the high gloss and produces satin-like finish.

11A8. Per Quart...**56c**

PAINTS — VARNISHES — COMPOUNDS



DIAL LITE COLORING KIT

Long lasting coloring for multi-colored dials. Instant drying. Bright colors of red, green, blue, amber, purple, and solvent. Dress up those old sets.

11A65. Per Kit...**50c**

POPULAR TELEPHONE BLACK and GRAY

Satin finish lacquer enamel of rich professional looking appearance. Not glossy, it is a lasting, fast drying, one-coat finish. Black will produce an ebony black finish that is so familiar on telephone devices. Is excellent for panel work and



R M A COLOR CODING KIT

Kit contains jar each of red, gray, white, black, brown, orange, purple, blue, green and yellow high quality fast drying lacquer enamel. Complete with brush and color code chart.

11A57. Per Kit **\$1.03**



"RUF-KOAT" AIR DRY WRINKLE VARNISH

Require No Baking or Heating, Dry Fast. Same professional finish as used on P.A. Test equipment, I.F. transformers, chassis, panels, racks, etc. Easy to apply.

Can be brushed or sprayed.

Size	Black	Gray	Brown	Ea.
2 Oz.	11A47	11A49	11A51	35c
1/2 Pt.	11A48	11A50	11A52	\$1.03



LUMINOUS LITE-KOAT KIT

"Glow in the Dark" A long-life, non-poisonous luminous coating. Ideal to coat or stripe dials, knobs, switch plates, panels, etc. Kit contains Lite Koat Powder, Mix-Koat and brushes.

16A436. Per Kit **97c**

RADIO CHEMICALS

CONTACT AND CONTROL REPAIRS

Specially made to eliminate noise on controls and contacts without taking them apart.



CARBON CONTROL CLEANER

Repairs noisy volume controls, switches, etc., while chassis is in cabinet. Removes oxidation and minimizes future trouble by coating contacts. Special applicator supplied.

No. 16A443. 2 Oz. Each...**44c**

CONTACT SILVER PLATE

For plating new or worn contacts and metals (Copper, brass, bronze, zinc, German and nickel silver) without special equipment. Merely wipe into metals with soft cloth.

No. 16A439. 2 Oz. Each...**44c**

CARBON TETRACHLORIDE

For cleaning electrical controls and contacts. Brush supplied in bottle.

No. 16A580. 8 Oz. Each...**50c**
 No. 16A581. 16 Oz. Each...**88c**

GRAFOLINE

To eliminate noise on wire-wound controls, switches and contacts on tube prongs.

11A24. 2 Oz. Bottle...**29c**

CONTACT DOPE

To prevent corrosion and eliminate noise on electrical or radio switches, contacts, relays, etc. Put up in handy, long-neck tubes.

11A22. Per Tube...**24c**

CARBON-X

For noisy carbon controls. Apply on the worn and noisy spots and the job is done.

11A23. 2 Oz. Bottle...**59c**

LUBE-REX

Moisture repellent, rust and corrosion preventive, and cleaner for all types contacts, switches, attenuators, locks, reels, guns, dial mechanisms, phone equipment, etc. Clings to metal.

11A21. Per 2-Oz. Bottle...**29c**

CONTACT AND ATTENUATOR SERVICE KIT

Consists of special contact cleaner and corrosion lubricant for noisy attenuators, tuners, all wave switches, variable contacts, etc. A handy kit.

11A20. Per Kit...**59c**

CONTACT AND CRYSTAL CLEANER

To clean crystal and delicate contacts without injury.

11A19. Per 2 Oz. Bottle...**24c**

"Q-DOPE"

For HF Coils, Insulation, etc. An ultra low-loss compound made from Polystyrene and recommended for HF work. Absolutely no loss in Q—fast drying, maintains coil characteristics.

11A25. 2 Oz...**29c**

ORIGINAL "LIQUIDOPE"

For holding all wave coil windings firmly in place. Automatically tightens winding and gives tough, protective film, assuring firmness and preventing characteristic changes due to moisture or weather. Non-inductive, fast and clear drying.

11A26. 2 Oz. Bottle...**29c**

PAINT & LACQUER THINNERS

Paint Thinner—For Ruf-Coat, Krome-Koat, B-K Cement, Insulating Varnish and Rubber Cements.

No. 16A576. 2 Oz...**24c**

No. 16A577. 8 Oz...**50c**

Lacquer Thinner—For lacquers, lacquer enamels, telephone black and gray, etc.

No. 16A578. 2 Oz...**24c**

No. 16A579. 8 Oz...**50c**

-CRYSTALLIZING LACQUER

Produces a professional crystal effect on metal panels or parts. Can also be used for wood or other materials. Easy to apply, quick drying.

11A53. 2 Oz. Bottle. Black...**35c**
 11A54. 1/2 Pt. Can...**\$1.03**

Service Items, Dial Belts and Accessories

Electronic Chemical Laboratory



In heavy steel rack. Contains 19 different bottles of service cement solvent, wax, polish, contact cleaner, coil dope, insulating varnish, carbon tetrachloride — fabric to metal, rubber to metal, and plastic cements—carbon-X, lube-rex, liquidope, grafoline, non-slip, rek-o-dope, and dial oil. Rack, finished in beautiful luster gray. Will hang on wall, or stand on bench. List Price Value, \$11.12. **No. 33A70. Net Complete \$7.20**



Radio Chemical Kit

8 radio chemical necessities, including bottle each of Service Cement, Rubber Drive Cement, Carbon X, Grafoline, Scratch Polish, Non-Slip Dial Compound, Dial Oil, and Contact Cleaner. **No. 11A32—Per Kit \$1.76**



CEMENT LAB-KIT

A cement and adhesive for every conceivable use and purpose. A necessity in every shop and factory. **No. 16A569. Per Kit \$2.94**



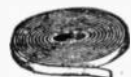
Insulating Cambric

Breakdown voltage 10,000 volts. Handiest item in any service shop for insulating. Prevents grounds and shorts on field coils, transformers, resistors, condensers, wires, etc. Dry, Yellow Cambric in rolls of over 210 square inches. **No. 11A29... \$4.00**



"Fish Paper"

High grade fibre sheet paraffined for insulation purposes. Fine for field coils, transformers, etc. .010 thick, sheet of 240 sq. in. **No. 11A30—Per Sheet \$2.9c**



Radio Friction Tape

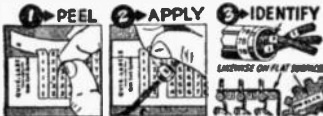
High quality friction tape, specially made for radio work. **No. 11A31. 3/4" narrow 65 ft. roll. \$3.2c**
No. 16A408. 3/4" regular 1/2 lb. \$4.7c



Turntable Replacement Felts

11A42—7 7/8" diam. Each... \$2.4c
11A43—9 1/8" diam. Each... \$3.5c
11A44—11 1/8" diam. Each... \$4.1c
Use Fabric to Metal Cement listed on opposite page to apply felts above.

QUIK-LABELS CODE CARD SYSTEM



Codes wires, leads, circuits, relays, and other parts fast and cheap. Easy to use, they stick-quick without moistening. Comes on handy card, 12 of each number, 1 to 16. **No. 19A259. Per Card \$1.5c**



Woven Fabric Made-Up Dial Belts

Exact duplicates of originals. Finest quality, heat and moisture proof. Treated to prevent slipping. State make and model of set for which desired. **21A1006. Each \$1.5c**
Kit of 25 with chart in handy steel box. No. 15A2023. Per Kit... \$3.94

Dial Cable Clips

Envelope of 50 for use on all types of Dial Drive Cord assemblies. Make up your own special cords with these clips. **17A1009. Env. of 50 Clips... \$2.4c**

Assorted Cable Spool

A sectioned spool containing 15 feet each of the three most popular types dial cable. **No. 11A71. Per Spool... \$1.47**



DIAL CABLES IN PLASTIC CONTAINERS

Containers are non-breakable and transparent.

Phosphor Bronze Cable

A good quality cable made of phosphor bronze wire, braided on a finely spun glass core. **11A66. Per 25-Ft. Spool... \$7.3c**

NYLON DIAL CABLES

Made of braided nylon as used by 95% of all sets.

No. 11A67. Extra Thin. \$7.3c
No. 11A68. Medium. \$7.3c
No. 11A69. Heavy. \$8.8c
25-Ft. Spool.

DIAL CABLE ASSORTMENT WITH METAL RACK

Hangs on wall. Has ruler to measure cable. Contains five 25-ft. spools, one each of Phosphor Bronze cable; Heavy, thin and extra thin nylon cables; Special thin bronze cable. **No. 15A2026. Per Assortment... \$3.82**

300-FT. DIAL CABLE ASSORTMENT WITH CORD RACK FREE

Replaces cord on nearly all sets since 1934. Includes 100-ft. each of Special thin cord, Standard cord, and Medium cord. **11A277. Assort. with Rack... \$5.22**



RADIO and PHONO Drives

No. 17A1004—Envelope of 2 No. 16 Phono Drives for General Industries RX-LX Motors, etc. Env. \$2.4c
No. 17A1005—Envelope of 2 No. 17 Phono Drives for Alliance Model 80 and Motorola Motors. Per. Env. \$2.4c
No. 17A1006—Envelope of 1 No. 18 Phono Drives for RCA. Env. \$2.4c
No. 17A1007—Envelope of 3 No. 19 Phono Motor Drives for Philco, RCA and etc. Per Env. \$2.4c
No. 17A1008—Envelope of 1 No. 20 Phono Drive for Detrola. Env. \$2.4c
17A1012. Spring phono drive for Detrola Model 550, etc., Utah, Trella and others. Each \$2.9c
A Kit of 25 assorted popular rubber friction drives for all popular models. **No. 18A70. Per Kit \$8.8c**

TURNTABLE SPRING ASST.

As used in most popular types of changers. **16A570. Assort. of 10 Small Sizes. \$2.4c**
16A571. Assort. of 8 Large Sizes. \$2.4c

Non-Slip Compound

A special compound for application to slipping dial cables, friction drives, belts, cords, etc. Makes them hold instantly. **POWDER. No. 11A73. 2-Oz. Bottle... \$2.4c**

LIQUID. No. 16A429. 1/2-Oz. Bottle... \$1.5c

Dial Cord Dressing

In sticks to apply to slipping dial cords and drives. **No. 11A74. Per Stick... \$1.5c**

Dial Oil

A special oil for radio dials and fine mechanisms. Treated with graphite. Long lasting. Will not gum. Handy 4-oz. spout can. **No. 11A75. Each... \$2.4c**

Dial Drive Cement

To cement rubber dial drives to metal shafts, rubber mountings to chassis, or any rubber to metal. **No. 11A76. 2-Oz. Bottle... \$2.9c**

DIAL PULLEYS

Kits of 6 assorted Brass idler dial pulleys, several sizes included. **17A1011. Per Assortment... \$2.4c**

Kit of 10 assorted Fibre idler dial pulleys, several sizes included. **11A80. Per Assortment... \$2.4c**

Assort. of 10 Aluminum Pulleys. Popular sizes. **No. 15A1116. Per Assortment... \$1.9c**

DIAL SPRING ASST.

Assortment of 25. Six popular sizes. **No. 11A77. Per Assortment... \$6.5c**

COMPRESSION SPRING ASSORTMENT

Used on dials, push-button tuners, phono motors, etc. **No. 17A1010. Assort. of 20... \$2.4c**

Cable Eyelet Tool

Consists of base and clincher. Handy for riveting or turning eyelets on dial cables. **No. 11A275. Per Set... \$5.9c**

Cable Clamps, Eyelets

Same as used on all dial cables. Assortment of 60 in plastic envelope. **No. 11A72. Per Assortment... \$2.4c**

Plastic Dial Crystals

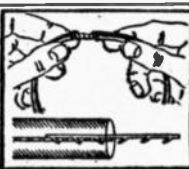
Special design makes it possible to use one basic crystal to fit any dial. Template, supplied with crystal, is used to cut a circle of any diameter with ordinary scissors. **Made of unbreakable plastic. It can be cemented firmly in place. For Radios, Clocks, test instruments, dash board dials, etc. No. 16A431. 6" Max. Diam... \$6.5c**
No. 16A432. 9" Max. Diam... \$1.06
No. 16A433. 8x10" Flat Sheet... \$9.7c

RADIO FABRICS FOR CONSTRUCTION or REPAIR AEROPLANE-TYPE FABRIC

Fabric used on all portable radios. Ideal for repairing, or modernizing portables, test apparatus, home-built radios, etc. **36" Wide. No. 21A1008. Per Yd... \$1.62**

LEATHERETTE FABRIC

For instrument cases, portables, etc. Same as used by most manufacturers on original cases. Ideal for repairing or new work. **36" Wide. No. 21A1009. Per Yd... \$1.62**



WALSCO "UNIBELT"

THE UNIVERSAL DIAL DRIVE BELT—CAN BE CUT TO FIT ANY DIAL DRIVE—Will Not SLIP or STRETCH Comes in 5-foot length spools and can be installed without taking dial mechanism apart. A real time and money saver. Eliminates the need for stocking numerous sizes of belts. **No. 19A1207. Per 5-Ft. Spool... \$1.62**

DeLuxe FELT-KOAT FLOCK BLOWER KIT



Professional job done without experience or special skill. Special designed gun distributes flock evenly and blows each fibre into the undercoat vertically, giving a smooth velvet finish. Use on phono turntables, Cabinets, grilles, tool boxes, hobby items, etc. Kit contains blower gun, cans of brown and ivory flock, brown and ivory under-koat, thinner, brush and instructions. **No. 16A417. Per Kit... \$5.59**

As used in above kit. **DE LUXE BLOWER GUN No. 16A418. Each... \$2.32**

FELT-KOAT FLOCK KITS

Kit containing flock, special applicator, and 4-oz. can of undercoat. **No. 11A6. Brown. Per Kit \$1.15**
No. 16A407. Black. \$1.15
No. 16A406. Ivory... \$1.15

FELT-KOAT FLOCK MATERIALS

Flock Undercoat
16A409 Brown. \$1.62
16A412 Brown. \$1.62
16A410 Black. \$1.62
16A411 Ivory. \$1.62
16A414 Ivory. \$1.62
1 1/2-Oz. Can. \$9.0c
8-Oz. Can. \$1.03
No. 16A415. Thinner. 8-Oz... \$3.2c

DUSTING GUN

Same gun as used in flock kit above supplied with a special pressure nozzle for cleaning out of radio parts, chassis, refrigerators, and cabinets. Nozzle can be removed and gun used for felt-koat flocking. **No. 16A521. EACH... \$2.67**

SPEAKER GRILLE CLOTH

Finest quality with beautiful tapestry effect pattern. **No. 16A521. EACH... \$2.67**



Finest quality with beautiful tapestry effect pattern.

Size	Brown	Ivory	Price
18x20"	11A45	16A434	73c
9x18"	11A46	16A435	34c
6x 6"	16A424	16A425	15c

METAL FLOCKED GRILLE SCREEN

For use on intercom systems, speakers, radios, or anywhere where a strong protective grille is necessary. Made of electro galvanized metal screen, it is flocked with a smooth rayon velvet-like flock on both sides. It can be bent to any shape, and is weatherproof for outside use. **Size 8x11". No. 16A522. Walnut. \$4.1c**
No. 16A523. Ivory... \$4.1c
Size 18x24". No. 16A456. Walnut. \$1.62
No. 16A457. Ivory... \$1.62

CHASSIS CLEANER

Removes dirt, grease, scum from radio chassis, etc. Non-explosive. Will not injure surface. **11A62. 8-Oz. Bottle... \$3.8c**

Laminated Bakelite Panels

For insulating parts, terminal strips, etc. Glossy Jet Black. Select quality. **6x6x1/16". No. 11A179... \$3.5c**

B.A. stocks All popular Radio Books



Elementary Phase

Ghirardi's Famous "Radio Physics Course" 36 BOOKS IN ONE VOLUME

Radio's leading school and home study text book. A remarkably complete course in radio, television and sound. Tells it in an easy to understand way. Gives all the essential facts about radio, from the simple fundamentals to the most intricate applications. Includes valuable and complete information on both servicing and experimentation, with hundreds of helpful illustrations which alone are worth the price of the book. It's the last word in a right book for any Radio Beginner, Student, Serviceman, Experimenter or Amateur—that's why it's endorsed and used by more technical schools than any other book printed.

16A46—Radio Physics Course, Latest Edition. 972 pages. 508 illustrations **\$5.00**

Elements of Radio

By Marcus and Horton
A-to-Z of basic radio communications. Learn radio in a few short weeks without previous instructions in radio, electricity, math, or physics. Features included: 535 working diagrams and illustrations... step-by-step directions for actually building experimental radio sets... non-technical explanations throughout Handbook style.

16A47. 700 Pages. Each... **\$4.17**

Understanding Radio

By Watson, Welch and Eby
601, 5 1/2x8" pages, 406 illustrations. A simple, clear explanatory text with ample illustrations and many plans for experimental equipment. Covers basic radio circuits and principles and gradually leads into a thorough unfolding of present day receivers, aeriels, and equipment.

16A54. NET EACH **\$2.94**

Radio Fundamental Principles and Practices

By Almstead, Davis and Stone
Prepares beginner for advanced training. Presents, clearly and concisely, fundamentals of radio theory and practice starting from the beginning. 219 pages.

No. 16A310. Net Each **\$2.20**

Laboratory Manual in Radio

By Almstead, Davis and Stone
Carefully selected and well-planned experiments for a high school course in fundamentals of radio. May be used with any standard text book. 16A82.

Net Each **\$1.00**

Manley's Radio and Electronics Dictionary

Cloth bound 6x9". More than 3,800 definitions of technical words and terms used in all branches of radio. 550 illustrations.

No. 16A55. Net Each **\$3.00**

"RADAR"

By John F. Rider, for students, hobbyists and layman. 16A150. Net Each **98c**

Cathode Ray Tube at Work

By John Rider. A review of the theory and operation of cathode ray equipment. Photos illustrate images produced in operation. 16A41. Net Each **\$3.92**

Radio Engineering

Terman's Radio Eng. New Revised 3rd Edition

609 illustrations. Completely rewritten to give up-to-the-minute information on FM, television, pulse technique, and all other phases of radio communication. Meet modern problems in radio design and research. 951 pages.

No. 16A75. Net Each **\$6.86**

Terman's Measurements in Radio Engineering

400 Pages 6x9"
208 Illustrations. A comprehensive discussion of the measuring problems commonly encountered by Radio Engineers. Gathers together information on measuring techniques and equipment, considerable attention being given to the construction of the most efficient and practical laboratory equipment.

No. 16A76. Net Each **\$4.41**

Terman's Radio Eng. Handbook

An exceptionally thorough and comprehensive reference book presenting technical information especially selected to meet the needs of the engineer dealing with practical radio and electronic problems. Charts, tables, circuit diagrams and concise text material simplify the solution of simple and complex problems.

No. 16A77. Net Each **\$6.86**

Henny's Radio Engineering Handbook Third Edition, 945 Pages

836 Illustrations. An extensive reference book prepared by 28 specialists. Contains abundant explanatory material, diagrams, formulas, and tables in each branch of the radio field. Covers everything from electric and magnetic circuits to such radio applications as television and facsimile.

No. 16A78. Net Each **\$6.86**

Elements of Acoustical Engineering

By Harry F. Olson
Revised 2nd Edition—Presents fundamentals and applications of modern acoustical engineering in all its phases. Solves problems in complex dynamical systems such as loud speakers, microphones, phonograph pick-ups, telephone receivers, etc. Includes a large number of practical formulas, tables and graphs. 537 pages. Cloth Bound, 6x9".

No. 16A572. Net Each **\$7.35**

Electron Tubes

Guide to Cathode Ray Patterns

By Merwyn Bly. A brief but important book for technicians, laboratory workers, and students in radio. Consists of sketches and captions summarizing the cathode ray pattern types encountered in the usual course laboratory as test bench work. A section of simple graphic analysis is included.

No. 16A74. Net Each **\$1.71**

Photocells and Their Applications

By Zworykin and Wilson, 2nd edition, 348 pages, covering theory and practice, including television, talkies, facsimile, etc.

No. 16A98. Net Each **\$3.43**

Miscellaneous

Practical Radio Communications

By Nilson and Hornung

Combines theory and practice into a well balanced complete course; It includes High Frequency, Frequency Modulation, ohm's law problems, principles of a.f. amplifiers, cathode ray oscilloscope, antenna relays, u.h.f. theory and practice, aviation radio and marine radio.

16A85. Net Each **\$6.50**

American Electrician's Handbook

By Terrell Croft. Revised 5th Edition. 1600 Pages.

Covers fundamentals, generators, motors, outside distribution, interior wiring, transformers, and electric lighting. Full description, definitions and methods. Fully describes up-to-date applications and codes. Covers 1935 National Electric Code. World famous among contractors, linemen, and general electricians.

16A91. Net Each **\$6.00**

U.H.F. Radio Simplified

By Milton D. Kiver. Explains U.H.F. in plain English. Proceeds from ordinary radio circuits to ultra high frequency radio. 242 pages.

No. 16A64. Net Each **\$4.41**

Inductance Authority

By Edward M. Shlepe, B.S., M.E.E.
Contains all necessary information on coil design. Covers all radio frequency bands. Entirely dispenses with all computation. By using the charts accuracy to 1% is attained.

No. 16A73. EACH **\$2.50**

Inside The Vacuum Tube

By John F. Rider. Gives simply and clearly with illustrations and pictures the theory of the vacuum tube and its operations. 424 pages.

No. 16A108. Each **\$4.41**

Aircraft Radio and Electrical Equipment

By H. K. Morgan of TWA. Equipment described simply and clearly for a complete understanding of it and ability to operate it. Illustrated with photos, diagrams, charts, etc. 374 pages.

No. 16A83. Each **\$4.50**

Servicing

Elementary Servicing

By William R. Wellman. Describes simply basic principles and operations of trouble-shooting and repairing of radio receivers. Gives in detail procedure in using signal tracing, voltage analysis, resistance measurement, alignment, etc.

No. 16A321. Net Each ... **\$3.75**

Advanced Radio Servicing

By M. N. Beitman
Series of 30 Lectures in Manual Form. Practical help on the business side of radio, as well as servicing. Describes circuits, operations, and applications of modern test equipment. Also material on radio circuits, advance trouble-shooting, FM and Television. Contains thousands of hints and suggestions to speed up routine jobs.

No. 16A327. Each **\$3.00**

FM and Television

Television: The Electronics of Image Transmission

By Zworykin and Morton of RCA
Authoritative, well organized, written in direct clear-cut English. A complete treatise on electron optics and television transmission and reception. 646 pages.

16A97. Net Each **\$7.00**

Television Simplified

By Milton S. Kiver
Written simply without involved theory, it proceeds from an analysis of circuits and the operating fundamentals of FM to the repairing of television sets and the explanation of an actual trouble-shooting system. 200 illustrations, 375 pages.

No. 16A342. Each **\$5.88**

FM & Television Receiver Servicing by Kiver

Gives directions for the installing of TV receivers; and the diagnosing, locating, and repairing of FM and television receivers. Given in a logical step by step manner it includes complete alignment and servicing instructions. 216 pages.

No. 16A358. Net Each ... **\$2.89**

Principles of Television Engineering by Fink

Designed to familiarize the radio technician with television engineering. Covering the television system completely, it gives information on reception and transmission, and supplies design data and descriptions of modern equipment. 313 illustrations, 541 pages.

No. 16B112. Each **\$5.39**

FM by Hund

Thorough, practical presentation of frequency modulation engineering, covering basic principles and their application. Compares amplitude, phase, and FM and covers FM transmission, receivers, and antennas.

16A95. Net Each **\$4.50**

FM Simplified

By Kiver. Gives a clear explanation of FM receiving circuit principles, FM transmitters, and commercial FM receivers. Includes practical details on installation and servicing. 347 pages.

No. 16A573. Each **\$5.88**

Supreme FM and TV Manual

A giant size manual of factory data for trouble-shooting, repairing, and alignment. Just the material you need to fix any FM or TV set. Contains circuit diagrams, explanations, and service hints. Covers all popular makes including FM tuners.

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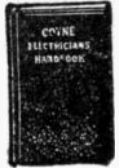
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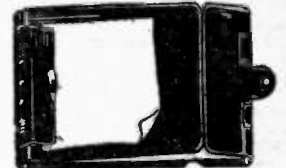
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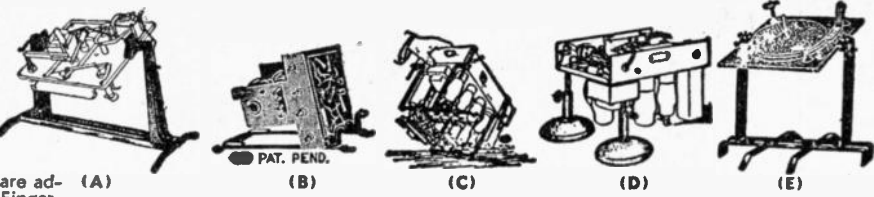
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Improved Extra - Sturdy construction eliminates wobble, provides rigid dependable operation. Holds any radio, amplifier, or record-changer chassis in any position for inspection, repairing, or assembling. Non-slip jaw-type clamps can be rotated to quickly change chassis to any angle. Uprights are adjustable to suit chassis width. Fingertip control provides fast easy manipulation.

Standard Model — Made of pressed steel.
No. 11A226. EACH..... **\$4.95**
Deluxe Model — Made of cast aluminum.
No. 33B85. EACH..... **\$6.81**

CHASSIS & TURNTABLE CRADLES & STANDS

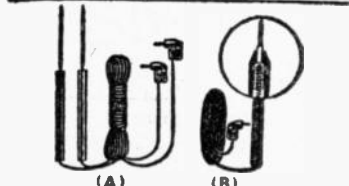


CHASSIS JACKS (D)
Use it to prop up set on bench. Adjustable to fit any set or condition. Made of metal.
No. 11A44.
Per Pair..... **\$1.15**

G-C PHONO TURNTABLE SERVICE STAND (E)
Here it is—an adjustable stand to hold phono turntable for repairs and adjustments. Raises turntable 15" above bench for checking of mechanism from every angle while in operation. Unit easily pivoted on swivel joints so repairs can be made without removing turntable from stand. Simply adjusted to all sizes and types. Sturdily made of steel.
No. 15A2030. Each..... **\$3.91**

CHASS-EZ New G-C Wonder Tool (B)
Adjustable to hold straight or flanged type chassis of any size. Simple—no parts to lose; fast to install; easy to use.
No. 16A537. Net Each... **\$2.15**

Radio Chassis Guards (C)
Fits any chassis. Easy and Fast to apply! The answer to the Radioman's problem — protects Tubes and Parts, while working on set in any position.
No. 11A3.
Per Pair..... **\$1.32**



SLIM-LINE TEST LEAD
(A) Long vinyl-insulated shaft permits probing in closely wired circuits without fear of shorting. Red and black tenite handles. 48" wire lead. Supplied with molded phone tip plug.
No. 16A517.
Per Pair..... **88c**

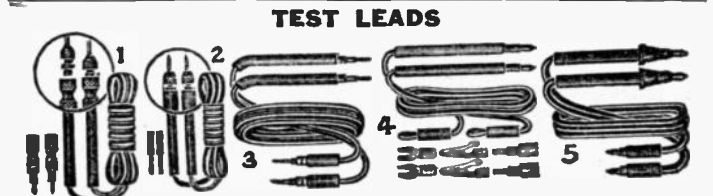
SAFE-T-TESTER
(B) Prod makes contact only when pressure is applied to barrel handle, eliminating danger of shorting. Ideal for probing in cramped spaces. Conductor is insulated for 10,000 volts. Has 7" handy grip handle, and 48" test lead with phone tip plug. Specially applicable to television needs.
No. 16A519.
Each..... **88c**

Pocket Alignment Kit
Contains 6" long metal tip insulated low inductance screwdriver, 7" insulated no-metal alignment screwdriver, combination screw nib and driver for use on RCA Sets and a combination alligator and 1/4" metal hex. wrench, all in leatherette case. A most handy, all-purpose alignment kit.
No. 11A231. **\$1.76**
Complete Kit.

Alignment Tool Set
4 Tools in One
When closed, is fountain pen size. Has 1/4" and 5/16" nut wrenches, small blade screwdriver, and a full size screwdriver. Made of finest bone-fibre.
No. 11A150. YOUR COST... **79c**
3 Tools in One. Identical to above except less full size screwdriver attachment.
No. 11A151. Each..... **50c**
With Metal Tips. Same as above but with metal ends for longer wear.
No. 11A156. Per Set..... **73c**

MINIATURE TUBE-PIN STRAIGHTENER
A handy tool that will make the job of straightening the pins on miniature 7 pin tubes a simple one. Assures socket contact. Made of steel.
No. 17A434. EACH..... **59c**

Dual Purpose Aligning Tool
For IF and "K-tran" midjet transformers. All-insulated tool made of trim fiber, and milled at one end; screw driver at other end.
No. 16A520. Net Each..... **44c**



TEST LEADS
Made up of best quality flexible, LABORATORY TYPE—FIG. 1 With removable phono needle chucks and 6" slim red and black handles knurled at end for finger grip ease. Heavy duty kinkless wire with knurled grip handle, insulated solderless plugs.
11A166, ICA Type 400. Each **97c**
PHONO NEEDLE TYPE—FIG. 2 With chucks in which phono needles can be replaced at will. Slim handles and extra flexible kinkless wire and standard phone tips. Slim 4" red and black handles. **53c**
11A167, ICA Type 382. Each **53c**
UNBREAKABLE TYPE—FIG. 3 Long, narrow brass handles covered with shockproof live rubber sleeves. Needle point prod and insulated solderless plugs.
11A168, ICA Type 331. Each **68c**

kinkless wire 48" to 50" long.
ALL PURPOSE TYPE—FIG. 4 Sturdy slim 6" Fenolite handles with sharp point tips. Equipped with banana plugs allowing for interchange of spade lugs, phone tips or alligator clips all supplied.
11A169, ICA Type 312. Complete Kit..... **\$1.47**

HIGH VOLTAGE TYPE—FIG. 5 Safety up to 10,000 volts. For use wherever high voltage prevails. Has low voltage drop due to heavy copper leads. Large diameter 6" prods with guards to prevent finger slips. Leads are of 18 gauge 67/36 copper with heavy wall. Handles and prods of bakelite with very little metal exposed.
11A170, ICA Type 475. Ea. **\$2.35**

Weston Type Test Leads
6" long handles of red and black phenolite. Molded finger grip tips.
11A171. Type 371. Ea. **\$1.03**

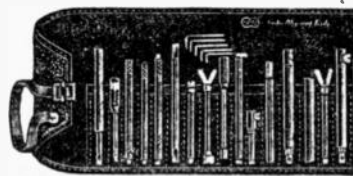
"15000" Volt Test Leads
Reiner "Scientific" 15,000 volt leads with a good safety factor. Made up attractively of Heavy Duty Kinkless Wire, 7" Heavy Duty Prods with triple barrier leakage guard and thumb rest, hardened steel prod points and insulated tip handles. 54" long over all.
No. 15A2031.
Net Per Set..... **\$2.91**

Adjustable Neut. Tool
No metal parts. Extension screw-driver on end, Hex socket on other. Tough bone-fibre, shock proof. Long—ideal for crowded spaces. Extends 6" to 11".
No. 11A152. Each..... **39c**

Duplex Alignment Metal Tip Screw Driver
Low inductance metal tip on both ends, made of "Genflex" material. One end is 1/4" and other is turned down to 1/8" diameter for small holes. Strong, durable, completely insulated.
No. 11A312, Each..... **44c**
No. 11A313, as above, except metal tip on one end only.
1/4" dia. x 6" long. Each... **24c**

Handy Flexible Tools FOR THE HARD-TO-REACH SPOTS
Equipped with flexible, unbreakable shaft. Screwdriver has locator to locate slots of screws. Socket wrench can be used as a probe to locate unseen nuts.
Screwdriver. No. 16A514. Net Each.. **\$1.18**
Socket Wrenches. No. 16A515. 1/4" Hex. Net **88c**
No. 16A516. 5/16" Hex. Each

"AMO" MINIATURE TUBE PULLER
Extract and replace miniature tubes easily from the hard-to-reach places without breakage, or burning the hands. Simple to operate.
No. 17A1095. Each..... **97c**



No. 15A2027. **\$11.73**
Per Set, Each



No. 15A2028. As above except in steel box **\$11.73**

G-C Professional Alignment Kit
30 Alignment and Neutralizing Tools in a handy leatherette roll type case.

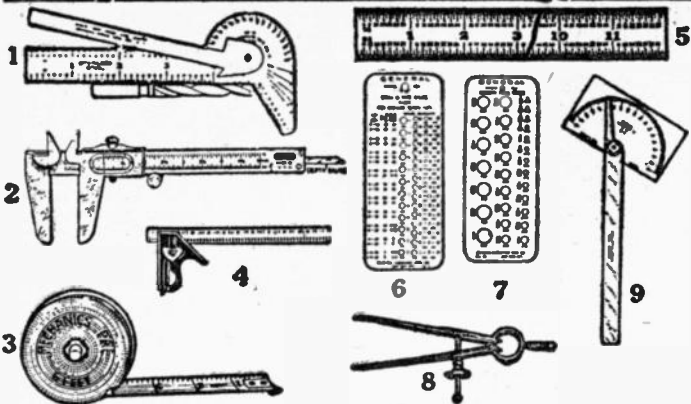
Handy Alignment Kit
Complete enough to take care of most sets. In a handy roll type case.
No. 15A2029. Per Kit... **\$3.68**

Neutralizing Tool Kit
Handy kit for balancing most radio receivers. In a leatherette roll type case.
No. 11A154. EACH..... **\$3.97**

G-C Test Probe
Handy to "dig-in" to find the trouble. Fiber point on one end and metal hook on other.
No. 11A311, Each..... **29c**

Dial Cable Adjuster
Replaces slipped-off dial cable over drive drum. Permits easy manipulation in cramped spaces.
No. 16A469. Net Each..... **44c**

Popular Tools for All Purpose Needs



① Multi-Use Rule and Gauge
Combines a 4" rule with 32nd and 64th scale, a drill point gauge; a square, a bevel protractor, a circle divider, center finder, and tap drill table. Made of stainless steel with leather case.
No. 11A196. Net Each..... **98c**

② Vernier Caliper
1001 Uses Every Day. Made of cold rolled steel, graduations deeply etched of 1/16" and 1/32" permit close readings. Inside jaws offset and may be used for scribing circles or dividers. 5" capacity. Vernier reading and depth gauge.
No. 11A195. Your Cost, Each **98c**

③ Combination Square
A 12"x1" steel blade with clearly etched figures and graduations. Graduated in 8th and 16ths on one side and 16ths and 32nds on the other. Black enameled beam is equipped with a level and scribe.
No. 16A472. EACH..... **\$1.25**

④ 6-Ft. Retractable Rule
Handy 6-foot rolling rule with push-button return. Steel case.
No. 11A230. EACH..... **38c**

⑤ 12-inch Steel Rule
Mechanic's Stiff Tempered 12" steel rule, 1" wide. One side calibrated in Quick Reading 32nds and 64ths, other in 8ths and 16ths.
No. 11A303. Your Cost, Each **98c**

Steel 6-inch Rule with B & S Wire Gauge (Not Illustrated)
Handy pocket all-purpose rule that no serviceman should be without. Made of stainless steel with 1/32" and 1/64" graduations. Has American of Browne & Sharpe wire gauge. Reverse side has gauge numbers and decimal equivalents. With pocket clip.
No. 16A536. NET EACH.... **41c**

⑥ Drill and Wire Gauge
Of tempered steel, highly accurate, easy to read. Drill, tap size and decimal equivalents of each.
No. 11A193. EACH..... **98c**

⑦ Jobbers' Drill Gauge
Same fine quality as above.
No. 11A194. Net Each..... **98c**

⑧ Spring Divider
Well balanced of round stock, swage tapered. Equipped with tempered stiff spring, assuring uniform tension and easy operating screw and solid nut.
No. 11A221. 4". **\$1.43**

⑨ Stainless Steel Protractor
For accurately transferring angles, setting of bevels, etc., graduated from 0 to 180° in opposite directions. Made to standard protractor dimensions. Head 3 3/8"x2", arm 8" long.
No. 11A197. EACH..... **98c**

NEW CASCO ELECTROMATIC POWER TOOL KIT COMPLETE PORTABLE POWER WORKSHOP

Includes electric tool and 50 accessories for working glass, plastics, wood, metals, and other materials. Vastly improved — more accessories — yet lower priced than previous electri-craft model. Casco again scoops the electric power tool field with this new eye appealing 1949 electric power kit. Hobbyists-Amateurs, here it is. The answer to 1001 of your job problems. It does practically everything. Kit includes: New improved power tool with a built-in Static suppressor; 50 accessories; sturdy, lustrous, burgundy plastic case; Illustrated project booklet. Operates on 110-120 Volts AC-DC. List Price, \$19.95. Stock No. 32B252. YOUR COST, COMPLETE..... **\$12.97**



Lots of 4..... **\$11.97**
Each..... **\$11.97**

SPEEDWAY ELECTRIC HAND GRINDER KIT "16 Tools in 1"

It Cuts, Grinds, Cleans and Polishes on Wood, Metals and Plastics

Home craftsmen, mechanics, handy men—here it is. The powerful all-purpose Speedway grinder with 16 accessories for getting professional-like job done. Sturdy grinder is designed for better grip, fingertip control and full visibility at point of work. 20,000 RPM motor delivers sufficient power for effective use of small diameter cutters and stones.



Kit includes grinder, 16 selected rotary files, mounted stones, discs, brushes and wheels. Instruction Manual. All in a hinged and fitted wooden case covered with dark blue leatherette. Operates on 110-120 Volt AC-DC. List Price, \$13.95.

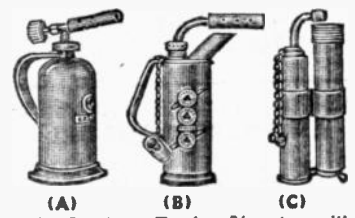
Stock No. 33B50. Dealers' Price in Single Lots. EACH..... **\$11.86**
Two to Eight. Each..... **\$9.77** Eight or More. Each..... **\$9.07**

SPEEDEX WIRE STRIPPER KIT

No crushing of wire with this automatic wire stripper. Kit comes complete with stripper and seven different size blades in handy steel box. Strips solid or stranded wire No. 8 to No. 30. No. 16B363. Complete Kit..... **\$10.00**
Automatic Stripper Only. For No. 14 to 30 wire. No. 16B364. Each..... **\$4.70**
Extra Blades. For use with stripper above. No. 16A594. For 10, 12, 14 wire. Each..... **88c**
No. 16A595. For Parallel No. 18 POSJ, Etc... **88c**
No. 16A596. For 300-Ohm Twin Lead..... **88c**

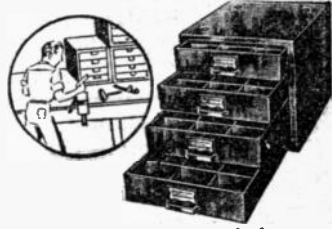


LENK ALCOHOL and GASOLINE TORCHES



(A) Gasoline Torch, 3/4 pt., with flame control, shut-off valve. 7 1/2" high x 3" dia. base. No. 11A253. Net Each... **\$1.99**
Alcohol Torch, same as above. No. 11A254. Net Each..... **\$2.15**
(B) Alcohol Torch—Double Burner, one for a needlepoint flame and the attachment for a heavy intense flame. Practical for fusing large terminal lugs and heavy duty soldering jobs. Size 7 1/2"x5 1/2"x2 1/4" No. 11A255. Net Each... **\$2.99**
(C) Alcohol Torch for light service needs. Compact, leak-proof. No. 11A256. Net Each..... **99c**

UTILITY CABINET



Keep Small parts and tools in one of these handy 4-drawer all-steel cabinets. Sectional design allows for use of one or more units. Add them as you need them. Cabinet Size: Width 10", Length 11 1/2", Height 10". Drawer Size: 9" Wide, 1 1/2" Long, 2" Deep. Twelve 3x2 3/4"x2" compartments in each. Removable partitions make possible alteration of each compartment size. Construction: Made of heavy gauge steel. Flush lap joint corners electrically welded. All edges hemmed. Finish: Outside of cabinet attractive grey ripple hard baked enamel. Wt. 9 lbs. 14 ozs. No. 34A162. Each..... **\$4.45**



(A) Folding Pocket Magnifier
Handy for vest pocket or tool kit, 1 3/4" diameter lens of 2 1/2" Power in moulded non-inflammable frame which folds into stiff leather case to protect lens.
No. 11A308. Your Cost, Each... **73c**

(C) Battery Hydrometer
Large size with beaded float.
No. 11A157. Net Each..... **54c**

(D) Inspection Lite
Light where you want it—110-Volt AC or DC. Just the light for service work in the field. Lights up those hard-to-see corners in chassis or refrigerators, also handy as a holder when coloring dial light bulbs. Dip bulb in coloring and job is done.
No. 11A83. Each..... **\$1.03**

WALSCO Staple Driver
Wire, cable, and other installations made easy and fast even in out-of-way places inaccessible to a hammer. Single stroke with hand drives staple home even to brick, etc. Holds 24 staples. 11A216. Driver and box of 250 staples..... **\$4.85**
No. 11A217. 250 Staples.... **35c**

NEW "Quick Strip" WIRE STRIPPER
A single tool which will strip insulation from solid or stranded wire sizes 12 to 22. Has tempered steel blades with special slot for scraping wire clean and a comfortable plastic handle.
No. 16A538. Net Each..... **56c**

BRISTOL WRENCH
For Bristol set screws. Has plastic handle with 1" long steel blade.
No. 17B685. SPECIAL, EACH. **15c**

KNOB PULLER
Makes the job easy. Simply slip behind knob and pull.
No. 15A122. Each.... **15c**

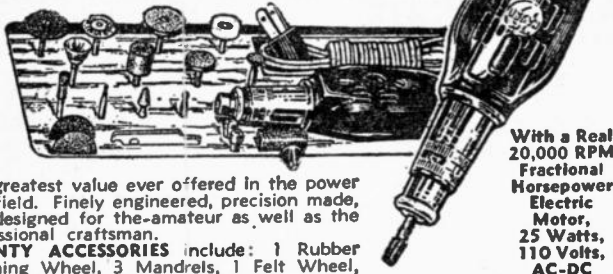
GREENFIELD REAMERS
(A) Tapers 1/8" to 1/2". No. 11A188. Each..... **\$1.23**
(B) Bit Shank Type. Tapers 3/16" to 15/16". Drop forged steel, tempered. No. 11A189. Each..... **\$1.55**
(C) Large Burring Type. For holes 1/4" to 1 1/4". Has bit shank. No. 11A190. Each..... **\$1.47**
No. 11A191. As above for holes 1/4" to 2"... **\$2.45**

Handy Tools for Service or all purpose needs

Complete Portable Power Workshop The POPULAR CASCO ELECTRO-O-TOOL KIT

Polishes, Engraves, Routs, Drills, Buffs,
Grinds and Saws ON Wood, Plastic, Glass,
Metal and Other Materials.

No. 36A14, Electro Tool and 20 Accessories. **\$9.97**
COMPLETE.....



With a Real
20,000 RPM
Fractional
Horsepower
Electric
Motor,
25 Watts,
110 Volts,
AC-DC

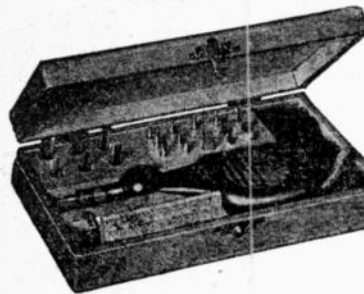
The greatest value ever offered in the power tool field. Finely engineered, precision made, and designed for the amateur as well as the professional craftsman.

TWENTY ACCESSORIES include: 1 Rubber Polishing Wheel, 3 Mandrels, 1 Felt Wheel, 3 Bristle Brushes, 2 Abrasive Separating Discs, 2 Collets, 1 1/8" Ball Cutter, 1 Dressing Stick, 1 1/16" Speed Drill.

KIT INCLUDES Casco Power Tool, 20 accessories, in Handy durable cardboard Box and informative instruction booklet. List Price \$14.95.

No. 36A14. DEALER'S PRICE COMPLETE **\$9.97**

BURGESS HANDICRAFT Vibra-Tool



With a Burgess Vibra-Tool you have electrical power at your finger tips to write your name on tools or other belongings... engrave jewelry... put designs on glass, metal, plastic... carve on wood... tool leather and a host of other big and little craft and shop jobs... all in a jiffy. Operates on 60 cy. 110 V. AC.

Stock No. 16A361, Vibra-Tool Deluxe Kit and 22 accessories with sharpening stone, complete in beautiful Hard Wood Chest. Ea. **\$9.90**

Stock No. 16A360, Vibra-Tool only—complete with standard engraving needle. Each **\$4.50**

Stock No. 16A351, Extra Standard Needle. Each **15c**

Stock No. 16A352, Hard Needles for tough metals and glass. Ea. **\$1.40**

STEEL TOOL MARKING SET

Machine made Roman face 1/8-inch letters and figures of good quality tool steel. Produces clear, sharp impressions for long wear. Letter set consists of nine characters including "6" and a period.

11A273. Per Set **\$2.97**

FIGURE SET

Consists of nine characters from 0 to 8, the "9" being also used for the "9".

11A274. Per Set **99c**

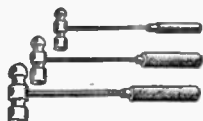


Handy Touch-Up Sprayer
Uses Spare Tire for Air

Operates on low pressure from spare tire or any other air container. Air-tight valve, adjustable spray tip, rubber hose and two 4-oz. jars. Handy for touching up cabinets, panels, etc.

No. 11A5. Complete **\$1.15**

All-Purpose HAMMER SET AN AMAZING VALUE!



Here's a handy trio for the workshop, hobbyist, and handyman. Precision made hardened steel ball pein hammers. Rust-proof plating. 8", 6 1/2", and 5 1/2" long.

No. 16A548. Set of 3. **87c**

"Removable" Tray Professional Chest COMPLETELY REDESIGNED AND NEW IN APPEARANCE

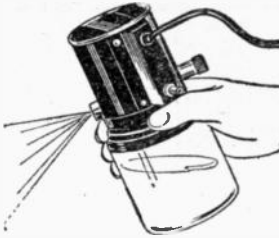


Of finest quality steel. Has two bolt catches; Built-in padlock eye in addition to regular key lock; rust-proof handle. Interior has forest green enamel finish, exterior a gray ripple finish. Of full lock-seamed construction with rounded cover design. Hinge of continuous type with lid opening entirely back. Reinforced corners stand hard knocks.

Sliding tray, size 15 1/4 x 4 1/2 x 1 1/2"; easily removed, narrow and need not be lifted to remove article below. Overall size, 16 x 7 x 7".

No. 36A13. YOUR COST... **\$2.93**

NEW... ELECTRIC PAINT SPRAYER



BURGESS VIBRO-SPRAYER COMPLETELY NEW AND DIFFERENT!

HOBBYISTS, AMATEURS, SERVICEMEN — Now you can get professional results with little work or equipment. Just the thing for doing those odd paint jobs around the home or shop.

A self-contained electric paint spraying unit that requires no accessory equipment and can be held in one hand. Plugs into 110 volts AC and will spray Enamel, Lacquer, Varnish, Insecticide, Disinfectant, etc. Includes Sprayer, assorted nozzles, 1/2-pint jar and instructions.

No. 20A591. EACH **\$6.00**

PLI-RENCH COMBINATION PLIERS, WRENCH CLAMP AND HAND VISE



Cadmium plated tool with self-aligning lower jaws. Gives full jaw-length grip on straight or angular objects with terrific power plus equalized pressure. Size 10".

No. 16A526. Each **\$1.46**

SWIVEL VISE



Has 2 1/2" jaw. Can be swung to any angle and locked to that position. Clamps to bench up to 2" thick. Wt. 4 1/2 lbs.

33A18. **\$2.35**
Net Each

BOSTITCH "3-IN-1" STAPLER



**DESK FASTENER,
TACKER,
HAND STAPLER**
For the school, shop or home. Handy for fast-

tening letters, checks, packages; tacking notices; sealing paper sacks; attaching tags and labels, etc. In your pocket—on work bench, counter, or desk—always convenient and ready to use. Includes box of 1,000 staples.

No. 20A592. **\$1.85**

Complete..... **35c**

No. 20A593. Extra Staples. **35c**

Box of 1,000..... **35c**



**Wire Stripper
and
5 in 1 Tool**
15c

Combination Wire Stripper, Screw Driver, Scraper, Cutter and Wire Winder.

11A276. Each **15c**

Amberlite Handle Wood Chisels



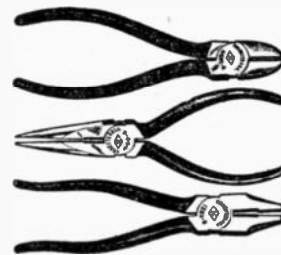
Handle absorbs blow from hammer without shock. Blades made from high grade chisel steel are brightly polished and treated with rust preventive. Perfectly suited for fine cabinet work. Set contains sizes 1/4", 1/2", 3/4", and 1" in a strong canvas roll.

16A365. Per Set **\$2.25**

SPECIAL VALUES IN PLIERS

Kraeuter "K" Line

Genuine Kraeuter quality, drop forged from a good grade of steel. Semi-polished heads. Blued steel handles.



DIAGONAL CUTTING PLIERS
For close cutting. Size 5".

No. 16A529. Each **\$1.29**

LONG NOSE PLIERS

Long tapered jaws with cutters and slender nose for getting into confined working space. Size 6".

No. 16A528. **\$1.50**

Each.....

SIDE CUTTING PLIERS

Electricians type plier with sturdy tap joint—milled jaws—hardened and tempered cutters. Size 5".

No. 16A527. Each **\$1.33**

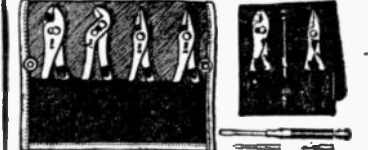
Each.....

6-IN. SLIP-JOINT PLIERS



Made of alloy steel drop forgings. Jaws are milled, and holes accurately punched. Heat-treated and hardened. Heavily cadmium plated.

No. 16A531. Net Each **45c**



(A) (B)

MIDGET PLIER KIT

(A) Four accurately designed, alloy steel pliers for a variety of small jobs in tight places. Standard and parrot nose types are slip-joint. Others are needle and flat nose. Each 4 1/2" long. Jaws are milled, handles knurled, tempered to correct hardness for long service. A quality kit in pocket size fabric roll.

No. 16A354. Net Per Kit. **\$1.91**

MIDGET TOOL KIT

(B) For hobbyists, sportsmen, home workshop, etc. Contains two midget pliers, standard type and needle nose, plus a three-in-one screwdriver with knurled brass handles (illustrated above in detail). In pocket size fabric case.

No. 16A353. **\$1.47**

INSULATED SPIN HEX NUT DRIVER

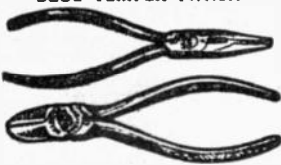


3/8" diameter, 6" long. 1/4" hex socket with long hollow shaft. Attached pocket clips. Shock-proof and break-proof.

No. 11A139. NET EACH... **63c**

Handy Tools for Service or all purpose needs

KRAEUTER PLIERS BLUE TEMPER FINISH



6" Diagonals for close cutting.
11A218. Each **\$1.96**
6" Long Nose Tapered jaws and
needle nose with cutter.
11A219. Each **\$1.91**
7" Extra Long Nose Tapered jaws and
narrow pointed nose.
11A81. Each **\$2.20**

Professional Needle Point Diagonals



5" Full polished diagonal cutter.
No. 16A470. Each **\$2.26**

MIDGET WRENCH SET



Handy pocket set that
fills the needs for
light work. Kit con-
tains: 8 midjet hex
sockets — 3/16" to
7/16", 3 midjet dou-
ble square sockets —
1/4", 5/16", 3/8". Spintite and hinge
handle.
No. 16A455. Complete, Ea. **\$5.27**

RADIO WRENCH SET



A very handy
set of sock-
et wrenches
which will
prove very useful. No service man
should be without a set. Made of
high grade steel with case-hardened
sockets. Has hollow handle for hold-
ing the sockets. Sizes are 1/4", 5/16",
3/8", 7/16" and 1/2". Handle is 7 1/2"
long and is heavily knurled, providing
a good gripping surface. Finished in
white nickel.
No. 16A368. Your Cost **75c**

Handy Pocket Wrench Set

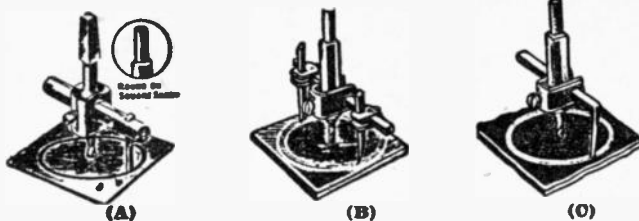
3 double end wrenches in leather
case. Sizes 1/4", 3/8", 1/2", 5/8" and
odd sizes.

KEY WRENCHES For HEX and SPLINE SOCKET WRENCHES



Set of 5 Hex Wrenches to fit set
screws No. 4, 6, 8, 10 and 1/4"
and cap screws No. 2 to 8. **24c**
No. 11A270.
Set of 4 Spline Wrenches to fit set
screws up to 1/4" and cap screws to
No. 8. **24c**
No. 19A1210
HEX AND SPLINE WRENCH KIT
Kit contains complete range of wrench
sizes used in the electronic trade.
Includes both hex (Allen) and Spline
(Bristol) wrench keys for No. 2 to
3/8" screws. In Leatherette roll type
case.
No. 15A123 Complete Kit..... **97c**

CIRCLE CUTTERS—A Type for Every Need



For cutting round holes in sheet steel, brass, aluminum, bakelite, hard
rubber, wood, plastics, and other materials. Drill acts as center pilot,
keeping cutter in constant alignment. Cross bar and cutting bits are
easily adjusted. May be used in slow speed drill press or hand brace.
Cutting bits are of high speed steel with exception of C.

"A" HEAVY DUTY Type 5. Cuts
holes 1" to 5 1/4" diameter.

11A181. Round Shank Choice Ea.
11A182. Square Shank. **\$1.95**

Type 4 (not illus.) like "A" but
smaller. Cuts holes 1/2" to 4". Has
comb. rd. or sq. shank.

11A183. Net Ea. **\$1.30**
12A1501. Extra Cutter for types 4
or 5 listed above. Ea. **30c**

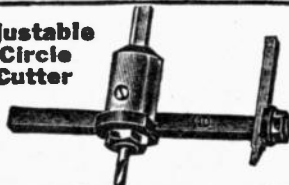
"B" Type 1. Cuts holes 1" to 4"
and beads edge at same time. Has
comb. shank. For medium work.

11A185. Net Ea. **\$1.95**
11A186. Like type 1 except
Less beading cutter **\$1.15**

12A1500. Extra cutters for
any above. Ea. **30c**

"C" JUNIOR. Cuts holes 1/2" to
2 1/4" for light work.
11A187. Net Ea. **80c**

Adjustable Circle Cutter



CUTS 3/4" TO 8-INCH HOLE

Hex shank fits either hand brace, or
electric drills. Has removable 3/16"
centering drill and adjustable 3/8"
square cutting bar.

No. 11A184. Each **\$2.95**
No. 12A1502
Extra Cutter **50c**

Greenlee Chassis Punches Driven by Screw Action.

Quick and simple.
Cutting done by
TWO-POINT punch
driven by 1/2" diam.
square head cap
screw, supported by
accurate die.
1/8" guide hole required at desired
location. Merely turn screw with
wrench until metal is cut through.

No.	Size	Ea.	No.	Size	Ea.
11A299	1/8"	1.94	11A215	1 1/4"	2.25
11A198	3/8"	1.94	11A202	1 1/2"	2.25
11A199	1/2"	1.94	11A203	1 3/4"	2.25
11A201	1"	2.11	11A204	1 3/4"	2.57
11A200	1 1/8"	2.25	11A205	1 3/4"	2.88
11A200	1 1/2"	2.25	11A223	2 1/4"	5.58

Extra Drive Screws For Above-For
5/8" 15A1129, For 3/4" and 7/8"
15A1130, For 1" through 1 1/2" 15A-
1131

Choice Each **25c**
For 2 1/4", 15A1132. Each **50c**

Square Hole Punch

Permits the cutting of
any odd shape hole
(square, rect., hex, ob-
long, etc.) on any size
panel or chassis. Will
cut up to 14 gauge
thickness of any metal.
A hammer or the only
other tool necessary.
11A206.
YOUR COST... **\$9.70**

KRAEUTER "K" PLIER SET

Drop forged
from a good
grade of steel.
Semi-polished
heads. Blued
steel handles.

1. 5" Diagonals
2. 6" Tapered
jaws with cut-
ter and slender
nose.
3. 6 1/2" Electricians type, sturdy Tap
joint, milled jaws, hardened and
tempered cutters.
No. 16A533 For
ALL THREE, Only..... **\$4.12**

Adjustable Hack Saw



Made by MILLERS FALLS. Adjust-
able for 2" to 12" blades. 4 posi-
tions. Sturdy construction. Black
composition pistol grip handle.

11A209. With 10" Blade
YOUR COST, **75c**

EXTRA BLADES—Made of special
analysis tungsten steel 1/4" wide,
with milled teeth.

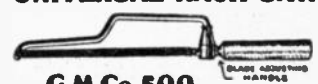
11A210—10". Ea. **10c**; Doz. **1.08**
11A211—12". Ea. **11c**; Doz. **1.19**

KLOSE KUT HACK SAW



Very Handy—Fits where or-
dinary hack saws cannot be
used. Will take any 10" blade,
and also uses broken blades. Nickel-
plated, buffed heavy steel frame.
No. 16A367. Complete With
Blade as illustrated. Each **75c**

UNIVERSAL HACK SAW



16A350 **35c** Extra Blades **10c**
Net Ea. 11A298. Ea. **10c**

"TOM THUMB" Hack Saw



Handy for cutting metal or wood
in those out-of-the-way places.
No. 11A297. Each **19c**
No. 11A298. Extra Blades, Ea. **10c**

KEY HOLE SAW

Very Handy, cuts wood or
metal.
No. 11A301, Net Ea. **35c**
No. 11A302. Extra Blades, Ea. **19c**

4-Way Offset Screw Driver



4 different positions for hard to get
at or tight screws where extra
leverage is necessary. Blades of
special hardened Chisel Steel. Over-
all length 5 1/4". Blades 1/4" wide.
No. 11A296,
Each **45c**

Reversible Blade Pocket Screw Driver



Handy for fine work. Made of
heavy knurled steel tubing with
hex head. Blades are tempered and
polished and will not turn in chuck.
Body dia. 1/4". Blade length 2 1/4".
11A304, 11A305. Extra
Each... **38c** Blades, Ea. ... **15c**

Plastic Radio Pliers



Weights only 1 1/2 ozs., a handy
pocket pliers—and because it's shock-
proof and non-magnetic—it can be
used on apparatus while in opera-
tion. 6000-V. breakdown. heat re-
sistance 240 to 300°. Tensile
strength of material, 5,000 lbs. per
sq. in.
No. 11A220. Each **90c**

Pioneer Chassis Punches Cuts Square Holes

Operates on the screw
principal for punch-
ing power similar to
conventional round
punches. Precision
machined of high
grade tool steels.

