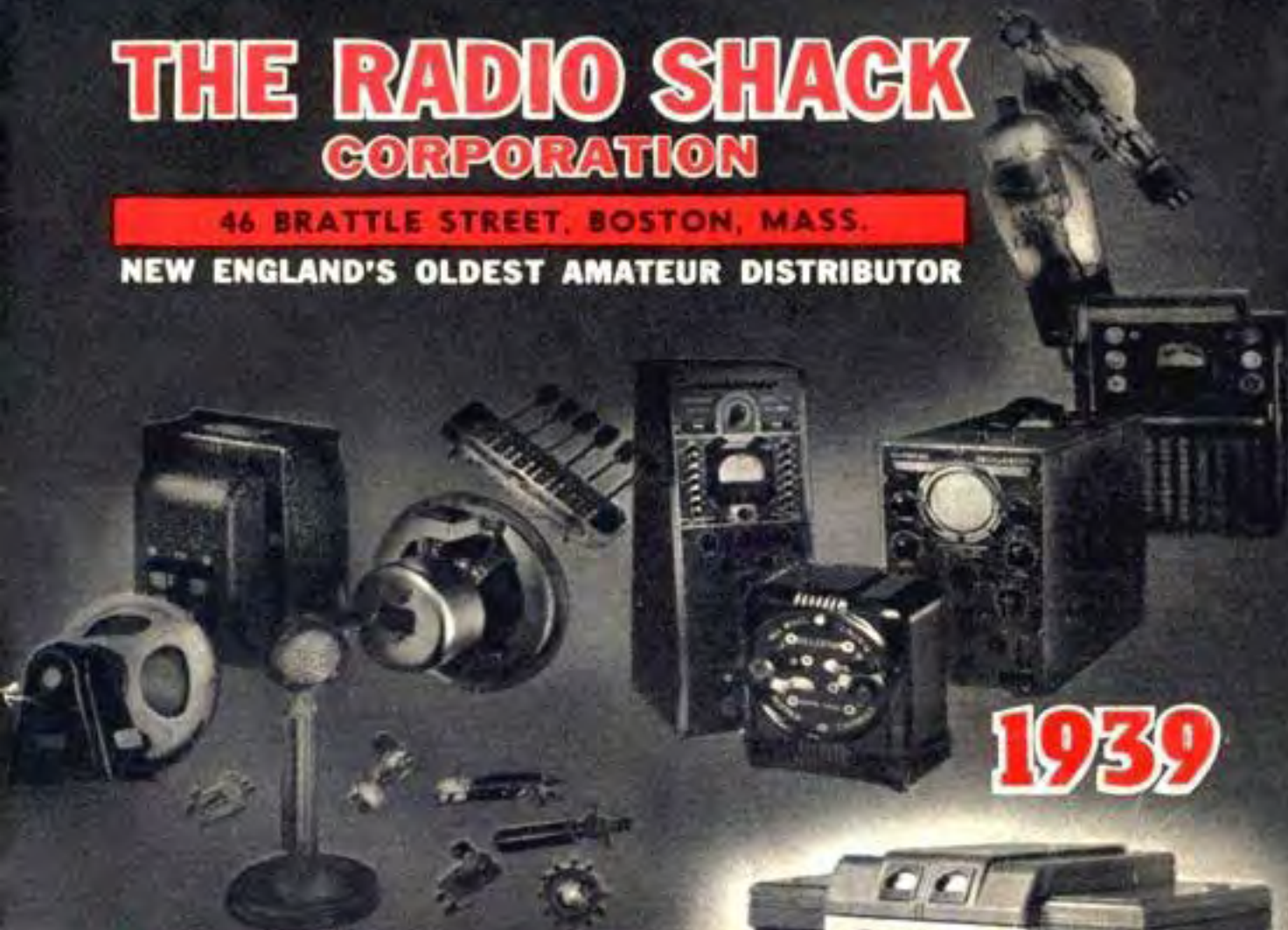


THE RADIO SHACK CORPORATION

46 BRATTLE STREET, BOSTON, MASS.

NEW ENGLAND'S OLDEST AMATEUR DISTRIBUTOR



1939

WHOLESALE DISTRIBUTORS

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EQUIPMENT

AMATEUR and COMMUNICATION

SUPPLIES

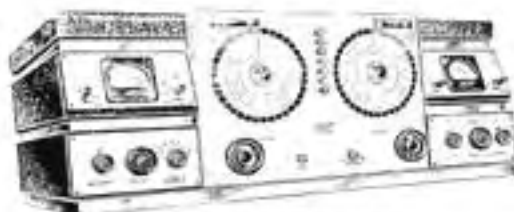
SOUND SYSTEMS

and SERVICE PARTS

LIBERAL TIME PAYMENTS
ATTRACTIVE TRADE-IN ALLOWANCES



the hallicrafter dual diversity receiver



DUAL DIVERSITY

- *The Reduction of Fading to Negligible Proportions.
- *An Increase of Average Signal Strength Over Any Receiver.
- *Improvement of Signal to Noise Ratio Over Any Single Receiver.
- *Reduction of Heterodyne Beat Note Interference.

In building the SKYRIDER DIVERSITY, the principles of functional design were faithfully adhered to. Every single component received especial attention from the designing engineers, and no expense or effort was spared to bring the SKYRIDER DIVERSITY to a high standard of electrical and mechanical perfection worthy of so advanced a receiving system.

INFINITE ADJACENT CHANNEL REJECTION

Another advantage of the SKYRIDER DIVERSITY aside from its Diversity Action is in the Infinite Rejection Circuit embodied in this system.

It is rather generally understood that selectivity can only be increased to a certain practical degree beyond which phone reception becomes unintelligible. This practical limit of selectivity is not great enough to prevent adjacent channel interference. However, with the Infinite Rejection Circuit, an interfering signal may be completely eliminated. It is so designed that, with a single control, the "rejection slots" may be moved in unison from 20 KC of resonance to within 3 KC of the signal being received, and simply by tuning the rejector to the offending signal, it can be entirely eliminated.

FEATURES

- *Diversity Reception throughout its tuning range.
- *6 Bands covering from 545 KC to 44 MC and there are 25 tubes in the complete system.
- *Separate "Diversity Action" meters.
- *Average sensitivity of better than 1 microvolt.
- *2 stages of RF amplification in each receiving section.
- *500 and/or 1,000 cycle Hetrotone oscillator for CW reception.
- *Audio amplifier output of 10 watts. (Tuner only 50 milliwatts.)
- *Carrier average output meter.
- *Current equalizing meter.
- *INFINITE ADJACENT CHANNEL REJECTOR.
- *Separate electro-mechanical band spread control.

DESCRIPTION

TUBE COMPLEMENT—2-1851, 1st R.F.; 2-1851, 2nd R.F.; 2-617, 1st detector; 2-6K7, 1st I.F.; 2-6L7, 2nd I.F.; 2-6H6 A.V.C.; 2nd detector; 2-6H6, noise limiters; 2-6J7, meter amplifiers; 1-6K6, H.F.O.; 1-6L6, hetrotone; 1-6J7, meter amplifier; 1-6J5, 1st audio; 1-6J5, 2nd audio; 2-2A3, push-pull output stage.
MODEL DD-1 TUNER. Dimensions—29 1/2" wide, 11 1/4" high, 19 1/2" deep. Complete with matched set of Raytheon tubes.
Cat. No. 88204—DD-1 Tuner only, less diversity action meter, audio amplifier, power supply, and speaker.
Net Price **\$300.00**

CONSOLE SPEAKER CABINET

Speaker cabinet for the SKYRIDER DIVERSITY housing a giant 15" base reflex Jensen speaker is shown on the front cover of this catalog. Provision for housing a power supply and audio amplifier is also made in this cabinet. An arm rest is provided in the cabinet for fine tuning of the Diversity receiver. The special walnut cover shown encloses the Dual Diversity meters. The SKYRIDER DIVERSITY used with the special speaker cabinet and matching walnut top thus becomes a radio receiver that could be used in the finest home surroundings. The SKYRIDER DIVERSITY with walnut speaker cabinet and matching top complete, nothing else to buy.

Cat. No. 88205
Net Price **\$500.00**
 Write for special free booklet describing the SKYRIDER DIVERSITY.

A DUAL DIVERSITY RECEIVING SET

Diversity reception is not entirely new to radio engineers. Commercial radio stations have built diversity receiving systems at great expense with striking improvements in the quality of short-wave reception.

The SKYRIDER DIVERSITY is a single control DUAL DIVERSITY receiving system, consisting of two complete R.F., I.F., and second detector circuits with a common R.F. heterodyne oscillator, common A.V.C. and one audio amplifier.

The principal advantages of diversity reception are:



"DIVERSITY ACTION" METERS

Two carrier level meters mounted on a harmonizing black crystal case, indicates strength of signal on the individual receiver circuits. Designed to mount on top of receiver.

Cat. No. 88203—With cable.
Net Price **\$20.00**



AUDIO AMPLIFIER AND POWER SUPPLY

Mounted in individual, ventilated, chrome-trimmed cabinets to match the diversity receiver. By placing one on each side of the receiver, a beautiful symmetrical appearance results. Size of each—7 1/2" wide, 10 1/2" high, 15 1/2" deep.

Cat. No. 88201—Audio Amplifier.
Net Price **\$50.00**

Cat. No. 88202—Power Supply.
Net Price **\$40.00**

The above prices include Raytheon tubes.



DYNAMIC SPEAKER

12" PM Dynamic Speaker in matching chrome trimmed cabinet built to Hallicrafter's specifications by Jensen. Cabinet size—15 1/2" wide, 18" high, 9 1/4" deep.

Cat. No. 88200
Net Price **\$12.00**

THE RADIO SHACK CORPORATION

FORTY-SIX BRATTLE STREET, BOSTON

Telephone CAPitol 7631

Distributors RADIO AND ELECTRONIC EQUIPMENT

Greetings, Friends

We here at the Radio Shack want to take this opportunity to say "hello" at one time to all who receive this first Radio Shack catalog, and to thank the many thousands of customers who, in the past seventeen years, have made our establishment the headquarters for their radio supplies.

This catalog is intended to serve as a comprehensive and accurate listing of what we believe to be the essential and unusual requirements of the radio amateur, the serviceman, laboratories, industries and schools. In the field of electronics we have had the pleasure of coming into contact with and serving in the capacity of supplier to, the largest of laboratories and schools where intensive research has been and is now being carried on. This has gained for us a wide understanding of the many problems in the field of radio physics and other branches of radio science; besides which, in order to render efficient service to accounts of this character, it has been necessary to build up a reservoir of information which has proved invaluable. We are happy to offer this same service and information to you.

In the way of service, it is policy for any house--large or small, old or new--to strive to be efficient and to handle the demands of its customers as promptly as possible. To boast of our service in any respect would be so much useless verbiage, service having been the feature of our growth.