Size	Each
1/2"	\$1.94
3/4"	2.95
1"	3.50

Rivet and Eyelet Punch Set

For rivets or eyelets of
most used sizes. Tools
of hardened steel, base
cast iron, hex, sides to
hold in vise. Price in-
cludes assortment of
eyelets and rivets.

11A207. Each **\$2.35**
Net Each **53c**
11A208. Rivet and
Eyelet Setting Tool. Only... **53c**

Can't-Rol Center-Punch

Tempered steel with large head and
knurled grip.
16A366. Each **15c**

Handy Scriber

Knurled steel handle with chuck
that holds needle point and retracts
into handle when not in use.
11A271. Complete, Each... **45c**
11A272. Extra Points **15c**

NE-O-LITE ELECTRIC TROUBLE SHOOTER

Handy for radio men
and electricians for test-
ing AC lines, polarity
of AC or DC, for blown
fuses, tracing ground
line in AC circuits, as
an RF indicator, spark
plug and cable tester,
etc. Can be used on
voltages of 60 AC to 500
volts AC or DC.
11A84. Each ... **35c**

ELECTRIC DRILL SETS • Drills and Accessories



Fairchild ELECTRIC DRILL KIT
The drill with the perfect "Feel". New Streamlined Design, Modern, AC-DC 1/4" Light-Duty Drill. Ideal for Home and Professional Repairman. An Outstanding Value. Housing made of 2-piece precision cast aluminum alloy—improved sturdy, keyless 3-jaw chuck. Lacquer sprayed with hard finish that will not peel. Saw grip handle gives grip and balance that makes for greater drilling efficiency. Quality Fairchild AC-DC motor. Long-life cord and plug. Operates on 110-volt AC-DC. Included are a sturdy, steel on the job utility box and 20 "mechanics length" high grade steel twist drills in sizes up to 1/4"—10 drills pointed 118° for use in iron and steel and 10 drills pointed at 90° for use in wood and plastics.
No. 16A405. **\$16.95**
The Complete Kit Only..

Fairchild ELECTRIC DRILL Only

As described above, less box and drills.
No. 37A32. NET EACH.....

\$11.95

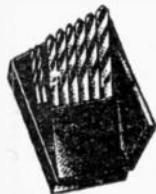
Century 18-PIECE HI-SPEED DRILL and WOOD BIT SET with TOOL BOX

Consists of Tool Box, size 10 1/2" long x 7" wide x 5" deep of 22-gauge steel with compartment designed to hold all popular 1/4" electric drills with extra space for other tools. Drills consist of 5 Carbon Steel Wood Bits with 1/4" dia. shank for Electric Drills and 13 Hi-Speed twist drills, a complete range of sizes from 1/16" to 1/4" by 64ths. Indexed Drill Holder in lid of tool box keeps drills at fingertips, space for each size and type of drill clearly marked for quick selection—rack tips forward for easy access to drills—when box is closed drills stay securely in rack.
No. 37A33. Tool Box with 18 Drills. PER SET.....

\$7.95

HI-SPEED and CARBON DRILL SETS

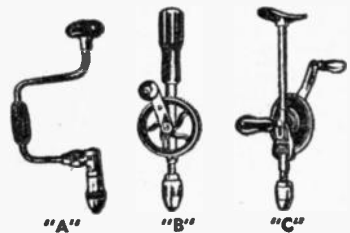
CENTURY THIRTEEN-PIECE HI-SPEED
V-13 Sizes 1/16" to 1/4" by 64ths. Contained in the famous all-steel Huot container, which opens like pages of a book, and stands on a bench with every drill accessible and identified as to size.
No. 16A382. **\$3.45**
Per Set.....



SEVEN-PIECE CARBON
F-7—Contains sizes 1/16" to 1/4" by 32nds with a sturdy red bakelite stand.
No. 16A381. Per Set **\$1.25**

FOUR-PIECE HI-SPEED
V-104 contains sizes 1/16", 1/8", 3/16", and 1/4" mounted on a card and cellophane wrapped.
No. 16A380. Per Set **\$1.15**

MILLER FALLS DRILLS



(A) RATCHET BRACE—Has Barber Chuck with alligator jaws. Mahogany head has steel-clad ball bearings. Metal parts are nicked and buffed. 10-inch sweep. **\$2.49**
No. 16A473. Net Each ...
(B) HAND DRILL—Steel Frame, cut gears. 3-jaw case-hardened chuck holds 0-1/4" round shanks. Length, 11". **\$1.59**
11A192. Net Each
(C) BREAST DRILL—3-jawed case-hardened steel chuck holds up to 1/2" round shanks. Cut gears, steel frame. **\$2.94**
No. 33A17. Net Each.....

HI-SPEED AND CARBON TWIST DRILLS

Size	CARBON		HI-SPEED	
	Stock No.	Net Each	Stock No.	Net Each
1/16	12A1509	14c	16A474	20c
5/64	12A1510	14c	16A475	21c
3/32	12A1511	14c	16A476	22c
7/64	12A1512	14c	16A477	23c
1/8	12A1513	14c	16A478	24c
9/64	12A1514	15c	16A479	26c
5/32	12A1515	15c	16A480	28c
11/64	12A1516	17c	16A481	31c
3/16	12A1517	17c	16A482	33c
13/64	12A1518	20c	16A483	35c
7/32	12A1519	20c	16A484	38c
15/64	12A1520	20c	16A485	42c
1/4	12A1521	22c	16A486	43c
5/16	16A496	27c	16A487	65c
3/8	16A497	38c	16A488	92c



Electric Drill Arbor FOR ATTACHMENTS NOT OVER 4" DIAM.
Enables using cutting wheels, wire brushes, buffers, etc. with regular Electric drill. Fits 1/4" chuck or larger.
11A228. Your Cost, Ea. **44c**

ARBOR ACCESSORIES

4x1/2" Emery Grind Wheel. **55c**
11A285. Net Each
4" dia. Scratch Brush. **76c**
11A286. Net Each
3" dia. Buffing Wheel. **39c**
11A287. Net Each

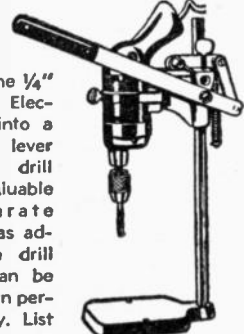
1/4-INCH ELECTRIC DRILL



A quality tool for precise work. Will take up to 1/4" drill with plenty reserve power due to double reduction steel cut gears and a special high-torque universal drill motor. Normal load speed, 600 RPM, correct for both carbon steel and high speed drills. Balanced design and light weight, 2 1/4 lbs., makes this tool a "honey" to use. Has nicely finished case and pistol-grip handle with toggle thumb switch and 6-ft. plug-in cord. Operates on 110-volt AC-DC. List Price \$11.80.
No. 16A539. Dealer Price **\$10.03**
In Single Lots. Each
Two to Eight. Each **\$8.26**
Eight or More. Each **\$7.67**

DRILL STAND

Converts the 1/4" SpeedWay Electric Drill into a convenient lever operated drill press. Invaluable for accurate drilling. Has adjustable drill mount. Can be bolted down permanently. List Price, \$5.25.



No. 16A540. Dealers' Price **\$4.46**
In Single Lots. EACH
Two to Eight. Each **\$3.68**
Eight or More. Each **\$3.41**

MILLERS FALLS AUTOMATIC DRILL



A push type drill that does a remarkably fast and easy job of drilling holes in hard or soft wood, plaster, soft metals, or other similar materials. The handle contains eight drill points, sizes 1/16" to 1/164" by 64ths in separate compartments with sizes marked. 4-jaw chuck holds points securely.
No. 16A549. Complete **\$2.65**
with Drills.....

G-C INSPECTION MIRROR
Just the thing for seeing in the chassis and inspecting coils, parts, and connections. With long handle, will get into most anyplace. **29c**
No. 20A573 EACH.....

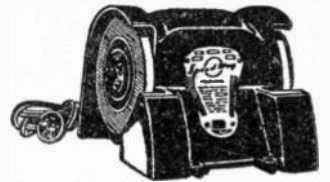
HOT VALUE Eagle 5-Piece Drill Set
Designed especially for use in hand drills. Has wider flutes for greater chip clearance, precision ground cutting edges. For metal, wood, or plastic. Drill sizes, 1/16 to 3/16 by 32nds. **45c**
No. 16A388. Per Set

ROTARY SURFACE SANDER FITS ANY DRILL PRESS OR 1/4" PORTABLE ELECTRIC DRILL



Produces a beautiful finish on wood, plastics, and metals. Results in true and even surfaces. Removes paint and varnish on cars, floors, sets, etc. Made of light weight aluminum. Sanding discs are changed instantly with special "Speed Cement". Sander includes tube of cement and 12 sanding discs. **\$2.58**
No. 20A590. COMPLETE.....
No. 20A588. Extra Tube of Cement. Each..... **18c**
No. 20A589. Set of 24 Discs. Per Set..... **72c**

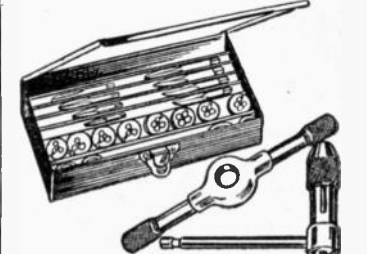
SpeedWay PORTABLE BENCH GRINDER



An electric grinder for every service shop, laboratory, and home work shop. Two grinding wheels—one coarse—one fine, 4 1/2" dia. x 3/8" thick. Runs smoothly, silently without creeping because it's beautifully balanced. Has a light, strong, 1-piece cast aluminum case, which completely houses motor, shaft and bearings, and provides wheel guards and tool rests. Bearings are bronze, self-aligning. Motor is 1/15 H.P. shaded pole type for 110-120 volt AC only. Finished in blue crackle enamel, with rubber bumper feet to prevent marring. Can be bolted down permanently. Has Off-On switch on base and 6-ft. plug-in AC cord. Length 8", height 6". Shipping weight 9 lbs. List Price, \$14.95.
No. 33B84. Dealer Price **\$12.71**
In Single Lots. Each
Two to Eight. Each **\$10.47**
Eight or More. Each **\$9.72**

THREADWELL TAP AND DIE SET Especially for the Radio-Man!

A tool set of the highest industrial quality—designed to fill a long-felt need in radio and hobby work. Contains just the sizes needed. Each die is provided with a pressed steel guide that assures a perfectly straight thread. Set contains one tap and one die of each following sizes: 2-56, 4-36, 4-40, 6-32, 8-32, 10-32, 12-24, 1/4-20; eight threading guides; a tap wrench and a die stock—plus a machinists' type wood box for the entire set.
16A541. Your Cost, Net **\$12.38**



MACHINE SCREW TAPS AND DIES
Threadwell carbon steel. Dies O.D. 13/16".

Size	Stk. No.	Each	DIES Stk. No.	Each
4-36	12A1503	32c	16A585	87c
6-32	12A1504	28c	16A586	87c
8-32	12A1505	28c	16A587	87c
10-24	12A1506	28c	16A588	87c
10-32	12A1507	28c	16A589	87c
1/4-20	12A1508	54c	16A590	87c

No. 16A591. Die Stock for Above Dies. EACH..... **\$1.20**

TAP WRENCHES
For holding taps, reamers, drills and other small tools. Has adjustable handle, knurled chuck shell, and tempered jaws. For sizes 1/16" to 1/4". **80c**
No. 16A471. Each



BIT STOCK DRILLS
Fits All Standard Braces

Stock No.	Size	Net Each
16A383	1/16	\$1.18
16A384	1/8	.20
16A385	3/16	.25
16A386	1/4	.30
16A387	5/16	.40

Soldering Irons, Solder & other handy tools

"DRAKE"—Quality, Yet Low in Price

ECONOMY MODELS

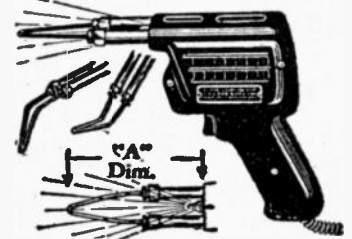
60 WATTS— $\frac{3}{8}$ " TIP. A VALUE!
Type No. 315. Excellent for light work. Highest quality nichrome wire in porcelain element. With 6 ft. cord, rubber plug and stand.
11A214. **\$1.00**
Only
16A508. Extra Tips..... **39c**

100 WATTS— $\frac{3}{8}$ " TIP. LOW PRICE!
Type No. 316. Highest quality nichrome wire in porcelain element. With 6 ft. cord, rubber plug and stand.
11A236. Only **\$1.73**
16A507. Extra Tips..... **59c**

NEEDLE POINT MIDCET IRON WITH TWO HANDY TIPS

Type 350, 35-Watt High Quality, mica-wound iron for meter and hearing aid needs, provided with two $\frac{1}{8}$ " tips, one standard and the other a special 45° angle tip.
No. 16A510. Each **\$2.06**
No. 16A511. Standard Tip. Chc. **10c**
No. 16A512. Special Tip. Ea. **10c**

Pull the Trigger, Start to Solder Within 5 Seconds



NEW! WELLER SPEED IRONS WITH SOLDERLITE

Power used only when trigger is held. Built-in spotlight focuses on work, making it easy to solder in dark corners. Loop tip has long reach to get farther down into work, and can be bent in any desired shape to solder around corners, etc. Easy to handle plastic case. Stays cool. Operates on 115 Volts, 60 Cycles A.C. 100 Watt Single Heat Model—for normal soldering.
20B102. Each..... **\$12.69**

Dual Heat Model—has second heat that gives 35% reserve power—instantly—when needed for chassis or other heavier soldering.
16A513. With "A" Dim. **\$14.65**
4" Long. Each.....
No. 20A570. For any need requiring Longer Reach. "A" Dim. **\$15.43**
8" Long. Each.....

20A103. Extra Tips **49c**
For Any Above. 6 For.....
16A598. New DUV2TIP. **24c**
Pkg. of 2.....

LONG LIFE TIP
For Weller Irons
Designed for long use without breaking or "Eating through." Chromium Plated.
16A550. Each..... **64c**

HEAT CONTROL
Controls heat of iron to keep it ready for instant use.
11A240. Net, Each **\$2.94**

100 Watt IRON with $\frac{3}{8}$ " Tip. Type 325. Ideal for general radio work. Highest quality Nichrome wire wound on amber mica. Complete with 6 ft. cord, rubber plug and stand.
11A233. Net, Each **\$2.76**
11A235. Extra Tip..... **39c**

Special 125 Watt "EXTRA HOT". Type 326. Special heavy service element, baffle fins keep handle cool. A favorite with service men.
11A284. **\$3.23**
With Stand
11A235. Extra Tip..... **39c**

DE LUXE MODELS

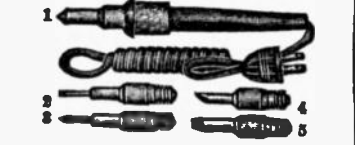
The Popular "400" for Tight Spots and Delicate Work. 60 watts with $\frac{1}{8}$ " tip—only 9" long, weight only 8 oz., yet will stand the "gaff" for even industrial use. Magic cup stand packed with iron.
11A237. Net, Each **\$2.91**
11A239. Extra Tips..... **32c**
500 Watt IRON with $\frac{1}{2}$ " Tip. Type 1400. For all heavy soldering $16\frac{3}{4}$ " long.
No. 37A5. Each..... **\$8.82**
No. 20A582. Extra Tips..... **\$2.35**

100-WATT MODEL 3138. This iron needs no description, it being an old stand-by in the industry for years. $\frac{3}{8}$ " tip, with 6 ft. cord and stand.
11A241. **\$5.36**
Your Cost, Each.....
11A242 **\$2.76**
Extra Element.....
11A243 **37c**
Extra tips.....

60 WATT MODEL 3128. A smaller "American Beauty" for lighter work and tight places. Plug type iron. $7/16$ " tip.
No. 11B244. Complete with stand **\$3.68**
No. 11B245. Extra Tips..... **30c**

THERMOSTATIC CONTROL (as Right).
To regulate heat of irons used at long intervals. Has adjustable thermostat. Made of durable plastic. Complete ready to use on 110 V. AC. 11A246. Each..... **\$4.41**
200-WATT MODEL 3158
For work of a somewhat heavier nature. Complete with $5/8$ " tip, stand, and cord.
No. 37A8. YOUR COST, EACH..... **\$6.41**
No. 20A576 EXTRA TIPS..... **73c**

NEW! UNGAR SOLDERING PENCIL



Features New, Cooler Handle of Durable Plastic and Ceramic Separators For double Safety.

For those delicate jobs and hard-to-reach places. Weighs only 3.6 ozs. Over-all length 7". Draws 17 watts. Note the wide choice of tips—one for every need. They screw in handle like a lamp.

Soldering Pencil, less tip.
11A247. Your Cost, Each..... **78c**
(1) $\frac{1}{8}$ " Standard Copper tip only. 11A248. Each **78c**
(2) $\frac{1}{8}$ " Chisel tip made of Elkloy A. 11A249. Each **78c**
(3) $\frac{1}{8}$ " dia. pencil tip made of Elkloy A. 11A250 **78c**
(4) Brass tip for plastics or marking. 11A251 **78c**
(5) Extra hot tip made of Elkloy A. 11A252 **78c**

Use It as Inspection Lamp. Regular S6 candelabra 110 V. lamp screws in place of tip and you have a neat service light.
S6 Lamp for light in tight places. 16A168..... **18c**

TWEEZERS for Soldering and General Use



(A) 7" Long, curved smooth point tweezers. 11A307. Each..... **38c**
(B) 6" Long common soldering tweezers, plain steel. No. 11A306. Each..... **21c**
(C) 6" Long Slide Lock, blunt smooth point tweezers, plated. No. 20A578. Each..... **34c**
(D) $5\frac{1}{2}$ " Long Self-Closing, blunt serrated points, plated. No. 20A577. Each..... **28c**

"AMERICAN BEAUTY" IRONS

100-WATT MODEL 3138. This iron needs no description, it being an old stand-by in the industry for years. $\frac{3}{8}$ " tip, with 6 ft. cord and stand.
11A241. **\$5.36**
Your Cost, Each.....
11A242 **\$2.76**
Extra Element.....
11A243 **37c**
Extra tips.....

60 WATT MODEL 3128. A smaller "American Beauty" for lighter work and tight places. Plug type iron. $7/16$ " tip.
No. 11B244. Complete with stand **\$3.68**
No. 11B245. Extra Tips..... **30c**

THERMOSTATIC CONTROL (as Right).
To regulate heat of irons used at long intervals. Has adjustable thermostat. Made of durable plastic. Complete ready to use on 110 V. AC. 11A246. Each..... **\$4.41**
200-WATT MODEL 3158
For work of a somewhat heavier nature. Complete with $5/8$ " tip, stand, and cord.
No. 37A8. YOUR COST, EACH..... **\$6.41**
No. 20A576 EXTRA TIPS..... **73c**

SOLDER FAST WITH "FLASH" SOLDERING IRON Streamlined, Perfect Balance, Non-Tiring Natural Grip TRIGGER CONTROLLED MODEL NEW "FLASH 75"



Operates Directly from 110 Volts A.C.-D.C. Quick heating. Has a natural gun grip with a cool, protected plastic handle. Light weight, handy to use. Comes complete with assortment of four tips shown below.
16A503. Each **\$3.28**
16A505. Replaceable Heating Element. Each **\$1.00**

Assortment of Four Tips—Containing $5/16$ ", $3/8$ ", Pencil, and Craftsman tips.
16A506 **\$1.00**

MALLORY SOLDERING IRON TIPS

Long Lasting Tips made of special copper alloy of great hardness and high electrical conductivity. Nickel plated to resist corrosion. Size $3/8$ " diameter, 4" length.
No. 20A575 For irons that are turned on for short periods only. **41c**
No. 20A574 For irons that are used continuously for long periods of time. **47c**

DRAKE SOLDERING ACCESSORIES



Ideal for tinning wires, etc. with speed, 110 volts AC-DC. Complete with cord.
(A) 300 WATT POT—Heavy duty type—Holds 2 lbs. of solder. Size of well $2\frac{1}{2}$ " dia. 2" deep. No. 37A6. Each..... **\$5.15**
(B) 150 Watt Pot—Holds 1 lb. of solder. Size of well $1\frac{1}{2}$ " dia. 1" deep. No. 37A7 **\$3.97**
EACH.....

STANDS



Model 11 Hooded Safety Stand—Prevents accidental burns of hands and test leads. No. 20A581. Each..... **73c**
MODEL 10 Plain Stand—As above except without safety hood. No. 20A580. Each..... **35c**
MODEL 12 Magic Cup Stand—Iron rest with "Magic Cup" for cleaning tips. No. 20A579. EACH..... **44c**

KESTER Rosin or Acid Core Solder

Put up in 1 lb. or 5 lb. spools and $3\frac{1}{2}$ oz. pkgs. and $3/8$ oz. CORE EACH

1 lb.	11A257	11A260	\$1.04
5 lb.	11A258	11A261	5.00
$3\frac{1}{2}$ oz.	11A259	11A262	.18

KESTER Thin Core Solder. Rosin Core. Diameter $\frac{1}{16}$ ".
11A263. 1 lb. **\$1.07**
11A264. 5 lbs. **\$5.15**

BURNLEY Soldering Paste. 11A267. Per 2 oz. can **10c**

Non-Stick Iron Tip Compound. Prevents tips from burning into soldering iron. Saves tip and iron. 11A288. Per 2 oz. bottle **29c**

TRI-CORE ROSIN FILLED SOLDER
16A500. 1 lb. Spool..... **\$1.04**
16A501. $\frac{1}{4}$ lb. Can..... **19c**

Screw Drivers • Socket Wrenches, etc.



XCELITE

SHOCK PROOF, BREAK PROOF AMBER PLASTIC HANDLE SCREWDRIVERS

Top quality Screwdrivers skillfully designed for better performance. Full sized handle is correctly shaped for grip and balance. Chrome Vanadium steel blade 4s accurately formed and ground, and firmly embedded in handle.

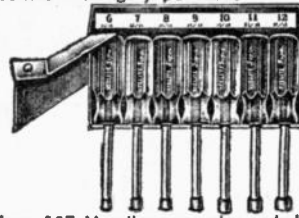
Blade Lgth.	1/8" Dia. Blade	3/16" Dia. Blade	1/4" Dia. Blade
3"	No. 11A85 27c	No. 11A88 45c	No. 11A92 57c
4"	No. 11A86 27c	No. 11A89 48c	No. 11A93 60c
6"	No. 11A87 27c	No. 11A90 54c	No. 11A94 68c
8"		No. 11A91 57c	
11A95—Stubby type 1/4" dia. x 1" long blade. Net Ea. 51c			

Phillips Type Screwdrivers

Stock No.	Size Blade	O'all Point Lgth.	Takes Screws	Net Ea.
11A96	3/8x3"	5"	Up to 4	\$.53
11A97	1/4x4 3/4"	7 1/2"	5 to 9	.79
11A98	5/8x6"	10"	10 to 16	1.09
11A99	3/8x8"	12"	18 to 16	1.21

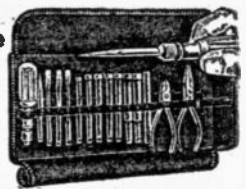
XCELITE SUPER DELUXE NUT DRIVER SETS

With Larger, Better Grip Handles Plastic handles, are newly designed to better fit the hand. Double heat-treated blades with double depth sockets are highly polished.



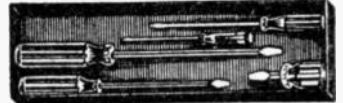
Type 127 Handles are color coded for easier selection of sizes. Metal container can be fastened to wall or work bench. Contains sizes 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", and 3/8".
No. 11A229. Per Set. \$4.03
Type 117 identical to set above, except with amber transparent handles (not color coded) and bench stand as in set illustrated below. \$3.79
No. 11A180. Per Set.

Handy Spin-Tite Set



Contains Chuck-Type Handle with Ream-awl, 3 Screw Drivers, 7 Spintites, 3/8" to 1/2", insulated neutralizing Alignment Wrench, a pair of diagonal pliers and a pair of side-cutting long nose pliers, all in a Leatherette Roll. No. 11A228. Complete, Only. \$9.11

Set of 5 Screwdrivers



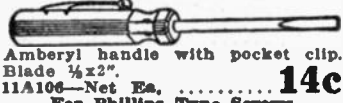
Shock-proof, break-proof ambery handles. 5000-volt insulation. Sizes: 5/16x8" sq. bit, 1/4x6" round, 3/16x6" round, 1/16x4" with pocket clip, 1/4x1 1/4" stubby. Set of 5 deluxe lifetime screwdrivers. 11A100. Per Set of 5. \$2.46

Set of 3 Thin Blade



Long, slim, narrow bits. Ambery 6,000 volt insulating break-proof handles. Blades of tough, heat-treated steel. Sizes, 3/8x4", 1/2x8", 5/8x8". 11A101—Your Cost, Per Set of 3 in Case. \$1.80

Small Pocket Sizes



Ambery handle with pocket clip. Blade 1/2x2". 11A106—Net Ea. 14c
For Phillips Type Screws
Ambery handle with pocket clip. Blade 1/4x1 1/4" with No. 1 point for Phillips type screws No. 4 or smaller. Over-all length 3 1/2". 11A107—Net Ea. 45c

Thin Blade for Set Screws



Small sizes—ideal for set screws in knob and other hard to reach places. Tempered tool steel blades. Ambery handles.

No.	Blade Size	Overall Lgth.	Net Each
11A103	3/32x2"	4 1/4"	22c
11A104	3/32x3"	5 1/4"	22c
11A105	3/32x4"	6 1/4"	22c



"Hold-E-Zee" Screwdrivers
Overall YOUR COST
11A110 5/32" 2" 4 1/2" \$.27
11A111 5/32" 4" 7 1/4" .47
11A112 5/32" 10" 13 3/8" .54

FOR RECESSED HEAD SCREWS (Phillips or Reed & Prince)
20A585 5/32" 2" 4 1/4" .47
20A584 5/32" 4" 7 1/4" .57
20A583 5/32" 6" 9 5/8" .62



LITTLE SHORTY
Ambery shock and breakproof handle. 5/32"x1 1/2" blade—4 1/2" overall. No. 11A113. Your Cost, EACH. 38c



For Cross Slot Screws One Size Fits All
Fits all Reed & Prince and other recessed head cross slot screws from the smallest to the largest. 3/8" round blade in ambery handle, over-all length 3 1/2". 11A102—Net Ea. 90c



Insulated Blade
Shock-proof, break-proof Ambery handle, with insulated blade. 11A114—Size 1/8"x6". Ea. 44c
11A115—Size 3/16"x8". Ea. 57c



All-Insulated Screwdriver
Ambery all insulated break and shock-proof screwdriver. 1/2"x6" all-insulated, hand forged vanadium 1/8" bit. 11A116—Each 42c



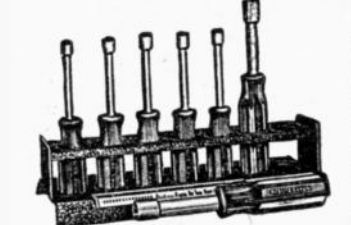
Phillips Offset Screwdriver
Handy for Tight Places Finest alloy steel, carefully finished points. 11A108, with Nos. 1 and 2 points for use up to No. 9 screws. 41c
11A109, with Nos. 2 and 3 points for No. 5 to No. 16 screws. 45c

XCELITE ADJUSTABLE SOCKET WRENCH WITH SCREWDRIVER BIT AND PLASTIC HAMMER HEAD

The handiest multi-use tool you ever owned—For shop, or home. Over-all length 6". C h r o m e - M o l y b d e n u m steel jaws open up to 1" for hex or square nuts. Plastic hammer or square shank screwdriver can be inserted for use easily and quickly. No. 20A586. Complete. \$2.06



Jeweler's Screw Driver Set
6 sizes, #0 to #5, each with hexagon swivel head. Removable blades are firmly held by threaded chuck, eliminating any back lash. 3" long x 3/8" dia.—total length, including blade, approx. 3 3/4". No. 11A309. Set of SIX. \$2.94



Type 137 Handles are color coded. Drivers are easily accessible from attractive metal stand. Contains sizes: 3/16", 1/4", 5/16", 11/32", 3/8", and Hollow Shaft Drivers 7/16" and 1/2". No. 20A587. Per Set. \$4.56

XCELITE NUT DRIVERS

Stock No.	Nut Size	Your Cost	Stock No.	Nut Size	Your Cost
11A128	3/16"	44c	11A133	1 1/2"	44c
11A129	1/4"	44c	11A134	3/8"	44c
11A130	5/16"	44c	11A135	1/2"	68c
11A131	3/8"	44c	11A136	1/2"	68c

ELECTROLYTIC CONDENSER NUT WRENCH
2" deep Socket; Ambery handle; 7" length overall. Choice Each
11A141. For 31/32" Nuts. 98c
11A142. For 1 5/32" Nuts.

XCELITE HOLLOW SHAFT NUT DRIVERS

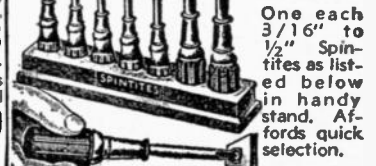
Stock No.	Depth of Hole	Nut Size	Nut Lgth.	Cost Each
11A143	2 1/2"	3/8"	6"	\$0.63
11A144	2 1/2"	1/2"	6"	.63
11A145	5"	3/8"	6"	.63
11A146	5"	1/2"	6"	.72
11A147	5"	3/8"	6"	.75
11A148	5"	1/2"	6"	.78
11A149	5"	3/8"	7"	.90

Handy Screw Driver Kit



Here in a handy pocket size tool roll are the necessary blade sizes to service the bulk of screw driver needs. Contains: one 1x3 3/8" Ambery handle with clutch; three regular blades, sizes 1/4x5", 3/16x4 1/2", and 1/8x4 1/2", and one each of No. 1 and 2 Phillips blades. No. 16A444. Per Set. \$2.22

"Spintite" Bench Set of 7



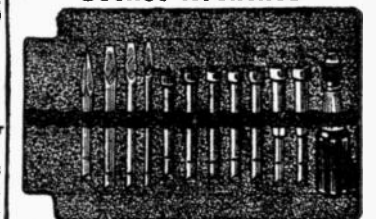
One each 3/16" to 1/2" Spintites as listed below in handy stand. Affords quick selection. 11A117—Complete Set. \$3.82
11A118—Bench Stand Only. Ea. 97c

Individual "Spintites"

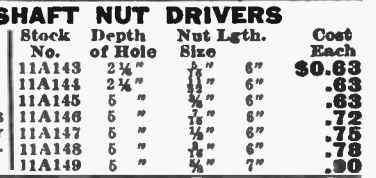
Use like a screwdriver. Built with a thin walled hexagon socket on end. Hollow shanks, socket reaches down over to grip nut.

Stock No.	Hex. Size	Your Cost	Stock No.	Hex. Size	Your Cost
11A119	3/16"	41c	11A124	1/2"	59c
11A120	1/4"	41c	11A125	1/2"	59c
11A121	5/16"	41c	11A126	3/8"	1.03
11A122	3/8"	41c	11A127	3/8"	1.03

Socket Wrenches



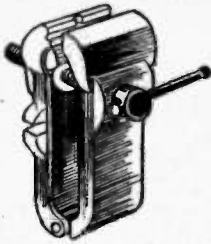
Leatherette Roll Set
Neat leatherette case contains three screwdriver bits, one ream-awl, seven Spintites 3/16" to 1/2" and universal chuck handle. 11A140. Complete. Net Ea. \$5.44



Handy Nut Driver Kit
Combines in one neat tool roll all the essential sizes to service most hexagon head screw and nut operations in common use. Consists of: one 1x3 3/8" Ambery handle with clutch; 5 Hex wrenches, sizes 1/4 x 3", 5/16 x 3", 11/32 x 3", 3/8 x 3", and 7/16 x 3". No. 16A445. Per Set. \$2.22

HANDY TOOLS BARGAIN PRICED

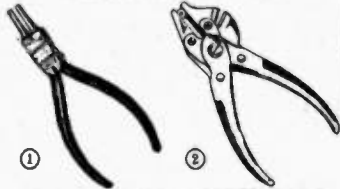
PORTABLE KIT-VISE



Stronger than a Wrench. Just as handy. Advanced type jaws spring open instantly to 2 1/4". Pipe jaws will hold pipe or rod from 1/4" to 1 1/2". V-type jaws will hold upright or horizontal. Fits anywhere...

on top, at side, or beneath work bench... handy for the tool kit, weight less than 3 lbs.—but its sturdiness will surprise you. Regularly a \$2.80 Value. No. 16A530. Special Each..... **\$1.45**

HANDY PLIERS



① **KRAEUTER ROUND NOSE**
A \$1.50 Value. A handy plier for shaping wire, metal and all around radio work. Made of Forged steel with polished head and blued finished handles. No tool kit should be without a pair. Over all length 6". No. 11A15. Special Each..... **65c**

② **BERNARD PARALLEL ACTION PLIERS**
Milled parallel jaws provide vise like grip, that won't slip. Has powerful side cutter on out-side of head. Made of nickel chrome alloy steel—blue-black finish. No. 16A543. SPECIAL, Per Pair..... **\$1.25**

TRIMMING SHEARS



① **PEXTO 7" METAL SNIPS**
Highest quality drop forged steel shears accurately machined to Govt. specs. Shaped to cut straight as well as right or left curves. An indispensable tool for the repairman and hobbyist. No. 16A542. Special. While They Last... **\$1.19**

② **"WISS" TRIMMING SHEARS FORGED STEEL.** A handy piece in every tool kit. "Just It" for trimming wire insulation, light metal or even snipping small gauge wire. 5" over all with quality spring in handle. Usually priced twice what we ask. No. 11A61. While They Last..... **\$1.29**

MECHANICAL FINGERS



The handiest tool you can have for getting into those inaccessible places for retrieving or installing small parts, screws, nuts, etc. Has powerful spring tension and sure-grip jaws. 12" long. No. 16A401. At Least a \$1.00 Value for Only..... **50c**

SEE INDEX FOR MANY OTHER HANDY TOOLS!

BARGAINS IN NEUTRALIZING TOOLS

Handy "5 in 1" Tool



When closed, is fountain pen size, no sharp points exposed. Has 1/4" slotted and 5/16" plain hex wrench, small and full size screwdriver, of fine quality bone fibre. No. 16A370. Special, Each..... **49c**

Low Capacity Screwdriver



For use in I.F. circuits in critical modern supers. With two screwdriver nibs—one extending 1/4". Other nib is recessed in opposite end. Made of tough bone-fibre. No. 16A369. Special, Each... **29c**

Adjustable Neutralizing Tool



Finest quality bone-fibre. Extension screwdriver adjustable from 6 to 11" on one end and hex socket on other. Ideal for crowded spaces. No. 17B662. SPECIAL, EACH **29c**

Alignment Screw Driver



Completely insulated—Low inductance metal tip. Made of strong—durable bone-fibre material. 1/4" dia. x 6" long. No. 16A372. Less Clip, Ea... **19c**

Insulated Hex Wrench



Inside hexed for 1/4" nuts. Hexed all thru so when worn or broken merely saw off and you have a new wrench. Made of tough bone-fibre. 5" long. No. 16A371. Spec. Each..... **10c**

Neutralizing Tool



Sturdy, unbreakable. Has metal collars each end with 1/4" and 5/16" hex sockets. 11A232. BARGAIN, Only..... **30c**

FLEXIBLE NECK FLASHLIGHT



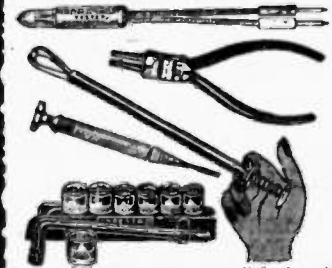
Very handy for unlimited number of uses. Bakelite case with slide switch and flexible 13" steel neck. Specially built for the Air Force at a cost of several times the low price we ask. Uses 2 standard flashlight cells. Comes with extra bulb less batteries. No. 16A402. A Real Bargain, Each..... **95c**

HOBBY HAND GRINDER



Handy clamp-on high speed grinder well suited for the amateur builder and hobbyist. A 2 3/4 x 5/8" wheel driven at just the right speed for sharpening drill bits, knives, and other small shop tools. Has stamped metal case, tool rest, bronze bearings and screw-on clamp. No. 16A535. Net. Each..... **99c**

HANDY TOOL ASSORTMENTS—BARGAIN PRICED!

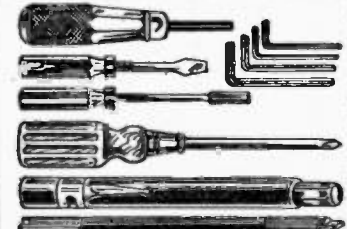


Consist of 1 AC-DC test lite, 1 pair of Krauter 6" round nose pliers, 1 12" fingers for getting into those hard-to-reach places, 1 4 3/8" jeweler's screwdriver and 1 set of vest pocket socket wrenches. A REAL BARGAIN. No. 18A938. Complete Set As Illustrated. ONLY **\$1.95**

SOFT FACE HAMMERS



(A) (B) (C)
Consist of 1 8-oz. Brass 3/4" diameter head with metal tang and wood handle, 1 2" dia. plastic head and 1 7/8" dia. plastic head with hickory handles. Made by well known tool manufacturer. AN OUTSTANDING VALUE. No. 18A939. Per Asst. of 3 Hammers... **\$1.95**
(A) Brass Hammer Only... **60c**
(B) 16A377. Special, Each... **60c**
(C) 7/8" dia. Plastic Hammer. No. 16A373. Special, Each... **65c**



Consists of a "5-in-1" alignment tool, an alignment screwdriver, a Bristol set—screwdriver, 4 Allen set-screw wrenches, a No. 1 Phillips screwdriver, a permeability IF wrench and a small screwdriver. Priced individually, this kit would cost at least \$1.00 more. No. 17A361. A REAL BARGAIN.... **\$1.65**

SCREWDRIVER ASSORTMENT



Unbreakable Plastic Handles with quality steel bits, each a handy size. ① 1/4" dia. x 6" long bit. ② 3/16" dia. x 4 1/2" long bit. No. 18B565. Set of 2. Only **59c**

Two-Piece Hammer Set

One has hard fibre and soft brass faces; the other is standard all metal ball pein. Well designed handle fits hand. Overall length 8". No. 16A582. Per Set..... **59c**

TYLER "SPIRAL" SAW



Saws in any direction, without turning frame. Cuts wood, plastic or light metal without binding or breaking. Blades are made of High Carbon Spring Steel with teeth cut spirally the full length, providing a sharp cutting surface completely around the blade. Sturdy steel frame has lever adjustment for proper tension. No. 16A544—Frame and 15 Spiral Blades..... **95c**
Extra Blades, also fit any standard coping saw frame. \$1.00 value. No. 16A545. 12 for..... **50c**

Jeweler's Screwdrivers



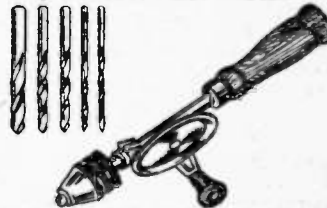
Hexagon swivel head, removable blade firmly held by threaded chuck eliminates any back-lash. Finest quality, at least a regular 65c value. Stock Blade Overall Choice No. Size Length Each 16A379 .080 3 11/16" 39c 16A551 .025 3 13/16" 39c

ADJUSTMENT WRENCH



For permeability IF's needed in every Serviceman's Tool Kit. No. 17A349. Special, Each..... **25c**

MIDGET HAND DRILL and 5-PIECE DRILL SET



Drill has 3/16" capacity chuck with 3 case hardened jaws. 2 1/4" gear wheel with small gear for 3 3/4 to 1 ratio. Entire drill nicely finished and hardwood mahogany handle. Overall length only 7 7/8". Comes with good quality 5-piece drill set, sizes 1/16 to 3/16" by 32nds. No. 16A534—Hand Drill and 5-piece Drill Set. Only **\$1.35**

BONNEY No. 2 PHILLIPS SCREWDRIVER



Popular size 2 Phillips driver with hardwood handle and high carbon tool steel blade. Blade length 4", overall length 8 3/4". No. 17B665. SPECIAL, EACH..... **45c**

TUBE PULLER

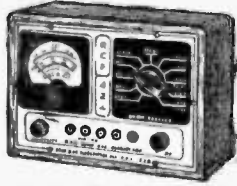
For the small series of metal tubes that are usually so hard to get at. No. 17A360—SPECIAL, EA... **39c**



Contains a socket wrench for use with a standard brace, to fit 3/8" square nuts. PLUS Five Hex Key Wrenches for Allen Screws, sizes 4 to 7/8". 18A570, Complete Set 6 Pcs... **25c**

B-A Feature Values !!

B-A JACK POT BARGAINS! SAVE \$ \$ \$ ON STANDARD MULTIMETERS



ALL PURPOSE AC-DC V.O.M.A.
"RCP" MODEL 424-A. 26 RANGES AND FUNCTIONS! 0-1000 AC & DC VOLTS, 0-1000 M.A. 0-10 MEG. WITH INTERNAL BATTERIES. 5-DC VOLTS RANGES FROM 0-2.5 to 1000 VOLTS 4-AC VOLTS RANGES FROM 0-10 to 1000 VOLTS. 4-RESISTANCE RANGES FROM 500 OHMS TO 10 MEGOHMS. 4-DC MA RANGES FROM 0-10 to 1000 M.A. 4-DECIBEL RANGES FROM -10 to +55 D.B. CALIBRATED FOR 500 OHM LINE IMPEDANCE. *2500 O.P.V. METER MOVEMENT—1% TOLERANCE SHUNTS & MULTIPLIERS. OAK CASE 7 1/2 x 5 3/4 x 3 3/4"; WITH BATTERIES; WT. 2 LBS.
Regular Net Price, \$29.50.
Stock No. 37T1023. "RCP" Model 424A. YOUR COST..... **\$21.50**

ANOTHER "HOT" V.O.M.A. BARGAIN!
"RCP" Models 420 (OPEN CASE) and 420-SP (HINGED LID CASE)
BIG 3 INCH METERS WITH SENSITIVITY OF 2500 O.P.V.

26-RANGES—
DC VOLTS, 0-2.5-10-50-250-1,000 and 5,000 DC VOLTS!
AC VOLTS, 0-10-50-250-1,000 and 5,000 AC VOLTS!
DC M.A., 0-1-10-100-1,000 DC MILLIAMPERES!
OHMMETER, 0-500-100,000 ohms; 0-1 MEG (INTERNAL BATTERY)!
OUTPUT VOLTS, Some Ranges as for DC Volts.
Decibels, Minus 10 to plus 69 db.

METER MOVEMENT ACCURACY GUARANTEED TO BE WITHIN 2% 1-POINT RANGE AND FUNCTION SELECTOR ROTARY SWITCH. DUE TO LACK OF SPACE, NO PICTURE OF THIS STANDARD MULTIMETER IS SHOWN—HOWEVER—WE GUARANTEE EITHER MODEL TO PLEASE YOU—OR YOUR MONEY PROMPTLY REFUNDED! 2—CASE TYPES TO CHOOSE FROM:

"RCP" MODEL 420-SP. IN HINGED LID PORTABLE OAK CASE, SIZE 6 3/8" x 4 1/2" x 1 1/4" WITH TEST LEADS & BATTERIES. Wt. 2 lbs. (SAVE \$6.00 ON EITHER MODEL)
Stock No. 37T1025. "RCP" MODEL 420-SP. **\$21.50**

COST ONLY.
"RCP" MODEL 420-S In open face oak case size 6 3/8" x 3 1/2" x 3" (Pocket Size) CPT. WITH BATTERIES. Otherwise identical to model 420-SP described above.
Stock No. 37T1024. "RCP" MODEL 420-S VOLT-OHM-MILLIAMMETER. YOUR COST EACH..... **\$17.50**

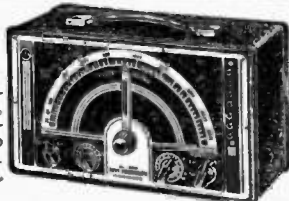
AND HERE IS NO. 3 "HOT MULTIMETER BUY"
"RCP" MODEL 449—THE POCKET 24-RANGE V.O.M.A. WITH 3" WIDE VISION SCALE METER—5,000 O.P.V. SENSITIVITY! COMBINES 6-INSTRUMENTS IN SMALL 5 7/8 x 3 1/16 x 2 1/8" STEEL CASE WITH BAKELITE PANEL. HAS 18-INSULATED PINJACK TERMINALS FOR THESE 24-RANGES AND FUNCTIONS:—

AC, DC AND OUTPUT VOLTS.—0-5-50-250-1000 VOLTS.
DC M.A.—0-5-10-100-1000 M.A.
OHMS—0-1000; 10,000; 100,000 ohms and plus 0-1-1 MEG.
DECIBELS: MINUS 6 TO PLUS 52 IN 4 RANGES.
A TOP VALUE TO ANY RADIO MAN AT \$24.50—CERTAINLY A REAL BARGAIN AT OUR CLOSE-OUT PRICE! WT. 1 3/4 lbs. CPT. WITH BATTERIES!
Stock No. 37T1022. "RCP" MODEL 449-A UNIVERSAL POCKET MULTIMETER. YOUR COST EACH..... **\$19.95**

SPECIAL NOTE—OUR STOCKS OF THE ABOVE MULTIMETERS ARE LIMITED—RUSH YOUR ORDER AND PLEASE STATE SECOND CHOICE! REMEMBER B-A GUARANTEES YOUR SATISFACTION OR YOUR MONEY BACK!

HERE'S A REAL BARGAIN! "RCA" AUDIO OSCILLATOR MODEL 154

Range 30 to 15000 CPS Continuous
Provides audio signal for checking fidelity curves; testing speakers. PA systems, etc. Choice of 250, 500 or 5000 ohm output impedance. Output voltages of 5.2 to 37.5 at no load. Distortion under 5%. Has 8 3/4" dial. Case size 9 1/2 x 13 1/4 x 6 1/2". wt. 19 lbs. Furnished Complete.
Stock No. 5A164.
While Limited Quantity Last. Special, Each..... **\$49.50**



FLUORESCENT "STRIP-LITE" BARGAIN!

Ideal for modernizing lighting in almost ANY location. EASY TO INSTALL, either singly, or end-to-end "In-Line" style. Cord and plug listed below may be quickly wired to this unit to convert it to plug-in type. Underwriters approved ballasts and components.
15 WATT size 2 3/4" wide, 2" high, 19 1/4" long COMPLETE WITH LAMPS. 32A45. 6 For **\$16.95**
Each. **\$3.15**
20A120. 6 1/2 Ft., #18 RUBBER COVERED CORD AND PLUG,
NET EACH..... **26c**

"HOT" TUBE BARGAINS

"Sylvania" identical to tubes that cost twice these prices except—no boxed.

Type	Stk No.	Each	25 Lots
14A7	21T3993	69c	62c
1407	21T3994	59c	53c
1486	21T3995	59c	53c
35Y4	21T3996	59c	63c
50A5	21T3997	69c	62c

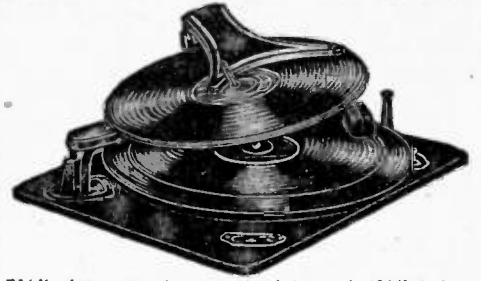
KIT OF FIVE

1 of each type as listed.
No. 21T3998..... **\$2.95**
10 Kits, Per Kit..... **\$2.75**

DON'T MISS THIS—YOU SAVE \$24.55!

Garrard "RC60" De Luxe Automatic Mixer-Changer

Plays BOTH 10" AND 12" RECORDS—INTERMIXED. Shuts off automatically after last record is played. Changes records—SILENTLY—GENTLY. LOW PRESSURE PICK-UP with PERMANENT JEWELLED STYLUS. Minimum cabinet dimensions required are 15" long x 13" deep x 5 1/2" clearance above unit plate and 4 1/2" below unit plate.
Stock No. 30A42. "GARRARD" MODEL RC-60. NET **\$44.95**



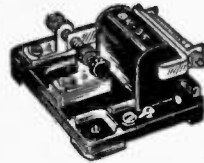
CRYSTAL PICK-UP BARGAIN!



High quality crystal pick-up. Die case aluminum curved tone arm finished smooth dark brown. Shure P93 cartridge will take semi or permanent needle. Mounts single hole on 7 1/2" center. With 18" shielded lead.
No. 20B13. Special, Each. **\$1.95**

ULTRA SENSITIVE RELAY

SPDT contacts, 16,000 ohm coll. Fully adjustable. Mounted on 2 5/8" square molded bakelite base. Screw terminals. Fine for plate circuits, photo cell applications and other uses where an exceptionally good relay is needed.
No. 17B233
An Outstanding Value..... **\$1.55**



TWO CIRCUIT JACK

With extra S.P.D.T. switching action. Circuits completely isolated. Long frame type.
No. 17A393. Spec. Each..... **29c**

CLOSEOUT! MALLORY 5th EDITION RADIO SERVICE ENCYCLOPEDIA

Just a few copies left. Over 450 pages of good usable information on 27,000 sets.
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WHILE THEY LAST..... **95c**

Save \$1.50 on This Popular Book Fundamentals of Radio

Written by 6 Distinguished Radio Experts. Edited by Wm. L. Everett. In thoroughness this book is outstanding... with no previous radio experience or knowledge one can obtain a thorough grounding in radio principles. Has over 300 working diagrams and step-by-step instructions by six of the country's greatest radio experts. Covers everything one needs to know about basic radio communications (400 pages). Hand-book style. Complete one-volume course.
Regularly sells for \$5.00—
Now, to Reduce Overstock. **\$3.50**
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PRICES CUT TO REDUCE OVERSTOCK... SAVE!



1700 Answers to Your Hardest Problems
1178 Illustrations
1000 Pages
130 Tables
105 Graphs
GET THE ANSWERS NOW

Here, in one big volume, you'll find all the time-saving answers to your radio problems... and time saved is MONEY EARNED. Written in easily understood language, yet accurate enough for an engineer. Completely revised and cross indexed for quick reference, this handy reference book for your tough jobs covers radio transmission and reception, public address systems, television, photocells and data on their important parts. It's a book you'll always use.
No. 16A14. \$6.00 Value.. **\$3.95**

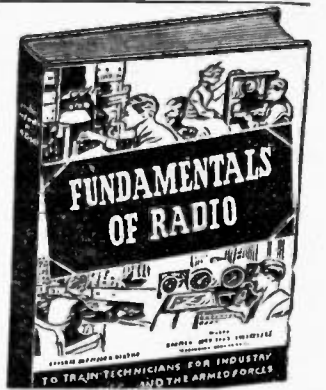
ELEMENTS OF ELECTRICITY by TIMBE

Third Edition—569 pages—470 Illustrations. 5 7/8 x 8 3/4" cloth cover—Clear, concise, and complete treatment of fundamental data the technical student needs. Contents: Magnet and Magnetism; the Generator; Electric Motors; Batteries; Vacuum Tubes, etc.
No. 16A49. \$3.25 Value. **\$1.95**
SPECIAL, EACH.....

OHMS LAW CALCULATOR



Answers any Ohm's Law problem with one setting. Finds volts, amps, and watts. Resistance range 0 to 10 meg-ohms. Has scales on both sides. Simple to operate.
No. 16A44. Each..... **10c**



BA Special Purchase Values

YOU SAVE AN EVEN \$25.00
ON THIS NATIONALLY KNOWN HI-QUALITY
ELECTRONIC MULTITESTER MODEL 668
EVERY SINGLE INSTRUMENT BRAND NEW — GUARANTEED!



THIS FINE AC and DC Vacuum Tube Volt-Ohm-Capacitometer is highly accurate, sensitive and flexible and provides these needed ranges for FM AND RADIO SERVICE NEEDS.

DC VACUUM TUBE VOLTMETER—Direct reading sensitivity: 160 to 16 megohms. 0, 6, 30, 150, 600, 1500, 6000 volts. Voltmeter readings can be taken without affecting circuit constant.

AC VACUUM TUBE VOLTMETER—Direct reading: Input capacity 0.00005 mfd. at terminals of instrument. Input res. 160 to 16 megohms 0, 3, 6, 30, 150, 600, 1500, 6000 volts. Measures signal and output voltages from 10 cps. to 15,000 cps.

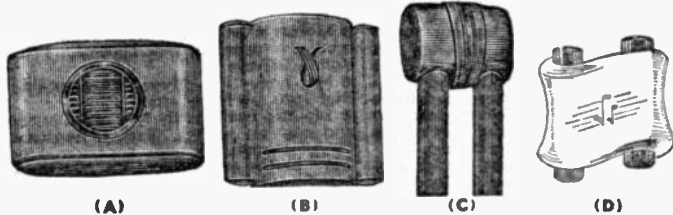
VACUUM TUBE OHMMETER—Direct reading: From 0.1 ohm to 1,000 megohms. 0-1,000, 10,000, 100,000 ohms. 1, 10, 100, 1,000 megohms.

VAPACITMETER (VACUUM TUBE CAPACITY METER)—Accurate measurements from 0.00005 to 2,000 mfd. 0-0.002, 0.02, 0.2, 2, 20, 200, 2,000 mfd.

★ Line voltage calibration adjustment. ★ 1% accurate matched multiple resistors. ★ Circuit eliminates all errors due to line voltage fluctuations. ★ Constant accuracy of low resistance ohmmeter ranges. ★ Accurate capacity-meter reads direct in microfarads. ★ Meter cannot be damaged by using low range on high voltage readings. ★ No danger of shock on high resistance or low capacity measurements. ★ Entire instrument is thoroughly shielded. ★ Easy replacement* of tube fuse at front panel. Supplied ready to operate complete with leads, tubes, pilot light and batteries in steel case. Size 9 3/4 x 9 1/4 x 7 3/8". Weight, 7 3/4 lbs.
Stock No. 36A80. Model 668 ELECTRONIC MULTITESTER. \$49.50
 Regular \$74.50 Value. YOUR COST.....

NATIONALLY KNOWN ELECTRIC CHIMES AT A FRACTION OF REGULAR DEALER COST!

Every chime Brand New and in original factory carton. Sorry, we cannot divulge the name of the maker.
 Every Chime a 2-door model! Separate tones for front and back doors or may be used on front door only. Designed to operate on standard "Door Bell" Transformer, or from 8 ordinary dry cells.



(A) Streamline, stunning CHROME Louvre and trim strips over gleaming, baked white enamel finish. Easy to install in restricted spaces, size 6 3/4 x 4 1/2 x 2 1/4".
No. 33A201X. Regular List \$3.95. While They Last, EACH..... \$1.85

(B) Rich, lustrous WHITE PLASTIC with CHROME TUBES sounds two rich, vibrant tones for front door, 1 tone for rear door. Size 7 1/8" wide, 6 7/8" high, 2 3/4" deep. Weight, 2 1/2 lbs.
No. 33A202X. Regular List \$5.95. While They Last, EACH..... \$2.75

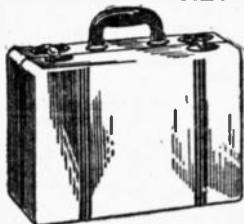
(C) Gorgeous short-tube beauty in glistening white enamel with CHROME tubes and trim; ideal for hallway, kitchen or breakfast nook. Steel body with brass, chrome plated resonant tubes sound 2 chime notes for front and 1 for rear door. Size 12 3/4" high, 6 7/8" wide, 2 5/8" deep. Weight, 3 lbs.
No. 33A203X. Regular List \$6.95. While They Last, EACH..... \$3.75

(D) Gorgeous Ivory Plastic housed chime with polished BRASS finish tubes; sounds TWO pleasing chime tones for front door signal and a single note for back door if desired. Size 10" high overall, 9 1/4" wide. Wt., 2 1/2 lbs.
No. 33A204X. Regular List \$7.95. While They Last, EACH..... \$3.75

(All chimes subject to prior sale. Please state SECOND CHOICE on your order)

CHIME OR DOOR BELL TRANSFORMERS
 Product of Nationally known maker. Reduces 110-125-volt 60-cycle AC current to 10 volts for operating most any door chime or bell. U/L approved. Regular List Price \$2.00.
No. 20A71X. Bargain Close-Out CHIME TRANSFORMER. EACH.. \$1.09

ALUMINUM UTILITY CASE
LIGHTWEIGHT — DURABLE
EYE APPEALING
IDEAL FOR



- RADIO SERVICEMAN'S PARTS AND TOOL KIT
- TUBE CARRYING CASE
- P. A. ACCESSORY CASE
- CAMPING, FISHING, PICNICS, ALL FAMILY USE

Life time aluminum case with bakelite handle, lock and key. Size 15" long, 11" wide, 5" deep. Weight only 3 lbs. Shipping weight approximately 5 lbs.
No. 36A75. Very Handy for Everyone. \$3.65
 NET EACH..... Lots of 3. EACH.... \$3.25

WHAT A BUY!
HIGH QUALITY PHONO MOTOR



ONLY..... **\$2.45**
 SIX..... **\$12.95**
 FOR.....

A lucky B-A purchase — we had to buy 'em all, but we can pass along to you one of the sweetest bargains we have seen in many a day!

Has heavy 9" rim drive turn table, rubber tired idler, and an oversize induction motor with three point rubber cushion suspension. Very easy to mount. Extends only 2 1/2" below motor board. Speed is standard 78 RPM and can be changed easily to 33 1/3 RPM by removing drive bushing and reducing motor shaft diameter slightly. Furnished with spare rubber idler tire. Operates on 110-volt 60-cycle AC.

No. 31A67. SPECIAL, WHILE THEY LAST, EACH.. \$2.45 6 FOR \$12.95

RECORD PLAYER KIT

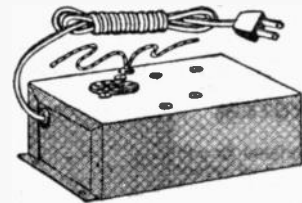
Kit With Amplifier — Contains motor listed above, a good crystal pick-up PLUS a completely wired phono amplifier. Uses 1 each 50L6, 12SJ7 and 35Z5 tubes (not included). Has volume and tone control.
No. 5B165. Special, Each (Less Tubes)..... \$7.95

Make Any Radio
AN AUTOMATIC COMBINATION
FOR ONLY \$16.69

At this ridiculously low price you get a Model 650 Detrola Changer, a harmonizing metal base, brown crackle finish, an approved 6 ft. AC line cord and 6 ft. of shielded wire and plug for connecting to radio. Takes only a few minutes to assemble and connect to most any radio to make a combination that automatically plays twelve 10" or ten 12" records. For 105-125 volt 60-cycle AC only. Size when assembled 12x11x7".
No. 40A1002. Assembly as Listed..... \$16.69



SENSATIONAL VALUE
WIRELESS PHONO-OSCILLATOR



Add it to your present single record player or record changer or build your own wireless player using this unit and any phono motor and pick-up.

Plays records through any radio without connecting wires. Tunes in like a radio station and is adjustable to any clear spot on your radio dial between 900 and 1600 KC.

Small enough to mount inside most portable players. Size 6" long, 3" wide, 1 1/2" high. Tube extends 2 3/4" above unit. Operates on 110-volt AC-DC. Complete with type 117L7 tube.

Stock No. 17A345. SPECIAL, While They Last. ONLY..... \$3.95

SAVE ON
NYLON IJ CRYSTAL CARTRIDGES



Replacement for Models "400" and "508" astatic pickups. Supplied complete with replaceable long life sapphire tipped Nylon needle.

No. 14A667. Special, While They Last, Each.... \$3.45

OPERATES STANDARD 110-VOLT AC RADIOS AND APPLIANCES from 32-Volt FARM POWER PLANTS



Converts 32-volt DC to 1 1/2 volts 60-cycle AC. Continuous load Capacity up to 100 watts, but has considerable overload capacity for electric motor starting, etc.

Easy to use—one socket for appliances, one for radios. Converter turns on or off automatically with appliance or radio—no separate switching required.

Dependable, Trouble-Free. With the extra vibrator included, this unit gives you 2,000 hours of trouble-free operation. Durable blue-gray enamel finish.

A TERRIFIC VALUE! Converter List value \$59.95 plus a \$12.50 extra replacement vibrator. Total list value \$72.45.

No. 32B41. While They Last. \$21.95
 ONLY.....

FOR ELECTRIFYING BATTERY SETS
MODEL "P" PORTO-POWER



Furnished 6-volt DC at 1 1/2 to 3 amp for operation of 6-volt battery sets from 110-volt AC line. Economical to operate—much cheaper than batteries. Quickly and easily installed by anyone familiar with radio. Crackle finish metal case measures 6 1/2 x 3 3/4 x 5 1/2". Equipped with AC cord, plug and switch. Complete with full instructions.

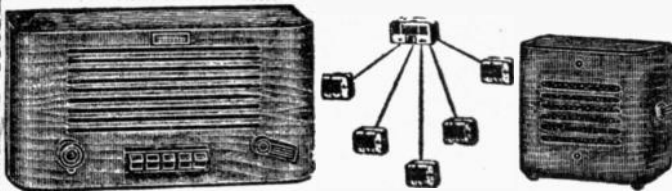
Stock No. 33A23. List Price \$24.25. \$9.95
 YOUR COST, EACH.....

DON'T MISS THIS!

Conversa Tone

Intercoms

**AT "B-A" BARGAIN CLOSE-OUT PRICES!
RUSH YOUR ORDER!
(ALL "CONVERSA-FONES" SUBJECT TO PRIOR SALE)
DE LUXE PUSH-BUTTON
MASTER TO REMOTE INTER-COM**

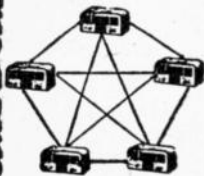


FOR 1 to 5 REMOTE STATIONS
No. 32A234X. Master and 1 Remote (EQUIPMENT FOR A TWO-STATION SYSTEM). ONLY..... **\$21.95**
No. 32A235X. Extra Remotes, Each..... **\$5.95**

(REMOTES WORK ON MOST ANY "MASTER-REMOTE" SYSTEM) Quick and easy to install, with any 3 conductor cable between each Remote and the Master as illustrated above. Easy to operate, merely push a button for the station wanted or several buttons together when paging of several is desired at one call. Remotes can call Master Station at will but cannot converse directly with each other. Master is housed in attractive Walnut wood cabinet 6 1/4 x 12 x 7 1/4" finished front and back, with self contained 4-tube, 2-watt sensitive amplifier and Alnico V-Speaker. The Remotes are in matching wood cabinets 6 1/4 x 7 x 4" with Alnico V-Speakers and call switch. Operates from any 110-volt AC-DC line. Supplied with instruction for installing and operating.

DE LUXE PUSH-BUTTON ALL MASTER INTER-COM FOR UP TO 5 STATIONS

Consist of Master like illustration above except with provision to connect 2, 3, 4, or 5 together as shown at left—thus ANY STATION can call and converse with any other. Uses ordinary cable with one more conductor than total number stations required; 3 conductors for 2 stations, etc. Operates from 110 volts AC-DC.
No. 32A256X. Per Station..... **\$17.95**



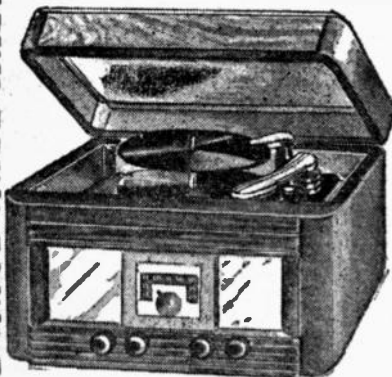
ECONOMY ALL MASTER SYSTEM FOR UP TO 4 STATIONS

Hook up as illustrated above for up to 4 stations to call and converse with each other. Selector switch is of rotary type. 3-tube amplifier, in attractive Walnut wood cabinet 6 1/2 x 7 x 4 1/4". Operates from any 110-volt AC-DC.
No. 32A257X. Per Station..... **\$15.95**



A Terrific Value

THIS GAROD RADIO-PHONO WITH AUTOMATIC CHANGER



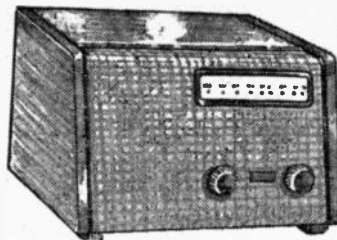
BUILT WITH THE FEATURES, QUALITY, AND LOOKS TO MAKE IT ORIGINALLY A \$119.50 SELLER. NOW WHILE A LIMITED QUANTITY LASTS...
No. 31A217. EACH..... **\$53.50**
3 Lots. EACH..... **\$52.50**

The Radio: A standard trouble-free superhet with these popular tubes, 12SA7, 12SQ7, 14A7, 50L6 and 35Z5, is assembled on full size chassis with heavy duty components. A large PM dynamic speaker assures quality reproduction of both radio and records. Antenna is built in.

The Phono: Simple and foolproof quick and smooth record changer of latest design plays ten 12" or twelve 10" records automatically with lid closed. Lightweight crystal pick-up and quiet self starting motor. The Cabinet: A stand out for beauty and quality. Solidly built, warp-proof, of Walnut veneers, hand rubbed to bring out the beautiful grain. Easy to read and attractive radio tuning dial and controls including full range tone control are accessible without raising the lid.

Stock No. 31A217. Operates on 105-125 Volts 60-cycle AC only. Cabinet size is 20 1/4" wide, 15 1/2" deep and 12 3/4" high. Shipping weight, 40 lbs.
Your Cost. EACH..... **\$53.50** 3 Lots. EACH..... **\$52.50**

Original Dealers Cost \$25.92



NOW ONLY.... \$15.95

LOTS OF THREE OR

No. 30A153. SINGLY..... **\$16.95**

HERE IS TRULY A GIGANTIC VALUE! Detrola Model 571 made to retail for \$34.95 and which many dealers stocked at a cost of \$25.92 each. Now because of a Special Purchase we offer it at this RIDICULOUS LOW PRICE. QUANTITY LIMITED... HURRY!

BEAUTIFUL WOOD CABINET — AC-DC Superhet. Full rich natural tone from its 5" Dynamic Speaker. Large loop aerial built in. Tube complement: 12SA7GT as osc. mixer. 12SK7GT I.F. amp., 50L6GT power output, 35Z5GT rect., 12SQ7GT 2nd Det. and 1st Audio. No. 30A153. SPECIAL, EACH..... **\$16.95**

Heavy Duty Chassis. Every component of quality in a distinctive blond wood cabinet with attractive plastic fabric grille front. Size 12 1/2 x 7 3/8 x 8". Tunes 540-1600 KC. For 110-volt AC-DC operation. Every One Brand New in Original Factory Cartons. Wgt., 11 lbs. Lots of 3. SPECIAL, EACH..... **\$15.95**

SEEBURG MODEL "M" A SUPER DE LUXE "INTERMIX" CHANGER "INTERMIXES" 10" AND 12"

RECORDS VERY SELDOM IS THIS "KING" OF RECORD CHANGERS AVAILABLE TO OTHER THAN MANUFACTURERS OF HIGH GRADE COMBINATIONS (THE \$500.00 AND UP KIND). A FORTUNATE B-A PURCHASE BRINGS THESE TO YOU AT A PRICE EVEN LOWER THAN ORDINARY INTERMIX CHANGERS. Every One Brand New in Original Factory Cartons. No. 35A1000. While They Last. BARGAIN PRICED AT..... **\$39.50**



CHECK THESE FEATURES

- Plays 12 records, 10" and 12", all one size or intermixed in any sequence. Also plays single records or rejects if desired.
- Equipped with a light weight pick-up and the famous Astatic QT 3M crystal cartridge with precious metal replaceable needle. The pick-up arm will accommodate the new G-E or Pickering cartridges without modification. With either of these cartridges installed, a full stack of records can still be played without the heel of the cartridge dragging on the record.
- Exclusive 3-post design. Holds records perfectly flat. Easy to load and unload. Has no hold down weights or spring clips, and no trick spindle to break off or enlarge center hole of records.
- Mechanism is gear driven throughout. Very quiet and positive acting, with a minimum of parts to get out of adjustment.
- Automatic shut-off after last record.
- Motor is heavy duty type commonly used on recording mechanisms. 110-Volt 60-Cycle AC.
- Has heavy rim-driven 10" turntable that runs perfectly true.
- Mounts easily with four solid studs and cushion springs. Base dimensions 14 1/4" square. Extends approximately 2 3/4" below mounting, 6" above. Finished in brown Hammertone enamel with posts plated and polished.
- Supplied with 4-ft. AC cord and plug and 2-ft. shielded phono lead and pin plug. Shipping weight, 20 lbs.

Only \$13.88

for this DETROLA MODEL 650

PLAYS TWELVE 10" or TEN 12" RECORDS AUTOMATICALLY AND REJECTS ANY RECORD AT WILL

Single post construction allows use of fewer moving parts, all of which are easily accessible for adjustment. Mechanism is entirely gearless and mounted on a heavy die cast base plate. Very quiet and fast during change cycle. Has 9" rim-drive, ball-bearing turntable and constant speed induction motor. Equipped with a light weight, balanced tone arm and a high quality crystal cartridge that will take any standard type needle. Mounting size approx. 12 1/4 x 13 3/8". Base size 10 3/4 x 12 1/8". Extends 5 3/4" above mounting and 2" below. Operates on 110-volt 60-cycle AC. Weight, 11 lbs.
Stock No. 40A1000. Two to a Factory Carton for ONLY.... **\$25.00**
SPECIAL, EACH..... **\$13.88**



CHANGER BASE. A precise fit for above Detrola Model 650 Changer. Brown crackle finished steel. Size 11 1/4 x 12 1/2 x 2 1/4". Attractively designed, rounded corners.
No. 31A64. SPECIAL, EACH..... **\$2.45**

3-TUBE PHONO AMPLIFIER

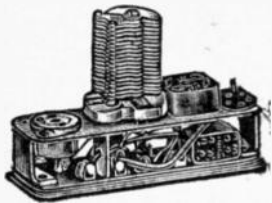


Works with any crystal pick-up. Small enough to install inside most record players to make your own amplified phonograph. Only 6" long, 3 1/4" wide. Mounts conveniently on bottom of motor board, extending only 4" below, with volume control and on-off switch shaft through motor board. Has two prong plug-in outlet for AC to phono motor, plug for phono input and 12" leads for connection directly to speaker voice coil. Output transformer is built in. Operates on 110-volt AC or DC. Requires one 125J7, one 35Z5GT and one 50L6GT tube. No. 5B171. Less Tubes. SPECIAL, EACH..... **\$3.95**

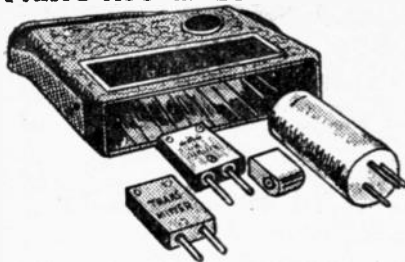
Terrific Values! but Limited Quantities Hurry!

BARGAIN PARTS ASSEMBLY

**MAKES BANTAM
1-WATTER**



(A)



(B)

(A) Consists of 140 mmf. midget variable, (alone worth what we ask for entire assembly), miniature 3 prong polystyrene coil socket, dual crystal socket, 10 contact terminal strip, resistors, etc., neatly assembled on metal chassis with fibre bottom plate 4" long, 1 1/4" wide x 1 1/2" high. Easy to disassemble for the parts or to convert to low power transmitter or receiver. See QST Jan. 1948 for article on Bantam 1-Watter, suggesting this unit as foundation.

No. 17B654. SPECIAL, EACH..... **29c** For... **\$2.50**

COMPLETE with CRYSTALS and COILS

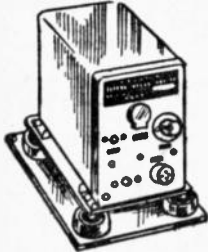
(A and B) Tuning unit BC746 is the Complete Assembly, the unit above PLUS TWO CRYSTALS in FT243 Holders in 80 meter band 3525 and 3980KC, midget polystyrene Coil form and RF Coil. The complete unit including wrinkle finish fibre cover measures 4" long x 2 3/4" high x 1 1/4" thick. No. 17A456.

While They Last! Complete, Each..... **\$1.35**

AS ABOVE Crystal unit with crystals outside Ham bands. Can be ground down to 7 M.C. band.

No. 17A457. SPECIAL, EACH..... **65c**

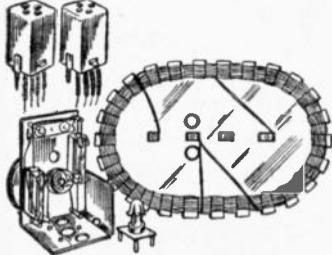
MARKER BEACON RECEIVER



Type BC-1023A. Consists of 4 tubes, 6SQ7, 6U6GT, 6SC7 and 12SH7. Adjustable 16,000 ohm, S.P.D.T. relay, etc. Assembly slides out of a neat aluminum cabinet, overall size 3 1/2 x 5 3/4 x 5 3/8". Will receive modulated signals on 75 MC band. Variable tuning for coverage of 62-80 MC without circuit changes. For 12 to 14 V. DC. Can be adapted to radio control for various devices, for taxi receivers, to open garage doors, etc., or for the parts and cabinet alone it is an outstanding value! Brand New in original factory packing.

No. 36A64. SPECIAL, EACH..... **\$3.95**

EXPERIMENTERS! SET-BUILDERS!



two wiring diagrams using all standard parts and conventional tube line-up. Tuner measures 4x2 1/2 x 2 1/4" overall with 2 1/4" dia. dial drum. No. 14A661. TUNER and COIL KIT, SPECIAL, EACH..... **\$1.95**

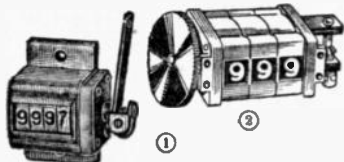
HERE'S A REAL BUY

PERMEABILITY TUNER COIL KIT

A basic coil kit for the construction of a 5- or 6-tube AC-DC superhet broadcast receiver. Excellent for students, set builders and experimenters. Kit includes a slug-tuned assembly as illustrated, that takes the place of old-style gang condenser, RF and antenna coils; a permeability tuned 455 KC oscillator coil; a loop antenna that matches the input circuit of the tuner and two good quality 455 KC IF transformers, plus

two wiring diagrams using all standard parts and conventional tube line-up. Tuner measures 4x2 1/2 x 2 1/4" overall with 2 1/4" dia. dial drum. No. 14A661. TUNER and COIL KIT, SPECIAL, EACH..... **\$1.95**

VEEDER-ROOT COUNTERS



TRIP CYCLOMETERS

Registers 000 to 999 in steps of 1/10 revolution, in other words, 10 numerals register for each complete revolution of the cam. Attractive Chrome housing size 1 3/4 x 3/4 x 1/2". Cam is 1 3/8" long. No. 18A987. Special, Each.... **95c**

REVOLUTIONS COUNTER

Reads up to 999. Resets to zero quickly with thumb operated knurled disc at one end. Designed for direct connection to rotating device. Shaft has 1/8" coupling attached. Numbers are white against black background. Overall size 2 3/4" long, 1 1/4" square. No. 17A346. SPECIAL, EACH..... **95c**

PARTS ASSEMBLY MICA CONDENSERS-RESISTORS



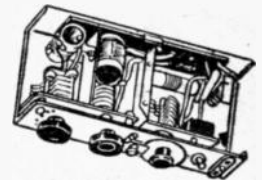
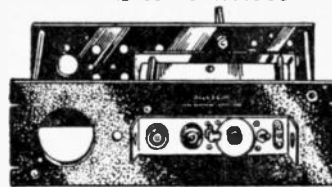
Contains 6 Sprague Mica Condensers 1000 V. Test 600 V. DC working, .01, .02 and .05 plus 6 1/2-W. resistors, 4 1 meg., 1 30 M and 1 150 M. All parts clean and new and easily removed from 3 1/8" x 4" terminal board. Worth several times the price. No. 17B652. SPECIAL, EACH... **59c**



Variable inductance, range 2.5 to 7 microhenrys. Wound with size 10 silver plated solid copper wire. Has ceramic insulation, low loss linen base phenolic frame and ceramic shaft coupler. Continuously rotatable. Makes an unusually good variable tank coil or variable antenna inductance. Mounts flush against panel. Overall size 5x4 1/2 x 2 1/2". No. 3B2. SPECIAL, EACH..... **59c**

EXCITING! EXCITER BARGAIN

25 to 40 WATTS — 10 to 80 METERS



FOUNDATION KIT

Engineered around the BC-610 series of plug-in tuning units. Described in the 11th edition Radio Handbook. Completed exciter uses 6AG7 crystal or electron coupled oscillator, 6L6 buffer-doubler and 807 amplifier. Kit includes four tuning units (illustrated at right above with cover removed), special 5/4" aluminum relay rack panel, socket for plug-in units and special hardware, together with full instructions and diagrams for assembling complete exciter.

No. 31A28. FU-40 Foundation. SPECIAL..... **\$9.95**

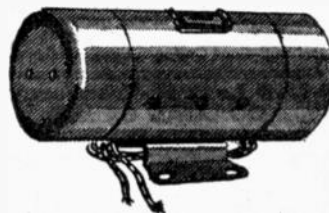
PARTS KIT. Everything needed to complete exciter except tubes and power supply. Includes all mica condensers, resistors, RF chokes, sockets, meter switch, 0-200 ma meter, key jack, and miscellaneous parts. No. 31A28A. Special Per Kit, Each..... **\$9.31**

Tuning Unit for BC-610



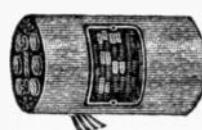
A swell addition to any Ham collection. Contains 3 midget variable condensers. Slight changes convert it into basic unit for VFO or ECO. Tubes mounted externally provide crystal or VFO stage, buffer-doubler and final amp. stages. 6AC7, 6L6 and 807 used in final conversion to make 25-40 watt transmitter-exciter. Used in BC-610 and Hallicrafters HT-4. 9x6 1/4 x 2" D. (Tubes not included.) No. 3A117. SPECIAL, EACH **\$2.59**

6 or 12 VOLT G.E. DYNAMOTOR



Designed for 12 V. D.C. input, 550 volts D.C. output at 85 ma. Continuous duty. Converts to 6 volt input, quickly and simply, with the instructions included. The output is then 250 volts at 85 ma—can be loaded up to 100 ma with only 10 volt drop. Will operate a receiver as large as the Hallicrafters S-40 or any mobile gear within these ratings. A G.E. product, well engineered, runs quietly with little vibration. BRAND NEW, in Original Factory Cartons. Regularly about \$50.00. No. 3A88. Special, Each... **\$4.95**

28 VOLT DYNAMOTOR

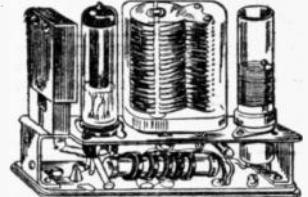


WEBSTER. Input 27.9 volts, amps 1.28; Output 224 volts, at .070 a mps, 4400 R.P.M. continuous. Has mounting holes but no mtg. bracket, overall size, 5 1/4 x 2 1/4". No. 3A42. Special, Each.... **\$2.95**

VARIOMETER

Variable inductance, range 2.5 to 7 microhenrys. Wound with size 10 silver plated solid copper wire. Has ceramic insulation, low loss linen base phenolic frame and ceramic shaft coupler. Continuously rotatable. Makes an unusually good variable tank coil or variable antenna inductance. Mounts flush against panel. Overall size 5x4 1/2 x 2 1/2". No. 3B2. SPECIAL, EACH..... **59c**

A SUB MIDGET TRANSMITTER FOR 80 METERS



Built from the BC746 tuning unit chassis. Size only 4x3x1 1/4". Simple to convert. It can be easily completed in one evening. Diagram and instructions furnished. Uses 1 1/2-volt A and 45 to 90-volt B batteries. Plate current 8 to 12 Ma. Kit includes the tuning unit chassis, sending key with cord, 80 meter crystal, tube, resistors, condensers, etc. Less batteries. No. 18B201. YOUR COST..... **\$3.95**

BATTERY KIT FOR ABOVE

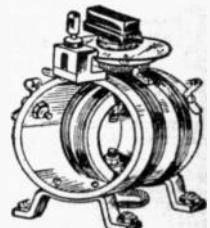
21A1. A Battery..... **30.08**
21A18. B Battery..... **1.84**
12A1341. Battery Connector.. **.12**

VARIABLE INDUCTANCE TUNING ASSEMBLY

Originally designed for antenna loading but well suited to any other experimental or amateur use requiring an easily adjusted coil. Precision built throughout with vernier tuning mechanism. Coil is 1 1/2" dia. x 2 1/2" long wound with 44 turns of size 16 wire. No. 18A976. Special, Each. **\$1.95**

VARIOMETER TUNING ASSEMBLY

Has 2" dia. x 2 3/8" long low loss form, a rotating inside coil attached to dial and pointer mechanism and an excellent dial lock. Can be adapted for transmitting and receiving uses such as variable interstage coupling, antenna tuners, wave traps, etc. No. 18A975. SPECIAL, EACH... **95c**



Quantities are limited and subject to prior sale. HURRY YOUR ORDERS!

SENSATIONAL VALUES IN



1000 Ft. Assortment

ALL OF IT IS HIGH GRADE QUALITY WIRE

The Biggest Buy in Wire we have ever offered. Consist of size 22 to 16, both solid and stranded, with various types of insulation. Ideal for hook-ups, lead-in and all-purpose needs. Supplied in bundles of 10 100-foot coils.

No. 3A37. Per Lot of 1000 Feet... **\$4.95**

500-FOOT ASSORTMENT
Contains some of above and other popular types.

No. 2A23. Per 500-Foot Lot... **\$2.95**

200-FOOT ASSORTMENT
Contains short lengths as well as 25-foot coils of various type wire, suitable for all-purpose needs.

No. 3A28. Per 200-Foot Lot... **\$1.45**

HIGH VOLTAGE Hook-Up Wire

Size 20 stranded tinned conductor with extra heavy vinylite and fibre glass insulation to make it suitable for use in high voltage circuits.

No. 3A63. Per 100 Ft. Coll... **85c**

TWISTED PAIR

Size 22 solid copper conductor Vinylite insulation. Ideal for intercoms, door bells and for general hook-up needs. Supplied in 50-foot coils.

No. 3A106. 10 Lots. **45c** Each... **39c**

4-WIRE CABLE 3 FEET 4 INCHES LONG

4 Color Coded Conductors, 2 size 18 and 2 size 20 stranded tinned rubber insulated with rayon braid, also overall rayon braid. 40' lengths. Handy for connection between power supply and receiver of battery sets, etc.

No. 3A107. 10 **12c** Only... **95c**

15 CONDUCTOR CABLE



Excellent inter-com or general purpose wire. Very flexible. Conductors are approx. size 20 stranded (each 16 strands No. 34 tinned copper) with rayon serving and glazed, color-coded cotton braid insulation, plus black glazed cotton braid overall. Diameter approximately 5/16"

No. 2A191. Special, Per Foot... **9c**
100 feet and over. **\$7.50**

Even "tho" of ridiculous low prices EVERYTHING in B-A catalogs must be Clean, New, Top Quality. You can depend on it!

SHIELDED WIRE AT CRAZY LOW PRICES



Needed for many applications. Size 20, stranded tinned conductor with vinylite insulation, cotton braid and overall tinned copper shield. Single Conductor. No. 2A84.

Per 100 Ft., ONLY... **\$1.45**
Per 500-Foot Coil... **\$5.95**

In bulk spools, about 3000 feet each when purchased in full spool lots.

No. 2A84. Per 1,000 Ft. **\$11.95**

THREE CONDUCTOR SHIELDED CABLE



Consists of 3 size 20 stranded tinned conductors vinylite insulation, color-coded cotton braid and tinned copper shield overall. For any use requiring 2 or 3 conductor shielded cable.

2A83. Per 50 ft... **\$1.95**
100 ft. **\$3.45**

WEATHERPROOF WIRE AT GIVE AWAY PRICES



MADE TO SIGNAL CORP SPECS. FOR ANY CLIMATE

3 Wire. Each conductor of 7 tinned strands of No. 28 (4 steel for strength and 3 copper for extra conductivity). Rubber insulated with two ply weatherproof saturated braid over each conductor; overall O.D. 5/32". Perfect for lead-ins, telephone, intercoms, etc. Brand New in original factory wound coils.

No. 4A503—Three Conductor. Per 550-Foot Coil, ONLY **\$4.95**

No. 4A502—As above except Single Conductor. Per 900-Foot Coil... **\$2.95**

Low Loss Hi-Frequency COAXIAL CABLE



TYPE RG/8U

Impedance 52 ohms, Capacitance per ft. 20 mmfd. Consist of 7 strands No. 21 bare copper wire encased in .285 OD Polyethylene dielectric, with Vinyl outer covering .405 OD over braided copper shield. Made to Jan-C-17 A.N. specs. 2A163.

Per 100-Foot... **\$3.50**

ODD LENGTHS RG/8U

Lengths vary from 25 ft. to 100 ft. Order within this range, quantity you desire and we will supply the lengths closest to the footage you specify—It's a Real Bargain. **3c**

4A500. Per Foot, Only **3c**

2A170, 62 ohm cable, like above except without the Vinyl outer covering. Consists of 7 strands No. 22 bare copper wire encased in Copalene with overall copper braided shield.

2A170. Per 100-Foot... **\$2.50**

RG29/U CABLE

53.5 ohm, O.D. Size .116", 28 mmfd per ft., Cond. size 20 wire with Polyethylene covering over tinned copper shield. Popular for shielded audio and RF circuits, also for mike cable in fixed installations.

Replaces also RG58/U, it being identical except for Polyethylene instead of black vinyl.

No. 3A105. 20-Foot Coils. **49c**

Special, Each... **3 1/2c**

No. 2A169. In continuous lengths of 50-ft. and over. **SPECIAL, PER FOOT... 3 1/2c**

BARGAIN PRICES, FAST SELLING ELECTRICAL CORDS



REPAIR CORD

① Electric iron and appliance repair cord, also for soldering irons. 3000 cycle—7 ft. long No. 18 conductor cord with rubber attachment plug and wire ends, stripped and tinned. No. 18A946. Lots of **26c** Special, Each **29c**

ELECTRIC SHAVER CORD SET

② For Remington, Shavemaster, Packard, or Nicholl-Velvet Shavers. 6 feet long. No. 18A945. Lots of **22c** Special, Each **25c**

MIDGET CORD SET

③ Coffee Maker and small appliance cord set. 6 ft. long No. 18 heater cord with rubber attachment plug cap and midget heater plug to fit

waffle irons, 3-lb. irons, etc. No. 18A944. Lots of **28c** Special, Each **31c**

APPLIANCE CORD

④ 3000 Cycle good quality cord set. Fits standard irons and appliances. 7 ft. long No. 18 conductors with durable attachment cap and plug. A Good 75c Seller. No. 3A98. Lots of **28c** Special, Each **31c**

DE LUXE CORD SET

⑤ 10,000 Cycle top quality. Extremely flexible for rugged use. Fits all standard irons and appliances. 7 foot long No. 16 conductors with rubber attachment plug and trouble free heater plug. Retail for \$1.35. No. 3A97. Lots of **59c** Special, Each **65c**

MIKE CABLE BARGAIN! FOR CRYSTAL, RIBBON, and CARBON MICROPHONES



WELL KNOWN QUALITY BRAND

Flexible stranding; cellulose yarn braid; waxed; rubber insulation; cellulose acetate yarn braid; tinned copper braid shield; plastic jacket. O.D. .210".

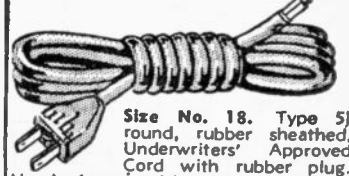
No. 2A190. Per 25-Foot Coll... **95c**
In bulk lots 100 ft. and over, Per 100 Ft.... **\$3.29**

TINNED COPPER SHIELDING

Expands to nearly double its original width reducing length about 25%.

18C98. 5/16" dia. 50-ft. Coll... **65c**
18B99. 9/16" dia. 50-ft. Coll... **95c**

38-INCH AC CORD



Size No. 18. Type 5J round, rubber sheathed, Underwriters' Approved Cord with rubber plug. Handy for a multitude of needs.

No. 3A102. 10 **15c** For. **\$1.00** Special, Each

6-FOOT AC CORD



Underwriters' Approved. Rubber sheathed size 18 cord with rubber plug. There's a big replacement demand.

No. 3A96. 10 **22c** For. **\$1.65** Each...

10-FOOT AC CORD

As above, 10-foot long.

No. 20A10. 10 **30c** For. **\$2.30** Each...

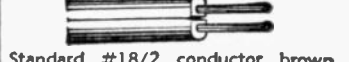
3-OUTLET EXTENSION CORD



Underwriters' approved Brown rubber parallel cord with bakelite plugs.

No. 3A99. 10 Lots. **26c** Each...
6-Ft., Each... **29c**
No. 20A98. 10 Lots. **29c** Each...
8 1/2-Ft., Each **32c**
No. 3A100. 10 Lots. **35c** Each...
12-Ft., Each **39c**

PARALLEL CORD



Standard #18/2 conductor brown rubber parallel cord—the kind you use every day.

2A28X. 500 Ft. **\$1.95**
100 Ft. **\$8.25**

BRAIDED AERIAL WIRE

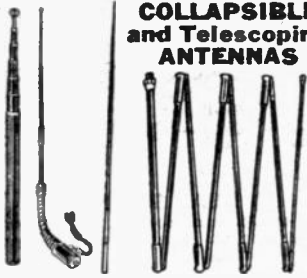
Consists of very fine strands of copper wire braided together to make for extreme flexibility.

No. 18A97. Per 25-Ft. Coll... **25c**

No. 2B25. In Bulk. **65c**
Per 100 Feet...

Every Item Here A Sensational Value!

COLLAPSIBLE and Telescoping ANTENNAS



8-FT., TELESCOPES DOWN TO 16 1/2 INCHES

① 7 brass sections, with grey corrosion resistant finish, telescopic from 16 1/2" to 8 feet. Base is 1/2" dia. threaded for 5/16"-18 screw. Type AN45A.

22A28. \$1.65 10 Lots. \$1.45 Each... 49c

GOOSENECK TYPE (2 Section)

② Ideal for UHF portable transmitters and receivers. Made of 1/8" dia. brass tubing mounted to a sturdy flexible base which permits adjustment to any angle after mounting. Overall length 34" collapses in center. Has threaded 1/4" mounting stud in base and attached connection for grounding. Finished in olive drab. Type AN130-B. No. 22A27. 59c 10 Lots. 49c Special Each

FOLDING WHIP ANTENNA

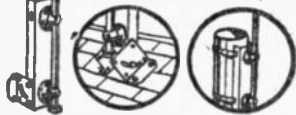
③ 10 1/2 Feet extended and only 17" collapsed. "Just it" for equipment that has to be carried around. Original equipment with SCR300 Walkie-Talkie. Consist of 8 tapered sections of brass tubing, held firmly upright by a powerful spring housed in base and braided stainless steel cable extending through the entire length of antenna. Base has 7/16" long threaded rod for mounting purpose. Dia. at base 5/16". Takes only a few seconds to extend or collapse. Finished in olive drab. No. 22A24. 95c Special, Each

HOUSE MAST ANTENNA

Extends Up to 12 Ft.

Eliminates overhead wires. Easy to install. Mounts to vent pipe, roof, cornice, window frame, gable, etc. 4 section nickel plated rod, extends to 12 foot. Includes all attaching clamps, lead-in wire, lightning arrestor and ground wire. List Price \$6.95.

Stk. 38A21X. Special Each \$3.45



BRAIDED AERIAL WIRE

Consists of very fine strands of copper wire braided together to make for extreme flexibility. Ideal for indoor or outdoor antennas.

No. 18A97. Per 25-Foot Coil. 25c No. 2B25. In Bulk. Per 100 Feet. 65c

Turnbuckle For SAGGING AERIALS, Etc.



Brass barrel, high tensile strength steel fork and eye.

No. 19A656. Each. 15c

PRICE CUT IN HALF ON AUTO ANTENNAS!

Noiseless! Rattleproof! RUSTPROOF! Admiralty Brass Triple Chrome Plated!

Bakelite insulators, shim contacts on telescopic joints, tapered on ends to prevent moisture and dust from entering tubes. With 33" low-loss cables with shielded loom.

Priced as low or lower than others of inferior materials and workmanship.

SOLD ONLY in packages of 5 (cannot be assorted).

No. 38A30. 3 Section Telescopic. Extends 20" to 65".

Package of 5. \$6.95

No. 38A29. 3 Section Telescopic. Extends 31" to 96".

Package of 5. \$8.95



Antenna Wire Bargain



100 Foot Coils Stranded aerial wire. 3 strands copper tinned, 4 strands monel metal. Greater strength - will not sag.

Rustless and stainless. Made to Government specifications.

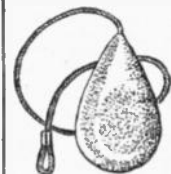
No. 3A85. 12 Coils For \$1.95 Special

Aerial Kit BARGAIN!

CONTENTS: 100 ft. stranded tinned aerial wire, 25 ft. lead-in wire, 2 antenna insulators, 1 ground clamp and 1 lead-in strip.

No. 3A16. 58c Special, Per Kit

ANTENNA WEIGHT



2 lbs., with stainless steel braided 11" cord attached on spring core. Originally used on trailing wire antennas.

3A120. Spec. Each 39c

ANTENNA LOOP



Replaces antenna coil on most any type set. Good pick-up and selectivity.

No. 20B15. Special, Each 24c

CERAMIC INSULATOR



For transmitting or receiving antennas. 3/4" square x 5 1/2" long of brown ceramic.

No. 18A961. Special, Each 10c

BRAND NEW! DYNAMIC NOISE-CANCELLING HANDSET \$70.00 List Value FOR ONLY... \$14.95

A TERRIFIC BARGAIN made possible by a B-A Special Purchase from a railroad equipment manufacturer. Specially designed for clear speech communications in railroads, marine, industrial and other high noise fields. Standard equipment on leading railroads. Average discrimination against noise 100 to 1. Ear phone is moving coil type, range 200 to 4,000 cps., rated 3 watts maximum, impedance 10 ohms. Microphone high impedance. Response to sounds of close origin, 200 to 4,000 cps. Output level -53 db. Case of tough gray plastic with press-to-talk button. Furnished with rubber ear cushion and special shielded 6-ft cord.



No. 22A30. Electro-Voice Model 660. WHILE A LIMITED QUANTITY LASTS. \$14.95

CRYSTAL MIKE

Well known make. Freq. response 30-6000 CPS; good bass response. High output; 62 db. Complete with 7 ft. cable. Base is removable. An outstanding BUY.



No. 20A873. At Only \$4.95

S.P.D.T. PUSH SWITCH



Leaf type. Makes one-breaks one. Silver contacts, has 3/8" threaded shank. Size 2x3/4x3/8". No. 15A1156. 10 Lots. 25c Special, Each 29c

SHALLCROSS SELECTOR SWITCH

Two-gang, 6-Position, 2 1/4" square bakelite plates, solid silver contacts and arm, isolated shaft 1/4", shaft 1 1/4" long single hole mounting. Size behind panel 3 1/4"x2 1/2". No. 17A373. SPECIAL, EACH \$1.95

83-1R CABLE UNIT



Consists of 1 83-1R chassis connector and hood with 18" length of RGB/U cable attached. A convenient size for connection of coax circuits inside the chassis.

No. 3B39. 10 Lots. 40c Special, Each 45c

SHIELDED PHONO LEADS

Extra flexible shielded single conductor wire for replacement in record players and changers. Length, approximately 26". No. 17A399. 6 lengths 29c for



No. 14A781. Same, except 72" long. SPECIAL, EACH 19c 10 Lots. 16c

ANTENNA HANKS

20 feet extra flexible stranded copper plastic insulated wire on fibre card.

No. 19A29. 10 Lots. 12c EACH

ANTENNA FEEDER SUPPORT

White porcelain 1 1/2" high, 1 1/4" dia., hole dia. 1/16". Tapped for and supplied with 10-32 screws for mounting.

No. 17A391. 10 Lots. 10c Special, Each 12c

HANDY BOOK SUPPORTS



Perfect for the work bench, ham shack, or office. Keeps books and records in orderly out-of-the-way fashion. Made of springy steel, black enamel finish. Size 4 3/4"x5 1/2". No. 16A458. Per Set of 2 25c

MIKE PLUG and JACK COMBINATION



Consists of 1 JK33A jack and 1 PL68 plug. No. 18A977. Special for Both 29c

BAKELITE & FIBRE ASST.

Tubing and solid rod—odd lengths, mill ends, various diameters, some black, some red. You can't go wrong. Make your own insulating, washers, bushings, spacers, insulated screw drivers, etc. Approximately 50 pieces. No. 18B202. Your Cost 39c

JK24 JACK

Circuit Opening, long frame type—fits PL55 and all standard phone plugs. Has 9/16" shank, mounts with 6-32 diameter Machine Screw. No. 15A2055. Lots of 10c Special, Each 12c

OHMITE "J" 50-WATT

75 Ohm Rheostat. All porcelain, Vitreous enameled. Shaft 1/4" long 3/16" dia. A \$5.85 List Value. No. 18B663. 50c Special, Each 45c Lots of 10. Each

CERAMIC COIL FORMS



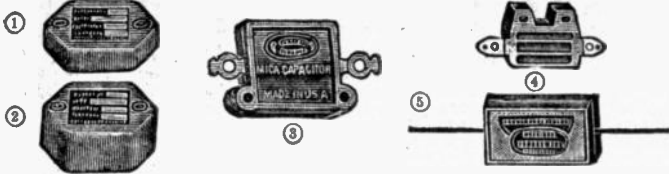
2" dia. x 5" long. Ribbed 10 grooves per inch. Drilled for banana plug connectors. No. 17A371. SPECIAL, EACH 10c

DIAL CABLE

6hur grip. 25 ft. hank, medium size braided silk. 18A889, Special Ea. 39c

Condensers ★ Priced as low as 1/10th of regular price!

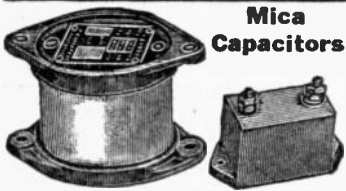
TRANSMITTING MICA CONDENSERS



Every one factory marked for rating. Most celebrated makes, many specially prepared with salt spray test, high capacity stability with respect to temperature change. Buy Them Now for Future Needs.

1000 DC TEST VOLTS				2500 DC TEST VOLTS			
Cap. Mfd. (above)	Type Stock No.	Special Each	10 Lots Each	Cap. Mfd. (above)	Type Stock No.	Special Each	10 Lots Each
.0005	4 15A26	\$.18	\$.16	.00025	3 15A43	\$.35	\$.31
.001	4 15A27	.18	.18	.00025	1 18A614	.35	.31
.005	4 17A287	.20	.18	.0005	3 15A44	.35	.31
.005	5 18A612	.20	.18	.005	1 15A47	.47	.41
.006	3 15A35	.25	.23	.002	3 15A46	.43	.39
.003	4 15A32	.22	.20	.02	2 18A118	.85	.76
.02	4 18A628	.32	.29	5000 DC TEST VOLTS			
.01	4 18A627	.32	.29	Cap. Mfd. (above)	Type Stock No.	Special Each	10 Lots Each
.01	1 18A116	.45	.40	.00025	1 18A613	\$.45	\$.41

Mica Condenser Asst.
TEN, assorted of those listed above and other popular ones. A Real Bargain!
No. 18A633—Per Asst. ... **75c**



Mica Capacitors

① TYPE G1 SANGAMO
6000 Peak Wkg. Volts 5% Tolerance
Anyone who has need for this type of condenser knows what they are. Up to \$31.90 list value units are priced as low as \$2.95.
They won't last long SO HURRY!
Cap. Cat. No. Special Each

.0004	18A596	\$2.95
.0006	18A597	2.95
.001	18A598	2.95
.004	18A599	3.95

.0002, 10,000 Volt Faradon Mica
No. 18A610, Special Each... \$2.95
.09 mfd. 1500 volt C. D. mica.
No. 18A947, SPECIAL, EACH... \$1.45

② Sangamo-Bakelite Encased at LOW LOW PRICE
5% TOLERANCE

Cap. Mfd.	Test Volts	Stock No.	Special Each
.05	1000	18A979	\$.50
.002	1000	18A978	.50
.0001	3000	18A122	.95
.0002	3000	18A123	.95
.0002	5000	18A600	1.45
.0004	5000	18A601	1.45
.0005	5000	18A602	1.45
.0008	5000	18A603	1.45



① Extremely low loss. Finest quality mica, coated with a compound reduced to silver in a high temperature furnace. Working voltage 350 D.C., flash test 1000 V. D.C., leakage resistance more than 10 megohms, tol. plus or minus 10%. Type 831S. List Price Each \$1.50.
No. 18A963, SPECIAL
While They Last, Each... **15c**
Lots of 10
Each... **10c**

② As above, Type 831S feed thru style with threaded bushing. Has a post terminal on one side and a wire terminal on other side. List Price, Each \$2.00.
No. 18A964, Special, Each... **20c**

Every Item New - Clean Top Quality Brands.



Bargains in Small Micas
Every One of Recognized make and quality in standard size with factory marked ratings.

Stk. No.	Cap. Mfd.	Choice Each
18A133	.00005	10c
18A134	.0001	Per 100
18A135	.00015	\$8.00
18A136	.00025	
18A137	.0005	
18A138	.00075	
18A139	.006	Choice Each
18A872	.005	12c
18A667	.004	
18A618	.003	
18A140	.002	
18A611	.0015	
18A610	.001	

18A229 .01 Each... **15c**

SOLAR—"Domino"



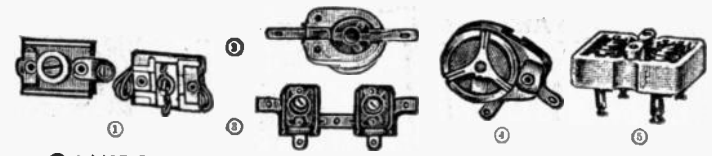
Molded in Bakelite, Meet Underwriters' requirements for units in a non-combustible case for use as a line by-pass—in instruments, electric fuel pumps and many industrial applications.
Every One Bargain Priced.

Cap. Mfd.	Volts	Stock No.	Special Each
.3	200	18A620	15c
.1	400	18A622	13c
.25	400	18A625	18c
.5	200	18A624	25c
.01	1000	18A623	18c

KIT of 10 MOLDED PAPER CONDENSERS, assorted from above and others.
No. 18A827. Per Kit Only... **75c**

.25 Mfd. 350 Volt Oil Filled Tubular Condenser
18A110, sealed in metal container and with tinned wire leads and lugs as illustrated. Each... **15c**

CERAMIC TRIMMER CONDENSERS



① MIDGET TRIMMERS

Stock No.	Cap. in mmfd.	Min.	Max.
15A1126	10	250	
15A1127	15	375	
15A1114	30	450	
15A1112	40	450	
15A1111	65	600	
15A1113	175	300	

CHOICE EACH... **10c** LOTS of 10. EACH... **8c**

② CRL MIDGET TRIMMERS
For soldering into circuit or can be fastened flat to chassis. Very stable and vibration proof. Size 1"x3/8".
No. 17A431, 7 to 45 mmfd.
No. 17A432, 4 to 30 mmfd.
CHOICE, EACH, SPECIAL... **19c**

③ DUAL SECTION
3-30 mmfd. each section, mounted on handy bracket. Can be removed and used individually.
No. 17A433.
Per Assembly... **15c**

④ ROTARY TYPE
110 to 10 mmfd. List Price \$2.50.
No. 18A515.
Special, Each... **35c**

⑤ DUAL CERAMIC TRIMMER
Sec. 1, 120 mmfd.; Sec. 2, 45-180 mmfd.
No. 18A1000.
Special, Each... **10c** For. **75c**

TRIMMER AND PADDER ASST.
25 assorted ceramics in popular capacities and types.
140. 18A156.
Per Asst... **65c**

CERAMIC CAPACITORS



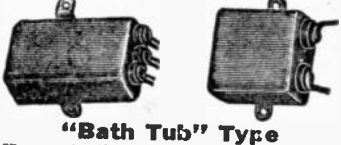
WELL KNOWN QUALITY MAKE

Stock No.	Cap. Mmfd.	Stock No.	Cap. Mmfd.
17B670	3	17C671	30
17B668	5	17B669	70
17B667	8	17C672	200
17B672	10	18A848	250
13A141	15		

YOUR CHOICE, EA... **8c** Lots of 10. EA... **5c**

Ceramic Condenser Asst.
KIT of 10 Fixed Condensers
Assorted from those listed above and other popular capacities. The use of any at regular price would pay for entire lot.
No. 17A376.
Per Asst. of 10... **39c**

Big Values in Oil Filled Capacitors

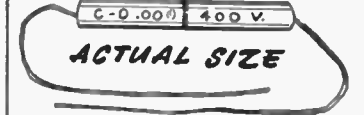


"Bath Tub" Type
Hermetically sealed in metal containers. With solder lugs and mtg. bkts. Top quality, well known brands. Priced at Fractions of Cost.
2x2 mfd., 100 volt—double section. 3 mfd. each sec. Size 2 1/2"x1 1/4"x1".
No. 18A112. Special, Ea. **25c**
1 mfd., 400 volt, 2"x1 1/4"x1".
No. 18A206. Special, Ea. **35c**
1 mfd., 600 volt, 2"x1 1/4"x1".
No. 18A207. Special, Ea. **45c**
2 mfd., 600 volt, 2"x2"x1 1/4".
No. 18A113. Special, Ea. **60c**
.05 mfd., 600 volt, 1 1/4"x1 1/4".
18A228. Special, Ea. **25c**
18A684. .1 mfd., 1000 V. **45c**

Oil Filled Condenser Assortment
10 Assorted of those listed above and other popular capacities in Bath-Tub and tubular types.
No. 18A968.
Per Asst. **95c**

.1 Mfd. 350 Volt Oil Filled Tubular Condenser
Sealed in metal container 2x2x3/4".
18A109, Special, Each... **15c**

BARGAIN PRICED Sub-Midget "MATCHSTIX" 400 V. Tubular Condensers



ACTUAL SIZE

Tiny, high-quality tubulars that can really "take it". Developed during the war for the VT fuse—requiring the utmost in stability, and highest possible insulation resistance. Use them for hearing aids, vest-pocket radios, radio-controlled models, or even regular full-size radio equipment. Over-all size only 5/32" dia., 1" long with cemented-in, 2" flexible, tinned wire leads.

Stk. No.	MFD	While They Last
15A384	.001	
15A385	.002	Your Last
15A386	.004	Choice Ea.
15A387	.01	10 for 25c

PAPER TUBULARS at LESS THAN 1/2 PRICE



400 Volt Paper Tubulars, top notch quality, standard make and size.
2 mfd.—18A981.
.5 mfd.—17A443.

CHOICE 12c Lots of 10. **10c** Each...
BUFFER CONDENSER
.02 mfd., 1600 Volt, oil filled tubular, sealed and externally insulated. Size 1 1/2"x3/4" with tinned wire leads. 75c Value!
No. 17A364. **35c** Lots of **25c** Special, Each... 10. Ea.

BARGAIN ASSORTMENT 25 PAPER TUBULARS

A handy assortment of 25 paper tubular Condensers, in good usable capacities and voltages. All first quality standard makes.
No. 13A203.
25 Assorted, Only... **\$1.95**
Kit of 25 Paper Tubulars, 5 each .01, .02, .05, .1, 5 mfd., all 600 volt. Special, Per Kit.
No. 21T3999... **\$2.85**

Quantities are limited and Subject to Prior sale. So Hurry Your Orders.

Take Time, Check every item FOR TERRIFIC VALUES

Oil Filled High Voltage Condensers AT A FRACTION of REGULAR VALUE

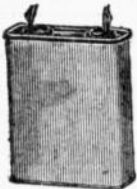


Every one Brand New. Known Brands with Ceramic pillar terminals, in hermetically sealed rectangular metal cases. Ratings and voltages are exact as marked on each unit by the maker. Built to rigid A & N Specifications. Buy Now, for Future Needs—they can't spoil—you will pay up to 5 times these prices when present surplus stocks are gone.

Cap. Mfd.	Working Volts	Size	Stock No.	Price Each
.2	5000	3 3/4 x 4 x 1 3/4"	17A341	\$0.65
.5	4000	3 1/2 x 3 x 1 3/4"	17A339	.95
1	1000	2 3/4 x 1 5/8 x 1"	17A169	.65
2	600	2 1/8 x 1 3/4 x 1"	18A214	.65
2	1000	4 x 1 3/4 x 1"	17A170	.95
2	2500	1 3/4 x 3 3/4 x 5 1/2"	21T3990	2.95
4	1000	4 5/8 x 2 1/2 x 1 1/8"	18A226	1.35
4	600	4 3/4 x 1 3/4 x 1"	18A366	1.65
5	1000	4 5/8 x 3 3/4 x 1 1/4"	18A367	1.45
10	1000	4 5/8 x 3 3/4 x 1 3/4"	17A268	1.95

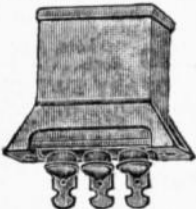
Dimensions given above are can size and do not include the additional height of the pillar terminals.

HERMETICALLY SEALED LUG TERMINALS



Oil filled condensers in hermetically sealed rectangular cans with flat lug terminals.

10 Mfd. 600-Volt. Size 4 5/8 x 3 1/2 x 1 1/8".	No. 18A111. SPECIAL, EACH.....	95c	
4 Mfd. 600-Volt. Size 3 1/4 x 2 1/2 x 1 1/4".	No. 18A971. SPECIAL, EACH.....	65c	
4 Mfd. 400-Volt. Size 3 1/4 x 2 1/2 x 1".	No. 17A340. SPECIAL, EACH.....	49c	
2 Mfd. 400-Volt. Size 2 3/4 x 1 3/4 x 1".	No. 17A342. SPECIAL, EACH.....	29c	10 Lots. 25c
2 Mfd. 600-Volt. Size 2 3/4 x 1 5/8 x 1 1/8".	No. 18A881. SPECIAL, EACH.....		45c
.5 x .5 400-Volt. Dual Section Size 1 7/8 x 1 5/16 x 1 1/16".	No. 18A209. SPECIAL, EACH.....	35c	10 Lots. 32c
.5 Mfd. 600-Volt. Size 1 3/4 x 1 1/4 x 1 1/16".	No. 18A211. SPECIAL, EACH.....	40c	10 Lots. 36c
1 Mfd. 400-Volt. Size 1 3/4 x 1 1/4 x 5/8".	No. 18A212. SPECIAL, EACH.....	50c	10 Lots. 45c
.25 Mfd. 400-Volt. Size 1 x 1 1/4 x 5/8".	No. 18A224. SPECIAL, EACH.....	35c	10 Lots. 32c



3X.1 Mfd. 600 Volt Oil Filled Condenser Only Each.. 10c

Hermetically sealed metal case. Height overall 2 5/8 x 2 3/8" wide at mounting bracket x 1/2" thick. 3 sections. 1 Mfd. each section at 600-Volt DC. No. 18A592. Crazy Low Price. Each..... 10c

CONDENSERS FOR EXTRA TOUGH SERVICES SUCH AS PA POWER AMPLIFIERS, ETC.

2 MFD. 1000-VOLT DC Oil Filled Condenser C D Type TLA



In hermetically sealed round aluminum can size 1 1/2" x 4 1/4". Standard inverted mtg. with threaded neck thru 3/4" hole. One terminal is well insulated, the other being the can itself. Often used to replace up to 8 mfd. electrolytics in amplifiers, etc. Regular List Price Value \$4.00.

No. 18A890, Limited Quantity. Special Ea. 75c

2 MFD. 600 VOLT DC. As above, size 1 3/8 x 3 3/4". No. 18A594. Special, Each... 60c

4 MFD. 600-VOLT DC Oil Filled Condenser

In round aluminum can like above, Standard quality make. Often used to replace up to 16 mfd. electrolytics. Regular List Price Value \$4.50. No. 18A891. Special Each... 75c



REPLACEMENT FOR 8-8 MFD. ELECTROLYTIC CONDENSERS

800-Volt Peak 600-Volt DC Working

Paper-wound in standard inverted aluminum can size 1 1/2 x 4 1/2" and 6" wire leads. A quality replacement for 8-8 mfd. Electrolytics, especially where excessive surges are encountered. No pollution to be observed. Well known quality make, priced at less than 1/2 its usual price. Buy plenty—paper condensers won't deteriorate in stock. No. 17A365. 10 Lots. 70c Special, Each..... 95c

MOUNTING BRACKETS



① LOCKING CLAMPS

Plated Steel Band with integral locking device and mounting bracket. For holding tubes and other cylindrical components securely in place. The universal bracket makes it adaptable for many applications.

No. 18A590. For 1 1/8" dia. tubes or components, Each... 10c

No. 18A591. For 2 3/8" dia. devices. Has two mounting brackets. SPECIAL, EACH..... 15c

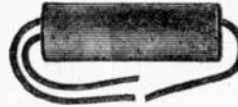
② FOR 1 3/8" DIA. TUBULAR

Condensers or other cylindrical components.

No. 18A589. SPECIAL, EACH... 5c

QUANTITIES ARE LIMITED AND SUBJECT TO PRIOR SALE... HURRY YOUR ORDERS!

DRY ELECTROLYTICS AT 1/2 REGULAR PRICE AND LESS!



Quality makes, fully guaranteed, waxed cardboard encased with tinned or insulated wire leads. Dual types have common negative.

Cap Mfd.	DC Volts	Stock No.	Net Ea.	10 Lots
8	450	17A225	29c	27c
8-8	450	17A234	59c	48c
16	450	17A232	41c	39c
20	450	14A775	59c	54c
30	450	17A233	55c	53c
8	150	14A774	32c	29c

Cap Mfd.	DC Volts	Stock No.	Net Ea.	10 Lots
20	150	18A634	25c	23c
20-20	150	17A235	35c	31c
30-20	150	17A439	34c	32c
30-30	150	17A440	45c	43c
40-20	150	18A632	50c	48c
40-20-20	150	18A959	59c	53c
50-30	150	17A441	50c	48c

MIDGET BOX TYPE

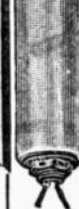


8 MFD. 450-Volt Working

DRY ELECTROLYTICS

Cardboard carton type dry electrolytic. Mounting flanges have slotted holes to fit various spacings. Mount flat, upright or will stack. Size 2 1/2 x 1 1/8 x 3/4". No. 15A267. Each..... 35c

1000 MFD. ELECTROLYTIC CAPACITOR



25 VOLTS DC WORKING

In plastic upright can, size 1 3/8" dia. x 3 1/2" high. Has 3/4" screw neck mounting and 5" wire leads. A dandy for replacement in or construction of low-voltage rectified AC supplies. No. 17A363. Special, Each 79c



FP TYPE DRY ELECTROLYTICS

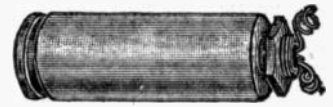
20-20 mfd.—450 Volts. Can size 1 x 3"

No. 18A630. SPECIAL, EACH... 69c

50x30 mfd.—150 Volts x 250 mfd. 10 Volts. Can size 1 x 2 3/4". No. 18A999. SPECIAL, EACH... 59c

Aluminum Can Screw Neck Electrolytics

Direct Replacement for Upright Wet and Dry Electrolytics



450 Working, 525 Peak Volts

Designed for heavy duty service—size 1 3/8" x 4" with 3/4" standard threaded neck—easy to mount in holes of old condenser to be replaced. Finest Quality, Fully Guaranteed.

8 Mfd. No. 15A378. Each... \$.84
16 Mfd. No. 15A379. Each... 1.09
20 Mfd. No. 15A383. Each... 1.21
30 Mfd. No. 15A380. Each... 1.37
8-8 Mfd. No. 15A381. Each... 1.36



40-20 mfd. 150 Volt Top Brand Quality make Dry Electrolytic Tubular Condenser. Compact, size 2" x 1 1/4". Latest type, has aluminum case with insulated cover and tinned solder lugs, common negative. Hermetically sealed, withstands high humidity. Regular Net 88c Each.

Here You Get No. 17A442. Each..... 40c
10 Lots, Each..... 38c

JENSEN NF-300 SPEECH MASTER REPRODUCER

An exceptionally compact and heavy duty loud speaker for the reproduction of speech. Very rugged and strong. Capable of withstanding extreme shock and vibration. Overrides wind and high background noise under most adverse conditions. Recommended for paging in plants, arenas, and other high noise areas where ordinary speakers are inadequate. Special design accentuates speech frequencies and permits use as talk back microphone in intercommunication systems. Embodies a heavy Alnico V magnet assembly, and moulded phenolic diaphragm with bakelite and cast metal sound chamber. Speech power rating 10 watts. Voice coil impedance 12 ohms. Has protective front screen and mounts easily in panel with flange rim. Diameter only 6 7/16" overall, 2 1/8" behind panel. Weight, 4 3/4 lbs. No. 36A85. EACH..... \$9.95



IGNITION FILTERS

Oil filled .5 Mfd. 200-volt in hermetically sealed metal can size 3/4 x 2 1/4". Single lug connection, can is negative. No. 17B727. 15c Lots of 10. Each 12c

.5 MFD. 1000-VOLT DC GE PYRANOL CONDENSER



Compact hermetically sealed drawn metal case, overall size 3 1/4" high, 1 3/16" wide x 9/16" thick. Mounting bracket attached.