With this catalog, we have evolved a very careful stocking system which, in itself, should take care of sending your order back to you the same day it is received.

So far as specials are concerned, here and there, scattered throughout the book, will be found items of unusual value with no compromise in quality, made possible through careful planning and large purchases.

To be of service to our amateur friends, a staff of trained men--all "hams"--are in constant attendance and they, at all times, will be happy to go over amateur problems. These same men will correspond with you through the mail when necessary.

A cordial invitation is extended to all amateurs and experimenters--in fact, the door is open at all times to everyone--and we will be happy to have you spend as much time as you have at your disposal with us, in an atmosphere of complete friendliness. Many years ago we painted the word "welcome" on the doormat, and our establishment has been a meeting place ever since. That is how it is to be kept. The latch string is always out.

Cordially yours,

THE RADIO SHACK Corporation

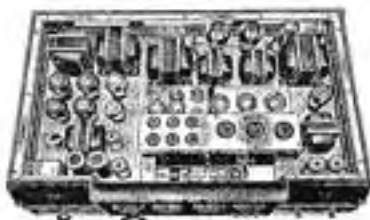
the hallicrafter transmitters

MODELS HF-1 AND HF-2 TRANSMITTERS

*Amateur transmitters, heretofore, have mostly been built by their owners from their own or suggested designs, or purchased in kit form and assembled. While many of these rigs are models of workman-like efficiency, the home-built transmitter design must suffer from lack of facilities. In building the first and subsequent transmitters of the Hallicrafters' line, the Hallicrafters engineers approached their problem from a fresh viewpoint. They visualized an ideal amateur transmitter, so simple that a novice could operate it—with adequate power at extremely conservative ratings—ruggedly built in the "commercial" style.

*With this goal constantly in mind, they attacked their problem, ignoring conventional transmitter construction and adhering strictly to the principles of functional design. The results of their efforts mark a new departure in transmitter design that no more resembles the conventional "kit" transmitter than the modern streamlined plane can be compared to the wartime "crate" in dependability. In performance, or in appearance. However, at no time have the designing engineers, themselves amateurs, lost sight of the amateur's requirements—on the contrary, they have closely approached the ideal amateur transmitter they set out to build.

*The Model HT Transmitter is conservatively rated at 100 watts CW and 50 watts Phone Carrier output, but, in operation is equivalent to the performance of the 75 or 100 watts "input" kit-constructed Phone Transmitter. Its operation has been simplified to a degree that makes it understandable even to a beginner. No detail has been neglected to add to its dependability—generously oversized transformers and other components are used—the design was built around the latest, most advanced type Raytheon Tubes; its designers leaned backward in conservatism to give the amateur the very utmost in dependability.



INSIDE
TOP
VIEW

The Model HT Transmitter is available for CW operation only (100 Watts Output) and for both Phone and CW operation (50 Watts Phone Carrier, 100 Watts CW) on 10, 20 and 40 meter bands. (As a matter of fact, operation for any three bands can be supplied between 10 and 160 meters in any arrangement required: as 80-40-20 meters, or 40-20-10 meters, or 160-40-20 meters with single crystal. Where two crystal operation is required as on 80-20-10, or 160-40-10, or 160-20-10, the price will be slightly higher.)

- ### SPECIFICATIONS
- **MODEL HT-1 PHONE CW.** 50 Watts Phone Carrier (slightly reduced at 30 MC). 100 Watts CW output. Frequency Range 10-20-40 meters crystal controlled on one frequency per band. Frequency (Band) Switching by single control in front panel, switching all circuits. Individual Tanks are knob controlled inside the cabinet and adjusted for the particular frequency for that band.
 - **TUBES.** 6A6—Crystal Oscillator, 1st Doubler. 6A6—Second Doubler. RK47—Final Stage Power Amplifier.
 - **MODULATOR.** 6J7—1st Audio. 6J5—2nd Audio. 4-6L6—(Push-Pull Parallel) running Class AB giving 50 Watts of Audio. Modulation capability 100 per cent. Fidelity—plus or minus 2 DB 50 to 3000 cycles.
 - **RECTIFIERS.** 2-5Z5, 1-50, 2-866.
 - **METERS.** (1) Cathode Current Meters (Switched to Modulator Current on Phone). (2) Grid Current, final. (3) Plate Current, final.
 - **CONTROLS.** Filament Switch. Plate Switch. Phone—CW Switch. Band Switch (Interstage Tuning Controls inside Cabinet). Gain Control. Standby Switch.
 - **CABINET.** Flame-Welded, Painted Steel with provision for ample ventilation.
 - **OUTPUT TERMINALS.** From adjustable pick-up coils on separate final plate tank coils. Proper pick-up coil and plate tank automatically selected by Band Switch.
 - **EQUIPMENT NEEDED FOR OPERATION.** Microphone (diaphragm type, down not more than 40 DB, Astatic Model D-104 recommended). Key, Bias Battery, and Antenna. (We will gladly furnish suggestions for antenna design and construction.) Dimensions—29 1/2" wide, 11 1/2" high, 19 1/4" deep.

MODEL HT-1—complete with tubes, coils for three bands, modulator, and one 40 meter crystal.
Cat. No. **\$8214.**
Net Price **\$195.00**

MODEL HT-2—for CW only as described above, complete with tubes, coils for three bands, and one 40 meter crystal, less modulator.
Cat. No. **\$8215.**
Net Price **\$175.00**

MODEL HT3 MARINE TRANSMITTER RECEIVER

The type HT3 consists of a complete 50 watt radio-telephone transmitter, a sensitive receiver, and necessary power units built into a single cabinet and necessitating only a 12 volt storage battery and an antenna for operation.

GENERAL SPECIFICATIONS

TRANSMITTER. Carrier output—50 watts. Frequency coverage—any three frequencies in the Marine Band 2100-2900 KC. Frequency control—low drift crystal controlled oscillator. Tuning—tuning adjustments set and locked upon installation. Subsequent changes of frequency by switch on front panel. Modulation—substantially complete modulation obtained by high level modulator driven directly from carbon microphone. Tubes—1-6E6 crystal oscillator; 2-RK35 Class C amplifiers; 4-6L6G Modulators. Antenna—provision is made for matching an antenna of reasonable length as encountered in Marine service. A relay inside the cabinet switches the antenna from receiver to transmitter when operating.

RECEIVER. Tubes used—1-6K7 r.f. stage; 1-6L7 1st detector; 1-6J5 H.F. oscillator; 1-6K7 I.F. stage; 1-6QY 2nd detector, AVC and 1st audio. Frequency coverage—Band 1—Standard Broadcast; Band 2—2100-2900 KC.

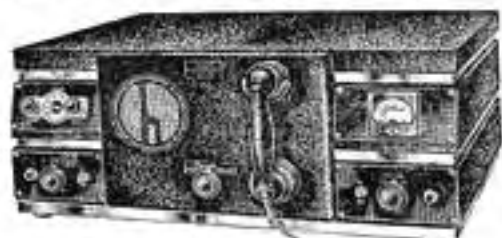
OUTPUT. 3 watts—normally fed to loud speaker on front panel, but switched to telephone receiver during operation.

POWER SUPPLY. Receiver and transmitter filaments supplied directly from 12 volt battery. Receiver plate supply furnished by vibrator operating from 12 volt battery. Transmitter plate power furnished by 450 volt dynamotor of rugged aircraft construction. Provision made for operation from other DC voltages to order.

Cat. No. **\$8216** Type HT3 Complete.

Net Price **\$390.00**

(3 crystals for marine channel not included in above price. Frequencies to be determined by service and location of purchaser.)



CONTROLS AND OPERATION. On the front panel are mounted a loud speaker, as well as a telephone handset, so arranged that the output of the receiver is normally connected to the speaker. When the handset is lifted from its hook, the receiver output is transferred to the earpiece of the handset. Transmitting is accomplished by pressing a button in the handle of the handset which starts the transmitter. A single switch on the front panel places the receiver in operation and turns on the transmitter filaments. Subsequent control is as described above.

One meter is provided for checking the transmitter operation and for tuning purposes. The meter is arranged to be switched into the various circuits. Other panel controls are the receiver volume control and the frequency switch.

Power drain from 12 volt supply—0.5 amps. for receiver and transmitter filaments during standby. 35 amps. while transmitting. Current drain from other voltage roughly in inverse proportion. Dimensions—29 1/2" wide, 11 1/2" high, 19 1/4" deep. Weight—155 lbs. complete.

the hallicrafter communication receivers

THE SKYRIDER 5-10

- * Noise Limiter.
- * Improved Band Spread.
- * Built-in Speaker.
- * Socket for SM20 Carrier.
- * Level Meter.
- * Send-Receive Switch.
- * 8 Tubes.
- * RK 1851 Stage of Pre-selection.
- * Continuous Coverage 27 MC to 68 MC on 2 Bands.
- * 1600 KC I.F. Amplification.



S-21

This receiver is designed for the amateur who needs and wants the exacting performance required for superior ultra high frequency reception. The S kyrider 5-10 covers the radio spectrum from 68 MC to 27 MC (4.4 to 11.1) in two bands with a degree of sensitivity and selectivity that offers unparalleled reception of the ultra high frequencies.

The recently developed RK 1851 tube, with a gain increase of 8 to 1, is used as an R.F. amplifier through which an ultra high frequency sensitivity of better than 1 microvolt is obtained for this receiver.

The coverage by bands is as follows: Band 1—27 MC to 43 MC, Band 2—43 MC to 68 MC. The separate Band Spread Dial provides easier and more accurate tuning, and equipped as it is with an inertia tuning control, making tuning practically effortless.

1 stage of 1600 KC I.F. amplification is used, providing a band width of 39 KC. at 15 times down. With this selectivity, even frequency modulated 5 meter signals are clearly understandable. Mounted in sturdy steel cabinets finished in grey. 110-120 Volts, 50-60 cycle current, 18 1/2" wide, 9 1/2" deep, 8 1/2" high.

Tube Complement—1851, R.F. amplifier; 6L7, first detector; 6J5, high frequency oscillator; 6P7, I.F. amplifier; 6Q7, second detector, AVC, first audio; 6H6, noise limiter; 6V6, power output tube; 80, rectifier.

Cat. No. S8206—S kyrider 5-10, complete with tubes and speaker

Net Price **\$69.50**

Cat. No. S8207—SM carrier level meter

Net Price **\$10.00**

This receiver may be purchased on the deferred payment plan. For details see Page 38.

THE SKYRIDER MARINE



MARINE S-22

- * Coverage—16.2 to 2150 meters (140 KC to 18.5 MC).
- * 4 Bands.
- * 8 Tubes.
- * Automatic Volume Control.
- * Individual Coils for each Band.
- * AF Gain Control.
- * Band Switch.
- * Sensitivity Control.
- * "S" Meter Terminals.
- * Tone Control.
- * Head Phone Jack.
- * Beat Frequency Oscillator.
- * Built-in Speaker.

An 8-Tube receiver designed especially for the commercial frequencies that can be readily adapted for marine work. In its design, special emphasis has been placed on 600 meter and 700 meter operation. Tunes from 16.2 to 2150 meters (18.5 MC to 140 KC) on 4 Bands as follows: Band No. 1—2150 to 845 meters (140 KC to 18.5 MC), Band No. 2—845 to 199 meters (140 KC to 1510 KC), Band No. 3—177 to 53 meters (1.7 MC to 5.8 MC), Band No. 4—54.5 to 16.2 meters (5.8 MC to 18.5 MC). Sensitivity and selectivity are excellent. Improved image rejection at the higher frequencies is achieved through the use of 1600 KC—1.5% transformers. The directly calibrated 338° Main Tuning Dial eliminates the use of complicated charts and tables, and an efficient mechanical band spread with separate dial provides easy and simplified tuning. Mounted in sturdy metal cabinet finished in black crystal. For operation on 110 Volt AC or DC.

Tube Complement—6K7, R.F. amplifier; 6L7, first detector; 6J5, high frequency oscillator; 6K7, I.F. amplifier; 6Q7, second detector, AVC and first audio; 251A, power output tube; 25Z5, rectifier; 6J5, R.F. O. Cat. No. S8209—S kyrider Marine, including tubes and speaker.

Net Price **\$64.50**

This receiver may be purchased on the deferred payment plan. For details see Page 38.

THE SKY BUDDY

- * 5 Tubes.
- * 3 Bands.
- * Complete Coverage (18.4 MC to 545 KC)
- * Built-in Speaker.
- * Phone Jack.
- * Send-Receive Switch.
- * AVC Switch.
- * Separate Band Spread Dial.
- * Beat Frequency Oscillator.
- * Pitch Control.



SKY BUDDY S-19

The S ky Buddy is an amateur's receiver in every respect, covering everything on the air from 18.4 MC to 545 KC including the 20, 40, 80, and 160 meter amateur bands. Band No. 1 (545 KC to 1800 KC), Band No. 2 (1.7 MC to 5.8 MC), Band No. 3 (5.8 MC to 18.40 MC).

The S ky Buddy is an AC set with conventional Power Transformer Construction. Controls incorporated are: AF Gain Control, Band Switch, Combined AVC and Beat Oscillator Switch with AVC on, AVC off, and Beat Oscillator on with AVC off positions; Phone Jack, Send-Receive Switch; Pitch Control. The Speaker is an integral part of the receiver, nothing else to buy. Band Spread is better than A.R.R.L. Handbook recommendations for band spread against scale calibration. Equipped for either Doublet or Marconi Antenna. For 110-120 Volt, 50-60 cycle, AC current only. Dimensions: 17 1/2" long, 8 1/2" deep and 8 1/2" high.

Tube Complement—6K8, first detector and oscillator; 6L7, I.F. Amplifier, BFO; 6Q7, second detector, AVC, first audio; 6K6, power output tube; 80, rectifier.

Cat. No. S8208—S ky Buddy, complete with speaker and tubes.

Net Price **\$29.50**

This receiver may be purchased on the deferred payment plan. For details see Page 38.

THE SKY CHALLENGER II



- * Recessed Main Tuning Dial.
- * 1000° Spiral Band Spread.
- * 38 MC to 540 KC (7.9 to 557 Meters).
- * Iron Core I.F.'s.
- * "S" Meter Terminals.
- * Doublet or Marconi Antenna.
- * Crystal Filter Circuit.

AMERICA'S GREATEST COMMUNICATIONS RECEIVER VALUE

This receiver offers the amateur and short wave listener a quality of reception that is far beyond its modest price, incorporating as it does many of the exclusive features found on the higher priced Hallicrafters receivers.

The Infinite Image Rejection is an exclusive Hallicrafters development that contributes largely to its superior performance. An illuminated selector scale is calibrated for image interference rejection.

The famous 1000° Spiral Electrical Band Spread used on this receiver offers the amateur a Band Spread that equals or exceeds the requirements of the A.R.R.L. Handbook on all bands, mechanically smooth.

Tune Control, Send-Receive Switch, A.F. Gain Control, Phone Jack, AVC Switch, Beat Oscillator, Crystal Filter Circuit, Phasing Control, Pitch Control, R.F. Gain Control, Provided for use of either Doublet or Marconi Antenna, and an auxiliary "S" meter.

The SKY CHALLENGER II tunes from 38 MC to 540 KC (7.9 to 557 meters) on five bands, offering complete coverage from the top of the broadcast band through the 10 meter band, with sensitivity and selectivity of a high order.

Tubes used include 6K7 R.F.; 6L7 first detector mixer; 6J5G oscillator; 6K7 first I.F.; 6K7 second I.F.; 6Q7G second detector; 6J7 beat frequency oscillator; 6T6G output tube; 80 rectifier.

Speaker output arranged for both 500 or 5000 ohms. 110-120 Volts, 50-60 cycle. Cabinet size: 9 1/2" high, 21" wide by 11" deep.

Cat. No. S8210—S ky Challenger II with tubes, less crystal and speaker

Net Price **\$77.00**

Cat. No. S8211—S ky Challenger II with tubes, and crystal, less speaker

Net Price **\$99.00**

8" FM Dynamic Speaker in cabinet, for the above receiver.

Cat. No. S8212

Net Price **\$10.00**

Model SM-18—"S" Meter in separate meter housing.

Cat. No. S8213

Net Price **\$10.00**

This receiver may be purchased on the deferred payment plan. For details see Page 38.

COMMUNICATION RECEIVERS — TUBES AND ACCESSORIES



For other receiver as described, supplied with a Jensen 12" High Fidelity Speaker add \$15.00

HAMMARLUND "SUPER-PRO"

A 16-tube superheterodyne, designed to meet every rigid specification of the professional operator and the amateur enthusiast.

Two stages of tuned R.F. in all bands, permitting maximum image suppression. Continuous variable selectivity from 2 to 16 kc. Sensitivity is so great and fidelity so faithful that many large broadcasting stations use the receiver exclusively for telephonic purposes. Another feature is the band spread system with a 12 micro condenser which spreads each amateur band over practically the entire dial. A frequency tuning condenser and a 12 to 1 ratio direct reading dial is calibrated in megacycles and kilocycles with accuracy of 1/2%. Other features include four air-tuned I.F. transformer stages, audio stages, variable tuning meter; C.W. Modulation switch. Receiver in metal cabinet is 18 1/2" wide by 7 1/2" deep and 10 1/2" high. Power supply in metal cabinet is 12" wide, 2 1/2" deep and 10 1/2" high. For 110 volt 60 cycles.

The "Super-Pro" is supplied in two combinations of frequency coverage either 7.5 to 300 meters, or 15 to 300 meters. Specify when ordering.

Cat. No. **55250** Type with two Super-Pro with Jensen 12" Dynamic Speaker. Complete with matched set of tubes. **Net Price \$243.00**

Cat. No. **55251** Type SP-110X, complete as described above, but with Crystal Filter. **Net Price \$261.00**

RME-69 COMMUNICATION RECEIVER

This simple signal superheterodyne receiver was designed and built for communication purposes where exacting requirements must be met. Full electrical band spread maintaining a separate, distinct band spread action. Individual dial operation, two dials, a broadcast and a band spread are featured in this receiver. Six band tuning range, having a continuous frequency range from 500 kc to 32,000 kc (30 to 550 meters). Calibration held in exceedingly close limit. Calibrated decibel-R meter, shown in the circuit affording a continuous indication of incoming signal strength. Setting also as an output meter in checking IF frequency alignment. Calibrated in decibels and in the common R values. Built-in monitor circuit, serving as a send-receive switch. Fixed gain output to monitor phone and CW quality when transmitter is on the air. IF transformers, set for optimum coupling value consistent with desired sensitivity and highest gain.

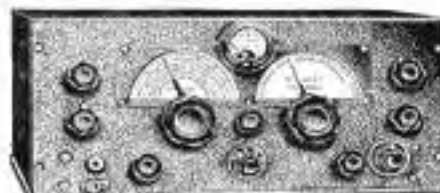
Tube complemented is: 1st RF-6BK; 1st Det-6C6; I.F. 2-6D6; 2nd Det-6BK; 2nd Det-6BK; Audio-12; Rect.-80. Tubes included with each receiver are shown used for final laboratory checks, assuming perfect alignment and adjustment to the receiver when shipped.

Crystal filter circuit, to cope with the interference problem to the maximum degree. Mounted in a black nickel steel cabinet. For 110 volt 60 cycle.

Cat. No. **55252** — RME-69 with crystal matched set of tubes, less speaker. **Net Price \$134.40**

Cat. No. **55253** — RME-69 same as above with 12-1 Solar Speaker built in, including tubes. **Net Price \$145.80**

12-1 Solar Speaker in a metal cabinet to match either of the above receivers. Cat. No. **55254** **Net Price \$11.85**



RME-69 can be supplied with various combinations of features. Write for literature, literature and quotations.

RME FREQUENCY EXPANDER

The RME 318N Frequency Expander can be used with a great many communication receivers provided that they tune down to 10 megacycles. Frequency coverage continuous from 27.8 to 30 megacycles in three bands. Extreme selectivity. Variable image frequency ratio. Self-contained power supply. Bias circuit for single wire or cabinet type antenna. Fully calibrated tuning dial is based on RME 69. Cabinet finish matches RME-69. Tubes used—1-6BK, 1-6L6, 1-6X5 and 1-80.

Cat. No. **55255** Type 318N **Net Price \$842.00**

RME DB-20 PRESELECTOR

This new signal intensifier and image rejector (preselector) has a frequency coverage of six bands from 500 kc to 32,000 kc in five stages. Mutual inductance ratio 20,000 to 1. Input design for either single wire or doublet type antenna. Cabinet depth and finish to match RME-69. Tubes used—2-6BK and 1-80.

Cat. No. **55256** **Net Price \$42.60**

Customer to house RME-69 receiver and DB-20 preselector in one unit. Cat. No. **55256** **Net Price \$11.70**

WESTERN ELECTRIC TUBES

TYPE 318A

Diode-Rectifier, ultra high frequency oscillator and amplifier. Plate dissipation 20 watts.

100 Plate Cur. 80 Ma. Filament 2 V., P.D. 400-500 volts. Cat. No. **55257** **Net Price \$10.50**

TYPE 318B

Tetode Power Amplifier. Operates in A or A' operation. Plate Dissipation 20 watts; Fil. V. 7 1/2; Plate V. 1250; Power Output 60 watts.

Cat. No. **55258** **Net Price \$12.50**

TYPE 305B

Tetode R.F. Power Amplifier. Ideal for ultra high frequencies. Max. Plate Voltage 1000; Plate Cur. 40-50; Fil. V. 10; Fil. Cur. 2.3 amps.