A Whale of a Bargain! No. 18B609. 49c Lots of 10. Each 45c

A TERRIFIC VIBRATOR BARGAIN!

Well known quality make released from government Surplus. BRAND NEW — PERFECT.

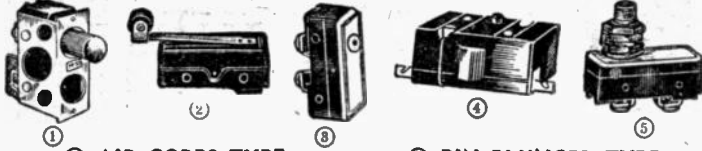


Non-Sync. 4 Contacts—4 Prongs (Standard) Fits Many Popular Auto Radios

19A25. Special, Each... \$1.19
TEN Lots, Each..... 99c

SWITCHES are always staple... You can go all out at these prices

MICRO SWITCHES for MOST ANY NEED



① AIR CORPS TYPE
Push-button type with bracket and mtg. holes. Rated at 25 amps., at 28.5 volts DC and 10 amps., at 125 volts AC.
Type WZ-RQ41. Norm. closed. 10 Lots **30c**
No. 18A991. Ea. **35c**
Type YZ-RQ41. Norm. open. 10 Lots **30c**
No. 18B225. Ea. **35c**
Type BZ-RQ41. Double throw. 10 Lots **40c**
No. 18A992. Ea. **45c**

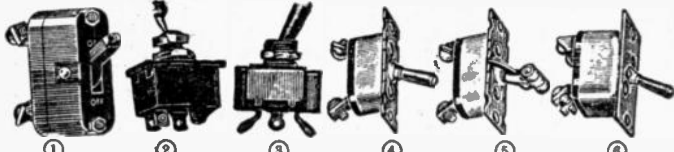
③ PIN PLUNGER TYPE
Type YZR31, S.P.S.T., norm. open. Operating pressure 7 to 8 1/2 oz.
No. 18A168. **45c** 10 Lots **35c**
Type BZ-7FTC, Double throw. Operating pressure approx. 32 oz.
No. 18A994. **50c** 10 Lots **40c**
Special, Each

② ACRO LEAF SWITCHES
Roller pin plunger type, all rated at 10 A. at 125 volts—5 A. at 250 volts. Pressure to operate 5 to 6 ounces.
Type RO-2M1, S.P.S.T. norm. open. 10 Lots **35c**
No. 17A255. **40c**
Special, Each
Type RD-2M, S.P.D.T. 10 Lots **45c**
No. 17A256. **50c**
Special, Each

④ G.E. SWITCHETTE
Type B3, normally open. Snap action momentary switch for limited space applications. Size only 1 1/4 x 1/2" of black bakelite. Operates by snap action of built-in spring return button. Contacts of pure silver.
No. 18A951. Special, Each **39c**
Type C3, D.P.S.T. 10 Lots **35c**
No. 18A952. Ea. **40c**
Special, Each

⑤ PUSH-BUTTON PLUNGER
Type BZRQIT, S.P.D.T. Single hole panel mounting.
No. 18A933. **50c** 10 Lots **45c**
Special, Each

TOGGLE SWITCHES at TERRIFIC SAVINGS



① HEAVY DUTY—BAKELITE
6 amp., "KLIXON" all bakelite, off-on switch. Size overall 2x1x3/4". Mounts with 8-32 screws. Has screw type connecting lugs.
No. 17A354. SPECIAL, Each **65c**

S.P.D.T. center off. Otherwise like Fig. 4.
No. 18A29. **30c** 10 Lots **28c**
Special, Each

② C-H D.P.D.T.
5 amp., at 125 volt; 3 amp., at 250 volt. 7/16" shank. Bakelite encased.
No. 17A436. **45c** 10 Lots **35c**
Special, Each

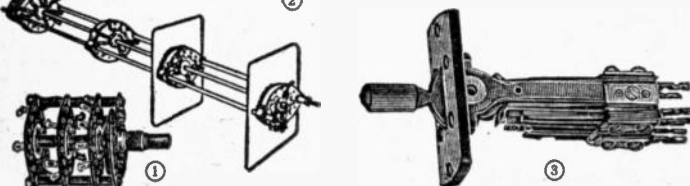
⑤ C-H MOMENTARY TYPE
S.P.S.T. Normally on, in "OFF" position with lever held down, spring return to "ON" when released. Rated at 5 amp., at 125 volts; 35 amp., at 24 volts. Has 3/4x2 1/16" mtg. plate with 1 13/16" mounting centers.
No. 18A27. **15c** 10 Lots **12c**
Special, Each
Normally Off, otherwise same as above.
No. 18A28. **20c** 10 Lots **18c**
Special, Each

③ C-H BAT HANDLE
S.P.D.T. 5 amp., at 125 volt; 3 amp., at 250 volt. Has 1/2" standard shank. Bakelite encased, compact, solder lugs.
No. 18A537. **35c** 10 Lots **30c**
Special, Each
OFF-ON, otherwise as above.
No. 17A381. **20c** 10 Lots **18c**
Special, Each
D.P.S.T. with lugs at side, otherwise as above.
No. 18A552. Ea. **35c** 10 Lots **30c**
Special, Each

⑥ C-H D.P. MOMENTARY
D.P.S.T. Normally on, in "OFF" position with lever held down, spring return to "ON" when released. Rated at 20-30 amp., at 125 volts. Has mtg. plate size 1 1/2x2 1/16" with 1 13/16" mounting centers.
No. 18A31. **65c** 10 Lots **55c**
Special, Each
D.P.D.T. Normally off in center position, in "ON" position with lever held up or down, spring return to "OFF" when released. Otherwise as above.
No. 18A32. **75c** 10 Lots **65c**
Special, Each

④ C-H HEAVY DUTY
OFF-ON. Rated at 5 amp., at 125 volts; 35 amp., at 24 volts. Has mtg. plate size 3/4x2 1/16".
No. 18A993. **18c** 10 Lots **15c**
Special, Each
S.P.D.T. otherwise like Fig. (4).
No. 18A1007. **28c** 10 Lots **25c**
Special, Each

CERAMIC SELECTOR and CAM ACTION SWITCHES

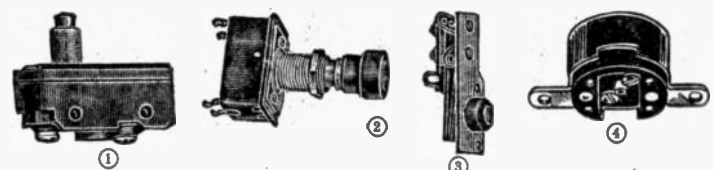


① CERAMIC SELECTOR SWITCH. 3 deck, capable of innumerable switching combinations. Mounts in 3/8" hole, has 1/4" shaft.
Stock No. 18A965. SPECIAL, EACH **39c** 10 Lots, Each **35c**

② CERAMIC GANG SWITCH. 8 circuits, 2 positions, 4 sections. The two center sects. are 2 cir., 2 pos. Front sect. is 3 cir., 2 pos. Rear sect. is 1 cir., 2 pos. The two rear sect. are individually shielded. Overall length 10". Can be easily disassembled and converted to a variety of combinations.
No. 17A428. SPECIAL, EACH **60c** 10 Lots, Each **40c**

③ CAM ACTION LEVER SWITCH—LOCKING TYPE. 3 circuit, normally open. Extends 3 1/2" behind panel. Mtg. plate 1x2". Bakelite handle.
No. 18A532. BAKELITE HANDLE. EACH **60c** 10 Lots, Each **60c**

BARGAINS in PUSH-BUTTON SWITCHES



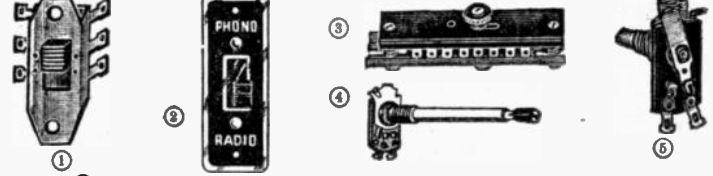
① C-H PLUNGER TYPE
Normally open. In "ON" position with pressure on plunger, in "OFF" position when plunger is released—the ideal safety switch for cabinets housing high voltages.
No. 17A257. **45c** 10 Lots **40c**
Special, Each

③ CIRCUIT CLOSING SWITCH
S.P.S.T. Normally open. Leaf type construction with 3/32" flat silver contacts. Flush mtg. Size 3/4x2".
No. 17A276. **15c** 10 Lots **12c**
Special, Each

② MOMENTARY D.P.S.T.
Normally closed. Finest quality make. Has bakelite push knob, mounts in panel up to 1/2" thick.
No. 18A874. **45c** 10 Lots **40c**
Special, Each

④ SURFACE MTG. SWITCH
Momentary type, normally open. Ideal for surface mtg. on floor, panels, etc. Has metal cover with bakelite body and screw terminals. Ruggedly constructed. Size 1" dia. x 3/4" high. Mtg. centers 1 3/8".
No. 15A1128. Ea. **18c** Each **15c**

HANDY SLIDE and ROTARY SWITCHES



① SLIDE SWITCHES
Small compact switch for a multitude of uses. Solder lug terminals and screw holes for mounting.
No. 17A437. D.P.D.T. Each **18c**
No. 17A438. **12c**
S.P.S.T. EACH

SWITCH PLATES ONLY
(Not illustrated.) Dual switch plate, one marked RADIO-PHONO other MOTOR ON-OFF.
No. 15A1153. SPECIAL, EACH **10c**

METAL SWITCH BOX
(Not illustrated.) Slip-on metal switch box that provides a protective cover for terminals. Has 3/8" dia. hole for leads. Fits all standard midsize slide switches.
No. 17B678. SPECIAL, EACH **5c**

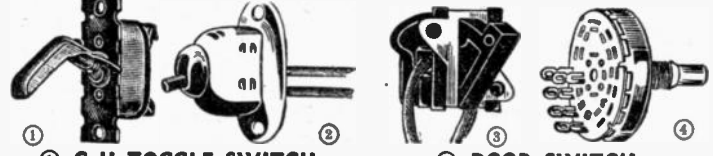
③ LOCKING SLIDE SWITCH
Completes 4 isolated circuits in each of TWO positions. Double break contacts. Thumbscrew locks it in either position. Has bakelite insulation throughout. A very high grade switch with many possible uses.
No. 17A273. **25c** 10 Lots **20c**
Each

② PHONO SLIDE SWITCHES WITH PLATES
Standard slide switches already mounted to plates 2 1/2x7/8". 2 3/16" mtg. centers.
No. 17A358. S.P.S.T. Plate Marked ON-OFF. Special, Each **19c**
No. 17A356. S.P.D.T. Plate Marked Phono-Radio. **21c**
Special Each

④ S.P.D.T. ROTARY SWITCH
With off position, shorting type. 2 3/4" split knurled shaft, 5/16" threaded shank.
No. 18A166. Ea. **18c** Each **15c**

⑤ WAFER TYPE
S.P.D.T. Compact, with 5/16" threaded shank 1/4" long plus 5/16" long 1/4" shaft.
No. 18A534. Ea. **10c** Each **8c**

MISCELLANEOUS — POPULAR SWITCHES



① C-H TOGGLE SWITCH
S.P.S.T. ON-OFF. Has special handy finger lever and mounting plate, size 2 1/16x3/4". Mtg. centers 1 13/16". Rated 5 amp., at 125 volts.
No. 18A34. **25c** 10 Lots **20c**
Special, Each

③ DOOR SWITCH
S.P.S.T. Norm. closed, spring return. Recommended for cabinets, closets, refrigerators, etc., where opening doors turns on light or alarm. Small easily mounted. Has 20" wire leads. Rated at .75 amp., at 125 volts.
No. 17B258. **35c** 10 Lots **31c**
Special, Each

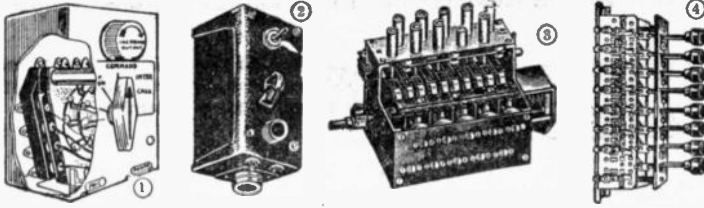
② TOGGLE SWITCH with WIRE LEADS
S.P.S.T. enclosed in metal shell for surface mounting on panels or motors, etc. Has heavy lead wires.
No. 17A382. **12c** 10 Lots **10c**
Special, Each

④ ROTARY SELECTOR SWITCH
Mallory 4-position, single circuit, 1 1/4" dia. Has 1/4" shaft 1/2" long.
No. 17A389. **15c** 10 Lots **12c**
Special, Each

HERE'S A REAL BARGAIN in SWITCHES
10 ASSORTED FOR ONLY **95c**
A handy assortment of Toggle, Push-button and slide switch types. All Brand New — Perfect. IF YOU USE SWITCHES at ALL YOU SHOULD HAVE THIS ASSORTMENT!
No. 18A935. Per Asst. of **10 ONLY 95c**

Relays and Switching Units at Low Prices Crazy

SWITCH ASSEMBLIES and PUSH-BUTTON UNITS



① INTERPHONE SWITCHING ASSEMBLY

Consist of 5-position selector switch (4 positive and 1 spring return) operated with bar type pointer knob. Included in assembly is a 10,000 ohm control with knob; one JK33A mike jack, one JK34A phone jack, an 11-point terminal block and receptacle of standard banana plugs and jacks. Entire assembly in a handy cast aluminum box, size $4\frac{3}{8} \times 3\frac{1}{4} \times 2\frac{1}{8}$ ". Has many applications for switch control in intercoms and P.A. Easy to wire for individual needs or to dismantle for parts, which are a tremendous bargain at the price we ask for the complete unit.

Stock No. 21T3984. SPECIAL, EACH, ALL BRAND NEW..... **59c**
21T3984A. As above except without back cover and 11-point terminal block receptacle for banana plugs. All other parts as above. **29c**
All Brand New. SPECIAL, EACH..... **29c**

② INTERPHONE and RADIO SELECTOR SWITCH

Assembly consists of DPDT toggle switch, 3-position tap switch and knob, JK33 mike jack, JK34 phone jack, 10,000 ohm pot with switch and knob wired into a neat $5 \times 2\frac{1}{4} \times 2\frac{1}{2}$ " black crackle aluminum box with front cover removable. Just it for building FM adaptor, Frequency meter, etc. Disassembled the parts are a whale of a bargain at this price.

No. 18A955. ALL BRAND NEW. Special, Each..... **59c**

③ PUSH-BUTTON TUNING UNIT

Consists of Ten $7/16$ " dia. Chrome-plated push buttons that extend $1\frac{1}{4}$ " from plate. Each button DPST positive action and automatic release. Assembly includes: Ten adjustable 100 mmf air padders, a 50 mmf variable automatically cam-adjusted or set manually by rotating and external shaft, and an adjustable 25 mmf air padder. Mounting drilled for 6-32 and 8-32 screws. Condensers are easily removed; parts value of this unit is many times greater than our low price! Size $6 \times 8 \times 5\frac{1}{2}$ ".

Stock No. 3B74. ALL BRAND NEW. Special, Each..... **\$2.45**

④ PUSH-BUTTON SELECTOR SWITCH

An eight-button switch designed for push-button tuning and numerous other switching applications. Has seven two-circuit sections which are all bridged together when all buttons are out (normal). Operating any one button releases all others to normal and inserts into the circuit the coils, resistors or whatever is being switched. The eighth button operates a SPST and a SPDT switch. Contacts can be easily modified and shoring sections removed for other circuit combinations. With removable walnut bakelite buttons. Size overall $6\frac{3}{8}$ " long, $1\frac{5}{8}$ " deep behind panel, $1\frac{1}{4}$ " thick. BRAND NEW.

Stock No. 17A344. SPECIAL, EACH..... **65c** LOTS OF 10, EACH..... **50c**

STARTING RELAY and CIRCUIT BREAKER



① STARTING RELAY. S.P.S.T. double break. Operates on 8 to 14 volts DC continuous duty. Will carry very high current. Used on PE 103A power units, etc.

No. 18A970. SPECIAL, EACH... **65c**

② KLIXON 24-VOLT CIRCUIT BREAKER. Type PLM 90, will handle very high current. Screw terminals. Mfg. centers $2\frac{3}{8}$ ".

No. 18A197. SPECIAL, EACH... **50c**

DIAL LOCK



Easy to mount in single hole. Positive action, does not alter dial setting.

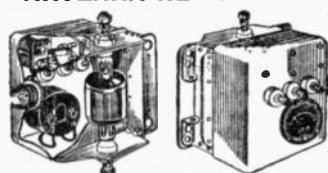
No. 18A526. Spec., Each... **18c**

CORD TYPE PUSH-BUTTON SWITCH

Well designed DPST double break momentary switch. Originally used as aircraft gun switch but well suited for any control operation requiring current capacity not over 5 amp. 1" diameter.

18A1008. Each..... **50c**

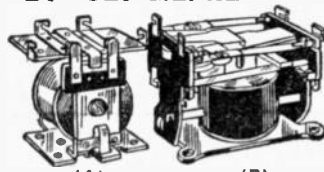
ANTENNA RELAY UNIT



Contains: 0-10 G.E. meter with 19.5 millivolt movement, a 50 mmf., 5000 volt vacuum condenser, and a SPDT antenna switching relay with 28-volt winding all wired in an aluminum box.

No. 3A114. SPECIAL, EACH..... **\$2.95**

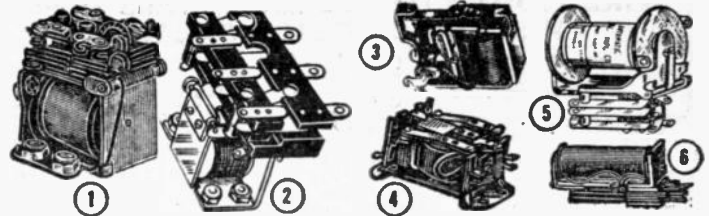
24 VOLT G.E. RELAYS



(A) 4 poles single throw normally open. Will handle up to 10 amperes non-inductive load. Coil voltage 24 V. DC. Resistance 300 ohm. Size $1\frac{1}{2} \times 1\frac{3}{4} \times 2\frac{1}{2}$ " long. Made by G. E. No. CR2791G100. Each..... **69c** Lots of 10, Each **59c**

(B) S.P.S.T. Normally open double break Midget relay. Positive noiseless operation. Coil resistance 175 ohms. Has $3/16$ " silver contacts. Size $1\frac{3}{8}$ " high, $1\frac{1}{2}$ " wide, $1\frac{1}{4}$ " deep. Has four 6-32 tapped holes for mtg. G. E. No. CR2791-B100A3. No. 17B660. Each..... **59c** Lots of 10, Each **49c**

RIDICULOUSLY LOW PRICES on RELAYS



① AUTOMATIC 24 VOLT DC D.P.D.T. 230 ohm coil, operates on 100 MA. Can be used in Cathode circuit to switch transformer primary, etc. Heavy duty wiping contacts. Very compact, size $1\frac{3}{4} \times 1\frac{3}{8}$ ". Mounts with 6-32 screws. Brand New.

No. 18A538. Lots of 40c Special, Each **45c** 10. Each **40c**

② 3-POLE SINGLE THROW Coil resistance 200 ohms. Operates on 100 to 150 MA at 20 to 30 volts DC. Contacts will safely handle 10 amps. at 110 volts AC. All bakelite insulation. Overall size $2 \times 2 \times 2$ ".

No. 17A355. Lots of 79c Special, Each **79c** 10. Each **65c**

③ S.P.D.T. MINIATURE Coil 115 volts AC. Overall size $1\frac{1}{4} \times 1\frac{3}{4} \times 1\frac{1}{2}$ ". Single screw mounting. Brand New.

No. 17A351. SPECIAL, EACH **95c**

④ 24 VOLT DC D.P.D.T. ANTENNA RELAY. Operates on 24-volt DC or in series with bias supply bleeder or tube cathode circuits. Coil resistance approx. 250 ohms. Operating current approx. 90 MA. Has additional SPST contacts, normally open. Very neat with ceramic insulation throughout and $1/4$ " silver contacts.

Size $3 \times 1\frac{1}{2} \times 1\frac{5}{8}$ " wide. Made by Advance Elec. or Leach Relay Co. Brand New.

No. 18A988. A Real Value. Each..... **\$1.65**

⑤ SENSITIVE RELAYS 4.5 MA. Contact arrangement in normal position, make one, break one. 6500 ohm coil. Can be used as single SPDT. Size $1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ ".

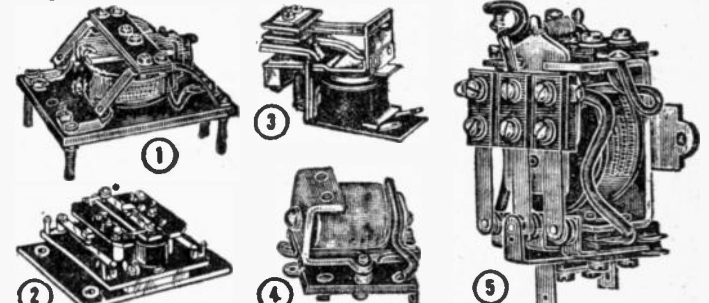
No. 17A377. Lots of 95c Special, Each **95c** 10. Each **85c**

⑥ 24 VOLT AC RELAY S.P.S.T. & S.P.D.T. int. Can also be used on 6 V. DC continuous duty. Size overall $1\frac{3}{8} \times 1\frac{3}{8} \times 1\frac{1}{2}$ ".

No. 19A27. Lots of 95c Special, Each **95c** 10. Each **85c**

⑦ SENSITIVE 6500 OHM Telephone type, for vertical or horizontal mounting. Contact arrangement, SPDT plus SPST normally open. Operates nicely on any 24-volt DC source or in tube plate or Cathode circuits carrying current of 4 MA or more. Size $4 \times 1\frac{1}{4} \times 1\frac{3}{4}$ ". BRAND NEW.

No. 18A989. SPECIAL, EACH..... **\$1.45**



① ADVANCE 60 VOLT DC D.P.S.T. normally open 10 amp contacts. 1500 ohm coil. Normally operating on 40 MA, it is ideal for underload or remote control applications. Mounted on micarta base, $3\frac{1}{4} \times 2\frac{1}{4}$ ", overall height $1\frac{3}{8}$ ".

No. 18A542. SPECIAL, EACH **95c**

② KEYING-BREAK-IN RELAY Double coil type for operation on 12-volt DC or 6-volt DC with coils in parallel. Has 2 sets of heavy $1/4$ " silver contacts normally open and 2 sets of light duty contacts normally closed. Well insulated for high voltage. Beautifully constructed of black bakelite. Size $2\frac{5}{8} \times 3\frac{7}{8} \times 1\frac{3}{4}$ " high.

No. 18A957. SPECIAL, EACH..... **\$1.49**

③ 110 VOLT AC S.P.S.T. contacts, normally open, of $3/16$ " dia. fine silver, rated at 550 watts non-inductive load at 60 cycles. Coil operates on 95 to 125 volts 50-60 cycles AC, with DC resistance of 550 ohms. Overall size, $2\frac{1}{2} \times 1\frac{7}{8} \times 1\frac{1}{8}$ ".

No. 17A353. SPECIAL, EACH **85c**

④ 12 VOLT DC MIDGET S.P.S.T. contacts, normally open. All ceramic insulation. Coil resistance 150 ohms. Operates on approx. 80 MA. Can be used in tube Cathode or power supply bleeder special control circuits. Made by Allied Control. Size $1\frac{1}{4} \times 1\frac{1}{8} \times 7/8$ ".

No. 18A990. SPECIAL, EACH **85c**

⑤ 24 VOLT MIDGETS S.P.D.T. By removing one screw, coil can be slipped out and easily rewound for other voltages. Size $1\frac{1}{4} \times 1\frac{1}{8} \times 7/8$ ".

No. 17A458. SPECIAL, EACH..... **95c**

⑥ ADVANCE 40 VOLT DC Type 975-B-3B, 3-pole, center contact SPDT—outer contacts ST. Normally open. 40 volts. DC, 1000 ohm coil, 10 amp., at 115 volts contacts. Area required for mounting, $2\frac{5}{8} \times 1\frac{7}{8}$ ". Ideal for many industrial applications. Worth twice the price asked.

No. 18A157. SPECIAL, EACH... **95c**

AN OUTSTANDING VALUE in RELAYS and RELAY PARTS

An assortment that provides unlimited experimental fun. Consist of 5 various relays, an extra relay coil and extra contact points.

ALL BRAND NEW.

No. 15A2036. Per Asst., ONLY..... **\$1.95**

Resistors AT PRICES YOU CAN STOCK UP FOR YEARS TO COME!

WIRE WOUND RESISTORS, Ferrule Type PRICED FOR QUICK SALE!

Ohms	Watt	Cat. No.	Price
125	1/2 x 2"	18A76	10c
	10 Watt		
125	3/4 x 3 1/2"	18A77	12c
1600	3/4 x 3 1/2"	18A78	12c
3000	3/4 x 3"	18A576	12c
3150	3/4 x 3"	18A79	12c
7.5	3/4 x 3 1/2"	18A80	15c
15	3/4 x 3 1/2"	18A81	15c
16000	3/4 x 3 1/2"	18A85	15c
	25 Watt		
315	1 1/4 x 4 1/2"	18A571	30c
400	1 1/4 x 4 1/2"	18A572	30c
400	1 1/4 x 5 1/2"	18A86	30c
1000	1 1/4 x 5 1/2"	18A583	30c
6000	1 1/4 x 5 1/2"	18A573	30c
8000	1 1/4 x 4 1/2"	18A88	30c
10,000	1 1/4 x 5 1/2"	18A574	30c
	100 Watt		
800	1 1/2 x 7 1/2"	18A577	35c
2000	1 1/2 x 7 1/2"	18A578	35c
	200 Watt		
40,000	1 1/2 x 9 1/2"	18A91	50c

Top quality makes, vitreous enameled. These present no problem in mounting with the wide selection of holders listed below—and a distinct advantage when a replacement is necessary—merely pull out the old and slip in the new as you would a cartridge fuse. Lengths given are over-all, including ferrule.

BARGAIN Assortment Ferrule Resistors
Includes 10 Resistors from above or other size ferrule type. Ideal for experiments, etc.
18A93, Per Asst. of 10 **95c**

Wire Wound Resistors at Fractions of Regular Value

Well known quality makes, vitreous enameled and cement coated with lugs as illustrated.

Stk. No.	Ohms	Watts	Size	Spec. Each
18A789.	100,000	100	3/4 x 6 1/2"	45c
18A799.	4,000	25	3/4 x 2"	25c
18A794.	100,000	50	3/4 x 4 1/2"	45c
18A795.	200,000	200	1 1/8 x 10 1/2"	95c
18A796.	75	50	3/4 x 4 1/2"	50c
18A797.	10,000	200	1 1/8 x 10 1/2"	95c

TYPE 4AG FUSES

Glass enclosed, 3/16" dia. x 1 1/4" long. Designed for use where there is considerable vibration such as in aircraft, etc. Being only 1/16" larger in dia. than the 3 AG type, they can usually be used to replace the 3 AG.

18A778. 2 Amp. } Choice
18A779. 3 Amp. } Each **3c**
18A780. 5 Amp. }

Box of **\$1.95**

Assortment of 100 4 AG Fuses. A mixed lot of above sizes.
18A785, Per Asst. of 100 **\$1.95**

TYPE 3AG FUSES

15A1146.	1 Amp.	Choice	2c
18A787.	2 Amp.	Each	.....
15A1147.	3 Amp.		
15A1148.	20 Amp.	Box	..... 95c
15A1149.	40 Amp.	of 100	

20 Amp. 250 Volt FUSES

250 volt, standard cartridge fuses. 2" long x 1/8" dia., Chase-Shawmut No. 2008.
18A177. Per Box of 10..... **50c**

HIGH VOLTAGE 1 1/2 Amp. 2500 Volt Fuse

Fibre enclosed with bright dipped brass end caps 1/16" dia. x 4 1/2" long. Fuse elements are phosphor bronze ribbons rigidly supported inside the fibre tube.
Resistance 1.1 ohms.
18A777, Special Each **10c**

Clips for Ferrule Resistors or Cartridge Type Fuses

12A1324—Cad. plated for 3/16" dia. ferrules or fuses.....	4c
12A1325—Bronze for 3/16" dia. ferrules or fuses.....	4c
18A775—Cad. plated for 1/8" dia. ferrules or fuses.....	5c
18A776—Bronze for 1/8" dia. ferrules or fuses.....	5c

Resistor Clip With Insulator

Cad. plated clip for 1/8" dia. ferrule resistors or fuses mounted to 1 1/2" high x 3/4" square. Ceramic insulator threaded for easy mtg.
Stock No. 18A793, Special Each **10c**

FUSE Clips

No. 12A1322—Phosphor bronze N.P. clips for 1/8" dia. fuses such as 3AG, etc.	1c
No. 12A1323—Beryllium copper clips for 1/8" dia. fuses such as high voltage, etc.	3c

B-A Bargain listings are CONFINED to Clean, Brand New, Known Quality Makes. Salvage from assembled equipment, etc., have no place at B.A. You can depend on it—Anything you order will be "tops" in Value.

Fuse Extractor Posts

For 3 or 4 AG Fuses. Mounts on panels up to 1/8" thick, 1/2" mtg. hole, extends behind panel 1 1/2". Fuse easily replaced from front of panel by screw type finger grip knob.
18A788, Special Each **15c**
100 Lots, Each **12c**

FOR 3AG FUSES otherwise as above (less mtg. nuts).
15A1125. SPECIAL, EACH.... **10c**

Fuse & Resistor Mtgs.

(A) 3AG FUSE HOLDER
For two type 3AG fuses. Bakelite base.
No. 18A887. SPECIAL, EACH... **10c**

(B) FUSE and RESISTOR MTG.
No. 18A94. Black bakelite base, 3 1/4" x 1 1/4", height 1 1/4", with beryllium copper clips for 1/8" dia. x 2 1/2" long fuses or ferrule resistors. Ea. **10c**

No. 18A95. Bakelite base 3 1/4" x 1 1/4", height 1 1/4", with spring bronze clips for 1/8" dia. x 2 1/4" long fuses or resistors.
Ea. **8c**

FUSE EXTRACTOR

Very Handy for Removing 3 or 4 AC Fuses.
No. 18A873. Special Each.... **10c**

10 WATT Wire Wound Resistors

Well known quality makes with wire leads and lugs.

Ohms	S.k. No.	Ohms	Stk. No.
1	18A931	2,000	15A1140
15	18A102	2,500	15A1141
25	15A1133	3,000	18A215
50	15A1134	10,000	15A1142
100	15A1135	12,500	15A1143
150	15A1136	15,000	18A217
200	15A1137	20,000	15A1144
500	15A1138	25,000	15A1145
1,250	15A1139		

CHOICE, EACH..... **15c**

WIRE WOUND Resistor Assortment

10 Watt resistors handy for service and other needs. All quality makes in good usable values.
18A801. Assortment of TEN..... **95c**

PRECISION Wire Wound Resistors

Accurate within 1%. Shallcross ARKA-OHM Type 190, 1 watt wound on ceramic. Size 1/2" x 1" with tinned wire leads.

Cat. No.	Ohms	Choice Each
18A858	1.01	
18A859	2.11	
18A860	2.58	
18A861	4.13	
18A863	23.8	

35c

PRECISION RESISTOR ASSORTMENT

10 ASSORTED IRC and Shallcross wire wound precision resistors, accurate within 1%. A variety of values. Any one resistor is usually priced what we ask for the TEN.
No. 17A379. Per Asst... **\$1.95**

Tapped Resistor

Vitreous enameled wire wound with 2 separate sections, 100 ohms at 7 watts and 750 ohms at 5 watts, tapped at 350 ohms.
17A275. Special, Each **50c**

50 Ohm 3 Watt Carbon Resistor

Size 1/4" x 2". With tinned wire leads.
18A800, Special Ea. **5c**

FINEST GRADE INSULATED RESISTORS

Standard RMA Color Coded, well known quality brands. In ohmage ONLY as listed.

Ohms	Ohms	1/2 WATT Ohms	Ohms
68	2,200	15,000	100,000
150	2,500	18,000	150,000
180	3,600	25,000	2 Megs.
470	9,100	39,000	2.2 Megs.
560	10,000	50,000	4.7 Megs.
1,500	13,000	51,000	

(When ordering specify Ohmage)
No. 12A654X—1/2 watt any size listed. 10 for..... **25c**
Lots of 100. Each value. ONLY..... **\$2.00**

WIRE WOUND 1 WATT

47	2,200	24,000	110,000
68	3,000	27,000	120,000
100	4,700	33,000	150,000
390	6,800	47,000	250,000
1,000	10,000	56,000	470,000
1,500	20,000	68,000	1 Meg.
2,000	22,000	100,000	

(When ordering specify Ohmage)
No. 12A655X—1 watt any size as listed. 10 for..... **35c**
Lots of 100. Each value. ONLY..... **\$3.00**

INSULATED RESISTOR ASSORTMENT

200 assorted, 100 1/2-watt, 75 1-watt, 25 2-watt. Per Asst. **\$3.95**
18A786. Free Handy Color Code Chart with each of the assortments listed.

Non-Insulated CARBON RESISTORS

I WATT
1/2 WATT
1/2 WATT

Tolerance within 20%. RMA Color Coded. In all popular capacities. State sizes wanted.

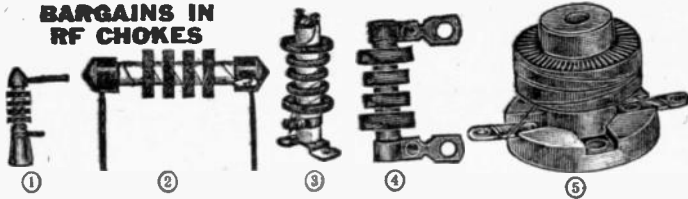
No.	Watt	Each	100 Lots	Each
12A651.	1/4	3c	100 Lots	2c
12A652.	1/2	4c	100 Lots	3c
12A653.	1	5c	100 Lots	4c

BARGAIN ASSORTMENT

100 assorted. (25—1 watt, 25—1/2 watt and 50—1/4 watt.)
18A71, Box of 100..... **\$1.45**
200 assorted. Good sizes in 1/4, 1/2, 1 and 2 watt.
18A73, Box of 200..... **\$2.45**
FREE Handy Color Code Chart with each of the assortment listed.

Take Time, Check every item FOR TERRIFIC VALUES

BARGAINS IN RF CHOKES



2.5 MH—125 MA
 ① 50 ohms D.C. resistance. Mounts with wire leads or statite stand-off, supplied with choke. No. 12A190. Each... **42c**

2.1 MH—125 MA
 ② 35 ohms D.C. resistance. Universal winding, fully impregnated, Isolantite core. Mounts any position by own leads. No. 18A129. Special, Each... **15c**

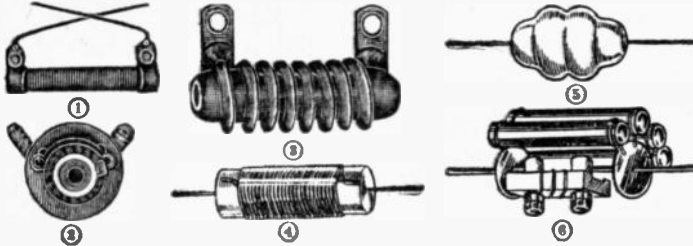
JOHNSON R154U
 ③ 1 MH RF Choke for 20, 40 and 80 meter bands. Inductance 1.1 mh., D.C. resist 6 ohms D.C. current 600

MA. Wound on isolantite core. Priced at less than 1/2 Regular. No. 18A550. Special, Each... **75c**

1.7 to 30 MC at 150 MA
 ④ Well known make choke of enameled silk covered wire impregnated with RF lacquer and wound on statite core. Length 1 1/2". No. 18A867. Special, Each... **25c**

10 MH—75 MA
 ⑤ Wound on 1-piece ceramic dowel and base. Overall size 1" diameter, 7/8" high. No. 18A553. Special, Each... **25c**

UHF CHOKES and PARASITIC SUPPRESSORS



2 1/2 and 5 METER RF PLATE CHOKES
 ① 13.84 MH. 1.64 D.C. ohms. Size 1 3/4 x 1/4". Wound with 110 turns 33SSE on statite form. No. 18A561. SPECIAL, EACH... **15c**

CENTER TAPPED CHOKES
 ② 4.8 MH. .15 ohms D.C. Wound with 63 turns of No. 25 P E wire on statite form 1 3/4 x 1/4", center tapped. No. 18A562. SPECIAL, EACH... **20c**

1.5 MH—125 MA
 ③ 21 ohms wound on impregnated wood dowel fastened to 1" dia. bakelite terminal plate, with solder lugs. Mounts with 6-32 screws. Very compact. Overall size 3/8" high, 1 1/2" dia. Thoroughly impregnated against moisture. No. 18A554. SPECIAL, EACH... **12c**

OHMITE PARASITIC
 ④ P300 Suppressor designed to prevent unwanted ultra — High — frequency parasitic oscillations which

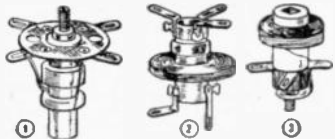
occur in the plate and grid leads of push-pull circuits. The parasitics are suppressed without loss of driving power. P300 is a non-inductive vitreous-enameled resistor combined with a choke into one small integral unit, only 1 3/4" long x 5/8" dia. Priced at less than 1/2 of regular. No. 18A593. SPECIAL, EACH... **55c**

807 PARASITIC SUPPRESSOR
 ⑤ An ultra high frequency choke of 22 turns on a 1/4" dia. x 13/16" long ceramic form with axial wire leads. No. 17B658. SPECIAL, EACH... **15c**

1 MA RF CHOKES
 ⑥ Midget size—only 7/16 x 3/8" long. Heavily wax coated with axial leads. Will handle 200 Ma. No. 17B659. SPECIAL, EACH... **15c**

HIGH FREQUENCY SUPPRESSOR
 ⑦ Carefully designed suppressor for 810's. Contains four 5% tolerance 10 ohm 1 watt resistors and a ceramic mounted inductance. A big value as a unit or for the parts. No. 17B684. SPECIAL, EACH... **15c**

ANTENNA and OSCILLATOR COILS



BC ANTENNA COIL
 ① Standard type air-core for broadcast band with 365 mfd. tuning condenser. Single 6-32 stud mounting; 1 3/4" high. No. 17A392. SPECIAL, EACH... **25c**

ANTENNA COIL
 ② Unshielded, ideal for replacements, etc. For broadcast band with a 365 mfd. tuning condenser. No. 18A1001. 10 Lots. Special, Each... **15c** Each... **10c**

MIDGET OSCILLATOR COIL
 ③ BC TAPPED for 456KC IF. Wound on ceramic form with single stud mounting. 3/8" dia. x 1" high. No. 17A398. Your Cost... **39c**

R. F. BARGAIN!



4 Amperes, 2% accuracy. EXPANDED scale, 2.19" diam. body. Has internal thermocouple. G. E. type D W 58 List Price \$19.75

No. 20A840. Special Each... **\$2.95**

1 AMPERE FULL SCALE
 2% accuracy. Has 2.19" dia. round bakelite case, standard white face with black calibration and internal thermocouple. Made by G.E., Model 8DW-44.

No. 18A1003. While They Last, Each... **\$2.25**

HIGH QUALITY I.F. TRANSFORMERS



456 KC, SLUG TUNED
 ① Has screwdriver slot adjustments top and bottom. Quality built throughout, low-loss polystyrene bottom with 4 solder lugs. Can size 2 1/2" high x 1 1/2" square, with spade 6/32 x 3/8" mounting studs. Ideal for replacement or experimental use as it can be easily rewound for higher frequencies. No. 17A343. Special, Each... **50c**

MIDGET 5.3 MC
 ② Slug tuned and padded with fixed silver mica condensers. Will make a dandy IF for VHF and FM receivers using miniature tubes. Moisture treated and beautifully made to Army-Navy Spec. Size 3/4" sq. x 2 1/8" high. No. 17A455. Special, Each... **29c**

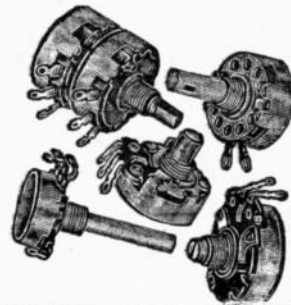
10 Lots. Each... 40c
 ③ Slug tuned and padded with fixed silver mica condensers. Will make a dandy IF for VHF and FM receivers using miniature tubes. Moisture treated and beautifully made to Army-Navy Spec. Size 3/4" sq. x 2 1/8" high. No. 17A455. Special, Each... **29c**

MICA TUNED MIDGET
 ④ 456 KC Iron Core. 1 7/8" high, 1 3/16" square, with wire leads at bottom. Designed for output to diode load, but can be easily converted for any standard IF circuit. No. 18A846. Per Set of Two... **65c**

456 KC IF'S
 ⑤ Universal input or output type. All ceramic insulated, with dual mica trimmers. Mounted in aluminum can 1 3/8" square, 3" high. No. 17A412. Special, Each... **39c**

IRON CORE 456 KC
 ⑥ Wound with litz wire, dual slug tuned. In aluminum can 1 3/8" square, 2 1/2" high. Has 4 solder terminals and spade mounting lugs. Will operate as IF input or output. No. 18A580. Special, Each... **59c**

A BARGAIN FEST in Volume Controls Standard quality makes, shaft lengths are in addition to the threaded bushing lengths.



Stock No.	Control Dia.	Shaft Lgth. Inches	Your Cost
18A644	20,000	1 1/8"	25c
18A645	25,000	1 1/8"	23c
17A245	50,000	1/2 slot	25c
18A647	50,000	1/2"	23c
18A648	50,000	1/2"	21c
18A651	50,000	slot	15c
18A661	100,000	3/8 1 1/8"	25c
18A653	200,000	3/8 3/8"	19c
18A654	200,000	3/8 5/8"	23c
18A656	250,000	3/8 5/8"	19c
18A657	250,000	3/8 5/8"	23c
18A659	250,000	3/8 5/8"	23c
18A949	500,000	1/8 slot	12c
18B584	500,000	1"	19c
18A665	1 Meg	1 1/2"	15c
17A238	1,200	1 1/2"	12c
17A239	1,800	1 1/2"	13c
18A950	4,000	1/4 slot	12c
18A637	5,000	1/4 1/4"	15c
18A638	5,000	1/2 1/2"	19c
18A640	5,000	1/2 1/2"	23c
18A641	10,000	1 1/4"	23c
18A642	10,000	1 1/4"	25c
18A643	20,000	3"	25c
*18A1002	1 Meg	1 1/8 1 1/4"	49c
*17B653	1 Meg	1 1/8 7/8"	35c

25 Watt Power Rheostat

IRC .5 OHM. An all-metal unit with die cast aluminum case. Heat is uniformly distributed throughout the element, regardless of percentage of element actually used. Dissipates heat rapidly. Screwdriver type adjustment. Single hole mtg. for panels up to 7/16" thick. List Price Value \$4.50. No. 18A773. Each... **45c** Lots of 10. Ea. **35c**

BUY NOW for future needs... **ASST. OF 10 CONTROLS** Assorted from those listed above and others. Your Money's Worth. SURE ENUFF. No. 18A934. Asst. of 10... **95c**

\$62.00 VALUE FOR ONLY \$16.95

GIANT AC VOLTMETER RANGE 0-300 VOLTS

Just the ticket for power panels, test benches, etc. Has non-gla.e scale approx. 5 1/2" long. Easily read from a distance. Made by G.E. Type AD-7, Model 8AD7VBD16. Accurate over frequency range of 25 to 125 cps. Internal resistance over 10,000 ohms. Case size overall 6 1/2" wide, 7" high. Mounts in hole 5 1/2" wide, 6" high. List Price \$62.00. No. 5B166. Special, Each... **\$16.95**

BRONZE NAME PLATES

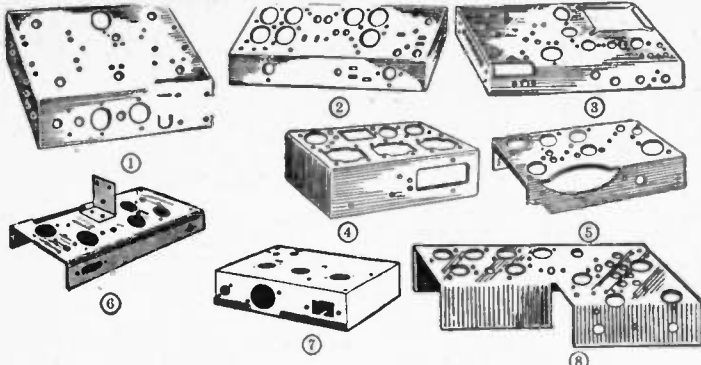
Modernistic design, rectangular shape 1 1/4" wide, 1 1/2" high. "OFF-ON-VOLUME" No. 15A1123. "BASS-TREBLE-TONE" No. 15A1124. CHOICE, EACH **12c**

INSTRUMENT RECTIFIERS

For applications requiring DC output current for meters, relays or other apparatus where frequency of AC source extends into audio range. Type M-Series 500; Full Wave Bridge Rectifier Output 10 V. 30 MA. No. 18A973. SPECIAL, EACH... **50c**

Terrific Values for THE BUILDER

BARGAINS IN PUNCHED CHASSIS



14x10 1/4 x 3 1/2"

① Heavy duty chassis. Extra heavy cad. plated steel. Ideal for heavy power supplies and equipment requiring extreme rigidity. Practically blank—the few holes in it are well placed. Corners are seam welded. Has 1/2" bottom lip. No. 5A172. SPECIAL, EACH **\$1.45**

10 1/4 x 3 3/8 x 1 1/2"

② Already punched with 7 socket holes but can be used for any number desired. Well made. Has base mounting brackets. No. 5A173. Special, Each. . . . **35c**

9 3/4 x 4 x 1 1/2"

③ Extra heavy steel, well built, cadmium plated. Turned down on all sides for greater strength. Has 6 socket holes, IF mounts and holes for other circuit components. No. 17B416. While they last. . . **49c**

AMPLIFIER CHASSIS

④ Punched and drilled for several tubes, power transformer, filter condenser, etc. Extra heavy welded construction. Size 12 1/4 x 7 1/2 x 1 13/16". No. 3B77. SPECIAL, EACH. . . . **65c**

TUBE SHIELDS



① Close fitting ventilated type for 55, 57, 58, 6A7, etc., small dia. dome-shaped tubes. Cap height 1 1/2", slotted for grid lead. Shell dia. 1 5/8", height of body 3". Chimney extension 3/8". Overall height assembled 4 11/16". No. 17A285. SPECIAL, Each. . . . **12c**

② 154 Tube Shield for miniature tubes such as 154, etc. Aluminum with retainer spring inside, 1 3/4" high x 3/4" diameter. No. 17A430. Each **4c** 10 For. **30c**

③ Glove-fite Bantam for CT type Tubes. No. 3A65. Per Box of FIVE. . . . **30c**

④ Shield can of drawn aluminum. 4x1 3/4" with 7/8" diameter hole in top. No. 3A70. SIX for. . . . **25c**

ALUMINUM BLANK CHASSIS

Made of bright new 20-gauge Aluminum. Turned down on sides with 3/8" bottom lip for added rigidity. No. 3B30—9 1/2 x 5 x 1 1/2". SPECIAL, EACH. . . . **59c**
No. 3B40—8 1/2 x 4 3/4 x 1 1/2". SPECIAL, EACH. . . . **49c**

MIDGET CHASSIS

⑤ Aluminum, rigidly constructed. Punched with 3 socket holes, etc. Size 7 1/8 x 3 3/8 x 2". Ideal for small sets, amplifiers, etc. No. 3A119. Special, Each. . . . **25c**

8 1/4 x 3 3/8 x 1 1/2"

⑥ Punched with 5 socket holes, speaker cut-out, etc. Fine for small sets and inter-coms. No. 17B415. Special, Each. . . . **29c**

5-TUBE CHASSIS

⑦ Made of heavy aluminum, size 8" long, 4" wide, 1 7/16" deep. Punched for five 1" sockets and other circuit components. With handy mtg. bracket. Ideal for building small receivers, amplifiers, etc. No. 17A411. Special, Each. . . . **35c**

STEEL CHASSIS BASE

⑧ Size 5x3x1 1/4" deep. Punched for miniature tubes. Ideal for phono amplifiers or battery type midgets. Has bottom plate. No. 5A170. Special, Each. . . . **20c**

8-TUBE STEEL CHASSIS

⑨ Just it for the large Radio Tunes, amplifiers, etc. Punched for sockets, I.F. Collis, Volume Control, etc. Recessed at left for 6" or 8" speaker. Size 13x6x2". No. 4A45. SPECIAL, EACH. . . . **35c**

Rubber Shock Mounts



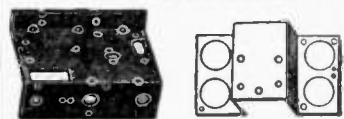
1 1/4" square, 1/4" hole for mounting units against vibration. 1/4" rubber each side of plate.

18A174. Special, Each. . . . **15c**

17A250, 1 3/4" square, 1/4" hole. rubber 1/2" thick. . . . **20c**

each side of plate. . . . **20c**
18A836. 2 3/8" square, .257" center hole, .196" corner holes on 1 15/16" centers. Has flat mounting surface at top 1 3/8" dia. with 1/2" thick rubber cushion. Cad. Plate. . . . **15c**

HANDY BRACKETS

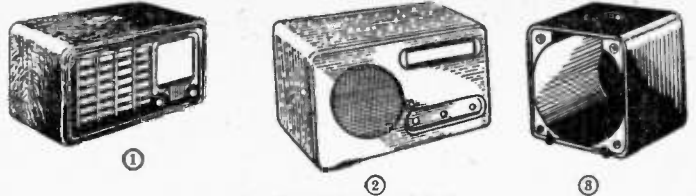


18A104. Bracket. Size 2 1/2 x 4 1/2". Mtg. flange 3/4" wide. Front flange 1 1/2" with extension wide. Handy for 1 1/2" oscillators or mounts as shown or various needs. . . . **10c**

18A105. Bracket. Handy for many needs. Offset is 1 1/4 x 2 1/2 x 7/8" with extension wide. Handy for 1 1/2" oscillators or mounts as shown or various needs. . . . **10c**

CHOICE EACH. . . . **10c** 10 Lots. **8c**

METAL AND BAKELITE CABINETS



BAKELITE CABINET

① Attractive grille design, natural brown bakelite, sturdy construction. Inside measurements 9 3/8" wide, 4 5/16" deep, 6 1/4" high. Dial opening 3 1/16" wide x 3 7/16" high. Ideal for replacements or new construction. No. 4A50. A REAL VALUE. . . . **95c**

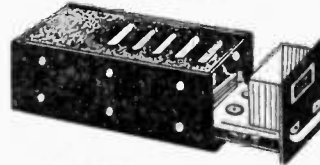
METAL RADIO CABINET

② Trim, neat appearing, all heavy gauge metal construction with beautiful grey hammertone finish. Size 11 1/2" long, 6" deep x 7" high. Has metal grilled cut-out for 5" speaker. OK for radios, inter-coms, etc. No. 5B161. SPECIAL, EACH. . . . **\$1.95**

BAKELITE CASE

③ Sturdy black bakelite, size 3" sq. x 2 1/8" deep. For 3" square meters, but also handy for countless other uses. Makes fine parts bins for the service or hobby bench. Buy plenty of them while available at this crazy low price. No. 4A51. . . . **19c** 10 For. **\$1.45**

HANDY CABINET WITH PARTS



Ventilated, aluminum drawer cabinet and chassis, black crackle finish. Ideal for building audio amplifiers, power supplies, or any small electronic apparatus. Drawer feature makes all components easily accessible both above and below chassis. Contains: power trans., condensers, (mica and oil) resistors, sockets, etc., easily disassembled and worth more than the price we ask for complete assembly. Size 8 3/4 x 4 1/2 x 3 3/4". No. 5A167. Special, Each. . . . **95c**

While They Last. . . . **95c**

6 CONTACT TERMINAL STRIPS



Made of 3/32" black bakelite 7/8" wide x 3 1/2" long, consisting of 6 cadmium plated terminals. No. 15A1115. 10 Lots. . . . **12c**

Special, Each. **15c** Each. . . . **12c**

BINDING POST



① Non-removable top, type 14CD Sergeant. Features 1/8" x 5/32" slot in which clamp moves up and down by turning cap. Provides vibration-proof contact for pin terminals or any type wire. Cap dia. 1/2", height open 7/8", closed 1 1/16". 8-32 stem 13/16" long. Tumble nickel finish. 10 Lots **8c**

As above exc. 1/2" long stem. 10 Lots **8c**

No. 19A1085. Each. . . . **10c** Lots **8c**

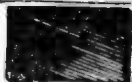
② Non-removable bakelite top 7/16" dia. Has hole for phone tip and 6-32 stud 7/16" long. 10 Lots **7c**

No. 17A385. Each. **10c** Each. . . . **7c**

③ 7/16" dia. black bakelite top, pushes down on spring to provide hole for standard tip. Has 6-32 1/2" long stem. With marking that can be easily removed. 10 Lots **4c**

No. 18A855. Each. **5c** Each. . . . **4c**

BARGAINS in ALUMINUM PANELS



All of .081 gauge 52-51 1/2 hard. Clean, easy to work and drill. Handy for many needs.

Size	STOCK No.	SPECIAL EACH
7x10"	4A52	40c
7x12"	4A53	45c
7x14"	4A54	55c
7x18"	4A55	65c

1/16" ALUMINUM PANELS

Plain, Etched or Grey Wrinkle Finish.	Size	Grey Wrinkle Etched	11A291 90c
7x10"	17A47	60c	
8x14"	11A292	99c	11A291 90c
7x10"	Plain Aluminum.		35c
No. 17A48. Each. . . .			

BAKELITE PANEL BARGAINS

Top quality glossy black laminated bakelite. Handy for insulating parts, terminal strips, etc.