Cat. No. **55259** **Net Price \$38.50**

RADIO SHACK SERVICE

Orders shipped same day as received. Complete stocks.

TYPE 308A

Tetode R.F. Power Amplifier. Max. Output 14 watts; Max. Plate V. 1500; Max. Plate Cur. 100 Ma.; Fil. V. 5; Fil. Cur. 1.2 amps.

Cat. No. **55260** **Net Price \$10.10**



TYPE 242C

Tetode Power Amplifier. Max. Plate V. 1250; Plate Cur. 120 Ma.; Plate Dissipation 100 watts; Fil. V. 10; Fil. Cur. 3.25 amps.

Cat. No. **55261** **Net Price \$15.00**

TYPE 306A

Suppressor Grid Pentode. Ideal for high radio frequencies. Max. Plate V. 300; Max. Plate Cur. 18 Ma.; Power Output 20 watts; Fil. V. 2.75; Fil. Cur. 2 amps.

Cat. No. **55262** **Net Price \$10.30**

TYPE 307A

Suppressor Grid Pentode Power Amplifier. Max. Plate V. 300; Max. Plate Cur. 60 Ma.; Fil. V. 2.5; Fil. Cur. 1 amp.; Plate Dissipation 15 watts.

Cat. No. **55263** **Net Price \$13.65**



BOGEN SPEECH MODULATOR AMPLIFIER

This 8M6 speech modulator has been especially designed for use in low and medium power transmitters. It will plate modulate 12 watts input in an oscillator or Class A amplifier, and can be used to grid modulate an R.F. stage up to 100 watts with an extremely low distortion output. An overall gain of 110 db. permits the use of a crystal, which gives excellent dynamic response. High impedance intermodulation. Two stage electron mixing permits simultaneous operation of the mixer input and phone inputs. Output tapped at 500-1500-1 and 2 db. Finishes in black crackle. Tubes used—2-6X5, 1-6L6, and 1-6V6. Dimensions 17" long, 4" deep, 7 1/2" high.

Cat. No. **55257** **Net Price, complete with matched set of tubes \$25.87**



25, 80 AND 200 WATT TRANSMITTER KITS



25 WATT OUTPUT



SX-25

The UTC SX-25 kit is an ideal unit for the beginner and also as a stand-by transmitter for the experienced amateur. With a good antenna this transmitter has made contacts over a range of several thousand miles.

The circuit of the SX-25 is very

simple, being a straight crystal-controlled oscillator of high power output (25 watts C.W.) and stability. It is constructed with a self-contained power supply and antenna tuning condenser. Keying is accomplished in the cathode circuit of the oscillator, thus permitting break-in operation. The SX-25 will operate on all amateur bands from 160 to 10 meters. It is supplied completely mounted, ready to wire, less the 200MA meter, tubes, and crystal. The kit includes the cabinet and all components and accessories, such as resistors, capacitors, coil form, sockets, etched plate, line cord, etc. The tubes required are one 6L6GT and one 83. Size 15" long by 7 1/2" wide by 10 1/2" high.

Cat. No. **S5900** Type SX-25 as described above

Net Price

\$17.64



Triplet meter type 250, 200MA for the above kit.

Cat. No. **S5901**

Net Price

\$3.75

Kit of Raytheon tubes for the above kit (6L6GT-83)

Cat. No. **S5902** 2 tubes

Net Price

\$2.18

See Page 12 for complete parts list

80 WATT TRANSMITTER



SX-80

The SX-80 transmitter kit is a complete 80 watt C.W. transmitter of modern design. Operation on all bands is obtained through the use of plug-in coils. Keying is accomplished in the oscillator cathode circuit in permit break-in operation. A rugged power supply using choke input filter is incorporated on the same chassis.

The output of the SX-80 consists of a link circuit terminated at two insulating feed-through insulators at the rear of the chassis, and may be connected to a twisted pair feeder or to an external antenna coupling system.

The SX-80 combines modern appearance with simplicity of construction and flexibility of operation. It may be used either as a complete 80 watt C.W. unit or as an exciter to drive a high power final stage. It lends itself to the possibility of being incorporated in full size equipment should higher power be desired. The tubes required are three 6L6GT's and one 83. The kit includes the cabinet and all components and accessories such as resistors, capacitors, sockets, coil forms, etched plate line cord, etc.

This unit is supplied completely mounted, ready to wire, less 1"-100MA and 1"-200 MA meters.



tubes, and crystal. Size 18" long by 12" wide by 12 1/2" high.

Cat. No. **S5903** Type SX-80 as described above

Net Price

\$36.75

Triplet meter kit, consisting of one 250 200MA and one 250 200MA.

Cat. No. **S5904** 2 meters

Net Price

\$7.50

Kit of Raytheon tubes (1-83, 3-6L6GT)

Cat. No. **S5905** 4 tubes

Net Price

\$4.74

200-300 WATT FINAL



SX-200

The UTC SX-200 transmitter kit is a high power output stage designed to be used in conjunction with the SX-80 to form a complete 300 watt C.W. transmitter. When supplemented by the UTC type S-100* modulator amplifier, it becomes a 200 watt phone transmitter. The SX-200 is of modern design, employing four

type 800 tubes in a push pull parallel circuit, thus effecting high power at moderate plate potentials and permitting operation at lower power by eliminating one pair of tubes, if so desired. The SX-200 may be used as a power amplifier stage following any exciter which has a power output of 40 watts. It will operate at all frequencies up to 30 megacycles. A rugged, highly efficient power supply is combined on the same chassis with the RF amplifier. Single section high efficiency choke input filtering is employed to obtain good regulation. The tubes required are two 800's and four 800's. This unit is supplied completely mounted, ready to wire, including all components, accessories, and cabinet. Size 18" long by 12" wide by 12 1/2" high. Less 2"-500MA meter and tubes.



Cat. No. **S5906** SX-200 as described above

Net Price

\$42.63

UTC Type S-100 modulator amplifier is included in the above transmitter is described on page 8.

Kit of RCA tubes for the above transmitter (2-800, 4-800)

Cat. No. **S5907** 6 tubes

Net Price

\$13.00



RAYTHEON

RADIO TUBES
FOR BETTER
RADIO RECEPTION



STANDARD GLASS — ALL METAL — OCTAL GLASS

WE CARRY A COMPLETE LINE OF RAYTHEON TUBES
10% DISCOUNT FROM NET PRICES FOR 25 OR MORE TUBES

STANDARD GLASS TUBES

Type	Cat. No.	List Price	Net Price	Type	Cat. No.	List Price	Net Price
00A	81000	\$2.25	\$1.15	82	81049	\$1.75	\$0.90
01A	81001	.80	.41	83	81050	1.50	.77
1A4P	81002	1.75	.90	84	81051	1.75	.90
1A4T	81003	1.75	.90	35/51	81052	1.25	.64
1A6	81004	1.75	.90	36	81053	1.25	.64
1B4/951	81005	2.25	1.15	37	81054	1.50	.51
1B5/258	81006	1.25	.64	38	81055	1.25	.64
1C6	81007	1.75	.90	39/44	81056	1.25	.64
1F4	81008	1.50	.77	40	81057	1.00	.51
1F6	81009	2.25	1.15	41	81058	1.25	.64
1-Y	81010	1.25	.64	42	81059	1.25	.64
2A3	81011	2.50	1.28	43	81060	1.50	.77
2A5	81012	1.25	.64	45	81061	1.00	.51
2A6	81013	1.25	.64	46	81062	1.50	.77
2A7	81014	1.50	.77	47	81063	1.50	.77
2B7	81015	1.75	.90	48	81064	4.00	2.05
2E5	81016	1.50	.77	49	81065	1.75	.64
5Z3	81017	1.25	.64	50	81066	2.50	1.28
6A3	81018	2.00	1.03	52	81067	2.00	1.03
6A4/LA	81019	1.50	.77	53	81068	2.00	1.03
6A6	81020	1.75	.90	55	81069	1.50	.77
6A7	81021	1.50	.77	56	81070	.80	.41
6AB5	81022	1.75	.90	57	81071	1.25	.64
6D5	81023	2.25	1.15	58	81072	1.25	.64
6B7	81024	1.50	.77	59	81073	2.00	1.03
6C6	81025	1.25	.64	71A	81074	1.00	.51
6D6	81026	1.25	.64	75	81075	1.25	.64
6E5	81027	1.50	.77	76	81076	.40	.41
6E6	81028	2.00	1.03	77	81077	1.50	.77
6F7	81029	2.00	1.03	78	81078	1.25	.64
6G5/81H5	81030	1.50	.77	79	81079	1.50	.77
6N5	81031	1.75	.90	80	81080	.80	.41
6T5	81032	1.50	.77	81	81081	2.25	1.15
6U5	81033	1.50	.77	82	81082	1.50	.77
10	81034	2.75	1.42	83	81083	1.75	.90
12A	81035	1.00	.51	88V	81084	2.25	1.15
12A5	81036	2.25	1.15	84/87A	81085	1.75	.90
12A7	81037	2.25	1.15	85	81086	1.25	.64
12Z3	81038	1.50	.77	89	81087	1.50	.77
15	81039	2.25	1.15	V99	81088	1.50	.77
19	81040	1.50	.77	X99	81089	1.50	.77
20	81041	2.25	1.15	192B/483B	81090	2.00	1.03
22	81042	2.00	1.03	193/483	81091	2.00	1.03
24A	81043	1.25	.64	485	81092	2.00	1.03
25Z3	81044	1.25	.64	950	81093	2.25	1.15
26	81045	.80	.41	BA	81094	7.50	4.50
27	81046	.80	.41	BH	81095	4.75	2.79
30	81047	1.00	.51	BR	81096	2.75	1.65
31	81048	1.00	.51	0A4G	81122	2.25	1.15