Stk. No.	Size	Each	10 Lots
14A683	6x 6x 1/8"	40c	35c
15A2033	6x 6x 1/8"	50c	45c
14A682	7x10x 1/8"	70c	65c
15A2034	7x10x 1/8"	85c	80c

MICARTA PANEL STRIPS

Fine quality linen base, color tan. 12" long x 2 3/4" wide x 1/16" thick. No. 17A251. EACH. . . . **25c**
7 1/2" long x 2 1/2" wide x 1/4" thick. No. 18A824. EACH. . . . **35c**

NEEDLE CONTACT TYPE

④ Type 95V—Has needle contact for piercing cable without removing insulation. Cap dia. 3/8", height open 1 5/32", closed 13/16". Stem 12-24x 3/4" long. All brass nickel finish. No. 12A1376. 10 Lots **12c** Each. . . . **15c**

⑤ Knob 5/8" dia. of molded bakelite, 17/32" high, base 23/32x 1/4" thick with 8-32x 3/4" stem. 10 Lots **10c**

No. 18A857. Each. . . . **12c** Lots **10c**

⑥ Sturdily made of brown bakelite. No. 18A849. 10 Lots **10c** Each. . . . **10c** Each. . . . **8c**

⑦ Sturdily made of brown bakelite. No. 18A849. 10 Lots **10c** Each. . . . **10c** Each. . . . **8c**

⑧ Sturdily made of brown bakelite. No. 18A849. 10 Lots **10c** Each. . . . **10c** Each. . . . **8c**

⑨ Sturdily made of brown bakelite. No. 18A849. 10 Lots **10c** Each. . . . **10c** Each. . . . **8c**

⑩ Sturdily made of brown bakelite. No. 18A849. 10 Lots **10c** Each. . . . **10c** Each. . . . **8c**

⑪ Sturdily made of brown bakelite. No. 18A849. 10 Lots **10c** Each. . . . **10c** Each. . . . **8c**

⑫ Sturdily made of brown bakelite. No. 18A849. 10 Lots **10c** Each. . . . **10c** Each. . . . **8c**

⑬ Sturdily made of brown bakelite. No. 18A849. 10 Lots **10c** Each. . . . **10c** Each. . . . **8c**

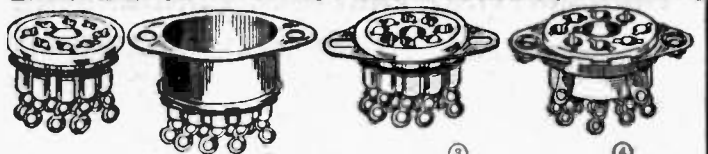
⑭ Sturdily made of brown bakelite. No. 18A849. 10 Lots **10c** Each. . . . **10c** Each. . . . **8c**

⑮ Sturdily made of brown bakelite. No. 18A849. 10 Lots **10c** Each. . . . **10c** Each. . . . **8c**

BINDING POST ASST.
25 assorted from those above and others.
No. 18A1004. Per Asst. . . . **95c**

Big Savings on Sockets and Connectors

BARGAINS IN OCTAL 8-PRONG CERAMIC SOCKETS



① Well known quality make. Mounts in 1/8" hole directly to chassis or panels with retainer ring furnished. No. 18A833. **14c** Lots of **13c** Special, Each 10. Each

② FOR BELOW SURFACE MTC. Has nickel, steel shell that mounts in 1 9/16" hole with 1 3/4" mounting centers. No. 18A864. **22c** Lots of **20c** Special, Each 10. Each

③ WITH SLOTTED MTC. PLATE. Mtg. centers 1 1/2" to 1 7/8". Mounts in 1 1/4" hole. No. 18A832. **19c** Lots of **17c** Special, Each 10. Each

④ 4-PRONG, otherwise as above. No. 18A831. **19c** SPECIAL, EACH

⑤ SADDLE MOUNTING TYPE, mtg. centers 1 1/2", mounts in 1 3/16" hole. Equipped with 4-36 stop nuts and grounding lugs. No. 17A378. **12c** Lots of **10c** Special, Each 10. Each

BAKELITE — OCTAL and MINIATURE SOCKETS



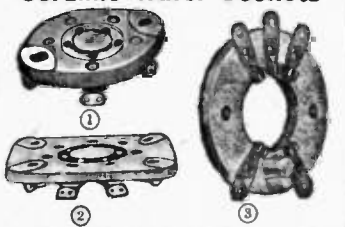
① OCTAL MICA FILLED BAKELITE. Mounts directly to chassis or panels in 1/8" hole. Complete with retainer rings. No. 17A396. **8c** Lots of **7c** Special, Each 10. Each

② OCTAL BAKELITE SOCKET with steel mtg. plate molded in so it cannot vibrate. Quality make. Mounts in 1 1/16" hole, 1 5/16" mtg. centers. No. 17A206. **6c** Lots of **5c** Special, Each 10. Each

③ OCTAL BAKELITE SOCKET. Saddle type mounting from either above or below chassis. Mounts in 1 1/16" hole. Mtg. centers 1 5/16". No. 18A835. **7c** Lots of **6c** Special, Each 10. Each

④ 7-PIN MINIATURE, top mount saddle type. Molded bakelite. Phosphor bronze contacts. Mounts in 7/8" dia. hole, 7/8" mtg. centers. Has center shield. For all 7-pin miniature tubes. No. 15A1122. **10c** 10 For. **75c** Special, Each

Ceramic Wafer Sockets



① ISOLANTITE LOW LOSS Well known make. Cadmium-plate phosphor bronze contacts. Recessed. Mounts against metal without arcing. No. 18A161. **5c** 4 **15c** 12A177. **5c** 5 **18c** 17A429. **6c** 6 **17c** 17A435. **8c** 8 Octal **23c**

② JOHNSON 7 PRONG Steatite. For 829B/ 832, 836, etc. Type 247, Cad. plated contacts. Finest construction. No. 18A829. SPECIAL, EACH... **29c**

③ ACORN TYPE Very Low Loss. No. 18A830. SPECIAL, EACH... **25c**

Low Loss Bakelite CRYSTAL SOCKETS

Well known quality make. Accommodates standard crystal holders with 1/2" pin spacing. Single screw mounting. No. 18A854. **12c** Spec. Ea. **18c**

As above except accommodates 2 crystal holders. No. 17A1038. Special Each... **18c**

① Standard steel mounting plate molded into bakelite body. Mounts in 1 3/16" chassis hole; two 5/32" screw hole on 1 1/2" centers. No. 17A394. **15c** Lots of **13c** Special, Each 10. Each

4-PRONG HIGH VOLTAGE SAFETY SOCKET

For 2x2 rect. and other tubes with base diameter of 1.156". Widely used in TV. and Photo Flash equip. Socket set at bottom of a deep molded bakelite shell. Steel mtg. plate molded into shell. Mtg. holes on 1 7/8" centers. Mounts from above or below in 1 1/2" hole. List Price, \$1.50. No. 17A357. Special, Each... **29c**

FOR "MOTOROLA" POLICE RADIOS

4 Prong plug with positions other than those found in regular plugs of this type. Also fits other special equip. A hard to find item. **59c** Lots of **50c** No. 17A395. SPECIAL, EACH 10. Each

AC RECEPTACLES AND PLUG ADAPTER



① Heavy duty AC cord outlet. Hard rubber plug with screw terminals. No. 17B676. **15c** 10 Lots. **12c** SPEC., EA. Each

② PLUG-IN ADAPTER Adapts standard Edison base plugs, light globes, etc., to plug-in outlets. Brown bakelite shell. No. 18A985. **15c** 10 For. **95c** EACH

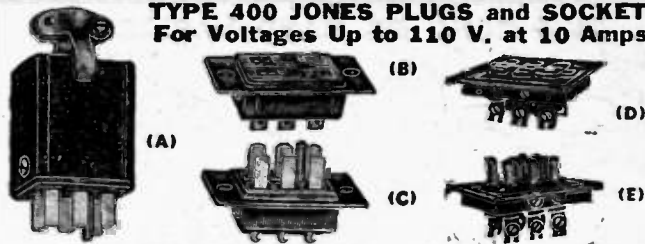
③ BASE BOARD OUTLET High quality. Has insulation piercing brass contacts which makes it unnecessary to strip insulation from wire for connection. Heavy brown bakelite, case with metal back cover plate, complete with mtg. screws. For use with standard plugs. UL approved. No. 18A986. **15c** 10 For. **95c** EACH

④ AC RECEPTACLE Bakelite body with removable steel mounting plate. Mounts in 1 1/16" dia. hole. 1 11/16" mtg. centers. Has screw terminals. No. 15A1154. **12c** 10 Lots. **10c** SPEC., EA. Each

2-CONDUCTOR CONNECTORS

Molded bakelite. 2-hole receptacle and 2-prong plug. Used on record changers, phono motors or anywhere where a separable 2-contact connection is desired. Female part with 6" wire leads. No. 18A106. SPECIAL, EACH... **25c**

TYPE 400 JONES PLUGS and SOCKETS For Voltages Up to 110 V. at 10 Amps



(A) and (B) 12 Contact Plug and Socket COMPLETE (Type P412CCT plug)—(S412SB socket). Socket with shallow bracket for flush mounting. Stock No. 18A810. Complete Assembly, Special Each... **\$1.25**

(C) 6 Prong Plug, Type P406SB with shallow bracket for flush mounting. No. 18A814. Special Each... **25c**

(C) 10 Prong Plug, Type P410SB with shallow bracket for flush mounting. No. 18A815. Special Each... **45c**

(C) 12 Prong Plug, Type P412SB with shallow bracket for flush mounting. No. 18A816. Special Each... **40c**

Type 500 JONES Plugs and Sockets For 5000 Volts at 25 Amps Per Contact

(D) 6 Contact, Type S506SB socket with shallow bracket. Stock No. 18A818. Special Each... **95c**

(E) 6 Contact, Type P506SB plug with shallow bracket. Stock No. 18A819. Special Each... **\$1.25**

TYPE 300 15 CONTACT JONES PLUGS & SOCKETS

(Type P-315-FHT) Plug with flared hole in top of cap. No. 18A940. SPECIAL, EACH... **35c**

(Type S-315-FHT) Socket with flared hole in top of cap. No. 18A941. SPECIAL, EACH... **40c**

(Type P-315-AB) Plug with angle bracket for chassis mounting. No. 18A942. SPECIAL, EACH... **25c**

(Type S-315-AB) Socket with angle bracket for chassis mounting. No. 18A943. SPECIAL, EACH... **30c**

JONES PLUGS & SOCKETS ASSEMBLIES

① EIGHT PRONG ASSEMBLY

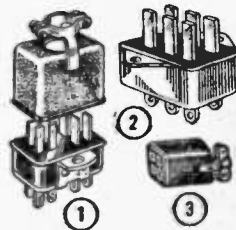
Eight prong chassis type plug, type P-308-AB and type S-308-CCT socket. No. 17A386. COMPLETE ASSEMBLY... **39c**

② CHASSIS MOUNTING PLUG

Popular on many types of gear. 6 Contacts. No. 18A956. SPECIAL, EACH... **20c**

③ 6 CONTACT SOCKET

For use with above. No. 12A346. EACH... **38c**



Plugs — Sockets — Jacks



JONES TYPE 101 SOCKETS and PLUGS

A low loss plug and socket ideal for high frequency connections. Brass, chrome finish, silver contacts, ceramic insulated.

① Plug—3/8" sleeve. No. 18A807. SPECIAL, EACH... **25c**

② Socket. No. 18A808. SPECIAL, EACH... **25c**

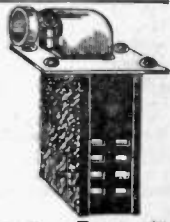
GIANT PLUG and JACK SET

③ and ④. Plug 1 3/16" long—jack is 7/8" and fits 3/8" hole. No. 12A1400. Per Pair... **25c**

⑤ 18A843. Jack Only... **10c**

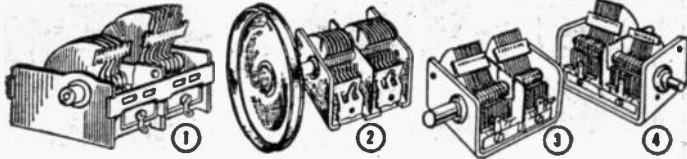
FOR BC 348 RECEIVERS Type P1-Q130A.

An 8 contact socket with cable clamp fitting. No. 18A998. Spec., Ea. **95c**



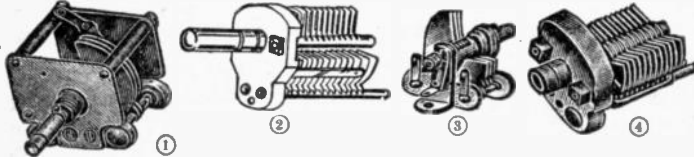
CRAZY LOW PRICES on TOP - QUALITY! Variable Condensers!

TWO-GANG BC BAND VARIABLES

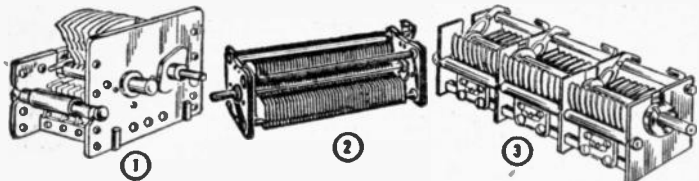


- ① **COMPACT TUNING CONDENSER FOR SUPERHETS.** Cut plate type to be used with standard 456 KC oscillators and IF coils. Has trimmers, ball bearing rotor and $\frac{3}{8}$ " dia. shaft for drums or can be reduced to $\frac{1}{4}$ " with shaft coupling. Overall size $2\frac{3}{4} \times 2\frac{1}{4} \times 1\frac{3}{8}$ ". No. 17A350. **SPECIAL, EACH 49c**
- ② **CUT PLATE TYPE** to be used with standard 456 KC oscillators and IF coils. Has trimmers, ball bearing rotor and $\frac{3}{8}$ " dia. splined shaft for drum or coupler. Supplied with universal mtg. bracket. Size $1\frac{7}{8} \times 2\frac{1}{4} \times 1\frac{3}{8}$ ". No. 17A447. **SPECIAL, EACH 75c**
- ③ **CUT PLATE TYPE FOR SUPERHETS.** To be used with standard 456 KC oscillator and IF coils. Has trimmers, ball bearing rotor and $\frac{3}{8}$ " dia. splined shaft for drum or coupler. Supplied with universal mtg. bracket. Size $1\frac{7}{8} \times 2\frac{1}{4} \times 1\frac{3}{8}$ ". No. 17A451. **SPECIAL, EACH 89c**
- ④ **SHAFT COUPLING.** To reduce above $\frac{3}{8}$ " shaft to $\frac{1}{4}$ " diameter. No. 12A1191. **EACH 14c**

MIDGET VARIABLE CONDENSERS



- ① **SEMI-MIDGET—50 MMFD** 5 plates, ceramic insulated. Overall size $1\frac{3}{8} \times 1\frac{3}{4}$ ". $\frac{1}{4}$ " shaft. No. 17A202. **SPECIAL, EACH 45c**
- ② **COMPLETELY INSULATED** 5 plates. 15 mmfd. $\frac{3}{8}$ " shaft and $\frac{1}{4}$ " end plates made of Bakelite. Can be mounted in any position. Size $2 \times 2\frac{1}{4} \times 2\frac{1}{4}$ ". No. 17A203. **Special, Each 65c**
- ③ **APC SHAFT TYPE** Ceramic insulated air padder condensers. Finest quality makes. Adaptable for wide variety of uses. All have $\frac{1}{4}$ " shafts.
- | Stock No. | Cap. MMFD | Shaft Length | Price Each |
|-----------|-----------|------------------|------------|
| 18A880. | 140 | 1" | 50c |
| 18B92. | 100 | $\frac{7}{8}$ " | 40c |
| 17A182. | 75 | $\frac{1}{2}$ " | 35c |
| 17A183. | 50 | $\frac{9}{16}$ " | 30c |
| 17A184. | 40 | $1\frac{1}{8}$ " | 25c |
- ④ **BUD TYPE MC1855** Semi-Circular—Double Bearing. Steatite insulated 100 mmfd max., 7 min., air gap .024", 14 plates. Can be single hole or chassis mtd. Has $\frac{1}{4}$ " shaft $\frac{1}{2}$ " long, overall size of condenser behind panel $2 \times 1\frac{3}{4}$ ". No. 18A804. **Special, Each 65c**
- ⑤ **APC SCREWDRIVER SLOT** Finest quality, well known brand, ceramic insulated air padder condensers adaptable for a wide variety of uses. Has screwdriver slot adjustment. (Mounts behind panel with 6-32 machine screws.)
- | Stock No. | Cap. MMFD | PRICE EACH |
|-----------|-----------|------------|
| 17A177. | 140 | 40c |
| 18A512. | 100 | 35c |
| 17A178. | 75 | 25c |
| 18A513. | 50 | 20c |
| 17A179. | 40 | 15c |
| 17A181. | 20 | 10c |

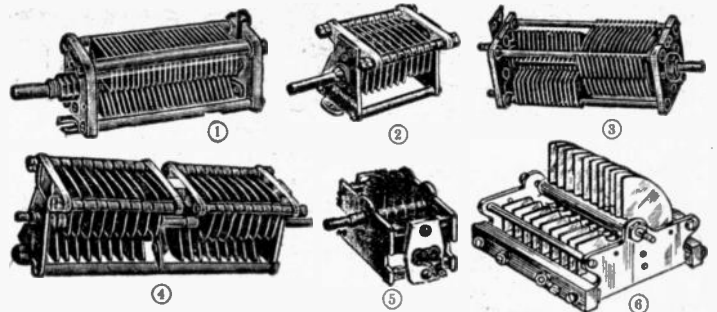


- ① **SINGLE GANG 365 MMFD** Ceramic insulated, precision built. Has $\frac{1}{4}$ " dia. x $\frac{3}{4}$ " long shaft with 10 to 1 ratio, anti-back-lash tuning mechanism. Size $2\frac{3}{4}$ " high x $3\frac{1}{2}$ " wide x $1\frac{3}{4}$ " deep. No. 18A974. **Special, Each \$1.45**
- ② **SINGLE GANG 440 MMFD** Straight line capacity, silver plated plates .30 spacing. Ceramic end plates, mtg. space 2×2 ", overall length, $7\frac{1}{4}$ " shaft $\frac{1}{4}$ ". O.K. for many broadcast band circuits. No. 18A507. **SPECIAL, EACH 79c**
- ③ **HAMMARLUND 3 GANG 236 MMFD PER SECTION** Each section shielded. Isolantite insulation, enclosed precision bearings, $\frac{1}{4}$ " steel shaft. Panel mounting space $1\frac{7}{8}$ " high x $2\frac{5}{8}$ " wide x $6\frac{3}{4}$ " deep. No. 18A958. **SPECIAL, EACH 95c**

JOHNSON TRANSMITTING VARIABLES

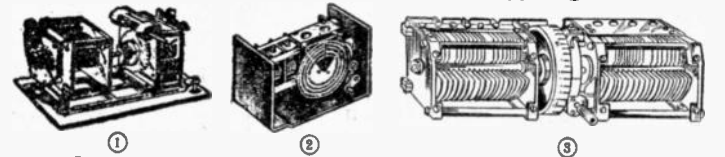
- Type (416CD45) Dual 416 max.-34 min. MMFD per section. 4500 volts, 33 plates per section, .0125 spacing. Sturdily constructed of the finest materials—heavy aluminum plates, $5/16$ " dia. aluminum tie rods, $\frac{1}{4}$ " stainless steel shaft. Size $5\frac{1}{2} \times 16 \times 17\frac{1}{4}$ " long. No. 3B43. **Special, Each \$4.95**
- Type (320D45) Single section 320 max.-36 min. MMFD. 4500 volts. 41 plates .125 spacing, $\frac{1}{4}$ " shaft. Same quality construction as above. Size $4 \times 4\frac{1}{4} \times 10$ " long. No. 3B73. **Special, Each \$2.95**
- Type (350D70) Single section 350 max.-38 min. MMFD. 7000 volts. 51 plates .175" spacing, $1\frac{1}{2}$ " long. Otherwise as above. \$17.75 List! No. 3B69. **Special, Each \$3.95**

TRANSMITTING VARIABLE CONDENSERS



- ① **JOHNSON 250 MMFD** Type H (250H15) 250 mmfd max., 11 min., .02" plates, compact yet very rugged. Panel space $1\frac{1}{2}$ " square x $3\frac{13}{32}$ " deep. $\frac{1}{4}$ " shaft, $1\frac{1}{8}$ " long. 51 plates .030 spacing. REC. LIST PRICE, \$5.75. No. 18A506. **SPECIAL, EACH 65c**
- ② **JOHNSON TYPE 250E20** Capacity 244 max. 12 min. MMFD. 2000 volts. 23 plates. Stator plates can be removed to vary capacity and to increase voltage breakdown. .045" spacing. $\frac{1}{4}$ " shaft. Size $1\frac{1}{8} \times 1\frac{1}{8} \times 2\frac{11}{16}$ ". \$6.10 List Value. No. 17A397. **Special, Each \$1.19**
- ③ **TYPE 100E30. 100 max. 11 min. MMFD. 3000 volts. 15 plates. .075" spacing. $\frac{1}{4}$ " shaft. Size $2\frac{5}{8} \times 2\frac{5}{8} \times 2\frac{1}{4}$ ". \$5.45 List Value. No. 14A674. **Special, Each \$1.45****
- ④ **TYPE 150E30. 154 max. 14 min. MMFD. 3000 volts. 23 plates. .075" spacing. $\frac{1}{4}$ " shaft. Size $2\frac{5}{8} \times 2\frac{5}{8} \times 4\frac{1}{4}$ ". \$6.00 List Value. No. 14A673. **Special, Each \$1.65****
- ⑤ **TYPE 70F30. 67 max. 11 min. MMFD. 3000 volts. 17 plates. .075" spacing. $\frac{1}{4}$ " shaft. Size $2\frac{1}{2} \times 2\frac{1}{2} \times 3\frac{3}{8}$ ". \$5.35 List Value. No. 14A675. **Special, Each \$1.45****
- ⑥ **TYPE 100F20. 95 max. 14 min. MMFD. 3000 volts. 25 plates. .075" spacing. $\frac{1}{4}$ " shaft. Size $2\frac{1}{2} \times 2\frac{1}{2} \times 3\frac{3}{8}$ ". \$5.30 List Value. No. 14A676. **Special, Each \$1.95****
- ⑦ **DUAL 170 MMFD** Split stator, silver plated plates .30" spacing. Ceramic end plates. Mtg. space $2 \times 2\frac{1}{2} \times 5\frac{1}{4}$ " overall length. Has $1\frac{1}{4} \times \frac{3}{4}$ " long shaft. No. 18A508. **SPECIAL, EACH 99c**
- ⑧ **JOHNSON DUAL 207 MMFD** Type F (200FD20) Capacity 207 mmfd max., 13 mmfd min. each 33 plate section. .045" spacing — 2000-volt. Type F with the same features as Type E listed below. Panel space $2\frac{1}{8}$ " wide x $2\frac{1}{8}$ " high x 8" deep. LIST PRICE, \$11.00. No. 18A510. **Special, Each \$1.95**
- ⑨ **JOHNSON DUAL 304 MMFD** Type E (300ED20) Capacity 304 mmfd max., 15 mmfd min., each 29 plate section. .045" spacing — 2000 volts. .032" plates rounded and buffed—heavy $\frac{1}{4}$ " frame rods, Ultra Steatite insulation, phosphor bronze contact springs, and stators mounted above to reduce cap. to ground. $\frac{1}{4}$ " shaft extends $1\frac{1}{2}$ " in front and $\frac{3}{4}$ " rear. Panel space $2\frac{5}{8} \times 2\frac{3}{4} \times 7\frac{1}{2}$ " deep. List Price, over \$11.00. No. 18A509. **Special, Each \$2.95**
- ⑩ **26 MMFD VARIABLE** 26 mmfd maximum capacity, 8 mmfd min. Rated at 4000 volts test. All aluminum construction, with isolantite insulation. $\frac{1}{4}$ " shaft, 1" long. Overall size, $1\frac{3}{4}$ " deep, $3\frac{1}{8}$ " wide, $1\frac{7}{8}$ " high with plates closed. No. 17A461. **Special, Each 95c**
- ⑪ **CARDWELL "MIDWAY"** 74 mmfd, 19 plates, air gap .070". Panel mtg. space $3\frac{1}{4}$ " deep x $2\frac{3}{4}$ " wide. $\frac{1}{4}$ " steel shaft; aluminum frame; brass bearings; plates buffed and rounded. Supplied with aluminum mounting feet. G.E. Mycalex insulation. Less Than Half Price. No. 18A853. **Special, Each \$1.45**
- ⑫ **CARDWELL MP26GS** 35 mmfd, 7 plate .070 air gap. Extends 2" behind panel, 3" wide. Has $\frac{1}{4}$ " shaft $\frac{3}{4}$ " long. No. 18A882. **Special, Each 95c**

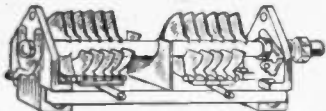
PRECISION TUNING CONDENSERS



- ① **VARIABLE FREQUENCY OSCILLATOR CONDENSER** Precision-built. Two sections, rigidly mounted. Isolantite insulation. Right angle spring loaded worm drive, with high gear ratio. First section, 17 plates, .0525" gap Cap. 0-150 mmfd. Second section, 25 plates, .06" gap Cap. 0-200 mmfd. 3 plate trimmer mtd. on one side. Other side has high precision trimmer panel, 51 individual adjustments! Size $3\frac{3}{8} \times 5\frac{1}{8} \times 10\frac{1}{8}$ ". Brand New, in original carton. No. 3B41. **Special, Each \$6.95**
- ② **VERNIER 3 GANG CONDENSER** A precision made assembly that can be used for single dial control of receivers, frequency meters, VFO units or medium power transmitters up to 75 watts. Includes two single-spaced 250 mmfd sections and a heavy, double-spaced 260 mmfd section, all ceramic insulated, and a worm driven 50-to-1 ratio dial drive mechanism attached. Gears are spring loaded. Has shaft lock and 4" calibrated metal dial with transparent hair line indicator. Size overall $7\frac{1}{2}$ " long, $4\frac{3}{4}$ " high, $4\frac{3}{4}$ " deep. A "Honey" of a Unit, that Cost Many Times the Price We Ask. No. 5A168. Limited Quantity. **Special, Each \$2.95**
- ③ **CARDWELL 7 GANG CONDENSER** Type CA325. Two 200 mmf, Four 100 mmf and One 75 mmf sections. Worm drive assembly and 0-30 calibrated dial; $5/16$ " shaft, $1\frac{3}{8}$ " long. Enclosed in metal housing $3 \times 1\frac{1}{2} \times 1\frac{1}{2}$ " size. No. 5A174. **A TREMENDOUS VALUE! EACH ONLY \$1.95**

B-A Feature Values !!

BIG BARGAINS IN VARIABLE CONDENSERS "HFD" MICRO DUAL CAPACITORS



Hammarlund type HFD-15-X. Double spaced 15 max.-6 min. Mmfd. per section 1500 volts. 11 plates per sect. .030" spacing. Screwdriver slot for tuning with shaft lock. Soldered brass plates cadmium plated. Aluminum end plates mounted on Isolating base. Has Isolating center shield. Silver plated rotor contacts can be shifted to 3 positions for shortest possible leads. Base mtg. Size 1 1/16x1 1/2 x3". Last value \$3.50.

No. 14A680, SPECIAL **99c**
EACH

Type HFD-30-X. 28.5 max.-8 min. mmfd. per section, 1500 volts. 19 plates per section. .030 spacing. 3 3/8" long. Otherwise as above.

No. 14A681, Special **\$1.19**
EACH

MIDGET VARIABLES



VERNIER 3-GANG CONDENSER

(1) For superhets or TRF receivers. Has two 365 mmfd. sections, plus 220 mmfd. center section, all with trimmers and isolating shields. Shaft is 1/4" dia. with built-in 7 to 1 vernier operated thru 1/8" dia. shaft. All ball bearing construction. Size 1 1/2x1 3/8" wide, 2 1/2" long.

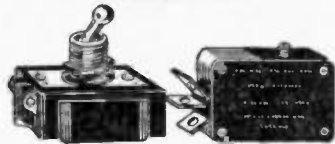
No. 17B444, Special **\$1.49**
EACH

30 MMFD.—HIGH VOLTAGE

(2) A rugged built ceramic insulated 30 mmfd. Midget type condenser. Designed for use in mobile or similar equipment where strength and stable operation is required. Mounts from front, has direct pigtail rotor connection and 3/8" insulated 1/4" shaft. Size 1 1/2" wide, 1 1/16" high, 1 3/4" behind panel.

No. 17B686, Special **95c**
EACH

TERRIFIC SWITCH BARGAINS!



G.E. SPST TOGGLE SWITCH

(1) Rated 3 amp. 250-volt, 6 amp. 125-volt. Bakelite enclosed 1 1/4x1 1/2x1 1/2" with 15/32" dia. mtg. sleeve 13/32" long. Nickel finished hardware cpte. with mtg. nuts.

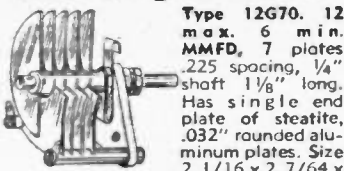
No. 15A1157, Special Each **20c**
10 Lots **18c** 100 Lots **16c**
EACH EACH

ACRO MINIAC SWITCH

(2) S.P.D.T., type 2MD3-1AX rated at 15 amps. 115 V. AC. Snap action by stainless steel plunger, silver contacts. Bakelite case only 1 3/16x 13/16x17/64" provides four 3/32" dia. mtg. holes. A handy little switch for countless applications. Ideally suited for stocking in multiple. Regularly sell for several times the price we show.

No. 17B666, Special Each **39c**
10 Lots **35c** 100 Lots **25c**
EACH EACH

JOHNSON TYPE G Neutralizing Condensers



Type 12G70. 12 max. 6 min. MMFD, 7 plates .225 spacing, 1/4" shaft 1 1/8" long. Has single end plate of steatite, .032" rounded aluminum plates. Size 2 1/16 x 2 7/64 x 2 5/8" long. \$4.00 list value.

No. 14A677, Special, Each **\$1.49**
Type 50G20. 52 max. 5 min. MMFD, 9 plates .045" spacing, 1 5/32" long. Otherwise as above.

No. 14A679, Special Each **99c**

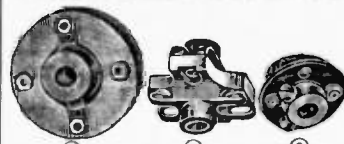
JOHNSON 12C130 Neutralizing Condenser



12 max.—6 min. mmfd. 13,000 V. 3 plates .500 spacing. Micalex end plate with 3 mtg. holes, 1/4" shaft, 3/4" long. Panel mtg. space 5 1/2 x 4 3/4 x 2 7/8".

No. 3B29, Special Each **\$1.95**

FLEXIBLE CONDENSER COUPLINGS



All of the finest quality, well known makes with set screw. ALL ARE FOR 1/4" SHAFTS.

(1) Steatite 1 3/8" Dia. 17A283. Special Each **30c**

(2) Steatite 1 3/4" Dia. 18A500. Special Each **30c**

(2) Steatite 2 1/4" Dia. 18A501. Special Each **50c**

(3) Canvas Bakelite 1 1/16" Dia. 18A502. SPECIAL EACH **25c**

PRECISION VERNIER DIALS



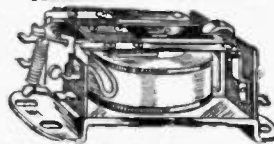
2 3/4" Dia. Black etched calibrations and numerals on brushed aluminum background. Large flanged bakelite knob, brass bushed for 1/4" shaft. With micrometer indicator allows logging to one tenth of one dial division. No. 18A516, 0 to 100, over 180°.

SPECIAL EACH **65c**

No. 15A2037 (Less micrometer indicator) with Black etched calibrations 0 to 100, over 320° on brass chrome plated background.

SPECIAL EACH **75c**

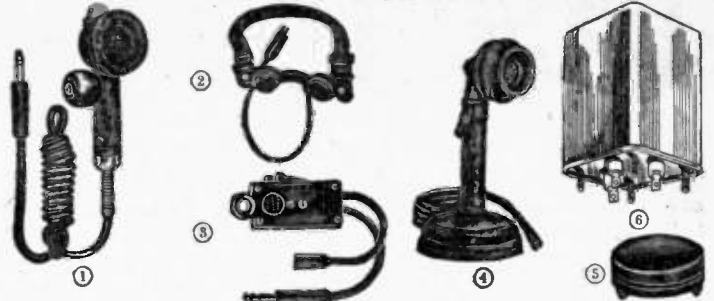
RELAY BARGAIN!



TWO Pole Single Throw normally open. Has 10 ampere contacts. Coil voltage 24V. D.C. Resistance 265 ohms. Easily rewound. Size 1 3/8x1 1/2 x 2 1/2" long. Leach type 1024.

No. 17B661, SPECIAL EACH **49c**

CARBON MIKES at "GIVE AWAY" PRICES



(1) TYPE T17B, 200 OHM Has press to talk switch in handle. Sturdy good looking bakelite case. Has 5 ft. rubber cord with PL68 plug. Can be connected to most radio sets for home entertainment and ideal for PA mobile and amateur needs.

18A368. Each **\$1.19** Lots of 10, Each **99c**

(2) THROAT MIKE Made up with two carbon mike buttons in molded rubber throat piece which snaps to neck strap. Works into any 200 ohm impedance input circuit. Ideal for UHF mobile and amateur equipment.

17A39. Each **35c** 10 Lots, Each **30c**

(3) CORD & SWITCH ASSEMBLY Has DPST press to talk switch enclosed in handy bakelite case easy to operate in palm of hand. Has cord with socket for connection to plug as on throat mike and 5 ft. rubber covered mike cable with PL68 plug

attached. 18A885. Ea. **45c** 10 Lots, Each **40c**

(4) 200 OHM CARBON-MIKE Telephone desk stand type with handy press to talk switch. With 6 ft. cord and plug. Requires 200 ohm mike transformer.

No. 4A499. Special, Each **\$2.95**

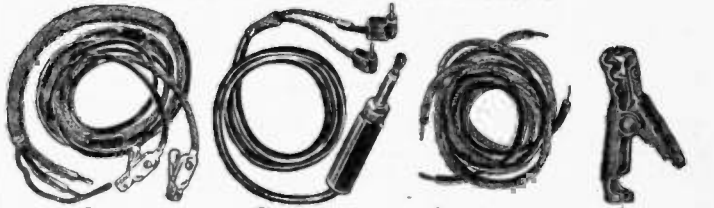
(5) CARBON MIKE BUTTONS As used in Throat mike. A swell gadget for experimenters on detecto-phones, mikes, etc. Picks up noise or speech from vibrations.

No. 17A40, 10 Lots **7c** EACH **10c** EACH **7c**

(6) MIKE TRANSFORMER Compact in Gray case, 1 3/4" sq. x 2 5/16" high. Matches either 200 ohm dynamic or single-button carbon mike to grid. Electrostatic shielded. Has 4 threaded studs for mounting thru chassis. Ideal for the carbon mikes listed here.

No. 18A960. Special, Each **95c**

TEST LEADS and TEST CLIPS



(1) TWO CONDUCTOR TEST CORD (1) Approx. 65 inches long. Very flexible size 18 stranded wire with black and red braid covering. Has pin tips one end and piercing spring clips like Fig. 4 at other end. Brand New.

No. 17B647, SPECIAL EACH **45c**

(2) HEAVY DUTY LEADS (2) Equipped with heavy duty standard phone plug, easy grip Weston type phone tips, flexible leads with overall rubber jacket. Overall length 5 ft.

No. 17A388. A Steal at **95c** SPECIAL EACH

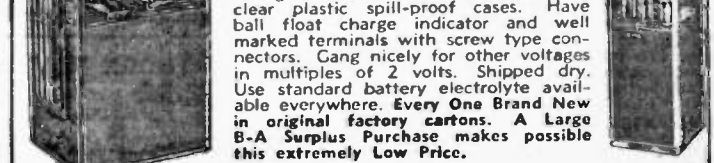
(3) TEST LEAD WIRE (3) Heavy duty, 10,000 volts. Non-kinking-flexible. Consist of tinned stranded copper wire with heavy wall of live rubber insulation. Paired red and black, 4-ft. long lead.

No. 15A2035. PER PAIR **29c**

(4) W.E. TEST CLIP (4) Type TL137 the one so widely used on telephone test sets. Jaw spread 3/4" with pin to pierce insulation. Very strong spring.

No. 17A453, SPECIAL, Each **10c** Six For **45c**

WILLARD 2-Volt STORAGE BATTERIES at RIDICULOUS LOW PRICES



Long life, finest quality rechargeable storage batteries encased in attractive clear plastic spill-proof cases. Have ball float charge indicator and well marked terminals with screw type connectors. Gang nicely for other voltages in multiples of 2 volts. Shipped dry. Use standard battery electrolyte available everywhere. Every One Brand New in original factory cartons. A Large B-A Surplus Purchase makes possible this extremely Low Price.

Type ERM 20-2 at left. EXACT REPLACEMENT For Model No. 530 G.E. Portable Radio and widely used for other portable needs. Size 3 31/32x 3 1/2x5 1/2" high.

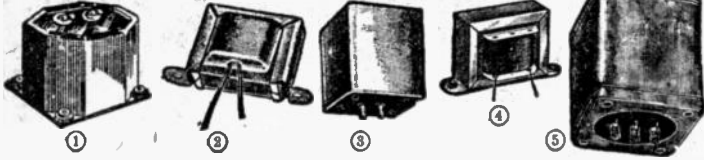
No. 5A142. While They Last, Each **\$1.25** 6 Lots, Each **95c**

Type ERM 25-2 at right. Its compactness—only 2 3/8" square x 6" high (about the size of the ordinary No. 6 dry cell) makes it applicable for a wide range of uses where battery power is needed, particularly in portable units. Rated at 25 A.H.

No. 5A133. While They Last, Each **95c** 6 Lots, Each **75c**
Bottle of Electrolyte (cannot be shipped Parcel Post).
Enough for 1 Battery, either above. No. 5B141. Each **25c**

HAMS!! Here are Happy Hunting Grounds **HURRY**

BARGAINS IN FILTER CHOKES



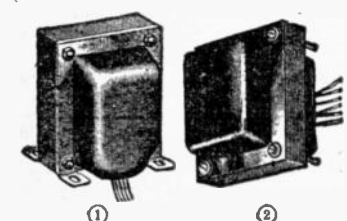
- ① **10 HENRY 40 MA.**
Fully enclosed size 2x1 9/16x1 3/4". No. 18A948. **SPECIAL, EACH..... 65c**
- ② **15 HENRY 50 MA.**
Totally enclosed choke. 120 ohms DC resistance. Fully shielded strap type mfg. Compact 1 3/8x2x1 1/4". No. 3A108. **SPECIAL, EACH. 79c**
- ③ **8 HENRY 120 MA.**
190 ohms resistance. Size 3 3/8x2 3/8x2" grey steel case hermetically sealed. No. 13B77. **SPECIAL, EACH. 95c**
- ④ **10 HENRY 75 MA.**
240 ohm filter choke with strap mounting. 240 ohms DC Resist. 2 1/2" mtg. centers. You'll want several of these at this price. No. 13B263. **Special, Each... 89c**
- ⑤ **SMOOTHING FILTER CHOKE**
6Hy. at 350 MA. DC resistance 82 ohms. 2000-volt insulation. Fully enclosed grey enamel heavy metal case 3 7/8x4 3/8x5" with mounting holes tapped for standard screws. Has third terminal with which to ground core. No. 3A78. **SPECIAL, EACH..... \$2.95**

FILAMENT TRANSFORMERS



- ① **10 volts C.T. at 10 amps,** primary input 220-240 volts. Secondary 5-volt C.T. at 10 amps with primary input 110 volts 60-cycle. 2000-volt insulation with heavy duty solder terminals. Fully enclosed in grey enameled heavy metal case 4 3/8x3 7/8x5" with mounting holes tapped for standard screws. No. 3A72. **SPECIAL, EACH..... \$1.95**
- ② **Top quality with 115-volt AC 60-cycle pri. Sec. No. 1 (2.5-volt, 10-amp.).** Sec. No. 2 (6.3-volt C.T. at 1-amp.). Hermetically sealed with porcelain insulated lugs. 10,000-volt insulation test. Overall dimensions 5 3/8" high, 4 1/2" long, 3 3/8" wide. Fine for Hams and Experimenters. No. 3B44. **SPECIAL, EACH..... \$2.95**
- ③ **Pri., 115-volt 60-cycle Sec., 2.5-volt, 1-amp.** Size 2" high x 1 1/2" thick. 2" mounting centers. Lots of 10. No. 20B14. **SPECIAL, EACH..... 59c EACH..... 55c**

POWER TRANSFORMERS



- ① **200 MA. 850-VOLT C.T.**
Furnishes high voltage plus 6.3-volt C.T. at 5 amp. and 5-volt at 3 amp. filament. Pri. 110-volt 60-cycle AC. Top quality construction. Fully shielded, upright mounting with wire leads. Size approx. 3 7/8" square x 4 3/4" high. Weight each, 7 3/4 lbs. No. 3A122. **Special, Each... \$4.79**
- ② **150 MA. 750-VOLT C.T.**
High voltage plus 6.3-volt at 5 amp. and 5-volt at 3 amp. filament. Pri. 110-volt 60-cycle AC. Double half-shell construction. Fully shielded with coded wire leads. Size overall 3 1/8x3 3/4x4 1/4" high. Wt. each, 6 lbs. No. 3A123. **Special, Each... \$3.79**

THORDARSON AUDIO TRANSFORMERS



- ① **CLASS "B" DRIVER**
Type T45947. Pri. P.P. 6F6; Sec. P.P. or P.P. parallel 6L6, split sec. Ratio 1 to 3. Size 4x2 3/4x3". Fully enclosed in gray enameled case. No. 3A113. **SPECIAL, EACH..... \$1.95**
- ② **INTERSTAGE AUDIO**
Type T45901. Pri. P.P. 6C5; Sec. P.P. 6F6. Ratio 1 to 4. Size 3 1/4x3x2 1/2". In fully enclosed gray enamel case. No. 3A112. **Special, Each... \$1.45**

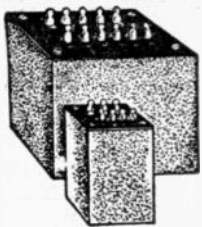
5BP4 CATHODE RAY TUBE



A swell buy for those who want to build their own television receiver. Has 5" white screen. Quality make, individually boxed in cushioned carton. Brand New, Perfect — **GUARANTEED. \$2.95**
36T206. **Special, Each.**

ADC TOP QUALITY TRANSFORMERS

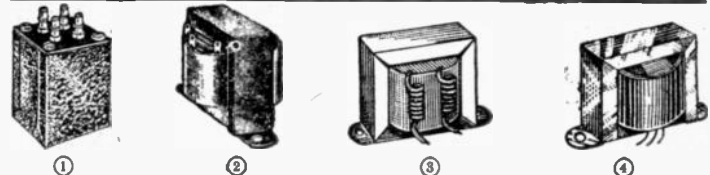
Every one is familiar with the plus quality of Audio Development Co. Transformers. A Special purchase from an overstocked equipment manufacturer bring these to you at Ridiculous Low Prices Brand New, Clean—but limited quantities. Hurry Your Order.



- HEAVY DUTY POWER**
Primary 115 volts 60-cycle; Secondaries 650 volts C.T. at 250 ma., 5 volts at 3 amps., 36 volts at 1 amp. and 36 volts at 1 amp. Ideal for low voltage high current plate supplies. 36-volt windings can be used with dropping resistor for 24-volt equipment or may be connected together and used as bias supply. Steel case, black crackle finish. Size 4 3/4x4 3/8x5". Weight, 16 lbs. No. 3A126. **SPECIAL, EACH..... \$4.95**

- POWER OR BIAS SUPPLY**
Primary 115 volts 60 cycles; Secondaries 240 volts C.T. at 60 ma., 6.3 volts at 1 1/2 amp. using a 6x5 or similar rectifier, delivers about 100 volts DC at 60 ma. Steel case, black crackle finish, size 3 1/2x2 3/4x2 3/8". Wt., 2 1/2 lbs. No. 3B118. **SPECIAL, EACH..... 85c**

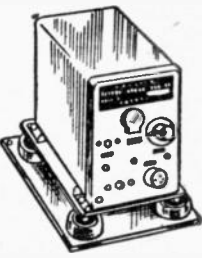
- RECEIVER POWER (Not Illustrated)**
Primary 115 volts 60 cycles; Secondaries 550 volts C.T. at 60 ma. 6.3 volts at 1 1/2 amps. Ideal for receiver power supply, etc., when used with 6x5 or similar rectifier tubes. Steel case, black crackle finish. Size 4 1/2x3 1/2x3". Weight, 5 lbs. No. 3A125. **SPECIAL, EACH..... \$1.95**



- ① **MIKE OR LINE TO GRID**
Primary 50 ohms; Secondary 150,000 ohm. A "Honey" of a top quality small mike transformer. Steel case, size 2 1/2x1 1/2x1 1/4". No. 20B17. **A Real Buy at... \$1.19**
- ② **PUSH-PULL OUTPUT TO VOICE COIL OR LINE**
Primary 10,000 ohms C.T. for 6V6's, etc.; Secondary 8, 12, 125, 500 ohms. Will handle 10 watts easily. Nut cased but impregnated. Size 1 3/4x1 3/4x3". No. 20B18. **Quality at Low Price 95c**
- ③ **OUTPUT TRANSFORMER**
2000 ohm primary to couple one tube of following types to 3 or 4 ohm voice coil: 25L6, 35L6, 50L6, 50A5, 70L7. 2" mounting center x 1 1/4" high. No. 18A888. **50c Lots of 10. Each 45c**
- ④ **PUSH-PULL OUTPUT**
For 6F6 tubes to 4 ohms. No. 13A264. **Special, Each... 65c**
- ⑤ **UNIVERSAL OUTPUT**
The two most popular replacement outputs at bargain prices! Primary impedance 2500 to 13000 ohms. Secondary 2 to 15 ohms with instructions. Mounting centers, 4-watt 2 1/8", 8-watt 2 3/8". No. 13A300. **4-Watt. Each 87c 5 For. \$3.95**
No. 13A301. **5 For. \$4.75**
8-Watt. Each **98c**

SHOCK MTD. CABINET CHASSIS & PARTS ASSEMBLY

Ideally proportioned for small sets, amplifiers and a variety of uses. The Cabinet. Drawn aluminum, 3 1/4" wide, 5 1/4" high, 5" deep. Is riveted to an aluminum plate 4 1/2x5" which has slide-locks for handy mounting or removing from shock mounted aluminum base 5 1/2x5 3/4". Chassis and Front Panel: Chassis is of drawn aluminum 3" wide, 5" long, 2" high. It is attached to the front panel (3 1/2" wide x 5 3/8" high) and slides into cabinet for an exact cover fit. The Parts to the front panel are neatly assembled, a closed circuit jack with cover, coax cable connector 4 prong plug and 2 air trimmers. The Chassis contains 4 octal sockets (2 ceramic, 2 bakelite) on top and below are condensers, resistors, chokes, etc., that are worth far more than we ask for the entire assembly. You get The Whole "Kaboodle", BRAND NEW. No. 36A86. **ONLY..... \$1.65**



BARKER WILLIAMSON 500-WATT TANK COILS

Brand New surplus from the famous "610". Link and Coil connections fit standard BW type 3321 jack bar assembly. Easy to remove turns. Save while yet available.

STOCK No.	FIXED CENTER LINK TYPE		WINDING		SPECIAL EACH
	FREQUENCY RANGE	TURNS	Dia.	Length	
17A422	2 to 3.5 MC	32 No. 14	3 3/8"	4 1/4"	\$1.45
17A423	5.7 to 8 MC	18 No. 12	2 3/8"	4 3/8"	1.95
17A424	14 to 18 MC	8 No. 7	2 3/8"	4 3/8"	2.45
17A425	VARIABLE LINK TYPE				2.45
17A635	2 to 3.5 MC	32 No. 14	3 3/8"	4 1/4"	\$1.25

TUNING CONDENSER FOR ABOVE

Johnson 200FD20. Capacity 207 mmfd. each section. Spacing .045"—2000 Volt. Size 2 1/2"x2 1/4"x8". A \$10.00 Value. Stock No. 18A610. Your Cost, Each..... **\$1.95**

80 METER "BW" COIL—ONE-HALF PRICE

Type 80BL, 150-watt Ct. Link center tapped Coil, mounted on base to fit type 3228 jack bar. Coil size 2 1/2" dia. x 2 3/4"—16 turns each side center. No. 17A374. **SPECIAL, EACH..... \$1.58**
Jack bar for above (Type 3228). No. 17A636. **EACH..... 85c**

SAVE WHILE YOU CAN ON 807 TUBES
JAN inspected, quality make, individually boxed, clean, perfect. **GUARANTEED.**
No. 20A668. **Special, Each... \$1.35**

Sensational Bargains in Quality Headphones

THE FINEST IN HEADPHONES

MADE TO AIR CORPS, ARMY & NAVY SPECIFICATIONS
ALL BRAND NEW — In Original Packing — at Terrific Savings!



8000 OHM TYPE HS23

(1) High impedance, extremely sensitive. Alnico Magnets in molded bakelite cases, concealed terminals. Headband fully adjustable leather covered, spring steel, 12" cord with PL54 plug attached at side out of way. Jack and rubber cord supplied to extend length to 5 1/2 feet. Removable rubber ear cushions. An extremely light weight pair of quality phones (weigh only 9 oz) that cost to build many times the price we ask. Get them while still available.

No. 17A37, Per Pair Cpts. **\$2.45**

TYPE HS23 (Less Headband)

(2) Identical to above, less headband, cushions or extension cord. Ready to use as shown or can be unconnected to make up single headphones or to use as replacements, etc. Headband Fig. 3 fits exactly.

No. 19A1218, Cpts as shown **85c**
Fig. 2. Per Pair.....

600 OHM TYPE HS33

(1) Identical to type HS23 except 600 ohm impedance, flat response; preferred for many applications. Cpts. with headband, cord, plug and cushions as illustrated Fig. 1

No. 22A26, Complete **\$1.95**
Per Pair.....

600 OHM HS38 (Less Headband)

(2) Identical to type HS33 600 ohm impedance, flat response, less headband extension cord and cushions. Headband (Fig. 3) fits exactly. Complete as illustrated Fig. 2

No. 18A1011 Per Pair **65c**

EXTRA HEADBANDS

(3) The identical band as supplied on type HS23, HS33, HS38, P23 etc. phones. Made of spring steel, leather covered and fully adjustable yokes. Has 12" cord attached at side and wired with terminals and cords for connection to receiver units.

No. 18A1010, Each **95c**

TYPE HS30 MIDGET HEADSET

(4) Built on hearing aid principle, ear fitting rubber cushions attached to receivers shut out outside noise. Comfortable light metal band shapes easily to contour of head. Extremely

light weight only 6 oz. Low impedance, converts to high impedance with transformer Fig. 7 — Very popular for conversion to mikes, telephone sets, miniature crystal set and for all around use. Supplied with cord and shirt clip as illustrated.

No. 14A684, Per Set..... **75c**

TRIMM COMMERCIALS AT A FRACTION OF REGULAR PRICE

(5) 600 OHM IMPEDANCE. Sensitive, Rugged, practically unbreakable yet extremely light weight. Black bakelite caps and shells only 2 1/8" diameter x 3/4" thick. Forged magnet of best grade Cobalt steel. Fabric covered wire headband with spring lock and adjusting clamp. 5 ft special moisture proof cord. Recommended for monitoring service. Regular list at \$14.50 and Net at \$8.70.

No. 17A413X, B-A **\$2.95**

Special While They Last.....

THE POPULAR TYPE "HS16"

(6) 600 Ohm impedance, flat response. Extremely sensitive. Quality molded black bakelite caps and shells, Chrome steel magnets, standard concealed terminals. Headband of Bronze spring wire, covered with textile webbing. Has sturdy thumb screw adjustment on sturdy yokes. Cord is moisture proof rubber insulated cotton braid covered, 6 feet long with standard pin tips. Weight complete about 14 oz. Widely used by U.S.A. Signal Corps trainees.

No. 5A169X, Per Pair... **\$1.95**

HEADPHONE MATCHING TRANSFORMER

(7) Converts Low Impedance Phones to high impedance; 8000 Ohms. Ideal for all phones listed here. Has screw terminals for direct connection inside transformer

No. 4A46, With 5" Cord **45c**
and PL54 Plug, Each

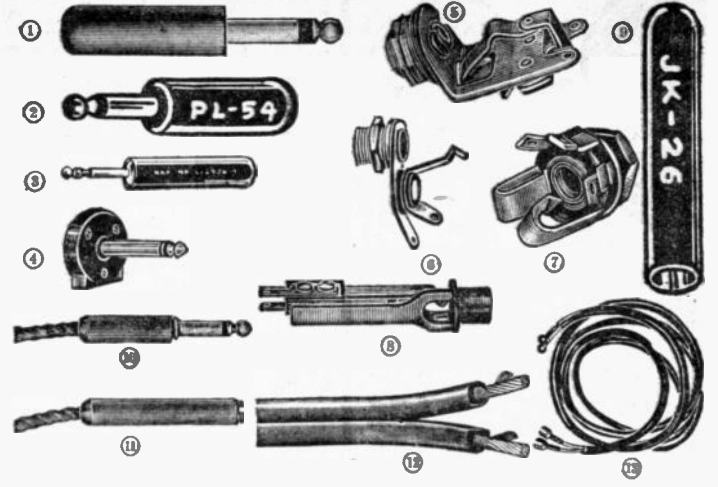
No. 14A685, with 6 Ft. Cord **65c**
and PL55 Plug, Each

RUBBER EAR CUSHIONS

(8) Comfortable, sponge rubber front. Exact fit for HS23, HS33 and HS38 type receivers.

No. 18A1009, Each..... **15c**

PHONE & MIKE PLUG, JACKS & CORDS



PL55 PLUGS

(1) Fits all standard Jacks. Quality built to "take it" for hard use. Tensite shell 1000 V. insulation overall length 2 13/16"

No. 17A262 **19c** 10 Lots **17c**
EACH.....

PL54 PLUGS

(2) Fits exactly the JK26 Jack. Handy for making up extension cords.

No. 17A383 **8c** 10 Lots **6c**
EACH.....

PL68 PLUG

(3) 3 contact mike plug. Fits JK33 Jacks.

No. 18A666 **19c** 10 Lots **17c**
EACH.....

FLAT PHONE PLUG

(4) 1 1/16" dia., 1/4" thick. Eliminates objection of protruding plug. Cord tips held tightly by screws. For all standard jacks.

No. 18A844 **29c** 10 Lots **27c**
SPEC. EA.....

CLOSED or OPEN CIRCUIT JR. JACK

(5) Short type closed circuit jack. Can be used for open circuit. Fits all standard phone plugs.

No. 18A838 **19c** 10 Lots **17c**
EACH.....

MIDGET OPEN CIRCUIT JACK

(6) Mounts in 3/8" hole on panels up to 1/4" thick. Ground connection third lug forms part of frame.

No. 18A840 **12c** 10 Lots **10c**
EACH.....

JK33 MIKE JACK

(7) Fits WE No. 109 and Army Nos. PL46, PL68 and PL168 mike plugs.

No. 18A839 **12c** 10 Lots **10c**
EACH.....

WESTERN ELECTRIC JACK

(8) Type 246E 3 way. Fits No. 109, PL46 or PL168 mike plugs.

No. 18A171 **15c** 10 Lots **13c**
EACH.....

JK26 JACK

(9) "Just it" for making speaker or phone extension cords. Fits exactly PL54 plugs or makes suitable contact on PL55 and other standard phone plugs.

No. 17A380 **13c** 10 Lots **11c**
EACH.....

PL55 PLUG WITH CORD

(10) 40" spiral wound long wearing rubber phone cord assembled to PL55 plug.

No. 17A263 **35c** 10 Lots **33c**
EACH.....

PL68 PLUG WITH CORD

4 ft. durable 3 cond. rubber mike cable assembled to PL68 mike plug.

No. 18A841 **45c** 10 Lots **43c**
EACH.....

JK26 JACK WITH CORD

(11) 4 ft. spiral wound long wearing rubber phone cord attached to JK26 Jack. "Just it" as extension for Army phones, that have short cord and PL54 plug.

No. 17A265 **25c** 10 Lots **18c**
EACH.....

TINSEL PHONE CORD

(12) Tinned tinsel conductor, cotton covered and over all rubber. Very flexible. Fine for long phone and speaker extensions.

No. 2A92, 25 ft. coil..... **65c**

In bulk, 100 ft and **\$1.50**
over. Per 100 ft.....

6-FT. MIKE or PHONE CORDS

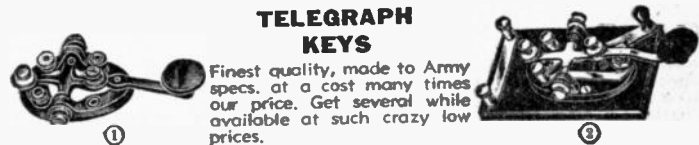
(13) Durable spiral wound rubber made to army specs. 3 cond. mike cord.

No. 18A842 **25c** 10 Lots **23c**
EACH.....

2 cond. phone or speaker cords.

No. 178648 **16c** 10 Lots **14c**
EACH.....

TELEGRAPH KEYS



Finest quality, made to Army specs. at a cost many times our price. Get several while available at such crazy low prices.

1 TYPE J37

1/2" silver contacts, frame of solid bakelite, phosphor bronze key lever, spring steel lever spring, brass hardware.

No. 17A414, A Terrific Value..... **49c**

2 TYPE J38

Jumper strip with binding posts mounted on bakelite base 4 3/4 x 3" with key. Has binding post connections and circuit closing switch. 1/16" solid silver keying contacts. All metal parts cadmium plated. Is an excellent key for sounder and buzzer telegraph systems, as it is equipped with two sets of binding posts. One set mounted on a jumper strip and the other set mounted on the key.

No. 17A38, SPECIAL EACH..... **49c**

MIDGET SPEAKER-MIKE

A Midget P. M. dynamic speaker complete with output transformer and connecting Leads. Only 2 1/4 in. diameter and one inch deep. Built for Walkie-Talkie, fine for midget radios, code practice sets and intercoms. Makes a good microphone.

No. 14A672, Each **\$1.45**

KELLOGG HANDSET

A "Hot" Value Made possible by a special B-A Purchase from an overstocked equipment Mfr.

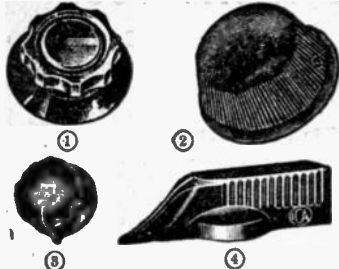
A beautiful, high quality, streamlined version of the commercial telephone hand set. Combines high impedance phone, 50 ohms DC resistance, and a 200 ohm carbon mike. Has built-in D.P.S.T. butterfly talk-listen switch. Three conductor cord included. A natural for mobile communications and interphones.

Brand New (Not war surplus)
No. 22A31, SPECIAL **\$5.95**
While they last, Each.....

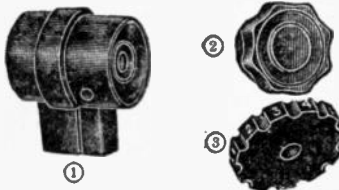


Take Time, Check every item FOR TERRIFIC VALUES

BAKELITE KNOBS



- ① 1 1/2" BLACK BAKELITE with 2 1/16" dia. flange, brass bushed for 1/4" shaft. **Special, Each 15c** Lots of 10. Each **13c**
- ② BLACK TAPERED, 1 3/4" dia. at top and 2 3/8" at base. Brass bushed for 1/4" shaft, with set screw. **No. 18A521. SPECIAL, EACH... 20c**
- ③ 18A522. Like above, 1 3/8" dia. at top, 2" at base for 3/16" shaft. **SPECIAL, EACH... 15c**
- ④ E-ZEE GRIP POINTER KNOB, 1 1/2" at base. Metal bushed for 1/4" shaft. Polished black bakelite. Complete with set screw. **No. 17A279. 15c** Lots of 10. Each **13c**
- ⑤ Black satin finish, 1" dia. at base. Otherwise as above. **No. 17B445. 12c** Lots of 10. Each **10c**
- ⑥ POINTER KNOBS. Pointer filled in white. Available in sizes and colors as listed. Complete with set screws. For 1/4" shaft. **Stk. No. Length Color Each 10 For**



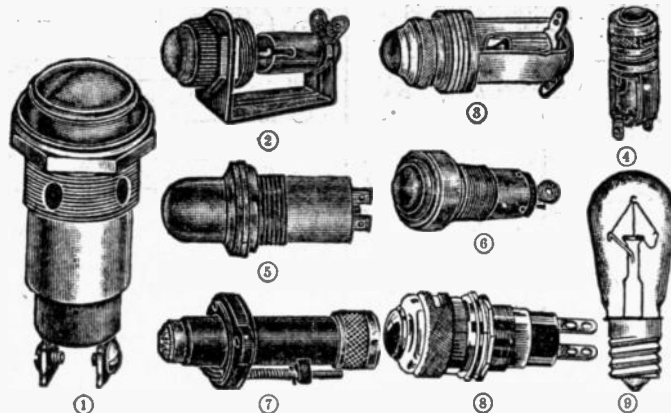
- ① LEVER KNOB. For coils, switches or contactors requiring a sturdy knob with plenty leverage. Has brass insert for 1/4" shaft and 2 set screws. 1" dia., x 1 1/4" deep with lever extension 3/8" wide x 1/2" long. Made of black polished bakelite. **No. 17A452. 15c** Lots of 10. Each **12c**
- ② ALL PURPOSE bakelite knob. 1 1/8" dia. Brass bushed for 1/4" shaft. With set screws. **No. 18A223. 10c** Lots of 10. Each **9c**
- ③ INDICATOR KNOB. Marked 1 to 9. Black bakelite 1 1/2" dia. has metal hub for 2 set screws. For 1/4" shaft. **No. 17A280. 5c** Lots of 10. Each **4c**



- ① BAKELITE KNOB. 1" dia., black. For 1/4" shaft with set screw. **No. 18A222. 15c** Lots of 10. Each **12c**
- ② BAR KNOB. Black bakelite for 1/4" shafts, brass insert. 1 3/8" long. **No. 17A362. 15c** Lots of 10. Each **12c**
- ③ TUNING KNOB. For SCR-274-N receivers such as BC-454, 455, etc. **No. 17A359. SPECIAL, EACH... 65c**

KNOB ASSORTMENT
Contains 10 quality bakelite knobs such as used on Amplifiers, Transmitters, Etc. All fit 1/4" shafts and are complete with set screws. The kind that usually cost you up to 25c each.
No. 17B679. Spec. Per Asst. of 10 For 65c

PANEL LIGHT ASSEMBLIES



At Ridiculously Low Prices
Bulbs accessible from front on all models shown. Fig. ① uses 110-Volt type S5 lamp (Fig. ⑦), all others use any regular T3 1/4 miniature bayonet base single contact bulb.

- ① 110 V., fully enclosed, porcelain and brass nickel plated. Underwriters approved. For single 1" hole mounting, any thickness panel. Over-all length 2 1/2". Lens 1" dia. Uses Fig. 9 Lamp illustrated. **No. 18A180. Red Lens. Special, Each... 60c** Lots of 10. Each **55c**
- ② 17A338. As above with variable dimmer. Red Lens. **Special, Each... 65c** Lots of 10. Each **60c**
- ③ Variable light intensity is possible by means of swivel in jewel holder. Adjustable to a variety of panel thickness, extends 1 3/8" behind panel. Has 1/2" plain red jewel. **18A527. 25c** Lots of 10. Each **20c**
- ④ A very popular type. Supplied with two fibre washers to adjust to various panel thickness up to 1/4". Extends 1 1/8" behind panel. Has 1/2" plain red jewel. **18A528. 25c** Lots of 10. Each **20c**
- ⑤ Requires only 3/8" panel hole. Extends back 1 1/2". Lens assembly removable at front and so arranged that brilliance of light coming thru lens can be varied. **18A886. Amber Lens. 17A449. Yellow Lens. Ea., Your 25c** Lots of 10. Each **20c**
- ⑥ Full view type. Plastic hood gives visibility from all sides. Suitable for Neon NE51 bulb or standard T3 1/4 miniature bayonet base S. C. lamp. For various panel thickness up to 3/8". Very compact, fully enclosed bulb. **18A529. 75c** Lots of 10. Each **70c**
- ⑦ An especially attractive assembly fully enclosing the bulb. Very compact yet suitable for panels up to 1/4" thick. Has 1/2" red jewel. Holder on swivel to allow variation of light intensity. **17A281. 15c** Lots of 10. Each **12c**
- ⑧ Made of bakelite, mounts on front of panel with screws and extends back 2". Faceted red lens pulls forward on springs and swings out of place for front removal of bulb. **18A193. 15c** Lots of 10. Each **12c**
- ⑨ Shutter type, intensity of light can be varied by turning knurl nut. Mounts in 1 1/16" hole, bulb can be removed from front. For bayonet base miniature bulbs. Red lens. **17A366. 45c** Lots of 10. Each **35c**
- ⑩ Bulb, 110-volt, 6-watt S5 cand. base for Fig. ① and any other similar indicators, etc. **16A168. 18c** Lots of 10. Each **16c**

10 Assorted PILOT LIGHT ASSEMBLIES
Contains 10 assemblies some from above and others. An Outstanding Value!
No. 18A14. Per Assortment of TEN 95c

HANDY LAMP



Type C4—AAF Cockpit Lamp.
Complete with press-to-light and rheostat switch and swivel base. Lens is so arranged that light may be focused to spot or flood as desired. Will take any voltage miniature bayonet base bulb, instead of those supplied so they can be converted to your special needs. Makes an ideal trouble light; also has many other uses.
No. 3A5. Complete with 4 ft. Cord and 24 Volt Bulb. 95c
Special Each 65c
6.3-Volt Bulb. Fits Handy Lamp above, for use with a 6-volt dry or storage battery or 3 No. 6 dry cells.
No. 16A161. Each... 10c

Panel Mount Socket

For double contact cand. bay. base Neon or Auto Lamps. Mounts on panel up to 1/4" thick. Nickel plated. Comes with mtg. nut and washer.
17A337. Each. 25c

GRIMES AIRCRAFT Retractable Landing Lights

Type ST 1220—12 Volts—8" Reflector. 415 Candle Power, 575000 Beam Candies. 20 Amp. Electrically extended and retracted by a motor. Adjusts to open between 50 and 85 degrees. An enclosed automatic switch lights lamp when extended. Operates from a 2-position switch that controls motor only. Very sturdily built. Weatherproof. Overall size when retracted 9 1/2" wide, 4 1/2" deep, 12" long.
No. 3A3—Sold in Pairs. \$90.00 Value. Per Pair... \$7.95
No. 3A4—Extra Lens for Above. Per Pair... 1.50
GRIMES SEALED BEAM 24-VOLT LAMPS—Type B-3C3000, Par 64,600-Watt. Stock No. 3A6—Each... \$1.50
AIRCRAFT HEADLIGHT LAMPS, GE239A19P—239-Watts A19, Med. Pref. Clear C2 Fil., M.E. Brass Base 12-Volt. Stock No. 3A9—Each... 95c

NATIONAL

"Velvet Vernier" Dial Mechanism. Identical to that used on the popular A C N Dial.
No. 18A525, Special Each 95c

VERNIER DIAL MARKERS
Allows logging to one tenth of one dial division. Easy to mount on any type panel.
18A518 For 180° Dials. 18A519 For 270° dials. CHOICE EACH 10c

Bayonet Base Neon Bulbs and Plastic Bezel



- ① T2 TINY NEON LAMP
Handy for many needs. Only 1 1/8" long x 1/4". For any voltage above 90-volt DC or 65-volt AC at .3 ma. Require current limiting resistance .2 meg. for 105 to 125-volt, .5 meg. for 210 to 250-volt. Has single contact bayonet base. **16A149. Each... 9c** 10 For **80c**
- ② NE-16 NEON LAMPS
105 to 125 Volts AC-DC, T4 1/2 with double contact Candelabra bayonet base. **No. 17A390. 15c** Lots of 10. Each **10c**
- ③ PLASTIC BEZEL
Clear plastic convex lens in friction spring mounting holder 1/4" diameter. Handy for many needs. **No. 17A348. SPECIAL, EACH... 10c**

24 Volt Bulbs
S.C. Miniature Bayonet Base
Ridiculous LOW PRICE
Type 1818, 24 V., .17 Amp.
18A194. 45c
Per Box of 10

Pilot Lamp Socket

(1) For miniature bayonet S.C. bulbs. Bakelite socket with bracket for mounting in any position.
18A186. Each... 18c

Airplane Signal Flashing Bulbs

G.E. 1038—12.8-VOLT
Double contact, Bayonet base, 3-amp. DC.
No. 18A199. \$1.50
Per Box of 10.
G.E. 1047—26-VOLT
Single contact, Bayonet base, 2.7-amp. DC.
No. 18A200. \$1.50
Per Box of 10.
G.E. 12-16 VOLT 15 C.P.
Double contact candelabra base.
No. 17B663. \$1.50
Special, Per Carton of 10... \$1.50
BULB FOR TYPE C-5 COCKPIT LIGHT
Ultra violet fluorescent bulb for use with Air Corps type C-5 cockpit light. 28 volts.
No. 17B664. Per Ctn. of 10. \$1.50

Bargains - IN OFTEN NEEDED HARDWARE

BRASS TERMINAL LUGS



Best quality brass tinned lugs for all types of radio and repair work.

No.	Type	Lgth.	Hole	Each	Pkg. Per 100
19A1079	1	1 3/16"	8-10	1c	60c
19A1080	2	1 3/8"	8-10	2c	95c
19A1081	3	1 1/2"	10	1c	30c
19A1082	4	1"	8-10	1c	50c

Assortment of 100 lugs as above and others. **45c**

BIG VALUES in TINNED SHAKEPROOF LUGS

Hole Size	Stock No.	Pkg. 100	Pkg. 500	Pkg. 1000
#4	18A371	30	.95	\$1.85
#6	17B673	30	.95	1.85
#8	17B682	35	1.10	1.85
#10	17B683	35	1.10	1.85

Barrier Type Terminal on Bakelite

Size 2 3/4"x1 1/4"x 3/8" with 8-32 Binder-head screws. 18A821, Type 2-142. Ea. . . . **15c**

CABLE CLAMPS

Heavy gauge steel, cad. plated. Fits cable Dia. as Listed.

Cat. No.	Cable Dia.	All Length	Pkg. 20	Per 100
12A1304	1/8"	3/4"	25c	\$1.05
19A1070	1/8"	1 1/4"	25c	1.05
12A1303	1/8"	1"	25c	1.05

Bakelite Cable Clamps

Cat. No.	Cable Dia.	All Length	Pkg. 20	Per 100
19A1071	1/8"	1 1/4"	29c	1.25
19A1072	1/8"	1 1/4"	40c	1.85

Cable Clamp Assortment 50 assorted cable clamps, as above and other useful sizes. No. 19A1073. Per Assortment. **.45c**

PLASTIC HANDLE

For drawer pulls, doors, light portable equipment, carrying cases, etc. Mounts with two 10-32 machine screws. Length 6". Black. No. 17B655. SPECIAL, EACH. **10c**

MOUNTING SPRINGS

For Record Changers, etc. No. 16A554 Pkg. of 10. **19c**

Grid & Plate Clip

National No. 12 for 1/8" caps. 18A220. Ea. 8c; 100 @3c

Tuning Slug

19A1078. 1" Iron core tuning slug with 6-32 threaded shaft 1 1/4" long. Has screwdriver slot for tuning. Special, Ea. 10c; Lots of 10, Ea. 8c

CERAMIC INSULATORS BARGAIN PRICED!

Finest quality, tapped each end for 1/4"-20 machine screw, 1" dia. x 1 1/2" high. 18A969. Special for 10 **65c**

LIGHTNING ARRESTER

Approved by Underwriters' Laboratories. Made of black porcelain, measures 3 3/4" in length. Non-grounding and weatherproof. Individually packed. No. 3A121. SPECIAL, EACH **18c**

MACHINE SCREWS AT BARGAIN PRICES

BH, designates Binder Head; RH, Round Head and FH, Flat Head. Top quality Steel machine screws. Nickel or Cadmium Plated, Our Choice.

Size	2-56	Size 6-32	Size 10-32
Lgth. No. Round Head	1" 19A701	1 1/4" 19A733	1 1/2" 19A764
1/2" 19A702X	1 3/8" 19A861	1 3/4" 19A767	1 3/4" 19A771
3/4" 19A702	1 1/2" 19A737	1 7/8" 19A879	1 7/8" 19A881
Ch'ce Above	1 7/8" 19A738	1 7/8" 19A881	1 7/8" 19A881
100 For	15c	1 3/4" 19A864	1 3/4" 19A773
FOR	60c	1 3/8" 19A740	1 3/8" 19A766
500 For		1 1/2" 19A1032	1 1/2" 19A766
		2" 19A865	1 1/2" 19A766

Size	4-40	Size 8-32		
Lgth. No. Round Head	1 1/4" 19A705	1 1/4" 19A775		
1/2" 19A707	1 1/2" 19A870	1 1/2" 19A776		
3/4" 19A854	1 3/4" 19A884	1 3/4" 19A776		
1" 19A855	1 7/8" 19A751	1 3/4" 19A776		
Ch'ce Above	1 7/8" 19A751	1 3/4" 19A776		
100 For	46c	1 3/4" 19A776	500 For	43c
FOR	\$1.95	1 3/4" 19A776	500 For	\$1.81
500 For	80c	1 3/4" 19A776	500 For	\$2.43

Size	6-32	Size 10-24		
Lgth. No. Round Head	1 1/4" 19A857	1 1/4" 19A782		
1/2" 19A995	1 1/2" 19A744	1 1/2" 19A782		
3/4" 19A858	1 3/4" 19A746	1 1/2" 19A782		
1" 19A859	1 7/8" 19A748	1 1/2" 19A782		
Ch'ce Above	1 7/8" 19A750	1 1/2" 19A782		
100 For	37c	1 1/2" 19A782	500 For	35c
FOR	\$1.57	1 1/2" 19A782	500 For	\$1.50
500 For	29c	1 1/2" 19A782	500 For	\$2.35
FOR	\$1.24	1 1/2" 19A782	500 For	\$2.35

Size	10-32	Size 5/16-18		
Lgth. No. Round Head	1 1/4" 19A871	1 1/4" 19A894		
1/2" 19A756	1 1/2" 19A871	1 1/2" 19A894		
3/4" 19A872	1 3/4" 19A871	1 1/2" 19A894		
1" 19A873	1 7/8" 19A871	1 1/2" 19A894		
Ch'ce Above	1 7/8" 19A871	1 1/2" 19A894		
100 For	35c	1 1/2" 19A894	500 For	\$2.25
FOR	\$1.38	1 1/2" 19A894	500 For	\$2.25
500 For	\$1.86	1 1/2" 19A894	500 For	\$2.25
FOR	\$1.38	1 1/2" 19A894	500 For	\$2.25

999-PIECE HARDWARE ASSORTMENT

As listed here and other popular sizes and lengths. No. 3A36 SPEC. EA. **99c**

BARGAIN SPECIAL! FLAT HEAD SCREWS

Nickel or Cadmium plated (our choice)	top quality Machine Screws.	Size	Lgth.	Stk. No.	100	1000
2-56	1/8"	19A850	.12	\$1.10		
2-56	3/16"	19A851	.12	1.10		
4-40	1/8"	19A1053	.15	1.30		
6-32	1/8"	19A717	.20	1.70		
6-32	3/16"	19A719	.20	1.70		
6-32	1/2"	19A722	.20	1.70		
6-32	5/8"	19A725	.22	1.90		
6-32	3/4"	19A728	.22	1.90		
8-32	1/2"	19A743X	.25	2.20		
8-32	3/4"	19A868	.25	2.20		
8-32	1"	19A747	.25	2.20		
8-32	1 1/8"	19A749	.25	2.20		
8-32	1 1/4"	19A752	.30	2.60		
8-32	1 3/8"	19A755	.30	2.60		
8-32	1 1/2"	19A757	.30	2.60		
8-32	1 3/4"	19A760	.30	2.60		
10-32	1"	19A765	.28	2.50		
10-32	1 1/8"	19A769	.28	2.50		
10-32	1 1/4"	19A770X	.28	2.50		
10-32	1 1/2"	19A772	.28	2.50		

Hexagon Nuts Many popular sizes at a saving over regular prices. Plated Finish.

NICKEL PLATED STEEL

For Screw Size	O.D. Stock No.	Per 100	Per 500
* 2-56	19A1026	38c	\$1.82
4-40	19A789	39c	1.87
6-32	19A792	39c	1.87
8-32	19A794	39c	1.87
10-32	19A897	43c	1.80
10-24	19A1219	53c	2.26

*Brass N.P.

NICKEL or CADMIUM PLATED (Our Choice)

For Screw Size	O.D. Stock No.	Per 100	Per 500
1/4"-20	19A798	45c	\$1.90
1/4"-20	19A799	45c	1.90
1/4"-28	19A800	45c	1.90
* 1/8"-18	19A801	70c	3.05
* 1/8"-24	19A899	70c	3.05

ELASTIC STOP NUTS

4-36 1/4"	19A1083	25	100
6-32 3/8"	19A841	FOR	FOR
10-24 3/8"	19A843	25c	80c
10-28 1/2"	19A844	25c	80c
10-32 3/8"	19A840	25c	80c

METAL WASHERS

Stock No.	Fits Screw	O.D. Size	Per 100	Per 500
19A900	# 2	3/4"	.15	.50
19A903	# 6	1/2"	.15	.50
19A905	# 6	3/4"	.15	.50
19A906	# 6	1/2"	.15	.50
19A907	# 8	7/8"	.15	.50
19A908	# 8	1"	.15	.50
19A909	# 10	1 1/4"	.20	.75
19A910	# 10	1 1/2"	.20	.75
19A1041	# 10	1 1/2"	.20	.75
19A911	# x x x	1"	.20	.75
19A913	# x x x	1"	.20	.75
19A1045	# x x x	1"	.20	.75

FLAT LEAD WASHERS

19A914	#10	1"	.20	.75
19A915	# x x x	1"	.20	.75
19A1044	# x x x	1"	.20	.75

SPLIT WASHERS FIG. F.

19A813	# 6	3/4"	.25	.95
19A814	# 8	1"	.25	.95
19A1038	# 8	1"	.25	.95
19A815	# 10	1 1/4"	.25	.95
19A1039	# 10	1 1/4"	.25	.95
19A816	# x x x	1"	.25	.95
19A817	# x x x	1"	.25	.95
19A818	# x x x	1"	.25	.95
19A818	# x x x	1"	.45	1.95
19A819	# x x x	1"	.45	1.95

SHAKE-PROOF WASHERS FIG. G.

19A919	# 4	...	.30	1.25
19A920	# 6	...	.30	1.25
19A921	# 8	...	.35	1.45

SHAKE-PROOF WASHERS FIG. H

19A806	# 4	...	.30	1.25
19A922	# 6	...	.35	1.45
19A923	# 8	...	.35	1.45
19A808	# 10	...	.40	1.65
19A1037	# x x x	1"	.40	1.65
19A1034	# x x x	1"	.40	1.65
19A811	# x x x	1"	.50	1.95
19A1033	# x x x	1"	.50	1.95

CUP LOCK WASHERS FIG. J

19A821	#10	1"	.15	.60
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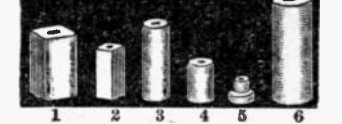
Jack Hole Covers

Keeps out dust and dirt. 18A851. Special Each **5c**

Worm and Gears At a Low Price

Bronze Boston gear, 20 teeth. Used in combination with worm illustrated for 20 to 1 ratio speed reduction. Ideal for making your own tuning assemblies, etc. 18A567 gear fits 1/4" shaft. 18A568 gear fits 3/16" shaft. 18A569 worm fits 3/16" shaft. **15c**

Low Prices on Stand-Off Insulators-Bushings



Low loss ceramic, threaded each end for standard machine screw sizes.

No. 1-3/4" SQUARE INSULATOR

Stock No.	High Ins.	Screw Size	Choice Each
19A1062	1"	10-32	6c
19A1061.	3/4"	square x1" high tapped for 10-32 screw.	7c
No. 3-3/8" ROUND INSULATOR	1/2"	6-32	5c
No. 3-1/2" ROUND INSULATOR	3"	6-32	12c
No. 4-1/2" ROUND INSULATOR	5 1/4"	6-32	4c
12A1369	1 1/4"	6-32	5c
19A1057	1 1/4"	6-32	5c

No. 5 Bushing, 1/8" hole for panels up to 1/4" thick. Bushing 1/2" dia. 12A1370. Pkg. of 12. **10c**

No. 6-3/4" ROUND INSULATOR

19A1027	3"	10-32	13c
No. 6-1" ROUND INSULATOR	1 1/2"	1/4-20	\$6.00
19A1058	1 1/2"	1/4-20	\$6.00

Each, 10c; Per 100. **\$6.00**

25 Assorted from above and other good usable sizes. 19A978. Per Assrt. **50c**

STAND OFF INSULATOR

Ceramic insulator with 1/8" hole for wire or for mtg. coils, condensers, etc. Other end is tapped for 8/32 machine screw. 3/8" square. 19A1088. 1 1/4" high. Chc. **5c**

19A1089. 1" high. Ea. **5c**

Steatite Stand-Off Insulator

Has nickel plated cap and base with 1/4"x1" insulation. No. 19A1074. Special Ea. **15c**

BUSHINGS—INSULATORS

(1) Steatite Bushing. Fits 3/8" dia. hole. No. 19A1067 Per Set as illustrated. 6c
(2) Steatite feed thru insulators size #6 hole with extruded shoulder for mtg. thru 7/16" hole. Used in pairs. No. 15A1150. Fits 1/2" dia. hole x 3/4" O.D. Per Set. 10c
(3) Ceramic Bushing Washers. Use two together with size 6 machine screw of appropriate length for feed thru bushing or insulated mounting. Has shoulder for 9/32" dia. mtg. hole. Bushing dia. 11/32" x 1/8" thick. No. 17B657 Pkg. of 10. SPECIAL. 15c

Lead-In Bowl

1 1/4" hole. For lead-in purposes at high voltages. 18A175. Each. **5c**

ALUMINUM RODS.

Handy for corner posts, mtgs., etc. 3/8"x1/2", tapped for 8-32 machine screws. No. 3A111 9 1/2" long. Special Each. **15c**

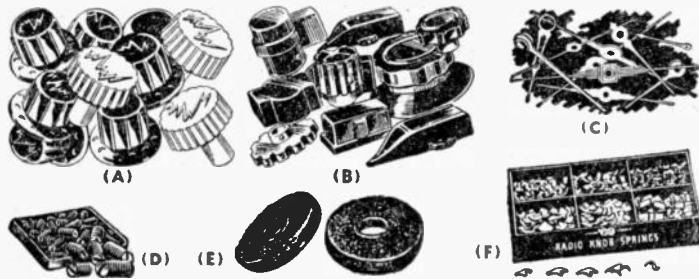
No. 3A110 18 1/2" long. Special Each. **25c**

B-A Handy-Popular

ASSORTMENTS

BUY THESE ASSORTMENTS WITH CONFIDENCE . . . EVERY PIECE BRAND NEW — PERFECT! B-A quantity purchases bring them to you at worth while savings. In many instances the value of one piece alone is worth more than the price shown for the complete assortment. EVERY ONE AN OUTSTANDING VALUE!

KNOBS — DIAL POINTERS — ACCESSORIES



(A) BAKELITE KNOBS
10 Assorted, Brown, Black and Ivory knobs, push-on type to fit standard 1/4" knurled shafts as used on most makes of sets.
No. 17A286. Per Asst. of 10 . . . **39c**

25 Assorted includes types as above and others.
No. 18A850. Per Asst. of 25 . . . **79c**

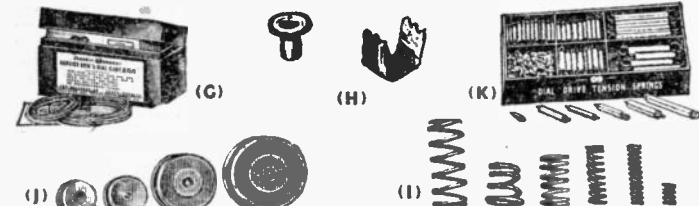
(B) KNOBS FOR AMPLIFIERS, TRANSMITTERS, ETC.
Contains 10 quality Bakelite knobs such as used on Amplifiers, Transmitters, etc. All fit 1/4" shafts and are complete with set screws, the kind that usually cost you up to 25c each.
No. 17B679. **65c**
Per Asst. of 10

(C) DIAL POINTERS
10 Assorted pointers for replacement needs on many makes of sets.
No. 12A1171. Per Asst. of 10 . . . **50c**

(D) SET SCREWS FOR KNOBS
25 Assorted of various lengths of 6-32, 8-32 and 10-32 screws. Handy for replacements on radio sets, etc.
No. 18A3. **59c**
Per Asst. of 25

(E) KNOB FELTS
45 Felts as used behind radio knobs on all the latest sets.
No. 18A2. Per Env. of 45 **24c**

(F) PUSH-ON KNOB SPRINGS
35 Assorted of the most popular types. A handy kit for any shop.
No. 18A4. Per Kit of 35 **41c**



(G) DIAL CABLE KIT
Contains 12 10-ft. lengths most often needed types bronze, linen and metal cables packed in handy leatherette box.
No. 11A70. Per Assortment . . . **\$2.73**

(H) CABLE CLAMPS, EYELETS
60 Assorted. Same as used on ready made dial cables. Make up your own cable and belts
No. 11A72. Per Assortment . . . **24c**

(I) DIAL CABLE CLIPS
Envelope of 50 clips (ONLY). For use on all types of Dial Drive Cord assemblies. Make up your own special cords with these clips.
17A1009. Env. of 50 Clips. **24c**

(J) COMPRESSION SPRINGS
Assortment of 20. For use on dials, push-button tuners, phono motors, etc.
No. 17A1010. **24c**
Per Assortment of 20

(K) BRASS DIAL PULLEYS
Kit of 6 Assorted Idler dial pulleys, several sizes included.
No. 17A1011. Per Assortment . . . **24c**

(L) FIBRE DIAL PULLEYS
Kit of 10 Assorted Idler dial pulleys, several sizes included.
No. 11A80. Per Assortment . . . **24c**

(M) ALUMINUM DIAL PULLEYS
Kit of 10 Assorted Idler dial pulleys. Precision made, distortion free—non-warping. Handy for replacements.
No. 15A1116. **19c**
Per Assortment

(N) DIAL DRIVE SPRINGS
Kit of 25. Contains 6 sizes to take care of any dial job.
No. 11A77. Kit of 25 **65c**
11A78. Pkg. of 10 assorted springs of various sizes. **24c**
11A79. Pkg. of 10 assorted small dial springs **24c**

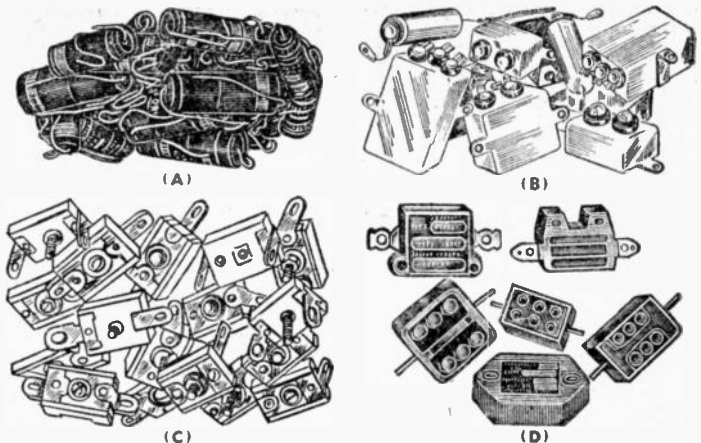
LOOK! at this "RED-HOT" BARGAIN CARBON BRUSH ASSORTMENT

50 ASSORTED of various sizes and shapes, some with springs and others with leads as illustrated. There is a brush for almost any job or if need be brushes can be easily altered to fit.

No repair or serviceman should be without this handy assortment. Truly An Outstanding Value!

No. 19A1068. **65c**
Special Per Assortment

HANDY CONDENSER ASSORTMENTS



(A) TUBULAR CONDENSERS
A handy assortment of 25 paper tubular condensers in good useable capacities and voltages, quality standard makes.
No. 18A203. 25 Asst. ONLY **\$1.95**
Kit of 25 Paper Tubulars, 5 each .01, .02, .05, .1, .5 mfd., all 600 volt.
No. 21T3999. **\$2.85**
SPECIAL PER KIT

(B) OIL FILLED CONDENSERS
10 Assorted popular capacities, tubular and bath-tub types.
No. 18A968. Per Asst. of 10 . . . **95c**

(C) TRIMMER CONDENSERS
25 Assorted quality ceramic trimmer condensers popular capacities. Regular cost up to 20c each. You can afford to have several assortments, even if the use is only occasional.
No. 18A156. PER ASST. ONLY. **65c**

(D) MICA CONDENSERS
TEN, Assorted top quality makes, including high voltage transmitting types. One or Two in the assortment at regular prices would cost as much as the assortment of 10.
No. 18A633. Per Asst. ONLY. . . **75c**

CERAMIC CONDENSERS

KIT OF 10 fixed condensers now so popular. Assorted capacities, minimum voltage 500 Volt DC both zero and negative temperature coefficients. The use of any one will pay for the entire lot. AT THIS PRICE YOU CAN AFFORD TO BUY SEVERAL.
No. 17A376. **PER ASSORTMENT OF 10 ONLY 39c**

KIT OF TEN MOLDED PAPER CONDENSERS

Bakelite molded wax impregnated with pig tail leads. Standard RMA color coded. Excellent, dependable substitutes for mica or paper tubular condensers. **KIT OF 10 POPULAR CAPACITIES AND VOLTAGES. 75c**
No. 18A827. SPECIAL PER KIT

SAVE ON THESE RESISTOR KITS

WIRE WOUND RESISTORS
10 Watt, wire wound resistors handy for service and other needs. All quality makes in good useable capacities with lugs or pigtail leads.
No. 18A801. A REAL BUY. **95c**
Assortment of TEN

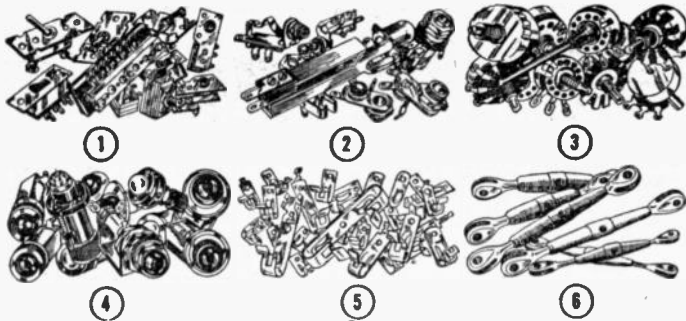
CARBON RESISTORS
100 Assorted. (25 1-watt, 25 1/2-watt and 50 1/4-watt.)
18A71. Box of 100 **\$1.45**
200 Assorted. Good sizes in 1/4, 1/2, 1 and 2-watt. **\$2.45**
18A73. Box of 200
FREE. Handy Color Code Chart with each of the assortments listed.

PRECISION RESISTORS
10 ASSORTED IRC and Shallcross wire wound precision resistors, accurate within 1%. A variety of capacities. Any One Resistor is usually priced what we ask for the TEN. **\$1.95**
No. 17A379. Per Asst. ONLY

WIRE WOUND RESISTORS FERRULE TYPE
Contains TEN Wire Wound Ferrule Type Resistors in popular capacities. Ideal for experimenters, Etc.
No. 18A93. **95c**
Special, Per Asst. of TEN

...at TREMENDOUS SAVINGS !!!

POPULAR MISCELLANEOUS ASSORTMENTS



① SWITCHES
10 assorted—toggle, push-button and slide type switches.
No. 18A935. Per Asst. ONLY **95c**

② JACKS
10 assorted long and short type frames, both open and closed circuits.
No. 18A937. Per Asst. ONLY **95c**

③ VOLUME CONTROLS
10 assorted of quality makes. Your Money's Worth.
No. 18A934. Per Asst. ONLY **95c**

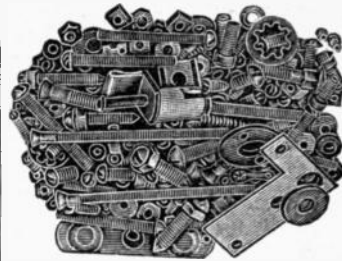
④ PANEL LIGHT ASSEMBLIES
10 assorted, a variety of colors. All for standard base panel bulbs.
No. 18A14. Per Asst. ONLY **95c**

⑤ FAHNESTOCK CLIPS
25 assorted of various sizes and types.
No. 17A267. Per Asst. ONLY **19c**

⑥ TURN-BUCKLES
6 assorted in pairs. Fine quality. Brass barrels — high tensile strength steel forks and eye.
No. 18A936. Per Asst. ONLY **95c**

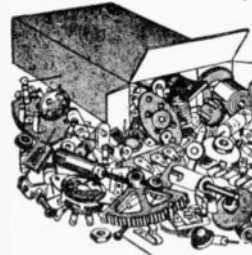
YOU BE THE JUDGE! Each assortment is to be to your complete liking for quality and value or it may be returned at our expense for refund or exchange. **CHECK EVERY ONE**—get them while you can. **MANY ARE SUBJECT TO STOCK ON HAND.**

Look! at This Bargain



500 PIECES HARDWARE 95c
Contains quite a wide variety of screws, nuts, washers, grommets and miscellaneous radio and general purpose hardware and fittings. A very handy collection to have around for anyone who does tinkering or repairing of any nature.
No. 3A66. Asst. of 500 pieces.. **95c**

"SWEEP UP" Assortment



Approx. 50 pieces of odds and ends of condensers, resistors and misc. parts as used in factory production lines. All of it is good usable stuff — and the price is cheap so you will get your money's worth.
No. 3A71. Sweep-up Asst. **50c**

Phono Set Screws 89c
18A343
10 Ass't.
Assortment of 10 most popular sizes.

999-Piece Hardware Asst. 99c



Every Piece Clean, Bright and New. Contains machine screws, nuts, washers, solder lugs, rivets, self-tapping screws, etc.—All good, useable types and sizes for which you will have need time and time again!
No. 3A36. Per Asst. **99c**

CRAZY SALE on AN Connectors



Consist of Amphenol, Cannon and Harwood. All priced at a mere fraction of regular price.

Size	Stock No.	Each
16S-4S	18200	20c
Fig. ① Type AN 3100		
12S-6S	18201	15c
18-2S	18202	15c
18-5S	18203	20c
18-6S	18204	20c
18-8S	18205	30c
18-16S	18206	20c
20-4S	18207	20c
22-4P	18208	20c
22-5S	18209	25c
28-1S	18210	25c
44-2S	18211	90c
Fig. ② Type AN 3106		
12S-3S	18212	20c
14S-1S	18213	30c
14S-2S	18214	25c
16S-4P	18215	25c
16-6P	18216	35c
18-1S	18217	40c
18-2P	18218	25c
18-2S	18219	35c
18-5S	18220	30c
18-5P	18221	30c
18-6P	18222	30c
18-16P	18223	30c
20-4P	18224	35c
22-5P	18225	40c
44-2P	18226	70c
Fig. ④ Type AN 3108		
28-19S	18227	35c
28-19P	18228	35c
22-4S	18229	25c
Fig. ⑤ Type AN 3108		
28-19P	18230	35c
28-19S	18231	40c

Size 20 ANJC 48 Wire Priced Ridiculously Low!



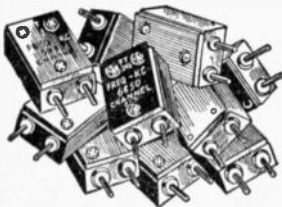
Consists of 7 strands .0126 tinned wires with vinylite insulation and overall glossy lacquered braid. Priced at about 1/2 regular market. Available in bulk reels of 5,000 feet and reels of 10 to 13,000 feet. G.E. and other quality makes.
No. 1A60.
5,000-ft. Reels. Per M... **\$5.45**
10,000 to 13,000-ft. Reels. Per M... **\$4.85**

Low Prices on Mike Cable Connectors



Single contact, brass chrome plated. Contact made by tightening of coupling ring. Each
① 14A320. Female Cable Type... **24c**
② 14A319. Male Cable Type... **21c**
③ 14A321. Male Chassis Type... **15c**

80, 75 and 40 Meter CRYSTALS, 10 for \$3.95



In FT 243 holders, cut from highest quality quartz accurately ground and acid etched. Frequency marked on each within 2 KC. Sorry we must sell them in assortments our pick of frequencies — But you can't go wrong! There are choice frequencies for 80, 75 and plenty for 40 meters or for doubling to 20- and 10 meters in each assortment. Every one guaranteed to be an active oscillator.
Stock No. 21T3991. Assortment of TEN. ONLY **\$3.95**

AMATEUR CRYSTAL KIT

Kit contains 3 Crystal Blanks approx. 50 to 10 KC. below fundamental freq. of 7,000 KC. can be ground to 7,000 KC or over (with abrasive included) to any desired freq. in amateur band. Fundamental freq. can be doubled and redoubled to become operative at 14 or 28 MC. or up. Included are Two holders complete with regular electrodes and springs and 2 additional sets of electrodes and 1 bag of abrasive. Instructions included.

No. 17A305. SPECIAL, PER KIT..... **89c**



CERAMIC INSULATED CARBON RESISTOR KITS



Contains all most popular capacities. 100 assorted, 50 each 1/2 and 1 watt.
18A74. Per Assortment **\$1.95**
100 assorted, 50—1/2 watt, 25—1 watt, 25—2 watt.
18A75. Per Assortment **\$2.25**
200 assorted, 100—1/2 watt, 75—1 watt, 25—2 watt.
18A76. Per Assortment **\$3.95**
FREE — Handy Color Code Chart with each of the above asst.



FLEXIBLE PLASTIC TUBING at CRAZY LOW PRICES!

Handy for a variety of insulating needs . . . for wire, solder lugs, etc. Extremely flexible, resistance to abrasion, cold and heat. High dielectric strength.

100-FOOT ASSORTMENT ONLY 95c
Consists of 4 25-foot coils; 2 coils .118" ID, 1 coil .106" ID, and 1 coil .148" ID. You would usually pay more for one coil than we ask for the four.
Stock No. 3B45. SPECIAL PER 100-FOOT ASSORTMENT..... **95c**

300-FOOT ASSORTMENT ONLY \$1.95
Consists of above and several other popular sizes. A value that would usually cost at least SIX TIMES this ridiculous LOW PRICE.
Stock No. 3B46. SPECIAL PER 300-FOOT ASST. ONLY..... **\$1.95**



Phono Jack, Plug and Lead Assortment

BARGAIN PRICED

Here are items that are almost in daily demand in servicing phono connections. Here is what you get for only 50c: 6 plugs, 2 jacks and 2 26" flexible shielded leads.
No. 16A547. Per Package. ONLY..... **50c**

Handy Glass Jars with Metal Screw Lids

To Stock Small Hardware, Parts, Resistors, Etc.



No. 3A24. 2-oz. 2" diameter x 1 3/4" high. Each . . . 8c Per Dozen . . . 85c Carton of 48. . . **\$2.50**
No. 3A25. 4-oz. 1 3/4" diameter x 3 3/8" high. Each . . . 10c Per Dozen . . . \$1.00 Carton of 48. . . **\$3.45**

SPAGHETTI ASSORTED



A neat bundle of 20 pieces, each 9" long, varnished high grade tubing in assorted popular sizes.
No. 18A69. Per Asst. **15c**

Needed Little Things

IN HANDY ASSORTMENTS

HANDY HARDWARE ASSORTMENTS in GLASS JARS



MACHINE SCREWS

100, cadmium and nickel plated steel and brass screws in most popularly used sizes in round, flat, oval and binder heads. An assortment that is handy for all purpose needs, in handy glass jars.

No. 19A961. Per Asst. **38c**

100, 6-32 machine screws, assorted heads, length and finishes, in handy glass jar.

No. 19A1055. Per Asst. **44c**

No. 19A1086. As above except all 8-32 machine screws.

Per Asst. of 100. **47c**

No. 19A1087. As above except all 10-32 machine screws.

Per Asst. of 100. **55c**

HEXAGON NUTS

100, steel and brass nickel and cadmium plated to fit screws contained in screw assortment at left. All in handy glass jar.

No. 19A962. Per Asst. **47c**

WASHERS

100, metal, cadmium and nickel plated plain, various types shake-proof, fibre, bakelite and lock type in sizes that go with screws at left. All in handy glass jars.

19A963. Per Asst. **25c**

SOLDERING LUGS

100, assorted various types and sizes, handy for anyone who does any soldering with wire.

19A964. In glass Jar. **30c**

HOLE PLUGS — RIVETS — EYELETS — CABLE CLAMPS



SNAP BUTTON HOLE PLUGS

10 assorted of most useful sizes, metal button with spring flanges.

No. 18A10. Per Asst. **29c**

RIVETS — EYELETS

50 assorted in sizes and types needed in Radio Work.

No. 18A6. Per Asst. **21c**

CABLE CLAMPS

50 assorted of metal and bakelite, various sizes.

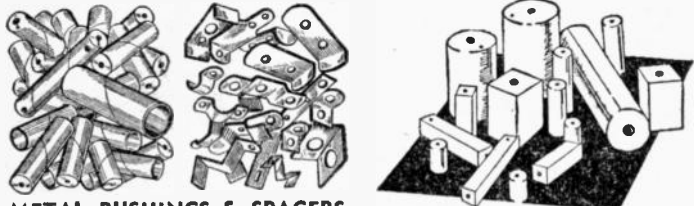
No. 19A1073. Per Asst. **45c**

CABLE CLAMPS — FUSE CLIPS

25 assorted brackets, cable clamps, and fuse clips. Very Handy.

No. 19A1065. Per Asst. **25c**

BUSHINGS — SPACERS — BRACKETS — COIL FORMS STAND-OFF INSULATORS



METAL BUSHINGS & SPACERS

25 assorted metal bushings and spacers, some are tapped for 6-32 and 8-32 machine screws, others are plain. Handy for countless needs.

No. 18A20. Per Asst. **39c**

MOUNTING BRACKETS

25 assorted of many types and sizes straight and angle mounting brackets. Handy for a wide variety of mtg. needs.

No. 18A7. Special, Per Asst. **35c**

STAND-OFF INSULATORS

25 assorted, finest grade ceramic insulators. A variety of sizes square and round tapped for machine screws, also included are several sizes of Steatite bushings.

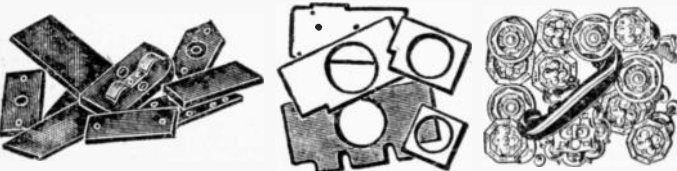
No. 19A978. Per Asst. **50c**

COIL FORMS

25 assorted paper forms from 1 1/4 to 3 1/4" long and 7/16 to 3/4" dia. Wind your own coils.

No. 17A289. Per Asst. **25c**

BAKELITE STRIPS — BAFFLES — DRAWER PULLS



BAKELITE STRIPS

25 pieces odds and ends of bakelite. So handy in any shop for making your own terminals or various insulating needs.

No. 18A825. Special, Per Asst. **25c**

DRAWER PULLS & HANDLES

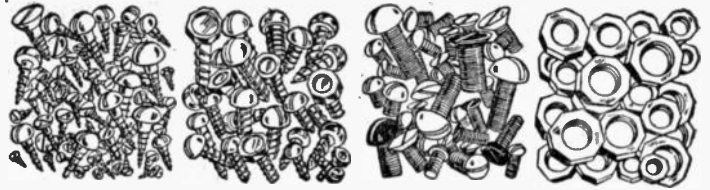
12 assorted styles and shapes and finishes. Ideal for replacement of those broken or lost handles. All very good values.

No. 19A1066. Per Asst. **65c**

BAFFLES — CABINET BACKS — ETC.

15 assorted pieces, cabinet backs, baffles, and miscellaneous handy items. No. 3A18. SPECIAL, PER ASSORTMENT, ONLY. **35c**

POPULAR MISCELLANEOUS HARDWARE



BRASS WOOD SCREWS

1/4-lb. pkg. approx. 200 pieces. Assorted of most popular diameter and lengths.

No. 19A969. Special, Per Pkg. **52c**

TAP SCREWS

100 assorted, regular self-tapping screws in popular sizes.

No. 19A953. Per Pkg. **50c**

MACHINE SCREWS

100 assorted of many types and sizes, a most handy pkg. in any shop.

No. 19A973. Special, Per Asst. **32c**

SET SCREWS

50 assorted headless and with heads for knobs and other uses.

No. 19A971. Per Pkg. **25c**

HEXAGON NUTS

100 assorted 4/36, 6/32, 8/32 and other popular sizes.

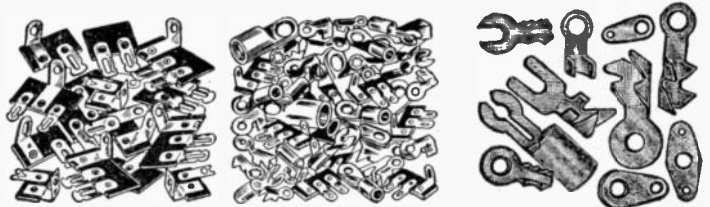
No. 19A974. Per Pkg. **41c**

ORNAMENTAL HEAD SCREWS

15 assorted of 6/32, various lengths, statuary bronze with rosette heads.

No. 19A980. Special, Per Asst. **24c**

TERMINALS — CONNECTORS — LUGS — CABLE CLAMPS



TERMINAL STRIPS

25 assorted terminal strips with lugs attached. Always needed in Radio Work.

No. 18A9. Special, Per Asst. **35c**

LUGS and TERMINALS

100 assorted terminals and lugs as illustrated. A very handy asst.

No. 19A1069. Special, Per Asst. **45c**

TERMINALS and CONNECTORS

100 assorted of solderless type that can also be soldered.

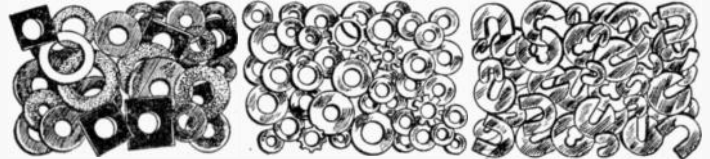
No. 18A25. Per Asst. **49c**

LUGS and CABLE CLAMPS

100 assorted in varied types and sizes. Included are cable clamps and small clips, etc.

No. 18A8. Per Asst. **35c**

BAKELITE, FIBRE, VELLUTEX and METAL WASHERS



BAKELITE — FIBRE WASHERS

100 assorted bakelite and fibre plain and shoulder washers, spacers, etc. Many varied types.

No. 19A975. Per Asst. **39c**

VELLUTEX INSULATING

100 assorted, hole sizes 6, 8, and 10. Very handy insulating washers.

No. 19A977. Special, Per Asst. **25c**

FIBRE WASHERS

100 assorted. FLAT and EXTRUDED type fibre washers.

No. 19A966. Per Asst. **45c**

METAL WASHERS

100 assorted many sizes; flat, shake-proof, split washers, etc. Plated finish.

No. 19A968. Per Asst. **15c**

FLAT BAKELITE and FIBRE

100 assorted FLAT BAKELITE and FIBRE washers.

No. 19A967. Per Asst. **45c**

"C" WASHERS

50 assorted. Handy for servicing volume controls, etc.

No. 19A965. Per Asst. **24c**

GROMMETS — CHASSIS MOUNTS — BUMPERS



RUBBER GROMMETS, CHASSIS MOUNTS AND BUMPERS

50 assorted rubber items so often needed in Radio and Electrical Work. Included are sponge rubber blocks, washers for floating condensers, etc.

No. 19A976. Per Asst. **60c**

GUM RUBBER GROMMETS

15 assorted of various dia. Gum Rubber Grommets.

No. 18A22. Per Asst. **24c**

RUBBER MOUNTS

20 assorted of various dia, and thickness. For use any place cushioning is desired against vibration.

No. 18A23. Per Asst. **39c**

PLAIN RUBBER GROMMETS

15 assorted of various dia. plain rubber grommets.

No. 18A21. Per Asst. **24c**

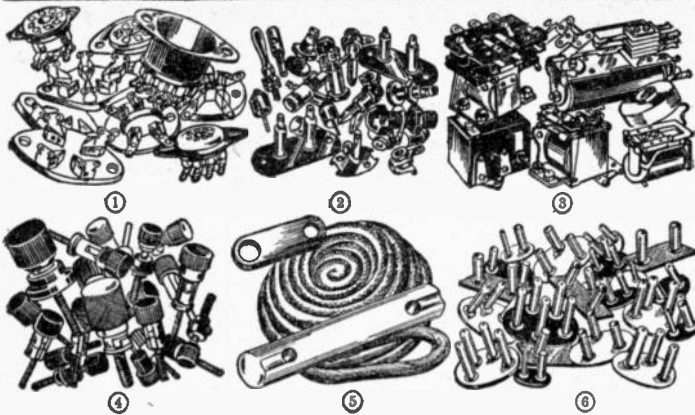
METAL GROMMETS

50 assorted various sizes of handy metal grommets.

No. 19A1064. Per Asst. **25c**

KITS - ASSORTMENTS

For The Radio Shop



① CERAMIC SOCKETS
10 assorted types with the greater portion octals complete with mounting plates. Would cost at least \$2.50 if bought regularly.
No. 18A1006. Per Asst. **95c**

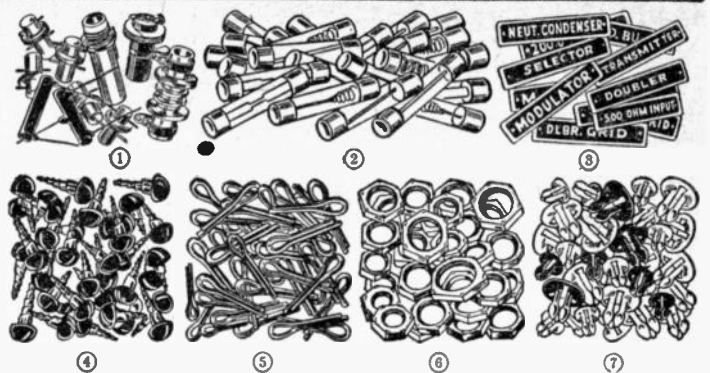
② JACKS, PLUGS, ETC.
25 assorted. Included are banana and phone tip jacks and plugs of sizes in popular needs. You Save Plenty on This Assortment.
No. 18A1005. Per Asst. **95c**

③ RELAYS and RELAY PARTS
An assortment that provides unlimited experimental fun. Consists of 5 various relays, an extra relay coil and extra contact points.
No. 15A2036. Per Asst. **\$1.95**

④ BINDING POSTS
25 assorted. High grade Metal and Bakelite Posts of Eby and other quality makes in types that regularly sell to 25c each and that you will have many occasions to have use for.
No. 18A1004. Per Asst. **95c**

⑤ ANTENNA INSULATOR KIT
Contains a 4" ceramic insulator, 15 feet of treated rope and a steel fitting for securing rope. OK for permanent or temporary receiving of transmitting antennas.
No. 22A25. Per Kit. **39c**

⑥ BATTERY TERMINALS
Kit includes 50 assorted plugs. All the popular types.
No. 18A24. Per Kit. **\$2.93**



① COIL AND CHOKE KIT
10 assorted miscellaneous Coils and RF Chokes. An outstanding value.
No. 17A387. Per Kit. **95c**

② TYPE 3AG FUSES
25 assorted 3AG fuses of most popular sizes.
No. 18A966. Per Asst. **45c**

② TYPE 4AG FUSES
100 assorted 4AG fuses of very useful sizes.
No. 18A785. Per Asst. **\$1.95**

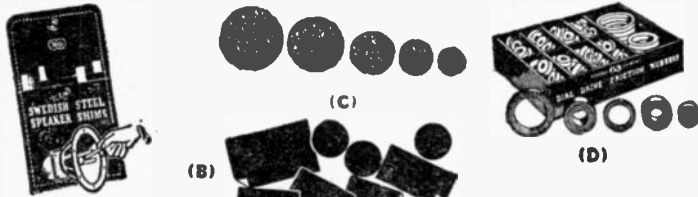
③ NAME PLATES
10 assorted. Made of Brass, Nickel-plated Finish. Letters are raised and etched on Black Satin background. Size 1 1/2 x 7/16". Pkg. of 10 assorted markings (as already made up).
No. 15A1120. ONLY. **25c**

④ NAME PLATE SCREWS
30 assorted small sizes of Escutchcon and Name Plate screws.
No. 18A19. Per Asst. **24c**

⑤ COTTER PINS
60 assorted. Replacement Cotter Pins in Radio, Electrical and Mechanical work.
No. 16A566. Per Asst. **24c**

⑥ MOUNTING NUTS
15 assorted mounting nuts for Volume Controls, Switches, Etc.
No. 19A979. Per Asst. **24c**

⑦ SNAP-IN TRIMOUNTS
40 assorted. Handy for use in place of screws to fasten dials, built-in aerials, and other parts.
No. 18A3. Per Asst. **32c**

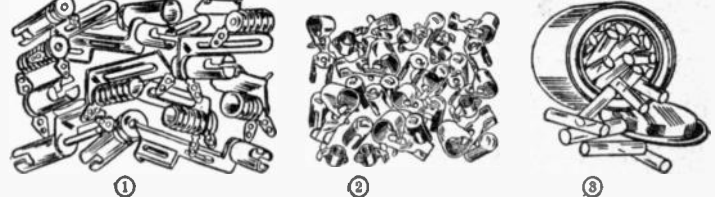


(A) SPEAKER SHIMS
Kit of 16 assorted Swedish Steel Shims, very flexible — a permanent tool, packed in handy case.
No. 11A158. Per Kit. **38c**

(B) SPEAKER CONE PATCHES
12 assorted patches. A quick means of patching speaker cones. Made of specially fabricated material and adhesive which forms a permanent bond.
No. 16A430. Per Asst. **24c**

(C) VOICE COIL DUST FELTS
25 assorted. Felt disc same as used on speaker voice coils to keep dust out. Can be glued on any speaker.
No. 16A567. Per Asst. **24c**

(D) RADIO & PHONO DRIVES
Kit of 25 assorted popular rubber friction drives for all popular models.
No. 18A70. Per Kit. **88c**



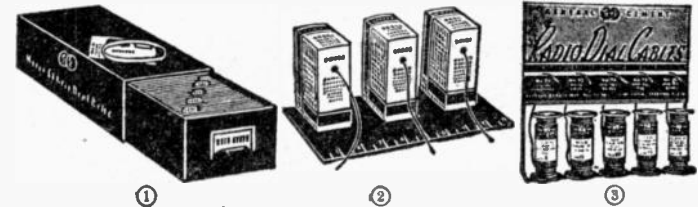
① PILOT SOCKETS
10 assorted dial light sockets in various popular types.
No. 18A1. Per Asst. **45c**

② GRID AND PLATE CAPS
25 assorted Grid and Plate Caps in popular Transmitting and Receiving types.
No. 18A205. Per Asst. **30c**

③ PLASTIC INSULATION
Approximately 50 pieces, in handy metal container. 1" lengths of flexible synthetic tubing for wire splices and insulating lug shanks or wire at soldered connections, etc.
No. 17A375. SPECIAL, PER CAN. ONLY. **18c**

BULB REMOVER
Rubber tool for removing practically every type pilot bulb from places awkward to your fingers.
No. 12A399. Each. **24c**

POPULAR DIAL BELTS AND CABLE KITS



① KIT OF 25 DIAL BELTS
Woven fabric made-up dial belts in handy kit with chart.
No. 15A2023. Per Kit. **\$3.94**

② 300 FEET DIAL CORD AND RACK
Assortment Includes 100 Ft. pre-stretched Special Thin Cord, fibreglas core. Just right for most small sets. 100 Ft. of pre-stretched Standard Cord, fibreglas core, diameter .031". 100 Ft. of Medium Cord.
No. 11A277. 300 Ft. Cable With Rack. **\$5.22**

③ FIVE 25-FOOT SPOOLS WITH RACK
Metal rack hangs on wall. Has ruler on rack to measure length of cable desired. Contains 25-foot spool each of 42-strand Phosphor Bronze cable, Heavy Linen, Light Linen, Special Thin Linen and Special Thin Phosphor Bronze.
Stock No. 15A2026. Your Cost Per Assortment. **\$3.82**

IRC ALL-PURPOSE CONTROL KIT
9 "hot-number" controls, switches, and shafts you will use every day! They are the most used 1/2, 1 and 2 meg. type D controls with the added adaptability of the tap-in shaft feature, plus 4 switches and 4 special shafts. An assortment that will save you time and money, and reduce your need for exact replacements. Factory packed in a handsome, sturdy, four-drawer, 12-compartment cabinet of sturdy cardboard.
No. 36A10. IRC Jr. control kit with FREE cabinet. Your Cost. **\$9.53**

MALLORY VOLUME CONTROL KIT
"Just it" for any service shop. 15 controls and 9 A.C. switches. Most popular types. The cabinet of sturdy steel is Free. You pay only for the controls, which have a list value of \$24.75.
No. 36A7. Mallory control kit with free cabinet. Your Cost. **\$14.55**

IRC "MASTER" CONTROL KIT IN METAL CABINET
Consists of 18 most often needed controls, 6 switches and 5 shafts. Will fill 87% of your control requirements. Included FREE is a 23 compartment Metal Cabinet overall size 14 1/2 x 7 3/8 x 4 1/2".
No. 20A876. Master Control Kit and Cabinet. Your Cost. **\$18.17**

VOLUME CONTROLS AT BIG SAVINGS!
Standard Quality Makes—Midget All-Purpose Type—Shafts 1 1/4" Length.

No. 19A1208—1/2 Meg., Less Switch. Each.	29c	10 Lots.	27c
No. 17A446—1/2 Meg., with SPST Switch. Each.	39c	10 Lots.	37c
No. 14A772—1/2 Meg., with DPST Switch. Each.	49c	10 Lots.	47c
No. 14A773—1 Meg., Less Switch. Each.	29c	10 Lots.	27c
No. 17B653—1 Meg., with SPST Switch. Each.	35c	10 Lots.	33c
No. 18A1002—1 Meg., with DPST Switch. Each.	49c	10 Lots.	47c

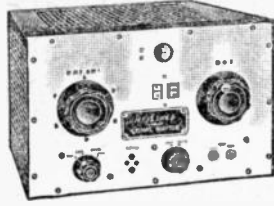
OVAL SPEAKERS AT BIG SAVINGS!

Our No.	Size	Watts	V.C. Imp.	V.C. Dia.	Field Res.	EACH
21A1023	4x6"	3.0	3-4 Ohms	3/4"	"PM" Type	\$1.99
21A1024	5x7"	3.0	3-4 Ohms	3/4"	"PM" Type	2.65
21A1025	4x6"	3.0	3-4 Ohms	3/4"	450 Ohms	2.29
21A1026	6x9"	6.0	3-4 Ohms	3/4"	4 Ohms/6-Volt	3.35

NEWEST

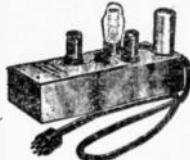
AMATEUR TRANSMITTERS and EXCITERS

MEISSNER IMPROVED SIGNAL SHIFTER



(A)

NOW AVAILABLE TWO WAYS . . . FACTORY WIRED AND TESTED OR IN KIT FORM AT A 50% SAVING! An extremely stable variable frequency exciter with band switching, accomplished by a 6-position shielded coil turret.



(B)

ret. Up to 6 coil strips of your own selection may be installed in the turret and thereafter switched from the front panel. A front panel crystal socket accommodates holders with 1/2" or 3/4" pin spacing. Power output is in excess of 6 watts on all bands. Keying can be accomplished either in the oscillator or amplifier circuits. Uses 6V6GT osc., 807 amplifier and doubler and a 6G5 tuning eye for visual check of overall operation. Power supply is separate, but mounts within cabinet with RF unit, and uses 2 5Y3 Rectifiers and a VR150 regulator. Cabinet is grey wrinkle enamel, 13 13/16x13 1/4x8 3/4" high. Power supply operates from 110-volt, 60-cycle AC.

- No. 30B147. Meissner EX Signal Shifter less Power Supply and less Coil Strips, with tubes and instructions. **\$66.50**
- Net Each
- No. 36A27. Model EP Power Supply for above, with tubes. **\$13.00**
- Net Each
- No. 36A28 80 Meter Coil Strip **\$4.00**
- No. 36A29 40 Meter Coil Strip
- No. 36A30 20 Meter Coil Strip
- No. 36A31 15 Meter Coil Strip
- No. 36A32 10 Meter Coil Strip
- No. 36A33 6 Meter Coil Strip

New EX Signal Shifter Kit No. 10-1207

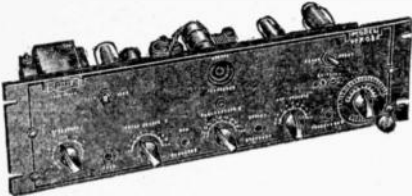
Includes every part to build the complete EX Signal Shifter described above including power supply. Detailed drawings and instructions are furnished. About three hours time is required and you save 50%. Included are coils for 80, 40, 20, 15, 11-10 Meter and all tubes, nothing else to buy. **\$49.75**

FMX Meissner Phase Modulator (Fig. B)

For use with EX Signal Shifter. Fits in the cabinet in place of power supply which then becomes remotely located and supplies power for both units. Phase modulator tubes are 6S17, 6S67 and VR150. These combined units make a very inexpensive NBFM or CW transmitter and will drive higher power final up to a kilowatt. **\$12.00**

No. 34A161. FMX Phase Modulator. Complete, Less Tubes. **\$12.00**

SONAR VFX-680 ALL BAND EXCITER



Functions as a complete narrow band FM phone exciter or all-band CW exciter. Has conventional VFO as well as special "rubberized" crystal oscillator allowing a frequency shift of 30 KC on 80 meters, 60 KC on 40 meters, etc. Operates on all bands except 6 and 2 meters. Output 4 to 6 watts. Employs frequency shift keying and allows CW or break-in operation on same frequency without shutting off the oscillator. Contains complete speech amp. and modulator for low or high power NBFM phone. Any high impedance crystal or dynamic microphone with output of minus 48 to minus 52 db. can be used. Has built-in monitors for CW and NBFM, FM deviation indicator and tuning indicator. Tubes: 6AG7 VFO-VFX osc., 6SL7 speech amp., 6SL7 NBFM mod. and monitor, 6AG7 freq. mult., 6L6 R.F. output, 5Y3 rect., 6AF6G tuning indicator and VR150 osc. voltage regulator.