OCTAL GLASS TUBES

Type	Cat. No.	List Price	Net Price	Type	Cat. No.	List Price	Net Price
1A5G	81123	\$2.25	\$1.15	6F6G	81159	\$1.50	\$0.77
1A7G	81124	2.25	1.15	6F8G	81160	1.50	.77
1C5G	81125	2.25	1.15	6G6G	81161	2.25	1.15
1C7G	81126	2.25	1.15	6H6G	81162	1.25	.64
1D5GP	81127	2.25	1.15	6J5G	81163	1.50	.77
1D5GT	81128	2.25	1.15	6J7G	81164	1.50	.77
1D7G	81129	1.75	.90	6J8G	81165	2.25	1.15
1E5G	81130	2.25	1.15	6K5G	81166	1.50	.77
1E7G	81131	2.75	1.42	6K6G	81167	1.50	.77
1F5G	81132	2.25	1.15	6K7G	81168	1.50	.77
1F7G	81133	2.25	1.15	6L5G	81169	2.25	1.15
1G5G	81134	2.00	1.03	6L6G	81170	2.50	1.28
1H4G	81135	1.00	.51	6L7G	81171	1.75	.90
1H5G	81136	2.25	1.15	6N6G	81172	2.25	1.15
1H6G	81137	1.75	.90	6N6MG	81173	2.50	1.28
1J5G	81138	2.25	1.15	6N7G	81174	1.75	.90
1J6G	81139	1.50	.77	6P5G	81175	1.50	.77
1N5G	81140	2.25	1.15	6P7G	81176	2.25	1.15
4A6G	81141	2.25	1.15	6Q7G	81177	1.50	.77
5U6G	81142	1.00	.77	6R7G	81178	1.50	.77
5V4G	81143	2.50	1.28	6R7G	81179	2.25	1.15
5W4G	81144	1.00	.51	6T7G/6Q6G	81180	2.25	1.15
5X4G	81145	1.50	.77	6U7G	81181	1.50	.77
5Y3G	81146	1.00	.51	6V6G	81182	1.50	.77
5Y4G	81147	1.00	.51	6V7G	81183	1.50	.77
5Z4MG	81148	2.00	1.03	6W3G	81184	1.50	.77
6A5G	81149	2.00	1.03	6W7G	81185	2.25	1.15
6A8G	81150	1.50	.77	6X5G/600	81186	1.50	.77
6AC3G	81151	1.25	.64	6Y6G	81187	2.25	1.15
6B4G	81152	2.00	1.03	6Y7G	81188	1.50	.77
6B6G	81153	1.50	.77	6Z5G	81189	1.50	.77
6B8G	81154	1.75	.90	6Z7G	81190	1.75	.90
6C5G	81155	1.25	.64	25A6G	81191	1.50	.77
6C6G	81156	1.50	.77	25A7G	81192	2.25	1.15
6D8G	81157	2.25	1.15	25B6G	81193	1.75	.90
6F5G	81158	1.25	.64	25L6G	81194	2.25	1.15
				25Z6G	81195	1.50	.77

METAL TUBES

Type	Cat. No.	List Price	Net Price	Type	Cat. No.	List Price	Net Price
82A	81097	\$1.50	\$0.77	4N8	81110	\$1.15	\$0.90
8T4	81098	2.50	1.28	6L6	81111	2.25	1.15
5W4	81099	1.00	.51	6L7	81112	1.75	.90
5Z4	81100	2.00	1.03	6N7	81113	1.75	.90
6A8	81101	1.50	.77	6Q7	81114	1.50	.77
6B8	81102	1.75	.90	6K7	81115	1.50	.77
6C5	81103	1.25	.64	6R7	81116	2.25	1.15
6F5	81104	1.25	.64	6V6	81117	1.50	.77
6F6	81105	1.50	.77	6X5	81118	1.50	.77
6H5	81106	1.25	.64	25A7	81119	1.50	.77
6J5	81107	1.50	.77	25L6	81120	2.25	1.15
6J7	81108	1.50	.77	25Z6	81121	1.50	.77
6K7	81109	1.50	.77				



TRANSMITTING TUBE HANDBOOK

An encyclopedia of technical information. Incorporated is a Color Chart for checking the color of the plates. Modulation, output impedance and I/C ratio, grid driving power, ratings, and tube characteristics.
Cat. No. 81196 **\$0.50**
Net Price.....

RECEIVING TUBE MANUAL

Raytheon Data Book containing the chief technical data on all receiving tube types from the oldest tube to the newest in 200 pages.
Cat. No. 81197 **\$0.25**
Net Price.....





GLASS — OCTAL GLASS — METAL RECEIVING TUBES

On all orders of 25 or more tubes you may deduct 10% from the net prices shown below.

STANDARD GLASS TYPES

Type No.	Net Price	Type No.	Net Price	Type No.	Net Price	Type No.	Net Price	Type No.	Net Price
6A5	\$1.22	6B7	\$.95	12A7	\$1.22	69	\$.68	80	\$1.43
6A6	.43	6C3	.68	12X7	.81	50	1.35	81	1.22
6A4	.95	6A4	.81	15	1.22	53	.68	82	.81
1A6	.95	6A5	.95	19	.81	55	.54	83	.95
1B4	1.22	6A7	.81	20	1.22	56	.68	83-V	1.22
1B5	.68	6B7	.81	23	1.08	57	.68	84	.95
1C6	.95	6C3	.68	24A	.68	58	.68	85	.68
1P4	.81	6L6	.68	25Z5	.68	59	1.08	87	.81
1P6	1.22	6E5	.81	26	.43	60	.68	89	.81
1-V	.68	6F7	1.08	27	.43	61	.81	90	.81
2A3	1.35	6G5	.81	30	.54	62	.54	112A	.64
2A5	.68	6N3	.95	31	.54	63	.81	874	2.43
2A6	.68	6P5	.81	32	.95	64	.81	875	3.51
2A7	.81	10	1.49	33	.81	65	.81	880	4.32

G-SERIES OCTAL BASE

Type No.	Net Price	Type No.	Net Price	Type No.	Net Price	Type No.	Net Price	Type No.	Net Price
1C7G	\$1.22	11B6G	\$.95	6B8G	\$.95	6J5G	\$.81	6N7G	\$.95
1D6G	1.22	13B6	.81	6C5G	.68	6J7G	.81	6Q7G	.95
1D7G	.95	204G	.81	6C8G	.81	6K3G	.81	6R7G	.81
1E5G	1.22	2V4G	1.35	6D8G	1.22	6K6G	.81	6S7G	1.22
1E7G	1.49	2X4G	.81	6F6G	.68	6K7G	.81	6T7G	1.22
1F57	1.22	2Y3G	.54	6F8G	.81	6L6G	1.22	6U7G	.95
1P7GV	1.22	2Y4G	.54	6F9G	.81	6L8G	1.35	6V6G	.95
1G5G	1.08	6A8G	.81	6G6G	1.22	6L7G	.95	6X5G	.81
1H4G	.54	6A5G	.68	6H6G	.68				

ALL METAL TUBES

Type No.	Net Price	Type No.	Net Price	Type No.	Net Price	Type No.	Net Price	Type No.	Net Price
5T4	\$1.35	6B8	\$.95	6H6	\$.68	6K3	\$.95	6Q7	\$.81
5W4	.54	6C5	.68	6J5	.81	6L6	1.22	6R7	.81
6A4	1.08	6F5	.68	6J7	.81	6L7	.95	6S7	1.22
6A5	.81	6P5	.81	6K7	.81	6N7	.95	6T7	.81

BROWNING "83" ALL-WAVE RECEIVER KIT

The new Browning "83" is a high fidelity four-band nine-tube receiver kit, having all of the latest features—high signal to noise ratio; sensitivity of less than 1 microvolt on all bands; a phase inversion push pull audio system; automatic volume control; tuning eye; band pass, triple tune. Link circuit I.F. transformer; a beautiful full-vision 7 1/2" airplane dial; easily wired. Only the best of parts are used with the Browning 83 receiver kit. Coaxial is punched and requires no extra drilling. Tubes used are 2-6B7G, 1-6H6G, 1-6F5G, 1-6G5, 1-6A8G, 1-6C5G, 2-6F6G and 1-50.

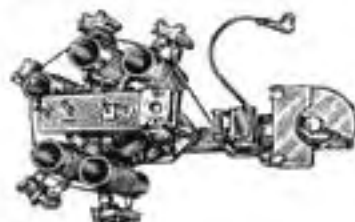


PARTS LIST

The complete Browning "83" kit consists of a BL-1 completely assembled, wired, tested and aligned tuner; one 7 1/2" oval airplane dial; drilled chassis and panel; I.F. transformer; power transformer; tuning eye assembly; mica condensers; IRC volume controls and fixed resistors; Tube electrolytic and paper condensers; complete hardware kit including all necessary screws, bolts, sockets, lugs, shields, etc.; complete set of full sized wiring diagrams and instructions.

Complete kit less speaker, tubes and cabinet.
Cat. No. 88375.
Net Price\$43.86

BROWNING BL-5H 10, 20, 40, 80, 160 METER RECEIVER TUNER



This new complete receiver tuner consists of five high Q coils, five trimmer band setting condensers, series antenna condenser, main tuning condenser and grid resistor-condenser combination. All rigidly mounted on a band switching alignment which keeps all leads at a minimum length and shorts out all coils not in use. Permits complete coverage of five amateur bands—10, 20, 40, 80, and 160 meters with good band spread. Can be used in a simple receiver for the beginner, a portable receiver, a preselector, and field strength meter. Wide adaptability.

Cat. No. 88376.
Net Price\$7.69

BROWNING BL-5G GRID AND BL-5P PLATE TUNERS FOR LOW POWER TRANSMITTERS OR EXCITERS



GRID TUNER

A complete tuned grid unit consisting of coils, fixed condensers and variable condenser, mounted on a two section switch which permits operation in the 20, 40, 80 and 160 meter bands and harmonic operation in the 5 and 10 meter bands. High stability. Calibration permanently reliable. Can be used with an electron coupled oscillator or crystal control. Eliminates plug-in coils and allows coil switching from the front panel.

Cat. No. 88377 Type 5G.
Net Price\$8.62



PLATE TUNER

This band switching plate tuner is designed to operate at fundamental frequencies in the 20, 40, 80 and 160 meter bands and the 5 and 10 meter bands on harmonics. With a combination of this plate tuner and the grid tuner at the left, a low power transmitter or exciter having an output of 30 watts can be constructed. An excellent driver for a 300 watt final. No plug-in coils, permits front panel switching.