Mounted on 5 1/4" standard rack panel, extends 8 1/2" deep. Finished in smooth, grey baked enamel. Supplied with tubes and plug-in coils for 40 and 20 meter bands. Additional coils for other bands available on special order. Requires crystals in the 160 meter band. **\$87.45**

Stock No. 33A69. SONAR VFX-680 Exciter. **\$87.45**

Your Cost, Each

TABLE CABINET FOR VFX-680. Grey wrinkle finish steel, with side louvers and foot bumpers open at rear. **\$6.75**

Stock No. 36A35. CABINET ONLY. **\$6.75**

AMP-50 FINAL AMPLIFIER. Use with FX-680 exciter to complete a 75-watt all band transmitter for NBFM or CW. Mounted on matching 3 1/2" standard relay rack panel. Has dual range Meter with switch. Plate tuning control. On-Off and stand by switch. Uses 6Y6G trigger tube and 2E22 final amplifier. No. 31A89. **\$57.45**

AMP-50 With Tubes, One Coil Set. **\$57.45**

31A92. Coil Set for 10 Meters. 31A94. Coil Set for 40 Meters. **PER SET**

31A93. Coil Set for 20 Meters. 31A95. Coil Set for 80 Meters. **\$3.10**

PS-50 POWER SUPPLY. To use with AMP-50 Amplifier. Output 850 volts at 130 MA 6.3 volts at 3 amps. Uses 5R4GY. Mounts at rear of transmitter no panel space required. Has plug and cable connection. **\$33.45**

No. 31A90. Complete with Tube. **\$33.45**

Sonar 75-Watt complete transmitter consisting of VFX-680 all band exciter AMP-50 final amplifier, PS-50 power supply mounted in a grey crackle deluxe type cabinet. Complete with tubes and coils for one band. **\$203.67**

No. 50A250. NET EACH. **\$203.67**

XE-10 NBFM Exciter. Converts any CW transmitter to NBFM phone operation. With tubes and instructions. Less crystals. **\$39.45**

No. 30A148. EACH. **\$39.45**

MB-611 Mobile Transmitter. 22 1/2 Watts output on 10-11 Meters. Furnished with tubes and instructions less crystal. Requires power supply 250-600 Volts at 100 Ma and 6.3 Volts at 2.6 amps. **\$72.45**

Stock No. 36A34. **\$72.45**

NEW STANCOR MOBILE KIT

Model ST203A. A 25-watt crystal controlled phone transmitter 27 to 32 MC, designed for reliable service in your car or for fixed station operation. Requires 400-500 DC volts at 200 MA and 6 volts AC or DC at 2.8 amps., which can be supplied from dynamotor or vibrator power supply or from a regular AC supply. Uses 6V6 osc. working from 7 MC crystals, 2E26 class C amp., 6J5 grounded grid speech amp. and P.P. 6V6 Modulators. Press to talk Mike switch operates the unit. Osc. amp., and antenna controls are on front panel as well as antenna jacks, mike and meter jacks with meter and crystal switch, allowing choice of two crystals. Size 8 5/8" wide, 7 3/8" high, 6 3/4" deep. Weight, 9 1/4 lbs. Has base mounting clip fasteners. Less tubes and crystals. **\$44.70**



No. 36A81. ST203A, KIT ONLY. **\$44.70**

No. 36A82. **\$58.90**

ST203A, FACTORY WIRED. **\$58.90**

Stancor 125-Watt CW Transmitter Kit

A band switching exciter range 3.5-30 MC, six bands completely self contained, features ease of construction, front panel selection of six crystal frequencies, separate 350-volt and 1,000-volt DC power supplies, exciter keying for break-in CW operation, meter switching, and adjustable link output coil. AM or FM Modulation may be added. Uses 6V6 oscillator, 6L6 buffer-multiplier, choice of triode output amplifiers such as 35T-HK54-811 or 5514, 5Y3GT L.V. Rect. and 5R4GY H.V. Rect. Terminals for antenna, telegraph key, remote stand-by switch, and an amplitude modulator. Cabinet size 14 1/16x13 3/16x9" high.



The kit includes the cabinet and all components, except the milliammeter, set of 5 tubes, amplifier tank coils, and crystals. The construction and operation are covered by a detailed instruction manual. Output amplifier tank coils required are the B & W standard BVL type. For operation on 105-120 volt, 60 cycle AC. Shipping weight, 55 lbs. **\$92.80**

No. 31A231. Stancor ST-202-A Kit as described. NET EACH. **\$92.80**

60-Watt Transmitter — Telvar T60-2

PHONE OR CW—10 TO 80 METERS

A trans. using plug-in coils, 6L6G regen. crystal osc., 2 6L6Gs in the final amp. operating as a push-push doubler requiring no neutralization. Audio line-up includes 6SN7GT cascaded speech amp., 6SN7GT phase inverter and 2 6L6Gs PP class AB modulators. Any crystal or high impedance mike may be used. Two power supplies, using 5U4G rectifiers. Has built-in antenna change-over relay, meter switching, front panel crystal socket, power plug for battery or vibra-pack operation, and send-receive switch. Neat gray wrinkle finished cabinet 17x11x9" high. For 115-V., 60-Cy. AC. **\$150.00**



Stock No. 32A6. T-60-2 Transmitter with Tubes and Coils **\$150.00**

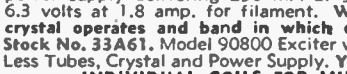
No. 33A78. 80 Meter Coil Set. **\$5.50**

No. 33A80. 20 Meter Coil Set. **\$5.50**

No. 33A79. 40 Meter Coil Set. **\$5.50**

Net Each

MILLEN 90800 EXCITER



The famous 50 watt exciter-transmitter using plug-in coils. Operates on 80 to 10 meters. Factory assembled on a standard 3 1/2" relay rack panel. The 6L6G Tritet oscillator can be tuned to the crystal frequency or to second or fourth harmonic. The 807 output stage can be used as a doubler or straight through amp. Requires power supply delivering 250 MA at 500 to 700 volts DC, 45 volts bias and 6.3 volts at 1.8 amp. for filament. When ordering state band in which your crystal operates and band in which output is desired. **\$42.50**

Stock No. 33A61. Model 90800 Exciter with One Set of 3 Coils, Less Tubes, Crystal and Power Supply. **\$42.50**

INDIVIDUAL COILS FOR MILLEN TRANSMITTER-EXCITER

One set of 3 coils from this group is supplied with the exciter. Order additional coils for other combinations of crystal and output frequencies.

Stock No.	Millen No.	Function	Net Each
33A62	43640	40 Meter Osc. Cathode	\$.90
33A63	43680	80 Meter Osc. Cathode	.90
33A64	43012	10 Meter Osc. or Buf. Plate	1.25
33A65	43022	20 Meter Osc. or Buf. Plate	1.25
33A66	43042	40 Meter Osc. or Buf. Plate	1.25
33A67	43082	80 Meter Osc. or Buf. Plate	1.25

MILLEN HIGH FREQUENCY R.F. AMPLIFIER

No. 90811 Amplifier provides 75 watts output on 20, 10, 6 and 2 meters. It is the final amplifier used in 90810 Transmitter. Uses 829B or 3E29 tube and type 48000 series plug in coils for quick band change. Designed for highest efficiency and stability. Comes complete with 10 meter coils, less tubes. **\$33.00**

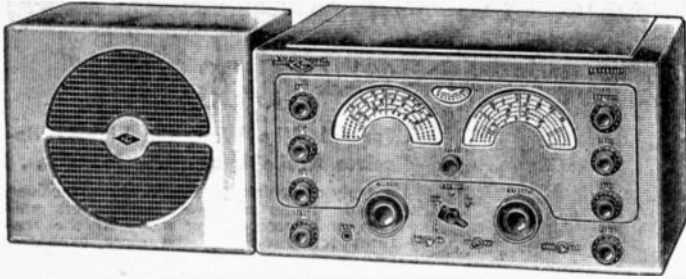
Stock No. 34A169. NET EACH. **\$33.00**

*Coil Sets consisting of one each grid and plate coil.

Stk. No.	Band	Stk. No.	Band	*PER SET
34A170	20	34A172	6	\$3.60
34A171	10	34A173	2	



POPULAR NATIONAL RECEIVERS



MODEL NC-183 WITH 10-IN. PM SPEAKER NC-183—16 TUBES INCLUDING RECTIFIER AND REGULATOR

- Two RF stages on all bands: Image rejection 40 db. at 28 mc.
- Full 8 watts push-pull audio output.
- Tunes 540 kc. to 31 mc. plus the 48 to 56 mc. band.
- Calibrated bandspread for 6, 10-11, 20, 40 and 80 meter amateur bands.

Designed for the discriminating amateur, it features the tops in performance and versatility. Two tuned RF stages provide extra high sensitivity and image rejection. Voltage regulated oscillator and BFO assure minimum drift for either phone or CW. Separate main tuning and bandspread dials are calibrated for ease of tuning or resetting to specific frequencies. Main dial covers 540 kc. to 56 mc. in 5 bands, bandspread dial calibrated for the amateur 80, 40, 20, 11-10 and 6 meter bands; bandspread may be used for fine tuning or to spread out coverage of any portion of 540 kc. to 56 mc. range. Selectivity switch of the wide range crystal filter permits a choice of six progressively narrower I.F. pass bands. A new noise limiter effectively suppresses electrical interference for either phone or CW.

Tubes: All low drain, 2 6SG7 RF, 1 6SA7 det., 1 6J5 osc., 2 6SG7 IFs, 1 6H6 2nd det., 1 6SJ7 BFO, 1 6AC7 AVC amp., 1 6H6 noise limiter, 1 6SJ7 AF, 1 6J5 phase inverter, 2 6V6GT audio output, 1 VR150 and 1 5U4C rectifier.

Push-pull audio. Uses two 6V6 tubes, providing undistorted output of 8 watts, with 11 watts maximum. Output terminals are for 8-ohm speaker or 500-ohm line. Phone jack on front panel. Other features: Phono input jack in rear for high impedance record player pickup, Phono-radio switch on front panel. Accessory socket permits using NFM-83 narrow band FM adaptor or accessories such as crystal calibrator; furnishes connections to 1st audio grid, AVC IF and to 6.3-volt AC, 280-volt DC and 150-volt DC voltage regulated. Supplied in steel cabinet, size 19 3/4 x 10 1/8 x 15" finished in smooth gray enamel with chrome trim. Weight, 56 lbs.

No. 31A237. With Tubes, Less Speaker. **\$268.00**

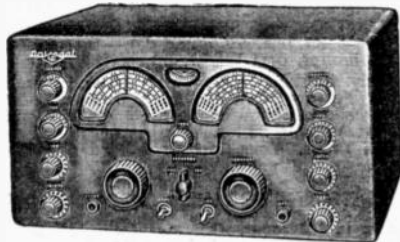
YOUR COST.....

No. 31A240. NC183TS Table Type Matching Speaker..... **\$14.00**

NARROW BAND FM ADAPTER NFM83

Makes the NC-183 an excellent receiver for narrow band FM. A 6H6 tube is employed as a noise suppressing ratio-type discriminator and a 6SK7 I.F. coupling stage eliminates undesirable loading of receiver circuits. Instant selection of AM or NFM by phono radio switch and easily connected to accessory socket in receiver.

No. 31A239. **YOUR COST, EACH**..... **\$16.95**



MODEL NC-173 FREQUENCY RANGE 540 KC. TO 31 MC. PLUS 48 TO 56 MC. CALIBRATED ELECTRICAL BAND SPREAD FOR 6, 10-11, 20, 40 AND 80 METER AMATEUR BANDS

NC-173—13 TUBES INCLUDING RECTIFIER AND REGULATOR

A great all around receiver, engineered for the host of applications for which one stage of high gain R.F. amplification and 3.5 watts of audio output power are adequate. The AVC system, crystal filter network, noise limiter and tuning system are identical to those in the NC-183 described above. The selectivity switch and characteristics of the NC-173 and NC-183 are identical. Sensitivity: 2.0 microvolts or better for a 6 db. signal/noise ratio through the frequency range. Tubes: 3 6SG7 R.F. amp., 1st and 2nd I.F. Amplifier; 6SA7 1st det. 6J5 H.F. oscillator; 2 6H6 2nd detector-AVC and noise limiter; 6AC7 AVC amplifier, 2 6SJ7 BFO and 1st audio; 6V6GT/G audio output; OD3/VR150 voltage regulator and 5Y3GT/G rectifier. The panel controls are as on the NC-183 above.

Operates from 110-120 or 220-240 volts 50/60 cycle AC. Has rear battery plug for mobile-portable use.

Cabinet looks like NC-183 above, size 19 3/4 x 10 1/8 x 12 1/2", smooth gray finish.

No. 30A158. With Tubes, Less Speaker. Weight, 46 lbs. **\$189.50**

YOUR COST.....

No. 30A159. NC-173TS Speaker for Above, with Matching Case. **\$10.00**

Narrow Band FM Adapter NFM73, Same Circuit as NFM83 described above.

No. 31A243. **YOUR COST, EACH**..... **\$17.95**

MONTHLY PAYMENTS

NATIONAL communication receivers listed on this page and HALL-CRAFTER communication sets on the pages following are available on monthly payments to responsible persons with steady incomes. Terms are: 20% down—add 6% to balance and divide into 12 equal monthly payments. WRITE FOR MONTHLY PAYMENT APPLICATION FORM.



THE NC-33 BIG RECEIVER QUALITY AT LOW PRICE

Attractive, streamlined communications type that will blend in any room of the home. Covers broadcast and short wave from 500 kc. to 35 mc. in four continuous bands: A, 12-35 mc.; B, 4-12 mc.; C, 1420-4200 kc.; D, 500-1420 kc. Separate main tuning and bandspread dials provide general coverage or bandspread for any position of any frequency range. Features: Antenna noise limiter, band selector, adjustable pitch beat oscillator, Code-phone switch, headphone jack, universal input for regular or doublet antenna. Calibrated main tuning dial has the important amateur, police and foreign bands plainly marked.

Tubes: 12SA7 converter, 12SC7 IF amp., 12H6 2nd det.-AVC noise limiter, 12SL7GT 1st audio and beat oscillator, 35L6GT audio output, 35Z5GT rectifier.

Cabinet of metal finished in durable gun-metal gray enamel, chrome trim and translucent dials. Size 16 9/16 x 8 3/4 x 8 1/2". Operates from 110-volt AC-DC. Weight, 23 lbs.

No. 31A245. Complete with Tubes and Built-in 5" PM Speaker. **\$57.50**

EACH.....



THE NC-57 NEAT 7-TUBE SUPERHET WITH BFO AND ANL

A good looking, compact set, with built-in 5" PM speaker and many of the features of larger more expensive receivers.

Tunes 540 kc. to 55 mc. continuously for broadcast and world wide short wave reception. Frequency bands: 540 kc.-1.6 mc., 1.6-4.65 mc., 4.65-13.5 mc., 13.5-35 mc., 35-55 mc. (tunes amateur 6 meter band).

Features: Calibrated main and electrical band spread dials, RF trimmer, noise limiter, adjustable beat oscillator, 3-position tone control, relay terminals, "S" meter socket, universal antenna input, voltage regulated converter, oscillator and RF circuits, stand-by switch 2 1/2-watt audio output, exceptionally high stability.

Tubes: 1 6SG7 RF, 1 6SB7Y conv., 2 6SG7 IFs, 1 6H6 ANL-2nd det.-AVC, 1 6SN7GT 1st audio and BFO, 1 6V6GT audio output, 1 VR150, and 1 5Y3GT rectifier.

Cabinet: Size, 16 1/2 x 8 3/4 x 11 3/4", smooth gray enamel, translucent dials. For 105-125 volts, 50-60 cycles AC. Weight, 31 lbs.

No. 31A238. **\$89.50**

Your Cost, Each.....

No. 31A247. SM-57 Plug in "S" Meter. **\$14.95**

NET EACH.....

MODEL HFS

VHF RECEIVER CONVERTER

COMPLETE COVERAGE 27 MCS — 250 MCS

... IN 6 BANDS,
INCLUDING
1 1/4, 2, 6, 10 AND 11
METER

AMATEUR BANDS RECEIVES CW, AM, FM

Incorporating the latest in VHF design, it is ideal for the Amateur, Police, News Services, Air, Taxi and Truck Lines and other two-way radio services. Tunes 27-250 mcs in six bands, including 1 1/4, 2, 6, 10 and 11 meter amateur bands.

Receives CW, AM or FM. Uses a super-regenerative 2nd detector for high efficiency. Special output terminals from 10.7 mc. IF channel permit its use as a converter with any low frequency receiver tuning to 10.7 mc. A Micro-meter dial with 500 divisions provides the equivalent to bandspread on all bands.

Tubes: 6AK5 1st det., 9002 osc., 6J5 converter output, 6SG7 IF, 6SK7 2nd det., 6J5 1st audio, and 6V6GT audio output. A 5" PM speaker is built in. Has phone jack, ant. trimmer, linear calibration chart, standby and receiver converter switch on panel. Finished in smooth gray enamel. Size, 16 9/16 x 8 3/4 x 8 1/2". Supplied with tubes and coils, less power supply (see below). Weight, 25 lbs.

No. 31A241. **YOUR COST, EACH**..... **\$142.00**

Model 5886 Power Supply for 115-230 Volts 50-60 Cycles AC. **\$22.43**

No. 31A242. **EACH**.....

Model 686S, 6-Volt DC Vibrator Power Pack. **\$34.16**

No. 31A244. **EACH**.....

WE CAN SUPPLY ALL NATIONAL RECEIVERS

Space would not permit the illustration of these other National Receivers and accessories. Complete detailed descriptions on request on Models listed below or any others—accessories, etc.

HRO-7T—With tubes, 110-volt AC power supply, type MCR 8" PM speaker in cabinet to match set and 4 coils covering 1.7 to 30 mc. **\$324.86**

No. 30B72-3. **YOUR COST**.....

NC-2-40DT—With Tubes. **\$236.25**

No. 50A254.....

No. 50A255. Matching Speaker for Above. Type NC-2TS..... **\$18.44**

NC-46—With Tubes. **\$97.50**

No. 50A256.....

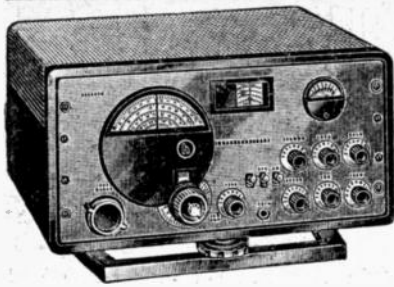
No. 50A257. Matching Speaker for Above. Type NC-46TS..... **\$9.90**

NC-108T—Receiver Tuner with Tubes, Built-in Monitor Speaker. **\$99.50**

No. 50A258.....

HALLICRAFTERS

COMMUNICATIONS RECEIVERS AND TRANSMITTERS



Model SX-42

Continuous Frequency Coverage 540 kc to 110 mc AM-FM-CW

Combines in one superbly engineered unit a top-flight standard and VHF communications receiver; standard broadcast, short wave and FM broadcast receiver and a high fidelity phonograph amplifier.

The tremendous frequency range is made possible by a new "split stator" tuning system and the use of dual intermediate frequency transformers. Reception of amplitude modulated and CW telegraph signals is provided throughout the entire range. In addition, a discriminator and two limiter stages permit reception of FM signals on 27 to 110 megacycles. The audio system is essentially flat from 60 to 15,000 cycles and has an undistorted output of eight watts.

All controls are arranged for maximum convenience and simplicity of operation. Main tuning has precision vernier scale. Other front panel controls are Band Spread Tuning, Band Selector, Volume and AC Switch, AVC Noise Limiter, Receive/Standby, Selectivity, Tone, Sensitivity, Crystal Phasing, selector for Phono, FM or AM and CW Pitch. Freedom from "drift" and maximum stability are provided by temperature compensation and a VR-150 voltage regulator. The crystal filter provides six different degrees of selectivity up to 30 MC. The carrier level meter performs as a tuning meter on the FM band through automatic switching.

External connections: Are provided on rear of chassis for a single wire or doublet antenna (300 ohm line except standard broadcast), output terminals to match 500 or 5,000 ohm speaker, phono input, and socket for external power supply and remote standby switch.

The Panel and chassis are assembled as a unit and can be removed from the steel cabinet for servicing or relay rack mounting. Panel is finished in deep gray, cabinet top is satin chrome and swings open on piano hinge. Lettering is light gray, red and green; remainder of cabinet satin black. Dials are light green, indirectly illuminated. Over-all dimensions 20" wide, 10 1/4" high, 18" deep. Weight, receiver only, 52 lbs.

Uses 15 tubes: 2—6AG5 RF amplifiers, 7F8 converter, 6SG7 1st IF amp., 6SK7 2nd IF amp., 6H6 AM rectifier and noise limiter, 7H7 1st FM limiter amp., 7R7 2nd FM limiter amp., 6H6 FM discriminator, 6SL7 audio inverter, 2—6V6 audio output, 7A4 BFO and FM tuning meter amp., VR-150 voltage regulator, 5U4C rectifier.

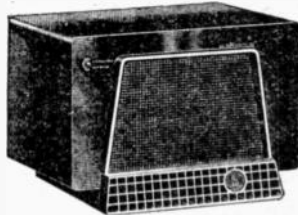
For operation on 105 to 125 volt, 50-60 cycle AC or batteries supplying 5 amps. at 6 volts DC and 160 MA at 270 volts. Weight, 65 lbs.

Model SX-42 Receiver with Tubes, Less Speaker.
Stock No. 30A139. Less Tilt Base Mount, Each. \$295.00
No. 32A268, B-42 Tilt Base. Chrome Finished. \$7.50

R-42 Speaker

This is the first speaker of its size to offer the splendid advantages of the base reflex principle. Designed as a companion piece to the SX42 and the new SX43, but it may be used with any other receiver having a 500 ohm output. Speaker dia. 8". Has two-position switch on front panel for communication or high fidelity reception. Terminals at rear for 500-600 ohm line. Size 17" wide, 11 3/4" high, 12 1/2" deep. Weight, 20 lbs.

Model R-42 Speaker.
Stock No. 30A140. YOUR COST, EACH. \$34.50



Model S-38

For All Who Want the FINEST Receiver Available at a Low Price. . . .

A truly competent communications receiver, styled in the post-war Hallicrafters pattern and incorporating many of the features found only in the more expensive sets.

Frequency range of 540 KC to 32 MC covered in 4 bands. Front panel controls all plainly marked for Tuning and Bandsread, Beat Oscillator, Band Selector, and Volume plus switches for Noise limiter, Speaker or Phones, Standby, AM/CW and power. The AM/CW switch turns on Automatic Volume Control in AM position, besides shifting from broadcast to code reception. A PM Speaker is mounted inside cabinet. Tip jacks for phones, and terminals for a doublet or single wire antenna are at the rear.

Cabinet is steel finished in satin black. Panel markings are light gray and switch knobs red. Over-all size 12 3/8" long by 7 3/4" high by 8 5/8" deep. Complete with six tubes: 1—12SA7, 1—12SK7, 2—12SQ7, 1—35L6GT, 1—35Z5GT. For operation on 105 to 125 Volts AC or DC; also 220 to 250 Volts AC or DC with line cord listed below. Weight, 16 lbs.

Stock No. 30A89. Model S-38. Complete with Tubes. YOUR COST. \$47.50

Stock No. 17A740. 220 Volt Adapter Line Cord. Net Ea. \$2.00

Model S-40A

FUNCTION and BEAUTY
540 kc to 43 mc

A great communications receiver handsomely designed, expertly engineered and tailor made for hams. Has many circuit refinements never before available in this price class.

Tuning range: 540 KC to 43 MC in 4 bands. Electrical bandsread and inertia flywheel tuning plus wide vision glareless dials, accurately calibrated, make this receiver easy to handle in crowded bands. Its many outstanding features make it especially well suited for the serious short wave listener who also wants a standard broadcast receiver that the whole family can use.

Special Features: Permeability adjusted "Micro-Set" inductances in the RF section, automatic noise limiter, temperature compensated RF oscillator, beat frequency oscillator, separate RF and AF gain controls, three-position tone control, rubber shock mounted PM speaker inside cabinet, and socket for connecting external "S" meter. Front panel controls for MAIN and BAND-SPREAD TUNING, RF SENSITIVITY (includes "S" meter on/off switch), BAND SELECTOR, VOLUME, AVC ON/OFF, CW/AM, NOISE LIMITER ON/OFF, TONE AC OFF, PITCH CONTROL and STANDBY-RECEIVE. Uses 9 tubes—6SG7 RF, 6SA7 converter, 2—6SK7 IFs, 6SQ7 2nd det.—first audio, 6F6G audio output, 6H6 AVC—noise limiter, 6J5GT BFO, 80 rectifier.

The cabinet is steel, very attractively finished in rich satin black. Overall size 18 1/2" long, 9" high, 11" deep. For operation on 105 to 125 volts, 50 to 60 cycle AC. Special plug in rear allows operation on 6-volt battery and vibrapack furnishing 70 Ma. at 270 volts. Weight, 33 lbs.

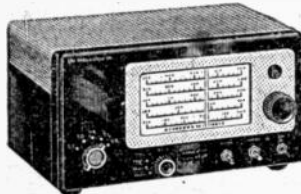
Stock No. 30A91. Model S-40A with Tubes. Your Cost, Each. \$99.50

Model S-52 LIKE S-40A ABOVE EXCEPT FOR AC/DC OPERATION

Answers the need for those who live in DC areas. Operates from 117 volts AC-DC or with interchangeable ballast from 230 volts AC-DC. Weight, 33 lbs.
Stock No. 32A269. Model S-52 with Tubes for 117-Volt AC-DC. YOUR COST, EACH. \$99.50

Stock No. 15A2056. Ballast Tube for 230 Volts. \$1.25

Master Oscillator HT-18



5 BAND VFO WITH ALL BAND NBFM—BAND SWITCHING— & BUILT-IN POWER SUPPLY

Add to this exciter one or two amplifier stages and you have a complete, high quality transmitter permitting operation on NBFM phone or cw up to 1 KW on all bands!

Has 7-range slide rule dial calibrated directly in frequency and FM deviation calibrated by bands. Other features include temperature compensation, two voltage

regulators, oscillator keying for cw use, built-in pre-amplifier for high impedance crystal or dynamic microphone, 3 built-in crystal sockets for spot frequency operation, low impedance output link and built-in circuit for transmitter and receiver control. Has ample output on all bands, ranging from 4 1/2 watts at 3.5 MC to 2 1/2 watts at 29 MC.

Tubes: 6BA6 Electron Coupled or Crystal Oscillator, 6BA6 Freq. Modulator, 6BA6 Audio Amp., 6L6 RF Output, 2—VR105 Regulators and 5Y3GT Rect.

Cabinet matches the new Hallicrafters receivers. Size, 12 3/4 x 7 3/4" deep. Weight, 25 lbs. Operates on 105-125 volt, 50-60 cycle AC.

Stock No. 30B146. Model HT-18 with Tubes, Less Crystals. \$110.00

YOUR COST. WE CAN SUPPLY ALL HALLICRAFTERS COMMUNICATIONS EQUIPMENT



Model S-53

Extended frequency range, tuning 540 KC to 54.5 MC in 5 bands.

Features: Uses 2 MC IF for improved image ratio, and positively eliminates all amateur station image or repeat points within the ham bands; accurately calibrated, edge illuminated slide rule dial; separate electrical full bandsread control; latest series

type noise limiter circuit; iron-core IFs; built-in PM speaker.
Front Panel Controls: RF gain, AF gain, Standby-Receive, Phone-CW, Tone Control, Noise Limiter, Band Selector and Speaker-Phone Switches. Phone Jack and connection for Phono Pickup on rear panel.

Uses 8 Tubes: 1 6C4 Osc., 1 6BA6 Mixer, 1 6BA6 1st IF AMP., 1 6BA6 2nd IF AMP., 1 6H6 Det., AVC, ANL, 1 6SC7 BFO and 1st Audio, 1 6K6GT Audio Output, 1 5Y3 Rect.

Beautiful, steel cabinet in satin black with chrome trim. 12 7/8" wide, 6 7/8" high, 7 7/8" deep. Operates from 105-125 volts, 50-60 cycles AC. Wt., 23 lbs.

Stock No. 32A52. Hallicrafters Model S-53. COMPLETE with Tubes. NET EACH. \$79.50

HALLICRAFTERS

COMMUNICATIONS RECEIVERS AND TRANSMITTERS

The SX-43 For Everything THE HAM ASKS FOR in a Medium Price Receiver



- 540 KC TO 55 MC IN FIVE CONTINUOUS BANDS.
- 88 TO 108 MC VHF BAND.
- AM ON ALL BANDS.
- CW ON 540 KC TO 44 MC.
- NBFM OR WIDE BAND FM ABOVE 44 MC.
- CRYSTAL FILTER.
- ELEVEN TUBES.
- SERIES NOISE LIMITER.
- TEMPERATURE COMPENSATION.

For the discriminating user who demands excellent performance and extremely wide frequency range at a medium price. No feature important to serious communications work or just "listening" has been omitted. Performance on standard broadcast and short wave AM bands and FM broadcast bands is excellent. Frequency range of the audio circuits is essentially flat from 70 to 8,000 cycles. Output is approximately 3 watts and provision has been made for phono input.

Other important features include good signal to noise ratio; high image rejection (on 44 to 55 MC AM the receiver is used as a double superhet); dual IF transformers with automatic switching; separate electrical, calibrated, bandsread; permeability adjusted inductances in RF circuits; and color coded control markings for simplified operation by entire family.

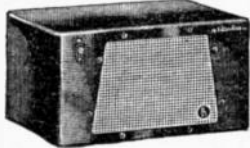
Panel controls are Tuning, Bandsread, Band Selector, Tone, Receive/Standby, Noise Limiter, Crystal Phasing, Selectivity, Sensitivity, Volume and Power Off, Selector for CW-AM-FM or Phono, and CW Pitch.

External connections are at rear for 300 ohm transmission line or single wire antenna, 500 or 5000 ohm speaker, phono input, and socket for external power and remote standby control. Headphone jack is at front.

Tubes: 6BA6 RF, 7F8 Converter-Oscillator, 6SG7 1st IF, 6SH7, 2nd IF and 2nd Converter, 6SH7, 3rd IF, 6H6 AM Det. and Noise Limiter, 6AL5 FM Det., 6SQ7AF, 6J5 BFO or 2nd converter Osc., 6V6 Audio Output, 5Y3 Rect.

The cabinet is steel finished in rich satin gray with top opening on full length hinge. Panel lettering is light gray with incidental red and green markings for standard and FM broadcast reception. Dimensions 18 1/2 x 12 x 8 7/8" high. Wt. 45 lbs. Supplied with tubes less speaker.

Stock No. 31A232. SX-43 Receiver. **YOUR COST... \$179.50**

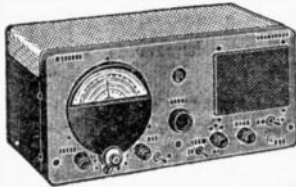


R44 SPEAKER

Designed as a companion speaker for the SX-43 receiver, but may be used with other receivers having a 500-ohm output. Uses PM speaker unit, size 6x9" with built-in network and front switch for communications or high fidelity reception. Size 18 1/2" wide, 8 1/2" high and 9 1/2" deep.

Stock No. 32A15. **YOUR COST... \$19.50**

The S-51 For Land . . . Sea . . . Air and Weather Communications



Frequency coverage from 132 KC to 13 MC in 4 bands . . . plus three fixed freq. channels which may be pre-set in the range between 200 to 300 KC and 2 MC to 3 MC.

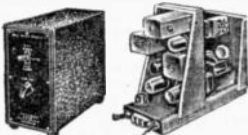
TUBES: 6SS7 RF, 7A8 Mixer, 2 6SS7 IFs, 7C6 det.—AVC, 35L6 AC-DC output, 6V6 battery output, 7A6 ANL, 7C6 BFO, 35Z5 rectifier. All parts protected against salt air. Directly calibrated main tuning dial and division of bands so that calling and working frequencies lie in the same band

assure maximum convenience. Features BFO with pitch variable from front panel. Combined AVC and BFO switch; separate RF and AF gain controls; inertia flywheel tuning and PM speaker with internal rubber shock mounting. Operates from 110-volt AC or DC or from 6, 12 or 32 volts with vibrator packs below. Size 18 1/2 x 9 x 11". Shipping weight, 31 lbs.

Stock No. 34A13. **EACH... \$149.50**

No. 34A14. 6-Volt DC Vibrapack. **CHOICE**
No. 34A15. 12-Volt DC Vibrapack. **EACH... \$22.50**
No. 34A16. 32-Volt DC Vibrapack.

MILLEN SINGLE SIDEBAND SELECTOR

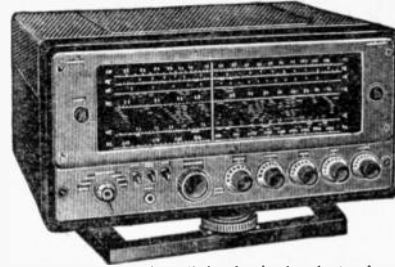


Model 92105. A dual crystal controlled converter to adapt any receiver with 455-456 KC IF channel for selectable single sideband reception. To be used when receiving AM transmissions having carrier and double sideband. By selection you can eliminate either sideband and work on the remaining sideband plus carrier. This narrows the receiver band width to approximately 25%, reducing interference from both noise and heterodyne signals. The SSSR greatly improves reception under crowded band conditions. Uses 6SA7, 6SK7, 6SN7GT and

5Y3GT tubes. Has built-in power supply, RF and AF gain controls and selector switch. Simple receiver connection. Attractive black crackle cabinet 8 3/4" high, 4 1/2" wide, 10" deep.

Stock No. 34A175. Complete with Tubes and Crystals. **\$75.00**

New Model SX-62



Here is the short wave listeners version of the SX-42 with all its exciting performance capabilities plus these popular operating conveniences: Wide vision slide rule tuning dial accurately calibrated to facilitate station finding when frequency is known, a 500 KC crystal calibrator and pointer adjustment to set dial exactly on frequency, foreign short wave stations and services like Marine and Aviation described

and located on the dial, single knob tuning with approximately 60 to 1 tuning ratio, and illumination only on band in use.

Frequency Range: Continuous from 540 KC to 110 MC in six bands. Receives AM or code throughout entire range and wide band FM from 27 through 110 MC. Crystal filter, with six step selectivity, operates on all frequencies from 540 KC to 30 MC.

Has phono-input connection and panel selector switch. Push-pull audio output stage delivers over 8 watts with under 5% distortion, throughout range of 60 to 15,000 cycles. Such technical features as "Split-Station" tuning, two tuned RF stages, voltage regulation, dual IF transformers, "Micro-set" permeability-adjusted, RF Coils, and oscillator temperature compensation to reduce drift insure the kind of outstanding performance expected from a receiver of this caliber. Uses 15 tubes plus rectifier. Cabinet is steel, finished in smooth two-tone grey. Chassis and panel can be removed from standard 19" rack mounting. Antenna input impedance matches 300 ohm line. Output impedance for speaker connections, 500 ohms. Model SX-62 Receiver with tubes, less speaker and tilt base.

Stock No. 34A17. **YOUR COST, EACH... \$269.50**
No. 32A268. B-42 Tilt Base. Chrome Finished. **\$7.50**

Model HT-19 TRANSMITTER



A completely self-contained medium power rig. Requires only a mike or key, antenna and source of AC power to go on the air. Incorporated is a complete band switching variable frequency oscillator and band switching final RF amp. with one control to effect this operation.

Tubes: 1 6BA6 electron coupled or crystal oscillator; 1 6BA6 Freq. Mod., 1 6BA6 audio amp., 1 6L6 intermed. RF amp., 1 4-65A power output RF amp., 2

1 VR105 Volt Reg., 1 VR150 Volt Reg., 1 5Y3 Intermed. Power rect., 2 866A Final Power rect.

Has extremely low freq. drift, low FM distortion, low hum and noise level, excellent keying, voltage regulators and variable output impedance from 50 to 600 ohms. Two separate antenna outputs are available for a possible use of a "beam antenna" to be left connected for the higher freq. bands and many other possible antenna combinations. Adjustable "link" coils vary the output impedance from 50 to 600 ohms. Operates on five amateur bands: 3.5 to 4, 7.0 to 7.3, 14.0 to 14.4, 21.0 to 21.45, 27.16 to 29.7 MC.

FEATURES:

1. Complete band switching on all frequency bands.
2. Narrow band FM on all frequency bands.
3. Five selections of FM Deviation, calibrated by bands.
4. Built-in preamplifier for high impedance crystal or dynamic microphone.
5. Oscillator keyed for CW use.
6. Three built-in crystal sockets for spot frequency operations.
7. Temperature compensation and voltage regulation insures negligible drift.
8. Built-in circuit for control of receiver for standby purposes.
9. Deviation ratio —0.4 (at 3,000 cps. audio input) or plus or minus 1,200 cps. on all frequencies with proper setting of deviation switch.
10. FM audio distortion measured on AM receiver under 5%. Less on FM receiver.
11. Audio frequency response (FM) essentially flat from 100 to 5,000 cps.
12. Hum and noise (FM) better than 60 db. below equivalent 100% AM modulated signal.
13. Provisions for addition of high level (AM) modulator by connecting such unit to rear terminal strip.
14. Power output not less than 125 watts on all bands.
15. Check switch for placing only the oscillator in operation to "spot" against incoming signals.
16. Protective "fixed bias" on final RF amplifier in case of failure of excitation from intermediate amplifier.
17. Indicator jewel lights show when AC power is on filaments only and when both the filaments and plates of tubes are supplied with power.
18. Single meter with depress button switch reads final amplifier grid current or plate current and remains on plate current reading (until depressed) for complete check on tube operation.
19. Front panel drilled to fit any standard relay rack.
20. Single tuning control for all amateur bands.
21. Completely fused in both filament and plate circuits.

Size: Only 20" wide x 10 1/4" high x 18" deep overall. Weighs approx. 85 lbs. For operation on 105-125 volts 50/60 cycle AC.

Stock No. 34A18. With Tubes. **YOUR COST... \$298.00**

Electrical Supplies for Household and Repair Needs

Attachment Plug Caps--Bases--Multiple Current Taps



- "A":—No. 20A28; Bakelite Handle Cap.....Ea. 8c; 25 @ Ea. 7c
- "B":—No. 20A91; Rubber Handle Cap.....Ea. 9c; 25 @ Ea. 8c
- "C":—No. 20A29; FLAT Bakelite Handle Cap.....Ea. 8c; 25 @ Ea. 7c
- "D":—No. 20A27; Brown Bakelite Pony Cap.....Ea. 7c; 25 @ Ea. 6c
- "E":—No. 20A87; Attachment Plug BaseEa. 7c; 25 @ Ea. 6c



- "A":—No. 20A84; PULL CHAIN CURRENT TAP..Ea. 29c; 10 @ Ea. 26c
- "B":—No. 20A85; 3-WAY CURRENT TAP.....Ea. 19c; 10 @ Ea. 17c
- "C":—No. 20A121; ANGLE TWO-WAY SOCKET...Ea. 17c; 10 @ Ea. 15c
- "D":—No. 20A82; PLUG-IN "TRIO TAP"Ea. 12c; 10 @ Ea. 10c
- "E":—No. 20A122; CORD TYPE "TRIO TAP"....Ea. 12c; 10 @ Ea. 10c
- "F":—No. 20A30; BASE-BOARD CURRENT TAP..Ea. 14c; 10 @ Ea. 12c

TERMINAL PLUGS FOR IRONS AND APPLIANCES



- "A":—SWITCH TYPE BAKELITE PLUG; for Appliances and Irons; Stock No. 20A89; Switch Plug, Net Each **31c**; 10 @ Each.....**28c**
- "B":—Genuine "C-H" SCREWLESS PLUG; black molded, no screws! Stock No. 20A82; "C-H" Plug, Net Each **14c**; 10 @ Each.....**12c**
- "C":—Standard size HEAVY DUTY BAKELITE PLUG. Stock No. 20A83; Heavy Duty Plug; Net Each **11c**; 10 @ Each.....**9c**
- "D":—COFFEE-MAKER and SMALL APPLIANCE PLUG. Fits "3 lb." Irons. No. 20A118; 3-lb. IRON PLUG; Net Each **11c**; 10 @ Each.....**9c**

Iron and Heater Elements—Approved Fuses and Tape



- "A":—"BUSS" Clear Window Plug Fuses; packed 5 to handy carton. No. 20A54/6-Amp.; No. 20A55/10-Amp.; No. 20A56/15-Amp. No. 20A57/20-Amp.; No. 20A58/25-Amp.; No. 20A59/30-Amp. CHOICE OF ABOVE.....Ctn. of 5 fuses, 30c; 20 ctns. for **\$4.95**
- "B":—"BUSS" 250-volt Cartridge Fuses; No. 20A60/6-Amp. No. 20A61/10-Amp.; No. 20A62/15-Amp.; No. 20A63/30-Amp. (10 to ctn.) CHOICE OF ABOVE.....Net Ea. 19c; Carton of 10 Fuses for 65c
- "C":—60 Amp. Cart. Fuses; No. 20A64Ea. 15c; 10 for \$1.25
- "D":—FRICTION TAPE, ½ lb. roll; No. 20A65.....NET PER ROLL 47c
- "E":—RUBBER TAPE, ½ lb. roll; No. 20A66.....NET PER ROLL 53c
- "F":—Standard Screw Base 1000-WATT HEATER ELEMENT; Stock No. 20A108.....Net Each 72c; Lots of 10 @ Ea. 65c
- "G":—"FITSALL" Genuine Nickel-Chrome IRON ELEMENT; for ALL 6-lb. irons using mica type element. Stock No. 20A86; "FITSALL" ELEMENTEa. 50c; 10 @ Ea. 45c
- "H":—600-Watt Nickel-Chrome Wire Replacement Element; ½" dia. coiled wire type for TOASTERS and small appliances. Stock No. 20A111; TOASTER ELEMENTEa. 18c; 10 @ Ea. 15c
- "I":—600-Watt Nickel-Chrome Wire Replacement Element, ⅓" dia. coiled wire type for HOT PLATES. Stock No. 20A119; HOT PLATE ELEMENT.....Ea. 19c; 10 @ Ea. 16c

Switches—Cord Connectors—Push Buttons—Staples



- "A": No. 20A32; S. P. TOGGLE SURFACE SWITCH; Bakelite cover with slotted porcelain baseNet Ea. 22c; 10 @ Ea. 20c
- "B": No. 20A31; FEED-THRU CORD SWITCH, indicating toggle type "push-thru" action; brown bakeliteEa. 22c; 10 @ Ea. 20c
- "C": No. 20A90; 2-PIECE CORD CONNECTOR.....Ea. 21c; 10 @ Ea. 18c
- "D": No. 20A123; 1½" Square Push Button.....Ea. 11c; 10 @ Ea. 9c
- "E": No. 20A33; ½" Dia. DEEP PEARL PUSH BUTTON, heavy duty type for desks, door bells, or chimes.....Ea. 34c; 10 @ Ea. 32c
- "F": No. 20A95; INSULATED STAPLES; 100 to Box.....Per Box 15c

Approved Appliance-Extension-Repair Cords



- "A": #16 Approved Heater or Iron Cord; very flexible, each conductor having 65 strands of #34 wire; Red and Black abrasion-proof outer braid, 3M Cycle. No. 2A30.....25 FT. for \$1.25; 100 FT. for \$3.95; 250 FT. for \$8.50
- "B": U/L APPROVED #16 HEAVY DUTY, ALL RUBBER, SUPER-SERVICE CORD; for Refrigerators, Washers, Motors, Extension Cords. No. 2A2725 FT. for \$1.35; 100 FT. for \$4.50; 250 FT. for \$9.50
- "B": U/L APPROVED #18 S. J. RUBBER COVERED SUPER-SERVICE CORD. No. 2A28.....25 FT. for \$1.15; 100 FT. for \$3.75; 250 FT. for \$7.75
- "C": "POSJ" #18 Rubber parallel U/L APPROVED LAMP CORD; BROWN. No. 2A2825 FT. for 60c; 100 FT. for \$2.15; 500 FT. for \$9.15
- "C": No. 20A120; No. 18 Approved rubber parallel repair cord with rubber plug cap; 6½ FT. LONG.....Ea. 26c; 5 @ Ea. 23c
- "H": No. 20A11; ELECTRIC REFRIGERATOR, WASHER, SMALL MOTOR REPAIR CORD. #16 "SJ" wire, 10 FT. LONGEa. 73c; 5 @ Ea. 67c



MOTOR BRUSH AND SPRING REPAIR KIT

Over 100 Pieces, Carbon brushes, springs, wicks; for most household fractional horsepower motors — fans, vacuum cleaners, washers, mixers.

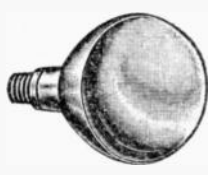
No. 20A23; Complete Kit. NET EACH **\$3.45**

"FIX-ALL" APPLIANCE REPAIR KIT

Terminal Replacements for most any make of Electric Iron and many Toasters, Grills, etc! No "dead" parts in this Profit-making Repair Kit! Indexed compartment box for quick location of needed part.

No. 20A24. "Fix-All" Repair Kit. Net Each... **\$3.45**

ELECTRIC BULBS FOR HOME AND BUSINESS



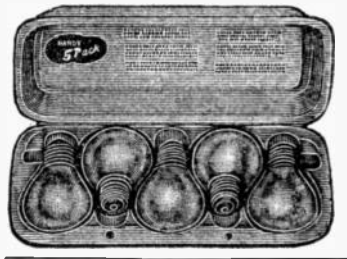
"Sylvania" Infra-Red "Heat Lamps" NEW, General purpose, INFRA-RED HEAT LAMP—screws into ANY ordinary lamp socket—to provide INSTANT, PENETRATING HEAT for treatment of sprains, aches and pains; heat small rooms, dry paint, thaw frozen pipes, warm cold motors, heat brooders, dry films, clothes, etc. Type R-40; 250 watts, 120 volts. No. List. Net 12 @ 77c. 20A115 \$1.10.... Ea. **88c** Net Ea. **77c**

Outdoor Reflector Lamps

"SYLVANIA" PAR-38 Weatherproof Spot or Floodlamp for OUTDOOR USE. 150-WATT. Built in silvered reflector; skirted standard screw base. 120 volt. No. Type Your Choice. 20A697. Spot } NET, EACH \$1.40. 20A698. Flood } 12 @ EACH 1.25

I.E.S. 3-Light Lamps

(100-200-300) Used in thousands of I.E.S. "Better Sight" Lamps in homes and offices. 3-contact Mogul bases; 120 volt. Inside frosted. List 61c Inc. Tax. No. 20A699 Net, Ea. 24 for **51c \$10.71**



"Sylvania" HOUSE LAMPS New "Handy-5" Package 5 LAMPS OF A SIZE IN "EGG CRATE" PACKAGE — revolutionizes lamp sales, eliminates breakage, each lamp in individual "nest"; "HANDY 5" keeps lamps safe until used! No. 20A689; 25-Watt, 120-Volt. No. 20A690; 40-Watt, 120-Volt. No. 20A691; 60-Watt, 120-Volt. Per Pkg. 12 Pkgs. 24 Pkgs. 53c @ Each 50c @ Each 48c

"SYLVANIA" 10-15-75-100-150-200 WATT LAMPS; Packed 6 to carton. All lamps 120 volt; all Prices include Excise Tax.

Stock No.	Watts	Finish	List Price Each	6 Lamps FOR	60 Lamps FOR	120 Lamps FOR
20A692	10	Clear	17¢	\$0.84	\$ 7.95	\$15.00
20A693	15	Inside Fr.	13¢	.64	6.00	11.52
20A116	75	Inside Fr.	17¢	.84	7.95	15.00
20A694	100	Inside Fr.	17¢	.84	7.95	15.00
20A695	150	Inside Fr.	22¢	1.08	9.80	19.80
20A696	200	Inside Fr.	30¢	1.48	13.14	26.28
20A117	200	Clear	30¢	1.48	13.14	26.28



FLUORESCENT LAMPS

"WARMTONE"

FLUORESCENT LAMPS
Exclusive with Sylvania—
at least a fluorescent lamp
that gives more light of
a color that is warm, soft
and flattering; definitely
not a "freakish" light—

it's the fluorescent lamp YOUR customers have been waiting for; the ONLY one that simulates incandescent light in color! Highly recommended for HOMES, STORES, SCHOOLS and OFFICES! Prices include Tax.

Sylvania "Warmtone" Fluorescent Lamps

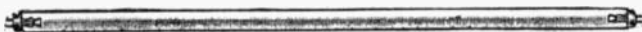
Stock No.	WATTS	Bulb Type	List Each	Net Each	6 @ Each	24 @ Each
20B675	15	T 8-18"	\$0.79	65c	61c	58c
20B745	20	T12-24"	.94	77c	73c	69c
34A5	40	T12-48"	1.21	99c	92c	86c

"Daylight" and "4500° White" Fluorescent Lamps

All prices include Federal Excise Tax.

DAY-LIGHT Stk. No.	4500° WHITE Stk. No.	Lamp Type	Lamp Watts	List Price	Net Each	6 at Each	24 at Each
20A676	20A677	6	T-5	\$0.83	\$0.78	\$0.85	\$0.81
20A678	20A679	8	T-5	.94	.83	.73	.69
20A680	20A681	14	T-12	.83	.76	.65	.61
20A682	20A683	15	T-8	.69	.63	.54	.50
20A684	20A685	15	T-12	.83	.76	.65	.61
20A686	20A687	20	T-12	.83	.76	.65	.61
34A1	34A2	30	T-8	.83	.76	.65	.61
34A3	34A4	40	T-12	1.10	1.01	.86	.83

"SYLVANIA" GERMICIDAL LAMPS



NOT designed or suitable for lighting, these lamps emit ULTRA-VIOLET RAYS for killing airborne or surface germs; the BEST for use and replacement in ANY type or make of Germicidal Fixture; or will operate in ANY fluorescent fixture designed for 15 or 30-watt lamps. CARE must be taken to protect eyes and skin from continuous direct exposure to these lamps!

Stock No.	Lamp Type	Lamp Watts	Lamp Size	List Price	Net Ea.	6 at Ea.	24 at Ea.
34A11	"B"	15	18"-T8	\$4.50	\$3.82	\$3.48	\$3.15
34A12	"B"	30	36"-T8	6.75	5.74	5.06	4.73

"SYLVANIA" FLUORESCENT STARTER SWITCHES

"COP-4" Starter Switch WITH RE-SET BUTTON. For all 40-watt lamps; eliminates "flashing" by cutting out dead lamps—saves ballasts!

No.	Net Each	10 @ Each	50 @ Each
20A67.	66c	58c	50c

"Sylvania" SPEED GLOSTAT Fluorescent Lamp Starters—the finest available for dependable, FAST STARTING and long life!

Cat. No.	"FS" Type	For Lamp	Net Each	10 at Each	50 at Each
20A68	FS-2	15 or 20 watt}	23c	20c	18c
20A69	FS-4	30 or 40 watt}			
20A70	FS-6	100 watt T-17	70c	62c	53c

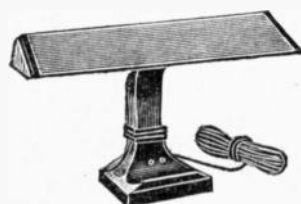
Fluorescent Bed Lamp



"Starlight" streamlined fluorescent Bed Lamp in gorgeous Ivory or Walnut plastic — cool burning 8-watt fluorescent lamp directs a FLOOD of good reading light at just the right angle for comfortable and safe reading in bed! Easily equals 25 watts of "hot" incandescent light! Rubber covered hook-over brackets adjust to fit ANY type of bed — without mar or scratch! Handy push-type switch on bottom of unit, 7 1/2 ft. cord and plug. Size, 15" long, 2" high, wt., 3 lbs. Complete with lamp, ready to use.

IVORY	WALNUT
Stk. No. 32A216.	Stk. No. 32A215.
Net Each \$4.47	Lots of 6. Each \$4.17

Fluorescent Desk Lamp



Streamline "Litemaster" Kool-Lite Desk Lamp is ideal for use in home or office! One-piece die cast base and standard supports heavy steel shade 18x3 1/4" — uses 15-watt Daylight or White lamp to flood a large desk with eye-easy light! Only 11" high overall. Base 5x5 3/4". Has On-Off Switch. Baked bronze finish; 8 ft. cord. Complete with lamp; weight, 7 lbs.

Stock No. 32A32.	6 at Each	\$5.45
Net Each.		\$5.85

Flexible Arm Desk Lamp



to permit adjustment of Parabola shade to any position! Brass push-button socket and 7-inch shade take up to 75-watt lamp. Wt. 4 lbs. Weighted, felt covered base. 6' cord and plug. Shade removable for use with "Heat" Lamps! 32A20, Ea. **\$2.45** 6 at Each **\$2.28**

Outdoor Floodlight Bracket



WEATHER-PROOF Cadmium plated OUTLET-BOX type bracket for ANY Reflector, Projector, or Heat lamp. Adjustable to direct beam of light in ANY direction. May be fastened direct to 4" outlet box, or by screws to any surface. All steel; porcelain socket. Base 4 1/8" diameter. Weight, 1 1/2 lbs. (Less Lamp.) No. 20A99. 6 at Each **\$1.93** Ea. **\$1.77**

Fluorescent

DE LUXE GLASS END "DOUBLE TWENTY" UNITS

In Choice of Permanent Ceiling or "Adapter" Types



NOW AT LOWER PRICES!

(A) "Fitter Adapter" type—Instantly installed to ANY 4" standard shade holder; no wiring of any kind to do! (B) Permanent mounting type—for easy installation DIRECT to outlet box or wires in ceiling of room; canopy of fixture covers wire connections and outlet box. "SOFT-GLOW" CAST GLASS END PIECES "dress up" fixture. Quality construction throughout—U/L APPROVED components, heavy steel body, baked snow-white enamel for maximum light output. TWO 20-WATT LAMPS will FLOOD the average kitchen or other room with shadowless light. Size 24 1/2" long, 4 1/2" wide, 4" high. COMPLETE WITH LAMPS. List Price, \$11.70. Weight, 9 lbs.

(A) DE LUXE ADAPTER TYPE UNIT

No. 30A57. For ANY 4" Shade Holder.	6 at Each	\$5.73
With Lamps, Net Each		\$5.95

(B) DE LUXE CEILING TYPE UNIT

No. 30A116. For Permanent installation to ANY Outlet. With Lamps, Net Each	6 at Each	\$5.73
		\$5.95

AND HERE IS THE "PAY-OFF" LESS 10 FOR \$39.95

Nos. 30A57 and 30A116 May Be Assorted at Above Prices

Streamline Economy Fluorescent Strip Lights



Refreshingly new low-cost, all-purpose Fluorescent Strip Lighting Units in SINGLE and TWO-LAMP styles for EITHER 20-watt or 40-watt lamps. Solidly constructed of heavy gauge steel, all have back plates and are completely wired, including all accessories necessary for hanging to ANY standard 110-volt A.C. ceiling outlet. Ends of each unit are supplied with knockouts to permit "In-Line" installation in continuous runs of any number of units desired. Single lamp units, shown left above, are 4 1/2" wide, 2 1/2" deep and 25" long for 20-watt and 49" long for 40-watt sizes. Two-lamp units are 6 1/2" wide. Every unit complete with lamps and Underwriter's Approved! Two-lamp, 40-watt units have High Power Factor Ballasts.

Stk. No.	Lamps	Net Ea.	6 at Ea.	Stk. No.	Lamps	Net Ea.	6 at Ea.
31A212	ONE	\$3.67	\$3.48	31A214	ONE	\$6.94	\$6.55
31A213	TWO	6.70	6.40	31A215	TWO	13.70	12.88

Modernize With Strip Lighting at New Low Prices



New "Strip-Lite" Units 15-20-30 OR 40 WATT TYPES

Ideal for modernizing lighting in almost ANY location. EASY TO INSTALL, either singly, or end-to-end "In-Line" style. Cord and plug listed below may be quickly wired to these units to convert ANY of them to "PLUG-IN" types. Underwriter's Approved ballasts and components. Size of all units 23 1/2" wide x 2" high; Complete ready to install, WITH LAMPS (Daylite or 4500° White).

Stock No.	"Strip-Lite" Type	Weight	NET EA.	LOTS OF 6 EA.
31A15	For 15-watt, 18" lamp	4 lbs.	\$2.95	\$2.75
31A16	For 20-watt, 24" lamp	4 lbs.	3.15	2.95
31A206	For 30-watt, 36" lamp	8 lbs.	6.85	6.45
31A207	For 40-watt, 48" lamp	10 lbs.	6.95	6.55

20A120. 6-FT., No. 18 RUBBER COVERED CORD & PLUG, NET EACH **28c**

B-A SUPER VALUES

"Double Forty" Industrial Unit—TWO 40-watt lamps easily equal 150 to 200 watts of incandescent light — easily installed anywhere! Heavy steel reflector quickly removable by thumb screws for access to Underwriter's Approved, high power factor Ballasts and Sockets. Baked White Enamel reflector, gray exterior, is 51" long, 11" wide—overall height, 5 1/2". Hangers at both ends of top channel, and knockouts in ends for channel allow hanging by chains, wire or pipe; knockouts in ends for switches. Supplied complete with 4500° White or Daylight lamps and 6-ft. cord and plug (cord not attached). Weight, 21 lbs. Stock No. 31A201. "Double Forty" Unit. Complete. Net Each **\$13.95** 6 at Each **\$13.25**

B-A SUPER VALUE "DOUBLE FORTY" UNIT "PACKAGE SPECIAL"!