Cat. No. 88378 Type 5P.
Net Price\$6.52

RCA TRANSMITTING AND SPECIAL SERVICE TUBES



TRANSMITTING TUBES

Type No.	Description	Electrodes	Max. Plate Dissipation Watts	Cathode Type	Cathode Volts	Net Price
203-A	R-F Power Amplifier, Oscillator, Class B Modulator	3	100	Filament	10.0	\$15.00
211	R-F Power Amplifier, Oscillator, A-F Power Amplifier, Modulator	3	100	Filament	10.0	15.00
800	R-F Power Amplifier, Oscillator, Class B Modulator	3	25	Filament	7.5	10.00
801	R-F and A-F Power Amplifier, Oscillator, Modulator	3	25	Filament	7.5	3.45
802	R-F Power Amplifier Pentode	3	10	Heater	6.3	3.50
803	R-F Power Amplifier Pentode	3	125	Filament	10.0	34.50
804	R-F Power Amplifier Pentode	3	40	Filament	7.5	15.00
805	R-F Power Amplifier, Oscillator, Class B Modulator	3	125	Filament	10.0	13.50
806	R-F Power Amplifier, Class B Modulator, Oscillator	3	150	Filament	5.0	22.00
807	Transmitting Beam Power Amplifier	4	21	Heater	6.3	3.50
808	R-F Power Amplifier, Oscillator, Class B Modulator	3	30	Filament	7.5	7.75
809	R-F Power Amplifier, Oscillator, Class B Modulator	3	25	Filament	6.3	2.50
814	R-F Beam Power Amplifier	4	50	Filament	10.0	17.50
832	Twin R-F Beam Power Amplifier	8	15	Heater	12.0 { 6.3 }	28.75
833	R-F Power Amplifier, Oscillator, Class B Modulator	3	100	Filament	10.0	35.00
834	R-F Power Amplifier, Oscillator	3	30	Filament	7.5	12.50
838	Class B Modulator, R-F Power Amplifier, Oscillator	3	100	Filament	10.0	16.00
840	R-F Pentode	3	—	Filament	7.0	6.00
841	R-F Power Amplifier, Oscillator, A-F Voltage Amplifier	3	15	Filament	7.5	3.25
845	Modulator A-F Power Amplifier	3	75	Filament	10.0	15.00
852	Oscillator, R-F Power Amplifier	3	100	Filament	10.0	16.40
855	Screen-Grid R-F Power Amplifier	4	15	Filament	7.5	12.75
954	(Pentode Arcing Type) Amplifier, Detector, Oscillator	5	—	Heater	6.3	5.00
955	Amplifier, Detector, Oscillator (Arcing Type)	5	—	Heater	6.3	3.00
956	Super-Control R-F Amplifier Pentode	3	—	Heater	6.3	5.00
991	Voltage Regulator	3	—	—	—	.90
1602	Amplifier Triode (Low-Microphonic)	3	15	Filament	7.5	2.75
1603	Amplifier Pentode (Low-Microphonic)	5	—	Heater	6.3	4.75
1608	Power Amplifier Oscillator	3	20	Filament	2.5	4.00
1609	Amplifier Pentode (Low-Microphonic Design)	5	—	Filament	1.1	1.60
1610	Crystal-Oscillator Pentode	5	4	Filament	2.5	2.00
1612	Pentagrid Amplifier (Low-Microphonic Design)	5	—	Heater	6.3	3.25
1619	R-F or A-F Beam Power Tube	—	15	Filament	2.5	4.75
1851	Television Amplifier Pentode	5	—	Heater	6.3	2.10
1852	Tel. Amp. Pentode Hi-Mu	5	—	Heater	6.3	1.85
1853	Tel. Amp. Pentode Low-Mu	5	—	Heater	6.3	1.85

RECTIFIER TUBES

Type No.	Description	Electrodes	Max. Peak Inverse Volts	Cathode Type	Cathode Volts	Net Price
866	Half-Wave, Mercury-Vapor	3	7,500	Filament	2.5	\$1.50
866-A	Half-Wave, Mercury-Vapor	3	10,000	Filament	2.5	4.00
872	Half-Wave, Mercury-Vapor	3	2,500	Filament	5.0	14.00
872-A	Half-Wave, Mercury-Vapor	3	10,000	Filament	5.0	16.50
879	Half-Wave, High-Vacuum for Cathode-Ray Tubes	3	7,500	Filament	2.5	3.00
884	Gas Triode for Cathode Ray Sweep Circuit Control	3	300	Heater	6.3	2.00
885	Gas Triode for Cathode Ray Sweep Circuit Control	3	300	Heater	5.0	2.00

CATHODE RAY TUBES

Type No.	Description	Electrodes	Max. Anode Volts	Cathode Type	Cathode Volts	Net Price
902	5" Electrostatic Deflection, High-Vacuum	4	600	Heater	6.3	\$7.50
904	5" Electrostatic Magnetic Deflection, High-Vacuum	5	6,000	Heater	2.5	52.50
905	5" Electrostatic Deflection, High-Vacuum	4	2,000	Heater	2.5	45.00
906	5" Electrostatic Deflection, High-Vacuum	4	1,200	Heater	2.5	13.50
907	5" Electrostatic Deflection, High-Vacuum, Short-Persistence Screen	4	2,000	Heater	2.5	48.75
908	5" Electrostatic Deflection, High-Vacuum, Short-Persistence Screen	4	1,200	Heater	2.5	18.00
909	5" Electrostatic Deflection, High-Vacuum, Long-Persistence Screen	4	2,000	Heater	2.5	49.00
910	5" Electrostatic Deflection, High-Vacuum, Long-Persistence Screen	4	1,200	Heater	2.5	21.25
911	5" Electrostatic Deflection, High-Vacuum (Electron gun of low-magnetic material)	4	1,200	Heater	2.5	22.50
913	1" Electrostatic Deflection, Low-Voltage, High-Vacuum	4	500	Heater	6.3	4.00
1800	9" Kinescope Electro-Magnetic Deflection	—	—	—	—	60.00
1801	5" Kinescope Electro-Magnetic Deflection	—	—	—	—	40.00

RCA TRANSMITTING TUBE MANUAL

A new 192-page transmitting tube manual containing vacuum tube considerations, discussion of generic tube types, transmitting tube installation and application, tube data, transmitter design consideration, transmitter circuits, rectifiers and filter designs.

Cat. No. 55225

Net Price 20c

RCA CATHODE RAY TUBE DATA BOOK

Data on the operation of cathode ray tubes and their associated circuits.

Cat. No. 55226

Net Price 25c

PHOTOTUBES

Type No.	Description	Max. Anode Volts	Net Price
868	Phototube (Gasless Type)	90	\$3.70
917	Phototube (High-Vacuum Type)	500	4.75
918	Phototube (High Sensitivity)	90	4.50
919	Phototube (High-Vacuum Type)	500	4.75
920	Twin Phototube (Gasless Type)	90	5.25
921	Cartridge Phototube (Gasless Type)	90	2.00
922	Cartridge Phototube (High-Vacuum Type)	250	2.00
923	Phototube (High Sensitivity)	90	2.60

**CUSTOM
BUILT**

Taylor Tubes



866

Half Wave mercury vapor rectifier. Fil. 2.5 Volts, 5 Amps. Inverse Peak 7500 Volts. Peak Current 600 M.A. Multistrand filament construction.
Cat. No. **\$1504**

Net Price... **\$1.50**



866 JR.

Half Wave Mercury Vapor Rectifier for medium Voltages. Fil. 2.5 Volts, 5.5 Amps. Max. R.M.S. 44 1250 Volts. Max. Inverse peak per pair (strike input) 750 M.A.
Cat. No. **\$1505**

Net Price... **\$1.00**



805
ZERO BIAS

Standard type Carbon Anode Zero Bias 805. Up to 150 Watts class B Audio Output. Fil. 10 Volts, 3.85 Amps. Max. Plate Current 210 M.A. Amp. Factor 50. Also is used R.F. Tube.
Cat. No. **\$1510**

Net Price... **\$13.50**



203-Z
ZERO BIAS

Will work on all Standard 20A Type Transformer. 300 Watts audio in Class B. Fil. 10 Volts, 3.85 Amps. Max. Plate Volts 2500. Max. Plate Current 175 M.A. Amp. Factor 85.
Cat. No. **\$1511**

Net Price... **\$3.00**



GAMMATRON HK-54

Net Price... **\$6.75**

Cat. No. **\$1513**

The Type 54 Gammatron has such features as Tantalum plate and grid, large direct filament supports, a bakelite mounted filament, and a Nomex glass envelope. Performs well in many forms of service. As a Class "C" radio frequency amplifier, a Class "B" audio frequency amplifier, a frequency multiplier, a crystal oscillator, an ultra-high frequency oscillator, the Type 54 Gammatron does an amazing job. Max. plate Volts 2000 Class C. Max. output in watts 210. No. and plate dissipation 20 watts. Fil. V. 5, Fil. Cur. 5 amps.

NEW TAYLOR T-40 AND TZ-40



T-40

40 Watts Plate Dissipation. Carbon Anode. Efficient on all bands. Fil. 2.5 Volts, 2.5 Amps. Plate 1000 Volts, 115 M.A. Amp. Factor 25. A really sensational value.
Cat. No. **\$1500**

Net Price... **\$3.50**

TZ-40
ZERO BIAS

Same general characteristics as the T-40 except Amp. Factor is 62. Class B Audio Output 175 Watts. Price doubler.
Cat. No. **\$1501**

Net Price... **\$3.50**

T-125
CARBON-TANTALUM ANODE

175 Watts plate dissipation. Large carbon anode with Tantalum Filament. Low interelectrode capacity. Low impedance. Fil. 10 Volts, 3.85 Amps. Plate 2000 Volts, 350 M.A. Grid to Plate 4.5 MMF. Mu 25. Easy to drive.
Cat. No. **\$1509**

Net Price... **\$13.50**



T-200
AMATEUR
POWER
HOUSE TUBE

200 Watts plate dissipation. Over-size Carbon Anode. Fil. 10-11 Volts, 4 Amps. Plate 2000 Volts, 350 M.A. Grid to Plate 7 MMF. Amp. Factor 17. The earliest drive 1 KW Type Tubes.
Cat. No. **\$1509**

Net Price... **\$21.50**



GAMMATRON HK-254

Net Price... **\$12.50**

Cat. No. **\$1514**

The 254 Gammatron, because of its unique design and electrical characteristics, will give outstanding performance in many types of service. As a Class C radio frequency amplifier, a Class B audio frequency amplifier, a frequency multiplier, an ultra-high frequency oscillator, the Type 254 does a better job. Max. plate volts 2000. Max. output in watts 400 Class C. Normal plate dissipation 100 watts. Fil. V. 5, Fil. Cur. 2.5 amps.



T-20

20 Watts Plate Dissipation. Efficient performance on all bands from 5 to 160 meters. Fil. 2.5 Volts, 1.75 Amps. Plate 750 Volts, 75 M.A. Amp. Factor 20.
Cat. No. **\$1502**

Net Price... **\$2.25**

TZ-20
ZERO BIAS

Same general characteristics as T-20 except Amp. Factor is 62. Recommended for Class B Audio and doubler service. Up to 80 Watts Audio Output.
Cat. No. **\$1503**

Net Price... **\$2.25**

T-55

The Champion over 8000 in use. Fil. 7.5 Volts, 2.75 Amps. Plate 1500 Volts 150 M.A. Grid to Plate 3.75 MMF. Amp. Factor 20. Extremely easy to drive. Ask the ham who uses one!

Cat. No. **\$1506**

Net Price... **\$6.00**



822

200 Watts Plate Dissipation. 800 Watts Audio in Class B. Fil. 10 Volts, 4 Amps. Max. Plate Volts 2000. Max. Plate Current 300 M.A. Efficient on 10-20-40-80-160 meters. A Super HI-200A. Amp. Factor 27.

Cat. No. **\$1507**

Net Price... **\$13.50**

814

Same general characteristics as the 822 except Amp. Factor is 12. Excellent tube for grid modulated or Class B Linear Amplifier.

Cat. No. **\$1508**

Net Price... **\$18.50**

HK-354

Net \$24.50

Cat. No. **\$1512**

The Type HK-354 Gammatron may be used as a Class C radio frequency amplifier with exceptionally good results. High mutual conductance, low internal capacitance, and the ability to stand high plate voltages make it possible to operate the Type HK-354 Gammatron at high efficiencies with low power excitation. Max. plate volts 4000 C.W. Max. output in watts 830. Fil. V. 5, Fil. Cur. 40. Plate dissipation 150





RAYTHEON

TRANSMITTING and AMATEUR TUBES



Cat. No.	Type No.	Description	Plate Watts	Fil. Volts	Plate Volts	Net Price
88700	RK10	Triode, Class C Amp. or Doubler		7.5	600	\$3.50
88701	RK11	Triode Power Amp. Acetator	25	6.3	750	2.50
88702	RK12	Triode Power Amp. Oscillator Hi-Mu	25	6.3	750	2.50
88703	RK13	Triode Power Amp. Oscillator	40	7.5	1250	10.00
88704	RK20A	Pentode Power Amp. Oscillator	40	7.5	1250	16.00
88705	RK21	Pentode Power Amp. Oscillator	10	2.5	500	4.50
88706	RK24	Triode Amp. Osc. Transmitter Use	1.3	2	180	2.25
88707	RK25	Pentode Power Amp. Oscillator	10	6.3	500	4.50
88708	RK25B	Same as RK25 with Bakelite Base	10	6.3	500	3.90
88709	RK28	Pentode Power Amp. Oscillator	100	10	2000	34.50
88710	RK30	Triode Power Amp. Oscillator	35	7.5	1250	10.00
88711	RK31	Triode Zero Bias Class B Modulator		7.5	1250	10.00
88712	RK34	Triode Power Amp. Oscillator		7.5	1250	8.40
88713	RK34	Twin Triode R.F. Power Amp.		6.3	400	3.60
88714	RK35	Triode, R.F. Amp. Osc. or Class B Audio	35	7.5	1000	8.00
88715	RK34	Triode, R.F. Power Amp. or Oscillator	100	5	3000	14.50
88716	RK37	Hi-Mu Triode R.F. or Oscillator	35	7.5	1250	7.75
88717	RK38	Hi-Mu Triode R.F. Power Amp. or Osc.	100	5	3000	13.50
88718	RK39	Beam Power Triode, Osc. Doubler	20	6.3	750	3.50
88719	RK41	Same as RK39 except Filament	20	2.5	750	3.80
88720	RK42	Triode Amp. Oscillator		1.5	180	1.10
88721	RK43	Twin Triode Power Amp. Osc.		1.5	180	1.50
88722	RK47	Beam Power Triode R.F. Amplifier	50	10	1250	17.50
88723	RK48	Beam Triode R.F. Power Amplifier	100	10	2000	27.50
88724	RK49	Beam Power Triode R.F. Amp. Osc.	21	6.3	400	2.10
88725	RK51	Triode Power Amp. Oscillator	60	7.5	1500	8.00
88726	RK52	Triode Power Amp. Hi-Mu	60	7.5	1500	8.00
88727	RK54	Tetrad Beam Power Amp. Osc.	8	6.3	500	3.00
88728	RK57	Triode Power Amp. Osc.	125	10	1500	13.50
88729	RK58	Triode Power Amp. Osc.	100	10	1250	16.00
88730	RK59	Twin Triode Power Amp. Osc.	15	6.3	500	4.50
88731	RK62	Gas Triode Detector Thyatron		1.4	45	3.50
88732	RK1451	Pentode Television Amp.		6.3	300	2.10

RECTIFIER TUBES

RK 60
Full wave high vacuum rectifier. Fil. V. 5; Fil. Cur. 3 amps; RMR per plate 750. DC output 650 V. at 150 MA.
Cat. No. 88733 Net...\$2.75

RK 866
Half wave mercury rectifier. Fil. V. 2.5; Fil. cur. 5; Peak Inverse Voltage 7500 V.; Peak Plate Current 1 AMP.
Cat. No. 88734 Net...\$1.50

RK 866A
Same as 866 above but with Peak Inverse Voltage 10,000 V. For heavy duty power supplies.
Cat. No. 88735 Net...\$4.00

RK 872A
Half wave mercury rectifier. Fil. V. 5; Fil. cur. 6.75 amps; Peak Inverse Voltage 1,000 V.; Peak Plate Current 5 Amps.
Cat. No. 88736 Net...\$16.50

RK 884
Gas Triode for Cathode ray sweep circuit controls. Fil. V. 6.3; Max. RMS 300 V.
Cat. No. 88737 Net...\$2.00

RX 885
Same as the RX 884 above except Fil. V. 1.5.
Cat. No. 88738 Net...\$2.00

EIMAC TRANSMITTING TUBES TANTULAM ELECTRODES Type 35T



The Eimac 35T has the lowest interelectrode capacities of any transmitting tube. Class C Output 170 watts; Fil. V. 5; Fil. Cur. 4 amps; Amplification Factor 30; Max. Plate Cur. 150 Ma.; Max. Plate Diss. 70 watts; Max. Plate V. 2,000.
Cat. No. 88738
Net Price...\$6.00

100TH

Incorporated in this tube are the new low-loss grid and plate electrodes. Ideal for ultra high frequencies. The 100th has a high amplification factor and is exceedingly easy to excite. Class C Output 300 watts; normal Plate Dissipation 100 watts; Max. Plate V. 2,000; Max. Plate Cur. 225 Ma.; Fil. V. 5; Fil. Cur. 6 1/2 amps; Amplification Factor 30.
Cat. No. 88739
Net Price...\$13.50



250TH

A Hi-Mu Triode. Has low-loss grid and plate electrodes. Very low interelectrode capacity. Ideal as a Class C amplifier, Class B audio tube and frequency multiplier. Can be operated at zero bias. Normal Plate Dissipation 250 watts; Max. Plate V. 3,000; Max. Plate Cur. 250 Ma.; Amplification Factor 32; Fil. V. 1; Fil. Cur. 10 1/2 amps.
Cat. No. 88740
Net Price...\$24.50



COTO LO-LOSS TRANSMITTING INDUCTORS

A very complete line of highly efficient inductors for All-Band operation. These inductors are wound with bright copper wire, protected from oxidation by a colorless baked enamel and cemented in slots in narrow strips of Cellulose Acetate (not cellophane).

Available in six types, covering the Amateur bands from 160 to 10 meters. The "T", "TL", and "TVL" series are designed to handle the output of one kilowatt amplifier. The "BT", "BTL" and "BTVL" series are intended for oscillator, buffer and low powered stages, not exceeding 300 watts.

LINK COUPLING TYPES—The Tank and Center-Tapped Buffer types are available with three turns, internally mounted, fixed or variable link coils.

All link type inductors are mounted on Stratix bars, equipped with plugs to complete necessary connections, when inserted in proper mounting base listed below.

Standard mounting centers for the various groups of inductors, permit the inter-changing of units for All-Band operation. Maximum condenser capacity recommended—160M types 75 mmf. All others 35 mmf. Mounting centers, T, TL and TVL 1 1/4"; BT, BTL, BTVL 5/8".

HI-POWER TANKS

Cat. No.	Wire Size Dia.	Net Price
160T	12 5"	\$2.34
80T	10 4"	1.98
40T	10 3"	1.74
20T	10 2"	1.30
10T	10 1 1/2"	1.32

C.T. with Fixed Link

160TL	12 5"	\$3.30
80TL	10 4"	2.94
40TL	10 3"	2.70
20TL	10 2"	2.34
10TL	10 1 1/2"	2.28

C.T. with Variable Link

160TVL	12 5"	\$3.90
80TVL	10 4"	3.54
40TVL	10 3"	3.30
20TVL	10 2"	2.94
10TVL	10 1 1/2"	2.88

LO-POWER TANKS

Cat. No.	Wire Size Dia.	Net Price
160BT	14 4"	\$1.50
80BT	14 3 1/2"	1.71
40BT	14 3"	1.44
20BT	14 2 1/2"	1.23
10BT	14 2"	1.17

C.T. Buffers with Fixed Links

160BTL	14 4"	\$2.75
80BTL	14 3 1/2"	2.67
40BTL	14 3"	2.40
20BTL	14 2 1/2"	2.19
10BTL	14 2"	2.13

C.T. Buffers with Variable Link

160BTVL	14 4"	\$3.36
80BTVL	14 3 1/2"	3.27
40BTVL	14 3"	3.00
20BTVL	14 2 1/2"	2.79
10BTVL	14 2"	2.73

Coto Mounting Bases

No.	For Ind.	Net
CI-91M	T	\$1.14
CI-91LM	TLTVL	1.20
CI-91UM	BT	1.14
CI-91ULM	BTLBTVL	1.20

Steatite Stand-Offs

Type CI-30		
Core Size	3" x 1/2"	
Overall Lath	5 1/2" in.	
Net Pr.	18c	
Type CI-31		
Core Size	1 1/4" x 3/4"	
Overall Lath	1 1/2" in.	
Net Pr.	12c	



NEW COTO PEE-WEE TRANSMITTING COIL

10 to 160 meters single ended or push-pull stages. Link on end, link in center with center tap, or no link center tapped available. All bands resonate with 75 mmf/d. condenser. High Q. New type of low stage coil, 60 watt wire. Coils wound with special enameled wire.

	10 Meters	20 Meters	40 Meters	80 Meters	160 Meters
Link on end	Cat. No. 88741	88742	88743	88744	88745
Link in center	Cat. No. 88746	88747	88748	88749	88750
No Link	Cat. No. 88751	88752	88753	88754	88755
Net Price, each, any type					94c
Mounting base to fit the above plug-in coil.					
Cat. No. 88756					36c



CRYSTALS AND HEAD PHONES

BLILEY CRYSTALS



HP2 Crystal for 10 and 20 Meters

FOR 10 and 20 METER FUNDAMENTAL CONTROL. Ideal for doubling to 5 meters. This unit incorporates the Bliley C-cut crystal. It has a frequency drift of approximately 20 cycles per degree centigrade in a positive direction for 20 meters, and 45 cycles for 10 meters. It is easily excited because of its high activity. The holder is moulded from Vitreous G. The HP2 is accurately calibrated, and guaranteed to be within .01% of its indicated frequency.

No. 41912—HP2-20 meter crystal.
No. 41913—HP2-10 meter crystal.
Net Price, each.....\$5.75
20 meter supplied within 15 KC.
10 meter supplied within 50 KC.

B-5 40 METER AND LD-2 80-160 METER CRYSTAL

This new crystal unit operates with unbelievable efficiency. Frequency drift is guaranteed less than 5 cycles per megacycle. C: 2/3 less than X-cut. Guaranteed .03% accurate, greater activity—excellent for tri-tets; supplied within 5 KC of your desired frequency.