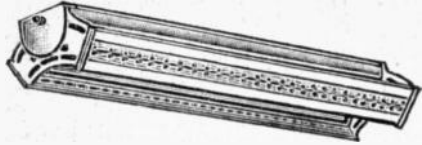
Stock No. 31A201-F4. Package of FOUR of above "Double Forty" fixtures, LESS AC CORDS AND LAMPS. Your Cost, Per Pkg. of 4. **\$39.95**

SUPER VALUE "DOUBLE TWENTY" Plug-In Fluorescent Fixture—Same type fixture as Double Forty above EXCEPT uses TWO 20-watt lamps; comes complete with 6-ft. AC cord and plug attached, ready to hang up and plug-in ANYWHERE! Size, 25 1/4 x 9 1/4 x 3 1/4" high, wt., 11 lbs. U/L Approved Ballasts and Components. Complete with TWO Daylight or White Lamps. Stock No. 30A60. "Double Twenty" Unit. Complete. Net Each **\$8.99** 3 at Each **\$8.39**

FOR PRICES OF FLUORESCENT FIXTURES, LESS LAMPS: Deduct from "Complete" prices shown, the following amounts PER LAMP—45c for each 15-watt lamp; 55c for each 20 or 30-watt lamp; 75c for each 40-watt lamp. (Choice of Daylight or White lamps supplied with all fixtures priced "with lamps.")

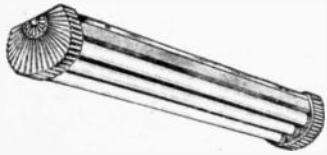
Quality Fluorescent Lighting Equipment

THE LATEST FLUORESCENT LIGHTING FOR HOME OR OFFICE
New! The "20th Century" Universal Ceiling Unit



TWO 20-WATT LAMPS!
MOUNTS ANYWHERE!
Sparkling new, CHROME plated ends hold ceramic-fused smartly designed DECORATIVE GLASS SHIELDS—set at an angle to avoid "blocking" light — provide 95% lighting efficiency WITHOUT GLARE! A super-efficient lighting unit, for use in HOMES, Offices—Salesrooms; provides glareless light equal to at least 150 watts of incandescent lamps! Underwriter's Approved construction throughout; heavy steel body with reflecting surfaces finished in gleaming white synthetic enamel, lamp holders securely braced and correctly spaced—lamps don't fall out or refuse to light! Frieze decorated Glass Panels are easily removed for cleaning, are held in place by polished Chrome Plated end pieces! Complete with fittings for quick, easy installation to any 110-volt A.C. ceiling outlet. 24½" long, 6½" wide, 5½" high; wt. 8 lbs. Complete with TWO 20-watt fluorescent lamps. "Flush" Mounting type.

Stock No. 31A208. The "Twentieth Century Deluxe Fluorescent Unit. Net Each \$7.75 6 at Each \$6.97



"Triple-Twenty" Economy
THREE 20-WATT LAMPS equal light output of several out-of-date incandescent lamps making this beautiful fixture adaptable to offices, or most any room in the home! Cast Glass decorated end pieces eliminate "dark" ends — glow softly when fixture is lighted. Fittings supplied for easy ceiling installation, permanently, to any standard electric outlet box. Built of heavy gauge steel with body finished in hi-bake gleaming white enamel. 50% more light than from usual 2-lamp 20-watt fluorescent fixtures with practically no increase in size of fixture! Underwriter's Approved construction throughout. Size, 24½" long, 4½" wide, 4" deep. Complete with THREE 20-watt Daylight or White lamps; wt., 8½ lbs.

Stock No. 31B204. "Triple-Twenty" Economy Unit. Net Each \$7.80 6 at Each \$7.15



2-Lamp Circlarc "Allure"
The newest in gorgeous fluorescent lighting — a pair of "Circlarc" lamps (½-circle), each 16 watts, blended into a beautiful modern design fixture of spun aluminum, with finish of mirror polished aluminum and hi-bake pure white enamel. Decorative cast support arms hold ornamental lace design glass. Overall size is 14" dia. x 5" high; wt., 9 lbs. Easily installed to any standard AC ceiling outlet. Complete with two 16-watt

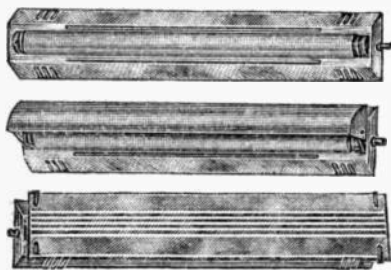
stalled to any standard AC ceiling outlet. Complete with two 16-watt "Circlarc" lamps. Stock No. 31B202. "ALLURE" Circlarc Unit. Complete, Net Each \$15.75 3 at Each \$14.90



Popular 32-Watt "Circline"
Efficient, attractive for most any room in home or office! Furnished complete with new 32-watt Circline lamp; lamp mounts in striking circular housing of high polished spun aluminum with white enamel reflecting surface; trimmed by crystal glass ornament. Installs easily flush with ceiling to any standard AC outlet. Size, 12" diameter, 5" deep; wt., 10 lbs.

Stock No. 31B203. CIRCLINE Fluorescent Unit. Net Each \$11.25 3 at Each \$9.95

New! Low-Cost Chrome Plated 15-Watt Brackets



For Bathroom — Recreation Room, Den, Offices, Beauty Parlors. All-over lustrous Polished Chromium in choice of 3 styles. Designed for 15-Watt, 18-inch fluorescent lamps; every bracket with wired-in switch. Underwriter's Approved; wired complete ready and easy to install on any 110-volt A.C. electrical outlet; wall or ceiling. All three styles are 19½" long, 3½" wide, and extend from wall approx. 3". Available in choice of three styles, as illustrated at left and listed below. All Brackets complete with lamp. Upper Illus: Standard All Chrome wall or ceiling bracket; wired complete; with mounting hardware and 15-watt type T-8 lamp. Wt., 3 lbs. No. 31A209. Model 118 All Chrome Bracket. Net Each \$3.95 6 at Each \$3.56

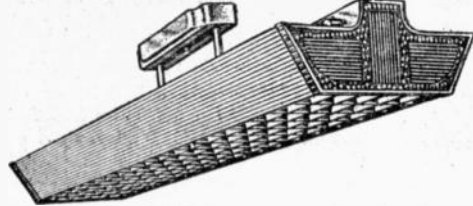
Center Illus: All Chrome Adjustable Reflector Bracket; identical to Model 118 but with addition of reflector, an ideal bracket for EITHER vertical or horizontal mounting in hundreds of locations. Wt., 4 lbs. No. 31A210-2. Model 118-R All Chrome Reflector Bracket. Net Each \$4.54 6 at Each \$4.11

Lower Illus: Beautiful All Chrome bracket with Etched Glass diffusing shield — a "natural" for flush ceiling mounting, or may be used as a wall bracket in any location. Glass easily removed for cleaning. Wt., 4 lbs. No. 31A211-2. Model 118-SP Glass Panel Bracket. Net Each \$5.44 6 at Each \$4.94

"The New Look" IN SUPER-EFFICIENT LIGHTING

"AIRLINER"

LOUVERED BOTTOM
20- OR 40-WATT
FLUORESCENT UNITS
FOR STORE, OFFICE
or PUBLIC BUILDING



Modernly styled and handsomely proportioned, the new Airliner not only adds to the beauty of the room in which it is installed—it provides the best and most efficient no-glare, even distribution of light possible! Using 4 LAMPS of either 20-watt or 40-watt types there is no limit to the type or size of room in which it may be used to extreme advantage! Unique side glass diffusing panels of "Corning" Albalight glass eliminate glare from lamps and diffuse light, usually wasted, over a wide area of working space; egg crate type bottom Louvers provide the best possible spread of efficient, soft fluorescent light—electrically baked-on White Enamel finish of fixture body reflects all the light—wastes none! Cast Aluminum end pieces, canopy and stems are highly burnished to a Silver finish. Bottom Louvers are of heavy steel, finished white enamel for highest lighting distribution efficiency. All component parts, ballasts, etc., are of best quality, Underwriter's Approved, and entire fixture is Union Made. Easily installed and maintained, shipped complete with Daylight or 4500° White Lamps. 40-watt units are H.P.F. All Pendant units are 36" from ceiling to bottom of fixture.

"AIRLINER" PENDANT TYPE FLUORESCENT FIXTURES

Stock No.	For Lamps	Size	Weight	Net Each	6 at Each
50A209.	4 40-Watt	49½"x16½"x6"	45 lbs.	\$36.80	\$34.40
50A210.	2 40-Watt	49½"x 9½"x6"	30 lbs.	25.30	23.70
50A211.	4 20-Watt	25½"x16½"x6"	20 lbs.	25.30	23.70

"AIRLINER" FLUORESCENT CEILING FIXTURES



Airliner Flush Mounting Ceiling Units may be installed as individual units, or in continuous rows of as many fixtures per row as desired or necessary. When ordering for continuous row installation BE SURE and state number of fixtures needed for EACH ROW—we will ship all fittings and trim needed for making the installation—single fixtures will be supplied complete with two Silver finished cast aluminum end pieces. Dimensions of these fixtures are identical to those listed above for Pendant models. Complete with Lamps.

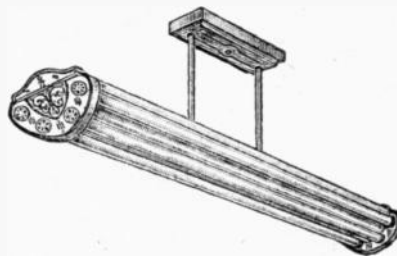
"AIRLINER" CEILING OR FLUSH MOUNTING FLUORESCENT FIXTURES

Stock No.	For Lamps	Specify Number of Fixtures in Each Row! Or Single Units.	Weight	Net Each	6 at Each
50A212.	4 40-Watt		40 lbs.	\$35.30	\$32.90
50A213.	2 40-Watt		25 lbs.	23.80	21.90
50A214.	4 20-Watt		16 lbs.	23.80	21.90

Royal Deluxe Fluorescent Lighting Units

The ultimate in fluorescent lighting beauty at NEW LOW PRICES! Top light output with NEW BEAUTY!

CAST GLASS END PIECES scintillate with sparkle from fluorescent tubes. FULL EFFICIENCY! DESIGNED FOR 40-watt, 48-inch lamps or 20-watt, 24-inch lamps. 40-watt type is 49" long; 20-watt, 25" long. Pendant type illustrated. Top quality throughout, Underwriter's Approved components. All 40-watt fixtures are power factor corrected. Complete with Lamps



36" drop pendant or close-up ceiling types for 40-watt, 48-inch lamps or 20-watt, 24-inch lamps. 40-watt type is 49" long; 20-watt, 25" long. Pendant type illustrated. Top quality throughout, Underwriter's Approved components. All 40-watt fixtures are power factor corrected. Completely wired, ready and EASY TO HANG.

Stock No.	For Lamps	Type of Fixture	Weight	Net Each	6 at Each
50A215.	4 20-Watt	Ceiling Type	19 lbs.	\$16.90	\$16.20
50A216.	4 20-Watt	36" Pendant	20 lbs.	17.60	16.90
50A217.	2 40-Watt	Ceiling Type	26 lbs.	16.90	16.20
50A218.	2 40-Watt	36" Pendant	27 lbs.	17.60	16.90
50A219.	4 40-Watt	Ceiling Type	30 lbs.	26.30	25.20
50A220.	4 40-Watt	36" Pendant	31 lbs.	27.00	25.90

(All the above may be assorted to obtain quantity prices.)

"FLEXO" ADJUSTABLE DESK LAMP

Concentrated light from TWO 15-watt fluorescent lamps may be directed quickly to ANY position—and HELD THERE without adjusting screws or thumb nuts! Spring-friction joints at base, elbow and shade and two 18-inch arms allow head to tilt up and down 180° or turn 330° on axis; upper elbow swings in 160° vertical arc, lower elbow swings in 110° vertical arc! Double arm extends to 36" in any direction—"stops" on joints prevent "shorts" or damage to lamp. Husky double thumb screw clamp allows quick fastening to any desk top or vertical panel up to 3" thick! Finished in statuary bronze with white enamel shade interior. Shade size, 18½"x4" wide x 2" deep for 2 15-watt T-8 lamps. Wt., 10 lbs. Stock No. 32A31. "FLEXO" ADJUSTABLE DESK LAMP.



Your Cost, Each \$16.75
(Note: Write us for quantity discounts on "Flexo" Desk Lamps.)

SELECTED VALUES IN MODERN ELECTRIC APPLIANCES

Sessions ELECTRIC CLOCKS



"A"



"B"



"C"



"D"

"Sessions" Self-Starting Electric Clock mechanisms are fool-proof, long life—quiet; contain only one-half the number of moving parts used in other "makes". **FEDERAL EXCISE TAX**—All prices quoted below are **DEALER NET PRICES**—all purchasers are required by Federal Law to remit 20% of the LIST PRICE of all clocks purchased to the Internal Revenue Department of the U. S. Government. We do NOT collect the tax!

(A)—Model 386W. White Plastic wall clock has 5" square dial and convenient bottom set knob. Size, 7x7 1/2". List \$4.75. **\$3.56** 6 at **\$3.33**
Stock No. 33A223. MODEL 386W. Net Each

(B)—Model 339W. White Plastic case "TEAPOT" Kitchen Wall Clock; 4" banded dial; bottom set knob. Size, 8 1/2" wide, 7" high. List \$4.95. **\$3.72** 6 at **\$3.47**
Stock No. 33A205. MODEL 339W. Net Each

(C)—Model 451W. Ivory Plastic Desk or Bedroom Clock, has 3 1/2" banded Metal Dial. Size, 7 3/8" wide, 4 1/2" high. List \$4.60. **\$3.45** 6 at **\$3.12**
Stock No. 33A215. MODEL 451W. Net Each

(C)—"CATNAPPER" Ivory Plastic Electric Bell Alarm, otherwise identical to Model 451W described next above. List Price, \$4.95. Wt., 2 1/2 lbs. **\$3.72** 6 at **\$3.47**
Stock No. 33A225. "CATNAPPER" Model Electric Alarm Clock. Each

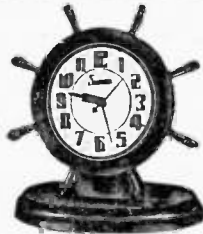
(C)—Sessions "CATNAPPER" Luminous Dial clock with soft tone Bell Alarm, same style case as (C) shown above, quiet, long life electric movement with Luminous numerals and hands. Wt., 2 lbs. **\$4.49** 6 at **\$4.17**
No. 33A225-L. Model 451AL. List \$5.95. Net Each

(D)—Model 438W. 14" METAL DIAL WALL CLOCK with black and gilt lacquered numerals. Time set knob. BLACK PLASTIC CASE 17" in diameter. A fine clock for Office or Business. List Price, \$13.95. **\$9.86** 3 at **\$9.07**
Stock No. 33A224. MODEL 438W. Net Each

HANDSOME MAHOGANY CASED SESSIONS ELECTRIC DESK CLOCK

Popular "Ship's Wheel" Marine design Mahogany finish case with dependable Sessions Self Starting Electric Time movement. Large 4" METAL DIAL has outlined, easy to read numerals. Polished brass spindles around case make this a most desirable and pleasing clock for Mantel, Den, Recreation Room or Office use. Size, 7 1/2" high, 6 3/4" wide. Wt., 3 lbs. "Sessions Model 456-W. List Price, \$10.00.

Stock No. 33A214. Lots of 3 **\$6.94** Each... **\$6.50** NET EACH



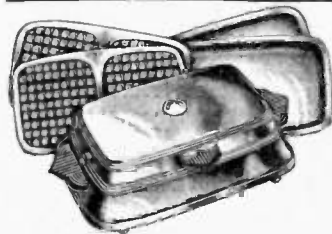
"DORMEYER" ELECTRIC MIXER

For every food mixing need—Plus Powered by life lubricated heavy duty motor; 3-speeds Kitchen Tested for perfect mixing of all kinds of batter! "Click" motor arm moves from center to side of mixing bowls—no change of bowl support necessary; turntable has 17 Ball Bearings—revolves without hand help! "Lift-Off Motor" comes off in a jiffy for use anywhere in the kitchen—no triggers to release or catch! Dual Chrome Nickel Beaters; two opal glass mixing bowls, juicer bowl with opal glass reamer for fruit juicing the easy way, spout directs juice to glass or dish. Adjustable stand and 6-ft. cord; operates on either AC or DC current at 110-120 volts; 13" high, 12 1/2" long, 11" wide; wt., 19 lbs. Complete, ready to use. List Price, \$29.95. Stock No. 30B51. "Dormeyer" Model 3200 Food Mixer. Each **\$22.59** 3 at **\$21.32**



"FOSTORIA" COMBINATION

Twin Waffle Mold and Sandwich Toaster! DOUBLE DUTY! DOUBLE VALUE! Heat Indicator Twin Waffle Baker bakes TWO WAFFLES, each 5x5 3/4" and both perfectly "done" in a matter of minutes. Cast Aluminum waffle molds are heated quickly and evenly by the heavy duty 750-watt heating elements in BOTH the cover and base of this fine home appliance! Waffle grids are quickly interchanged for heavy steel Sandwich Grids for



toasting dellicious cheese or other combination sandwiches. Heat Indicator tells proper temperatures and indicates when grids are ready for use. Waffle and sandwich grids are interchanged easily by means of knurled screws at each end of frame. Highly Chrome Plated heavy steel housing has new air-cooled bakelite handles, no burned fingers! Bakelite feet guard against scorched table tops. SIZES, Sandwich Grids, 10 1/2 x 6 3/8"; Waffle Grids, each waffle, 5x5 3/4"; overall size 13 1/2" long, 9" wide, 3 3/4" high; wt., 6 lbs. Complete with cord set. For 115-125 volt AC or DC current. Model 351. List Price, \$11.20. Stock No. 30B52. "Fostoria" Waffle-Sandwich Maker. Each **\$8.40** 3 at **\$7.46**

"REMINGTON" ELECTRIC SHAVERS



Use-tested and proven satisfactory by thousands of men. "Remington" Shavers cut heavy or light beards with equal ease—take long hairs, short hairs or stubble in their stride—they have no equal in electric shavers for shaving around sideburns and mustaches!

THE REMINGTON "FIVE"

Newest of the "Blue Streak" Remington shavers; has TWO Twin Shaving heads providing four long beard shaving edges PLUS the standard close cutting round head—3-heads in all; the shaver that converts the skeptic to electric dry shaving! Operates on 110-volt AC or DC current; with cord in handsome case. Wt., 2 lbs. No. 20A165. (List \$21.95). NET..... **\$15.05**

THE REMINGTON "FOURSOME"

Long the choice of thousands of experienced users of electric dry shavers, the "Foursome" provides two of the close shaving round heads and ONE of the new "Blue Streak" twin cutter shaving heads. Operates on 110-volt AC or DC current, in handsome carrying case with cord; weight, 2 lbs. Stock No. 20A127. "Remington" Foursome. (List \$19.50). NET..... **\$13.65**

Toastswell

AUTOMATIC "POP-UP" TOASTER

The finest in Automatic Toasters! Makes perfect toast—from the thin slice to any desired degree of brownness by merely setting the Color Selector to dark, light, or in-between shade desired. Split-second Super-Silent Clock Thermostat Control guarantees fully automatic action WITH-OUT the "flicking" noise found in other types of automatic toasters! Time control lengthens toasting time when toaster is cold, shortens it when toaster is hot; makes every piece of toast identical in color and crispness! Does not require pre-heating! "Toastswell" POPS the toast out when finished—cuts off the current automatically! Unsurpassed in beauty, performance and dependability. Toastswell is streamlined with case finished in highly polished SUPER-CHROME plate with black bakelite trim and handles. Size, 7" high, 6 1/4" wide, 11 1/2" long; complete with attached heavy duty cord. Operates only on 110-125 volt, 60 cycle AC current; 860 watts. List Price, \$21.50. Weight, 6 lbs. Stock No. 32B30. "Toastswell" Automatic Toaster, Each..... **\$15.65** 3 at **\$14.74**



Popex

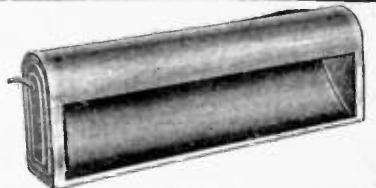
DE LUXE ELECTRIC CORN POPPER



Pops fluffy, tender, crisp French Fried Pop Corn in a jiffy—no guess work—no stirring—no shaking; merely put the measuring cup (supplied) full of corn in the popper with the cooking oil, set the popper on the hot plate, and watch it pop through the crystal clear, heat resisting glass cover. Popper is made of heavy spun aluminum, finished to a high polish—Hot Plate, 660-watt heavy duty type, has flat top surface, is entirely separate from popper utensil—may be used for a hundred other purposes around the home! Popper kettle capacity is 2 quarts, may be used for any other cooking purpose also! Size, 8 3/4" dia. at base, 10" overall height. List Price, \$6.95. For operation on 110-125 volt AC or DC current. Weight, 5 lbs. Stock No. 32B27. "Popex" Corn Popper. **\$5.20** 3 at **\$4.87** Net Each

New! "GERMODOR" GERMICIDAL UNIT

Effectively kills air-borne bacteria and other micro-organisms by transmission of Germicidal Lamp germ killing radiation through air currents traveled by these germs! Deodorizes—removes unpleasant odors



by creation of Ozone in the air. Special design of mirror-finished aluminum reflector assures maximum distribution of Germicidal Rays for germ killing and deodorization, yet is so constructed as to not endanger occupants of room by direct exposure to the lamp. Germodor should be installed 6 1/2 to 7 ft. above floor and preferably over doors or windows—one 15-watt unit to each 125 sq. ft. of floor area. A "must" for all Public Rooms—a big help in the home! Hangs on wall, plugs in anywhere! Size 3 3/4" wide, 5 3/4" high; 19 1/8" long for 15-watt, wt., 5 lbs.; 37 1/8" long for 30-watt; wt., 8 lbs. Exterior finish in beautiful Baked Bronze. Complete with Germicidal Lamp, 11 ft. cord and plug, and "On-Off" switch. No. 31B205. 15-Watt "Germodor". No. 31B200. 30-Watt "Germodor". Net **\$12.49** 6 at **\$10.59** Net **\$16.67** 6 at **\$15.53** Each

DON'T FORGET that "B-A" allows YOU to DEDUCT 2% from the total of your order on orders over \$100.00 as a FREIGHT ALLOWANCE!

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YOU GET FASTER SERVICE FROM B-A IN THE HEART OF AMERICA



HOW TO ORDER

- Use our order blank where possible—it will help us process your order more speedily. Additional blanks are yours for the asking.
- Print your name and complete address legibly with typewriter, ink, or black pencil.
- List the items you want—only one to a line. Write down exact stock numbers and prices as in our catalog. Show size, color, resistance, etc., in the description. Give second and third choices on scarce items.
- Specify how we should ship—Parcel Post, Air Parcel Post, Express, or Freight—by checking one of the squares. Estimate shipping weights not given and use the Parcel Post Rate Chart and Zone Map to estimate amount of postage. Express and Freight charges are collected on delivery unless there is no agent in your town. For your protection, all shipments are insured.
- Total your order, add sufficient to cover postage and insurance. Any unused amount will be refunded at once by Bank Check.
- Parcel Post Insurance: Parcel Post C.O.D. charges include insurance. Paid Parcel Post shipments are insured in a reliable company at LESS than Government rates, guaranteeing safe delivery of shipment.
- Use a separate sheet of paper for inquiry or correspondence not related to order.

PRICES AND TERMS

OUR PRICES are net F.O.B. Kansas City, Missouri.

All discounts, including 2% for cash, have been deducted from catalog prices. 2% freight allowance on orders \$100.00 or over.

All merchandise is sold at prices in effect on date of shipment, and all prices quoted in our catalogs and flyers are subject to change without notice.

PRICE REDUCTIONS. Your order will be shipped at the lowest prevailing price at time of shipment. We advise you of increases over 20% before making shipment of items involved.

OUR TERMS are cash with order on ALL orders for \$5.00 or less; OR we will ship C.O.D. on orders over \$5.00 when deposit of 25% accompanies such orders. Remittance IN FULL with your order SAVES you costly C.O.D. charges and expedites your order. Government, State and Industrial purchase orders are handled on the usual payment plan.

FOREIGN ORDERS: See special sheet included in export catalog or contact our export department for details on shipments to your country.

MISSOURI CUSTOMERS add 2% State Sales Tax to ALL items for your own use. Please give your Tax Registration Number on items purchased for resale.

HOW TO SEND MONEY

It is safest to remit by Post Office or Express Money Order, Bank Draft or Check. Avoid sending coin or currency, but, if necessary, register your letter. Use Western Union for rush money orders. Small amounts will be accepted in 3c stamps. You can avoid C.O.D. charges even when you do not know the approximate amount to remit, by sending your signed blank check for us to fill in the exact amount. You may write across the bottom to limit the check to some figure which you know will be sufficient. Your invoice, mailed immediately after shipment, shows the exact amount your check was made payable for. Your money is handled at B.A. by bonded employees. For business references, we refer you to Dun and Bradstreet, Mercantile Home Bank and Trust Co. of Kansas City, Mo., or Commercial National Bank of Kansas City, Kansas.

RETURNS—ADJUSTMENTS

Your complete satisfaction is our goal, and you can depend on us for prompt adjustment in case of error, defective merchandise, etc. Please write us first before returning anything, and always be sure to send along all order papers or correspondence necessary to substantiate your claims. Damages in transit. Obtain a damage report from the delivering carrier and include it with your order papers and letter to us.

FREIGHT SHIPMENTS

Where rapid delivery is not essential and merchandise selected weighs approximately 100 pounds or over, Freight shipment is recommended. See your agent for rates. Do not remit Freight charges if you have a local agent.

FOR URGENT RUSH SHIPMENT, wire or phone. Local and long distance phone number Baltimore 1155. Salesmen on duty 8:15 A.M. to 5:30 P.M. during week, Saturday 8:30 A.M. to 12:30 P.M.



PARCEL POST ZONE MAP

The arrow on the map indicates the location of Kansas City, the home of B. A. Note that it is in the exact "Heart of America", close to everywhere. Kansas City rates high as a railroad center—there are plenty of fast trains in every direction. Our central location, our adequate stocks, our long experience in mail order routine—these are the reasons for faster service from B. A.

AIR AND RAIL PARCEL POST SHIPMENTS

BE SURE TO INCLUDE ENOUGH POSTAGE — EXCESS IS REFUNDED

The table below and Zone Map above will help you estimate Parcel Post charges. For packages under 8 ounces, allow 1½¢ for each 2 ounces, any Zone. The Post Office figures fractions over as a full pound. Example: A package weighing 5 lbs., 2 oz. is figured as 6 lbs.

INSURANCE rates on shipments via P.P. are: 3¢ up to \$5.00 value, 10¢ for values of \$5.01 to \$25.00, 15¢ for values of \$25.01 to \$50.00, 25¢ for values of \$50.01 to \$100.00. A part of the fee on P.P. C.O.D. shipments is for insurance.

NEW AIR PARCEL POST RATES are shown in light face type. Regular Parcel Post in bold face. On all Air shipments to U. S. territories, Alaska, Hawaii, etc., and to APO or FPO addresses rate is 80¢ per lb.

Weight in Pounds	Zones 1 & 2		Zone 3		Zone 4		Zone 5		Zone 6		Zone 7		Zone 8	
	Up to 150 Miles		150 to 300 Miles		300 to 600 Miles		600 to 1000 Miles		1000 to 1400 Miles		1400 to 1800 Miles		Over 1800 Miles	
1	.09	.55	.10	.60	.11	.65	.12	.70	.13	.75	.15	.75	.16	.80
2	.11	.59	.12	.68	.15	.79	.18	.94	.20	1.08	.24	1.20	.27	1.45
3	.12	.63	.14	.76	.18	.93	.23	1.18	.27	1.41	.33	1.65	.38	2.10
4	.13	.67	.16	.84	.22	1.07	.28	1.42	.34	1.74	.42	2.10	.49	2.75
5	.14	.71	.18	.92	.25	1.21	.34	1.66	.41	2.07	.52	2.55	.61	3.40
6	.15	.75	.20	1.00	.29	1.35	.39	1.90	.48	2.40	.61	3.00	.72	4.05
7	.16	.79	.22	1.08	.32	1.49	.44	2.14	.56	2.73	.70	3.45	.83	4.70
8	.17	.83	.24	1.16	.36	1.63	.50	2.38	.63	3.06	.79	3.90	.95	5.35
9	.18	.87	.26	1.24	.39	1.77	.56	2.62	.70	3.39	.89	4.35	1.06	6.00
10	.19	.91	.28	1.32	.43	1.91	.61	2.86	.77	3.72	.98	4.80	1.17	6.65
11	.20	.95	.30	1.40	.46	2.05	.66	3.10	.84	4.05	1.07	5.25	1.29	7.30
12	.22	.99	.32	1.48	.50	2.19	.72	3.34	.92	4.38	1.16	5.70	1.40	7.95
13	.23	1.03	.34	1.56	.54	2.33	.77	3.58	.99	4.71	1.26	6.15	1.51	8.60
14	.24	1.07	.36	1.64	.58	2.47	.82	3.82	1.06	5.04	1.35	6.60	1.63	9.25
15	.25	1.11	.38	1.72	.61	2.61	.89	4.06	1.13	5.37	1.44	7.05	1.74	9.90
16	.26	1.15	.40	1.80	.65	2.75	.94	4.30	1.21	5.70	1.53	7.50	1.85	10.55
17	.27	1.19	.42	1.88	.68	2.89	.99	4.54	1.28	6.03	1.63	7.95	1.97	11.20
18	.28	1.23	.44	1.96	.72	3.03	1.05	4.78	1.35	6.36	1.72	8.40	2.08	11.85
19	.29	1.27	.46	2.04	.75	3.17	1.10	5.02	1.42	6.69	1.81	8.85	2.19	12.50
20	.30	1.31	.48	2.12	.79	3.31	1.15	5.26	1.49	7.02	1.91	9.30	2.31	13.15
For each additional pound add	.01	.04	.02	.08	.03½	.14	.05½	.24	.07	.33	.09	.45	.11	.65

EXPRESS SHIPMENTS — FRAGILE MERCHANDISE

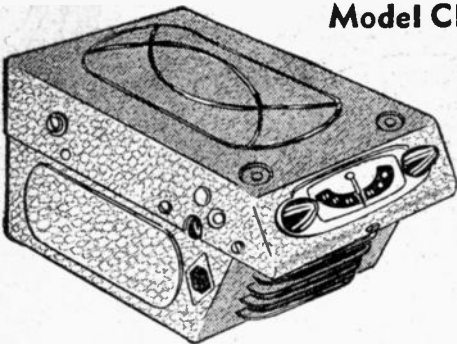
To assure safe arrival, all test equipment, amplifiers, radios, fluorescent fixtures and fragile or bulky merchandise will be shipped by express. IF THERE IS NO EXPRESS AGENT IN YOUR TOWN SPECIFY SHIPPING POINT. Shipments are made collect for charges. All express is insured as follows: No charges under \$50.00 value, 10¢ for values of \$50.00 to \$100.00, and 10¢ for each additional \$100.00 value or part thereof. See Rate Table below which includes Federal Tax.

Weight of Pkg.	DISTANCE IN MILES FROM K. C.						
	100	200	300	400	500	600	1000
5 lbs.	\$0.95	\$0.98	\$1.04	\$1.05	\$1.06	\$1.11	\$1.21
10 lbs.	1.05	1.09	1.23	1.25	1.27	1.36	1.55
15 lbs.	1.15	1.21	1.42	1.45	1.48	1.62	1.90
20 lbs.	1.26	1.33	1.60	1.65	1.69	1.88	2.23
30 lbs.	1.46	1.57	1.97	2.04	2.11	2.38	2.93
40 lbs.	1.67	1.80	2.35	2.44	2.52	2.90	3.62
50 lbs.	1.88	2.04	2.51	2.83	2.95	3.40	4.30
75 lbs.	2.38	2.64	3.63	3.83	4.00	4.68	6.04
100 lbs.	2.90	3.23	4.60	4.82	5.05	5.95	7.77

PHILCO AUTO RADIOS



For **CUSTOM** or **UNIVERSAL** Installation
Model CR-2 — MOST AMAZING VALUE in the **LOW PRICE**
RANGE is this **UNDER DASH SUPERHET**

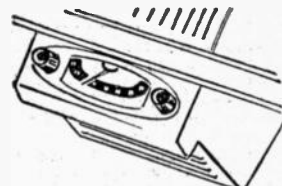


Its **Delightful, Rich, Clear Tone** and **Smart Appearance** combined with **Philco Quality** and **Exclusive Engineering Features** make this **Auto Radio** the **BIGGEST MONEY'S WORTH** in the **entire field**. **Complete Ready to Play**.

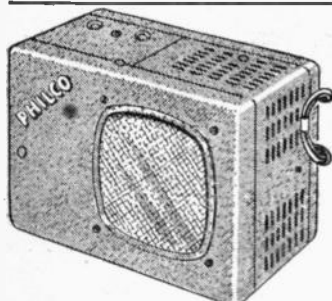
- 5 Ioktol tubes, plus rectifier
- Built-in Electro Dynamic Speaker
- Built-in Interference Filter
- R.F. stage . . . Stabilized I.F. transformers
- High-gain Iron Core Antenna Coil; Antenna Compensator
- Automatic Volume Control

Housed in **Rugged, Compact steel case** finished in **Silver Gray Hammertone Lacquer**. Size $4\frac{5}{8}$ " high, $5\frac{3}{16}$ " wide, $1\frac{1}{2}$ " deep. **List Price \$44.50**.

PHILCO MODEL CR-2. Stock No. 33B45. \$33.55 Lots of 6, Each **\$32.55**
DEALERS PRICE. Net Each.....



Mounts Neatly and Attractively Under the Instrument Panel of Any Car. Easy to Reach.

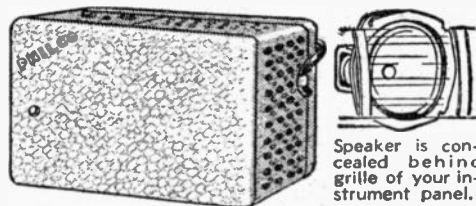


MANUAL TUNING MODELS CR4-CR6

You will find no other Auto Radio that can match these in **tone quality, clarity, power** and **over-all performance** of these amazing low prices. Choice of either **custom styled** or **universal manual controls**.

A FEW OF THEIR OUTSTANDING FEATURES: Permeability tuning . . . Tuned RF stage for maximum sensitivity, distance and selectivity . . . Beam power output . . . Built-in Interference Filter . . . Tone and Automatic Volume Control . . . Superhet with 5 tubes, two of which are dual purpose **PLUS** rectifier tube.

The **Custom style** manually tuned controls are designed for the instrument panel as though a part of its original equipment . . . while the **universal control** is designed to fit under dash of **ANY Car** regardless of make or model.



Speaker is concealed behind grille of your instrument panel.

MODEL CR4. Single unit—with powerful built-in 6" Electro-Dynamic Speaker—Sturdy yet attractive steel case, size $7\frac{1}{32}$ " high, $9\frac{3}{4}$ " wide, $5\frac{1}{2}$ " deep, designed for cars with limited space and in which no provision is made for speaker mounting. **List Price Complete, \$59.95.**

No. 30B68/600M with Universal Manual Control for any Make or Model.

Stock No. With custom style Manual Control.
30B68/622M for Chevrolet (all models) 1941 to 1948 inclusive.

30B68/627M for Ford-Mercury 1942 to 1948.
30B68/623M for Chrysler, DeSoto, Dodge, Plymouth (all models) 1941 to present.

Dealers Net, Each, Complete. \$43.25 Lots of 6, Each **\$40.40** Ready to Install.....



CUSTOM STYLE MANUAL CONTROL



UNIVERSAL TYPE MANUAL CONTROL

MODEL CR6. Two unit with separate 7" Electro-Dynamic Speaker that conceals behind instrument panel grille in cars so provided. Sturdy steel case in attractive Taupe brown Hammertone lacquer. Size $7\frac{1}{32}$ " H., $9\frac{3}{4}$ " W., $5\frac{1}{32}$ " D. **List Price Complete \$69.95.**

No. 30B70/600M with Universal Manual Control for any Make or Model.

Stock No. With Custom style Manual Controls.
30B70/622M for Chevrolet (all models) 1941 to '48 incl.
30B70/627M for Ford-Mercury (all models) 1942 to '48 incl.

30B70/623M for Chrysler, Dodge, Plymouth, DeSoto (all models) 1941 to present. List Price \$69.95.

Dealers Net, Each, Complete. \$50.48 Lots of 6, Each **\$47.12** Ready to Install.....

MODELS CR8 AND CR12 WITH PUSH-BUTTON CUSTOM OR UNIVERSAL CONTROLS

MODEL CR8. Superhet with the 5 tubes plus rectifier and all other features of the CR6 above. Plus Automatic Tuning on 6 Push-Buttons. Station indexing simple, accurate and positive. A large 7" Electro-dynamic speaker gives exceptional Fidelity and Power—installs behind instrument panel grille provided in practically all cars. Overall case size of the CR8 is $7\frac{1}{32}$ " H., $9\frac{3}{4}$ " W., $5\frac{1}{32}$ " D.

Compact enough for most any car. Custom style control mounts in instrument panel as though original equipment —the universal type mounts under dash of any make or Model. **List Price Complete \$89.95.**

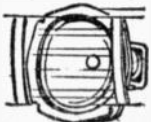
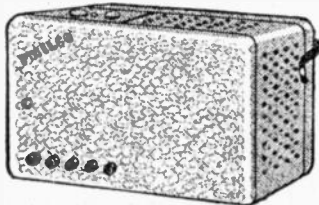
No. 30B69/600A, with universal Push-Button Control for any Make or Model.

Stock No. With Custom style Push-Button Controls.
30B69/622A for Chevrolet (all models) 1941 to '48 incl.

30B69/623A for Dodge, Plymouth, DeSoto Chrysler (all models) 1941 to present.

30B69/627A for Ford-Mercury (all models) 1942 to 1948.

Dealers Net, Each, Complete. \$61.11 Lots of 6, Each **\$57.50** Ready to Install.....



This large 7" Electro-dynamic speaker is concealed behind instrument panel grille. Gives Exceptional Fidelity and Power.



CUSTOM STYLE PUSH B CONTROL



UNIVERSAL TYPE PUSH B CONTROL

MODEL CR12. America's finest. A 7 tube plus rectifier Super-het, with Push-Pull Beam power output for power and Tone comparable to the finer Home sets. Attractive steel case $7\frac{1}{32}$ " H, $9\frac{3}{4}$ " W, $5\frac{1}{32}$ " D, is designed for easy installation in most any car. The large 7" Electro-dynamic speaker, designed for exceptional fidelity, installs behind instrument panel grille provided in most cars. Supplied with Automatic tuning Push-Button Controls —your choice of custom style, designed for the instrument panel as though original equipment or Universal type that mounts under dash of Any Make or Model Car. **List Price Complete \$99.50.**

No. 30B71/600A with Universal Push-Button Control for Any Make or Model.

Stock No. With Custom Style Push-Button Controls
30B71/622A for Chevrolet (all models) 1941 to '48 incl.

30B71/623A for Dodge, Plymouth, DeSoto, Chrysler (all models) 1941 to present.

30B71/627A for Ford, Mercury (all models) 1942 to 48.

Dealers Net, Each, Complete. \$67.62 Lots of 6, Each **\$63.64** Ready to Install.....

PHILCO REAR SEAT SPEAKER

Rear Seat Auto Speakers are now the vogue. (Consists of $6\frac{1}{4}$ " speaker, grille, wire, switch, filter and complete instructions for installation). **\$12.50 List.**

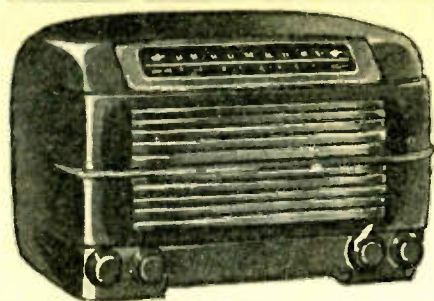
No. 31A72. Rear Seat Speakers for use with Model CR-4.
No. 31A73. Rear Seat Speakers for use with Model CR-6, CR-8 or CR-12.
DEALERS PRICE, \$7.50 CHOICE EACH.....

HANDY PHILCO FOOT CONTROL



Completely automatic Push-Button tuning without taking your hands from the wheel or your eyes from the road. As easy as dimming your headlights. Tune in any station that your Push-Buttons are set for, or switch to manual by simply pressing the Foot Control Knob. For CR-8 and CR-12 only. **\$2.67**
No. 32A1003. NET EACH.....

Headliner Values from Leading Makes

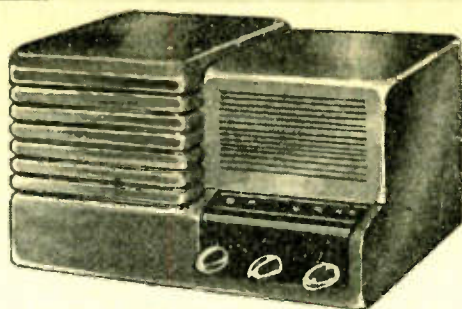


**OLYMPIC Hi-Power
BROADCAST and SHORT WAVE**

An amazingly powerful and efficient receiver that is truly in a class by itself. Gives full console performance — thanks to Olympic's exclusive "true-base" feature which reproduces the full audible tonal range. 5 tubes plus rectifier AC Superheterodyne with tuned RF stage and three-gang tuning condenser. Powerful specially constructed electrodynamic 6x9" oval speaker, full-range tone control, 5 watts power output. Built in "Hyper Q" antenna includes shortwave loop video-phonograph connection for use with record players or with converter unit for FM and television sound.

Tuning Ranges: Standard Broadcast 535-1700 KC (175-550 meters). International Shortwave 5.6-18.2 MC (17-53 meters). This receiver will operate satisfactorily in locations remote from broadcasting stations where many sets will not receive any signals. Ideal for use overseas. In beautifully streamlined grained Walnut Plastic Cabinet. Size, 16" long x 9" high x 7 3/4" deep. Operates on 110-125 volt 60-cycle AC current.

No. 34A159. 3 Lots. **\$36.45**
Net Each... Each... **\$35.95**



**The "MAQUIRE"
STYLED FOR TOMORROW**

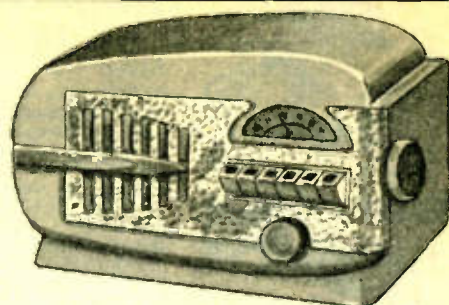
Here is Beauty . . . in style . . . in performance. Features a new and different cabinet with advanced functional design with ultra smart slide rule dial.

In performance too, it is as outstanding as its appearance. A Superheterodyne, with special audio circuit it is extremely high in sensitivity with low signal to noise ratio. With high selectivity it is capable of tuning in distant stations steadily and clearly. Covers broadcast band 535-1620 KC.

Excellent tone is assured from the 5" Alnico dynamic speaker. Automatic volume control. Built in loop antenna eliminates need for external antenna except in most difficult areas. Provides external aerial connection, if needed; also socket for phono.

6 tubes including rectifier incorporates Beam power output. Tubes: 2 12SK7, 1 12SA7, 1 12SQ7, 1 35L6, plus 1 35Z5 power rectifier. Operates from 110-125 volt AC or DC current. Walnut or Ivory plastic cabinet size 12 3/4 x 6 1/2 x 7".

No. 36A90—Walnut. 3 Lots. **\$18.88**
Each... No. 36A89—Ivory. 3 Lots. **\$17.98**
Each...



**BELMONT with EZI-SET
6-STATION PUSH-BUTTON TUNING**

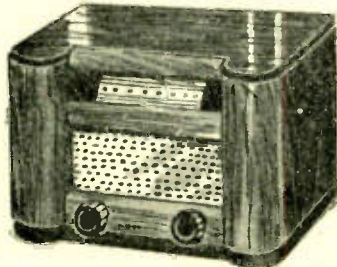
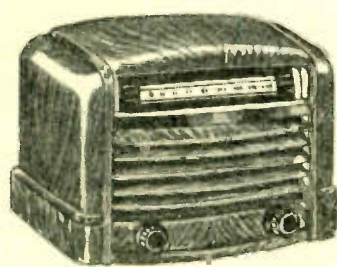
Features Belmont's popular time proven push-button tuner unique in a table radio.

As to appearance it's a Stand-Out. Streamlined for the modern trend, it has universal appeal . . . and there is power packed into the Superheterodyne chassis. Where other small sets attain limited results, this one reaches out and brings in broadcast reception as true and clear as desired.

AC-DC circuit, Beam power output 5" PM dynamic speaker, automatic volume control. Self-contained loop antenna eliminates in most instances, need for external antenna. Push-button tuning for six stations plus manual control. Covers broadcast band 535-1600 KC. Underwriter's approved. 6 tubes including rectifier: 12SK7-I.F., 12SK7-R.F., 12SA7 converter; 12SQ7, 2nd detector AVC 1st audio, 35L6GT output, 35Z5GT rectifier.

Cabinet of ivory plastic with attractive half moon dial. Size 12x7x6 1/2". Operates on 110-125 volt AC-DC current.

No. 31A227. 3 Lots. **\$26.67**
Net Each... Each... **\$25.97**



DeWald a Famous Name in Radio Since 1921

Selected from the "top" numbers in the DeWald line, these especially reflect the skill and craftsmanship that has made DeWald a respected name in radio since 1921.

Streamlined table models that look "right at home" in any room, anywhere! Powerful efficient Superhet. Circuit with Beam-power output. 5 tubes including rectifier: 12SA7, 12SK7, 12SQ7, 50L6 and 35Z5. 5" PM dynamic speaker. Built-in loop aerial, Automatic volume control. Easy-vision illuminated slide-rule dial tunes Standard Broadcast and Police reception. Operates on 110-125 volt AC-DC.

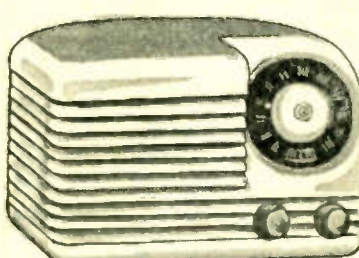
In Plastic Cabinet, size 6 1/2 x 11 x 5 7/8". Figured Walnut or Antique Ivory. 3 Lots. **\$17.95**

No. 36A54—Walnut. **\$18.33**
NET EACH... Each... **\$18.95**

No. 36A53—Ivory. **\$19.33**
NET EACH... Each... **\$21.47**

In Handsome Hardwood Cabinet, hand rubbed Walnut finish. Accomplishes tone quality as only wood cabinets can. Size 6 3/4 x 10 1/2 x 5 3/4". 3 Lots. **\$21.47**

No. 36A55. **\$21.97**
NET EACH... Each...

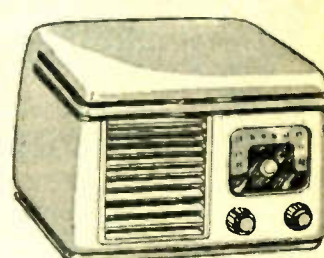


OLYMPIC "Compact"

Small enuf to fit anywhere; big enuf to perform wonderfully well, and styled to streamlined perfection. "Clear-vue" beautiful edge-lighted dial inclined for easy vision tuning. "Hi-power" AC-DC Superheterodyne, 5 tubes including rectifier, 5" Dynamic speaker, built-in "Hyper-Q" antenna. Tubes: 12SA7, 12SK7, 12SQ7, 50L6, 35Z5. Tunes 535 to 1700 KC. Cabinet of beautiful lustrous plastic. Size 12x6 1/2 x 5 3/8". Operates from 110-125 volt AC or DC current. Underwriter's approved.

No. 31A86—Walnut. **\$14.97**
Net Each... 3 Lots. Each... **\$14.47**

No. 31A87—Ivory. **\$15.97**
Net Each... 3 Lots. Each... **\$15.47**



MECK "Trail Blazer"

Looking for a real bargain in radio? A real treasure as the extra set for bedroom, kitchen or rumpus room. Neatly designed plastic cabinet, dial, pilot light, vernier tuning. 5 tubes including rectifier, 4" Alnico 5 PM Speaker. "High-Q" built-in loop antenna with plastic insulation. Automatic volume control. Tubes: 12SK7, 12SA7, 12SQ7, 50L6, 35Z5. Tunes entire Broadcast band. Cabinet of gleaming plastic size 8x5x5". Operates from 110-125 volt AC or DC.

No. 30A166—BLACK. **\$12.45**
Net Each... 6 Lots. Each... **\$11.95**

No. 30A167—IVORY. **\$13.45**
Net Each... 6 Lots. Each... **\$12.95**



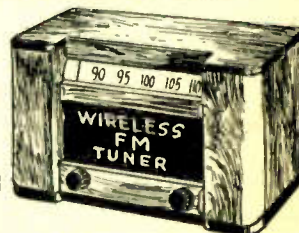
Combines a Reading Lamp with a 5-tube including rectifier super-het Radio in a beautifully streamlined compact Ivory plastic cabinet. Provides glareless, high efficiency light. Eliminates eye strain and no danger of shock or burn.

Built-in antenna does away with unsightly connecting wires. Large size speaker reproduces with clear, sweet tone. Tuning and volume controls easy to adjust while lying down. Radio and light controlled by separate switches.

Hangs over head of bed with straps adjustable for its thickness and protected to avoid scratching. Operates from 110-volt AC-DC current. Complete ready to plug in and operate. **\$21.92**
No. 36A88. Net Each...

DeWald "WIRELESS F.M. TUNER"

**F.M. ON ANY
RADIO
NO WIRING TO
RADIO
NECESSARY
SIMPLY PLUG-IN
AND PLAY**



5 tubes plus rectifier Superhet Circuit AC-DC operation utilizes 3 Iron Core I.F.'s and a new balanced F.M. Detector Circuit. Capable of picking up F.M. stations in most localities without installation of antenna, and converts this signal so that any radio will reproduce F.M. without any wiring to radio. In beautiful hand-rubbed Walnut cabinet. Size 11x6x7 1/2". **\$27.85**
No. 36A69. COMPLETE, EACH...

Astra-Sonic WIRE RECORDER-RADIO-PHONO



FOR THE HOME



FOR BUSINESSES, OFFICES AND INSTITUTIONS

Everything You Want for Recording & Listening . . . Three Great Units in One Combination!

RADIO: Highly selective superhet — superlative tone.
PHONO: Tru-tone crystal pick-up — maximum selectivity.
WIRE RECORDER: Uninterrupted recording up to an hour — two-way automatic shut-off. Combining in one portable unit, a superhet radio, a record player and a wire recorder, the seven tube Astra-Sonic is packed with special features engineered for high fidelity response and ease of operation.

Nothing has been spared to make it a product of exceptional performance. Only the finest of parts have been assembled with painstaking care, into this finest of instruments.

It records directly on the wire with no appreciable loss of quality from its radio, phonograph, or mike. The instrument features complete one-timing erasure, even of overloaded signals: High speed rewind; a two-way automatic shut-off, preventing wire tangle; and the Astra-Sonic Synchronized Timing Meter which eliminates guesswork in finding a specific place on the wire.

The perfect unit for homes, offices, businesses and institutions, the Astra-Sonic is equipped with a sturdy, smart looking crystal mike, a nine-foot line cord, two spools of Astra-Sonic recording wire and a long-life phono needle. Housed in a sturdily constructed luggage type cabinet, covered in the finest quality simulated leather.

Operates on 105-120 Volts AC Only.
 No. 31B219. YOUR COST. COMPLETE.



The Astra-Sonic provides outlets for external speaker and external amplifier jacks. An F.M. input jack is provided for recording from an external F.M. tuner. The unit is built to conform to R.M.A. standards. Amplifier and recording head response is essentially flat from 75 to 7,500 cycles and performance is hum and flutter free.

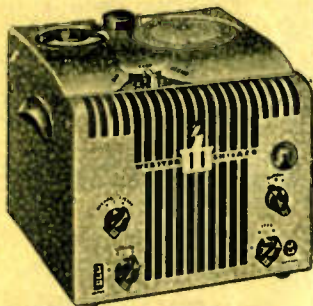
\$149.50

WEBSTER-CHICAGO MODEL 81

WIRE RECORDER

Has every feature of the portable Model 80 so enthusiastically accepted for use in business, in the professions and for home entertainment. Housed in a metal table model cabinet attractively finished in Hammerloid enamel with gray and maroon trim, it blends in with any surroundings. Like the Model 80 its features are:

Recording and Playback amplifier with 4 dual purpose tubes, including rectifier . . . full-range tone and volume control . . . 5 1/4" P.M. Speaker . . . magic eye tube recording level indicator . . . constant uniform speed induction type 4-pole motor . . . triple purpose recording head for Record, Playback and Erase. Microphone is high impedance crystal type—may be held in hand, suspended or placed on table or floor, 8-foot cord.



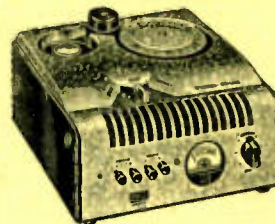
Furnished complete, ready to use with one 15-minute spool wire. Size 12 1/2 x 11 1/2 x 9 7/8". Plastic cover to protect when not in use is included. For 105-120 Volt AC only.
 No. 31A96. YOUR COST.

\$114.50

WEBSTER-CHICAGO MODEL 80 PORTABLE WIRE RECORDER
 Like above, in attractive Luggage type carrying case. Complete with three spools recording wire (two 15-minute, and one 30-minute).
 No. 30A162. Size closed, 17 3/8 x 11 3/8 x 7 1/2". **\$149.50**

Webster-Chicago WC286 Wire Conditioner. For removing over-recorded signals from wire.
 Stock No. 16A592. NET EACH. **\$1.03**

CONVERT ANY RADIO TO A WIRE-RECORDER COMBINATION WITH WEBSTER-CHICAGO MODEL 78



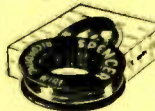
Consist of the famous simple-to-operate Webster-Chicago wire transport mechanism, pre-amplifier, interstage amplifier, oscillator and power supply—all complete in a one-unit attractive metal case size 11x11 3/4 x 6" . . . ideally suited for console installation or as companion piece to table radio or amplifier. Provided are meter type recording level indicator and push-button control for "record" or "listen" on mike, radio, record-changer. "Record", "rewind" or "erase" operations are easily controlled. Complete with microphone and one spool of wire, it is ready "as is" to record by merely plugging into any AC outlet. To "playback" merely connect output to any radio or amplifier. Connecting cables, plugs and complete instructions are furnished. For 105-120 Volt AC only.
 No. 31A230. Complete, Ready to Connect. Net. **\$99.50**

BUILD "YOUR OWN" WIRE RECORDER WITH THE WEBSTER-CHICAGO MODEL 79 FOUNDATION UNIT . . . BIG SAVING!
 This foundation unit, identical with the mechanism in models 78, 80 and 81 gives you the "heart" of a fine wire recorder. Consists of complete reversible wire-transporting mechanism; triple-purpose head which records, plays back and erases; winding wire guide; special oscillator coil for erasing and a 15-minute spool of wire. Supplied assembled with detailed schematics and instructions, parts lists, etc., for audio amplifier and oscillator stage necessary.
 No. 30A160. **\$44.10**
 YOUR COST, EACH.

WEBSTER-CHICAGO RECORDING WIRE

No. 14A587—15-Minute Spool.	Net Each . . . \$2.00	10 @ Each . . . \$1.40
No. 14A588—30-Minute Spool.	Net Each . . . 3.00	10 @ Each . . . 2.10
No. 14A589—1-Hour Spool.	Net Each . . . 5.00	10 @ Each . . . 3.50

SPENCER RMA STANDARD RECORDING WIRE



Acclaimed by wire recording manufacturers and users as the finest magnetic recording wire available. Made of precision drawn stainless steel—the result of months of research by skilled specialists in the precision wire field. Spooled on RMA standard metal spools to fit all standard wire recorders, such as Webster-Chicago, Majestic, Air King, Astra-Sonic. Individually boxed with an instruction sheet that tells how to get the best results.

No. 14A656—1/4-HOUR SPOOL.	NET EACH \$1.25
No. 14A657—1/2-HOUR SPOOL.	NET EACH 1.88
No. 14A658—1-HOUR SPOOL.	NET EACH 3.15

EMPTY RMA STANDARD WIRE SPOOL

Metal Spool—Fits Webster-Chicago and other standard wire recorders.
 Stock No. 14A655. NET EACH. **45c**

RECORDING TELEPHONE CONVERSATIONS ARE NOW POSSIBLE



With the Electro Teleducer or the Electro Tele-Pickup—inductive pickup devices that attach to your recorder in place of the microphone. Both sides of the conversation are reproduced. There is no "wiring" or direct connection to your telephone and its regular operation is not affected in any way. All you need do is place which ever style of pickup unit you choose in close proximity to the induction coil of the telephone instrument. Output of the pickup is approximately —50 db., sufficient for any recorder using a common high impedance crystal or dynamic type microphone. Must be used in accordance with latest FCC regulations.

Model 1175 Teleducer. Fits under French type telephones. Has 12-foot Shielded Cable.	\$10.29
No. 17B680. YOUR COST.	
Model 1125 Tele-Pickup. For wall type or ringer box type telephones. Has 6-foot Shielded Cable.	\$4.12
No. 17B681. YOUR COST.	



PORTABLE RECORDER- RADIO AND PHONO

PROVIDES FACILITIES FOR:

- ★ Recording voice or music through microphone.
- ★ Recording from self-contained radio set.
- ★ Playback of recorded programs.
- ★ Playing of ANY 10" or 12" standard record.
- ★ P.A. Amplifier for Speech Instruction.
- ★ P.A. Amplifier for small group meetings.
- ★ Fine radio reception.

COMPLETE IN ONE PORTABLE UNIT

The "Meissner" Portable Phono - Radio - Recorder is truly a FOUR-IN-ONE INSTRUMENT—with each unit providing A-1 service for its particular function: "Super-Het" Broadcast Receiver with built-in loop is highly selective and sensitive—has antenna connection for outside



serial for long-distance reception. Recorder-Record Player—2-SPEED, heavy duty recording-playback motor with Crystal cutting head for recording up to 10-inch records, and light weight Crystal Pick-up for playing any type of recording or standard record up to 12-inch. Neon indicators show "Normal" and "Overload" when recording—enable accurate recording of incoming radio programs—help make GOOD recordings of singing or musical groups. Crystal Microphone with "hand or stand" base for recording or P.A. use. Extra speaker may be connected to amplifier if desired—plug-in connection provided on panel. Storage Compartment for records or record blanks is built into lid of portable cabinet. Safety storage compartment for Microphone provided in cabinet. COMPLETE with 7-TUBES, Microphone and cable; in heavy duty portable carrying case with luggage-type covering, size 19 1/2 x 19 1/2 x 9 1/4". Wt. 40 lbs. Retail Price \$174.50.

Stock No. 30A170. "MEISSNER." List Price \$174.50. **\$111.28**
 Radio-Phono-Recorder-P.A. System. Net.