No. 41914 40 meter band B-5.
No. 41915 80 meter band LD-2.
No. 41916 160 meter band LD-2.
Net Price, each.....\$4.80
Exact Frequency.....\$5.00



40-80-160 Meter BC-3

A powerful active X-cut mounted crystal that is guaranteed .03% accurate in your transmitter. Has approximately 22 cycles per megacycle C drift.

Supplied within 5 KC
No. 41917 40 meter band.
No. 41918 80 meter band.
No. 41919 160 meter band.
Net Price.....\$3.35
Exact Frequency.....\$4.95

40-80-160 Meter Mounted Crystals

The crystal in this unit is highly active and will handle considerable power. The drift is 20 cy. per meg. per° Centigrade. Supplied within 5 KC's of the desired frequency. Specify frequency.



Cat. No. 41925.....\$3.00
Net Price.....\$4.80

Unmounted Crystals

The 40 and 80 meter crystals are X-cut. The 160 meter crystal is a special cut. Frequency drift less than 20 cy. per meg. per° Centigrade. 1" square. Specify frequency. Supplied within 5 KC's.

No. 41927 80 and 160 meter. Net Price.....\$1.50
No. 41928 40 meter. Net Price.....\$1.96

Crystal Holder



Made of glossy black Bakelite. Electrodes are of stainless steel. GR prongs will fit in 5-prong sockets or GR jacks.
No. 41929A 80-160 meter. Net Price.....89¢
No. 41929 40 meter. Net Price.....89¢



BLILEY CRYSTAL HOLDER

Moulded bakelite holder with tube-pin arrangement for mounting. Threaded top excludes dust and moisture. Plans lapped electrodes with variable spring tension. Mounts in any position.

No. 41922 40 meter band.
No. 41923 80 or 160 meter band.
Net Price, each.....95¢

BLILEY VF-1



The Type VF-1 Variable Crystal Unit is a mounted low drift 80-meter crystal whose frequency is adjustable over a range of up to 8KC merely by turning the knob mounted on the holder. The frequency adjustment has no appreciable effect on the activity and stability of the crystal. Is not affected by position of mounting.

No. 41924.....\$7.50

CFI SINGLE SIGNAL FILTER

For crystal filter and superheterodyne. A precision product—scientifically designed and rigidly tested. Supplied within 5 KC of desired frequency.



No. 41920 450 KC. No. 41921 565 KC.
Net Price, each.....\$5.50

Standard Frequency Crystal



The type SMC100 standard frequency crystal unit provides a simple inexpensive means for rapidly checking the calibration of radio receivers, test oscillators and amateur frequency monitors. It is a mounted, precision, dual-frequency crystal ground to oscillate within .01% of 100kc. and .05% of 1000kc. Either frequency can be chosen by inserting (or switching) the proper tank coil in a simple oscillator circuit. 100kc. harmonics can be developed up to 30mc. and 1000kc. harmonics up to 60mc.

Cat. No. 41924 SMC100
Net Price.....\$7.75

Low Drift 40-80-160 Meter Crystals

This crystal is of the low temperature coefficient type, having less than 4 cy. per meg. per° Centigrade. Calibration is guaranteed within .03%. Supplied within 5 KC's of the desired frequency. Specify frequency.



Cat. No. 41926.....\$4.80
Net Price.....\$4.80

20 Meter Crystal



A special 20-meter crystal for the 20-meter band. Cut for minimum drift. May be used for doubling to higher frequencies. Supplied within 20 KC's of desired frequency. Specify frequency.
Cat. No. 41930
Net Price.....\$5.50

BRUSH CRYSTAL HEADPHONES



Brings in weak signals strong and clear and will handle excessive volume without overloading. Response 60 to 10,000 cycles. Only 6 oz. complete with headband and cords.

Cat. No. 41900.....\$5.29
Net Price.....\$5.29
Cat. No. 41901—Single phone with headband and cord.....\$2.94
Net Price.....\$2.94
Cat. No. 41902—Single phone with jergonette handle and cord.....\$3.82
Net Price.....\$3.82

TRIMM FEATHERWEIGHT HEADPHONES

Weight only 4 oz. 1. Diam. 2-3/16". Depth 1/2". Bakelite shell and cap. Forged magnet of best 35% Cobalt Steel. Adjustable steel headband. Ideal for Aircraft, Amateurs. Very fine quality throughout. Complete with 5-foot cord.



No. 41903—2000 ohm.
No. 41904—1000 ohm.
No. 41905—24,000 ohm.
Either impedance.
Net Price.....\$5.88

Trimm Dependable Phones



Bakelite shell and cap. Forged magnet of Chrome Steel. 2000 ohm D.C. resistance. No outside terminals. Very sensitive and absolutely reliable.

No. 41906.....\$2.00
Net Price.....\$2.00

Trimm Acme DeLuxe Phones

An exceptionally efficient, small, low price headphone for Amateurs and Special Installations. Chrome steel magnets. Molded Bakelite caps, giving this exceptionally light-weight, comfortable headset a rich, mellow tone.



No. 41907—2000 ohms. Net Price.....\$1.09
No. 41908—4000 ohms. Net Price.....\$1.43

TRIMM ACME PHONES

Same phones as above except that the caps are of black enameled aluminum.
Cat. No. 41909—2000 ohms.....\$0.99
Net Price.....\$0.99
Cat. No. 41910—4000 ohms.....\$1.33
Net Price.....\$1.33

Trimm Rex Phones



Hi-polar construction, chrome magnets. Shell of aluminum. Molded cap. 2,000 ohms.
Net.....\$1.62
20,000 ohms.
Net.....\$1.80

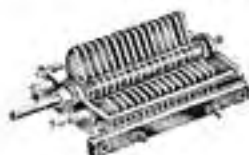
Earphone Cushions

Made of sponge rubber. Necessary for comfort for operators who use receivers over long periods of time.
No. 41911
Net per pair.....32¢



CARDWELL CONDENSERS

MIDWAY FEATHERWEIGHT CONDENSERS



Straight line capacity type. Light in weight, compact (panel space only 4" x 2 1/4"), adapted to all receivers and 25-watt or lower C.W. transmitters, also portable equipment. Extremely rugged and rigid. The air gap between plates is .001". Shaft diameter 1/4". Insulation material is Mycalex.

SINGLE CONDENSERS

Cat. No.	Type	Max. Cap.	Min. Cap.	Peak Voltage	Net Price
S2600	MR-25-BR	25	5	1000	\$1.62
S2601	MR-50-BR	50	8	1000	1.68
S2602	MR-75-BR	75	10	1000	1.77
S2603	MR-100-BR	100	12	1000	1.83
S2604	MR-150-BR	150	15	1000	1.89
S2605	MR-200-BR	200	18	1000	1.98
S2606	MR-250-BR	250	20	1000	2.27
S2607	MR-300-BR	300	22	1000	2.38

DOUBLE CONDENSERS

Cat. No.	Type	Max. Cap. Each	Min. Cap. Each	Peak Voltage Each	Net Price
S2608	MR-25-BD	25	5	1000	\$2.61
S2609	MR-50-BD	50	8	1000	2.82
S2610	MR-75-BD	75	10	1000	2.94
S2611	MR-100-BD	100	12	1000	3.06
S2612	MR-150-BD	150	15	1000	3.18
S2613	MR-200-BD	200	18	1000	3.30
S2614	MR-250-BD	250	20	1000	4.80

TRANSMITTING CONDENSERS

A very popular condenser in the amateur experimental and commercial fields. The air gap is .001" and is especially suitable for use in C.W. transmitters up to 100 watts input or phone transmitters of 20 watts carrier with 100% modulation. The insulation is Mycalex.

SINGLE CONDENSERS

Cat. No.	Type	Max. Cap.	Min. Cap.	Peak Voltage	Net Price
S2615	MT-20-GH	20	5	2500	\$1.95
S2616	MT-25-GH	25	6	2500	2.10
S2617	MT-30-GH	30	8	2500	2.34
S2618	MT-35-GH	35	10	2500	2.67
S2619	MT-40-GH	40	12	2500	2.94
S2620	MT-45-GH	45	14	2500	3.60
S2621	MT-50-GH	50	16	2500	3.80

DOUBLE CONDENSERS

Cat. No.	Type	Max. Cap. Each	Min. Cap. Each	Peak Voltage Each	Net Price
S2622	MT-20-GD	20	5	2500	\$3.32
S2623	MT-25-GD	25	6	2500	3.60
S2624	MT-30-GD	30	8	2500	3.80
S2625	MT-35-GD	35	10	2500	4.20
S2626	MT-40-GD	40	12	2500	4.80

STANDARD TRANSMITTING CONDENSERS (GE Mycalex Insulation)

These condensers have heavy rotor and stator plates with rounded edges which are buffed and polished insuring minimum corona losses and maximum peak breakdown voltage. A self-cleaning aluminum bronze contact spring assembly provides a perfect rotor connection offering very low R.F. contact resistance.



SINGLE CONDENSERS

Cat. No.	Type	Max. Cap.	Min. Cap.	Peak Voltage	Net Price
S2627	NT-220-PH	220	20	3500	\$2.70
S2628	NT-150-PH	150	20	3500	4.62
S2629	NT-100-KH	100	10	3750	2.70
S2630	NT-165-KH	165	12	3750	3.90
S2631	NT-200-KH	200	15	3750	6.70
S2632	NT-250-KH	250	18	3750	6.48
S2633	NT-300-KH	300	20	3750	6.48
S2634	NT-350-KH	350	22	3750	2.10
S2635	NT-400-KH	400	25	3750	3.90
S2636	NT-450-KH	450	28	3750	5.82
S2637	NT-500-KH	500	30	3750	6.00
S2638	NT-550-KH	550	32	3750	3.30
S2639	NT-600-KH	600	35	3750	4.50
S2640	NT-650-KH	650	38	3750	6.92
S2641	NT-700-KH	700	40	3750	9.90
S2642	NT-750-KH	750	42	3750	13.20

DOUBLE CONDENSERS

Cat. No.	Type	Max. Cap. Each	Min. Cap. Each	Peak Voltage Each	Net Price
S2643	NT-200-PH	200	18	3500	\$3.90
S2644	NT-250-PH	250	20	3500	3.30
S2645	NT-300-PH	300	22	3500	5.22
S2646	NT-350-PH	350	25	3500	4.50
S2647	NT-400-PH	400	28	3500	6.60
S2648	NT-450-PH	450	30	3500	13.20
S2649	NT-500-PH	500	32	3500	12.60
S2650	NT-550-PH	550	35	3500	6.42
S2651	NT-600-PH	600	38	3500	10.71
S2652	NT-650-PH	650	40	3500	7.80
S2653	NT-700-PH	700	42	3500	21.60
S2654	NT-750-PH	750	45	3500	15.00
S2655	NT-800-PH	800	48	3500	20.70

TRIM AIRS

Use of bakelite (1 1/2" insulation) makes these condensers especially suitable for ultra-high frequency work. Detachable shaft end locking nut. Panel mounting by means of bushing and nut.

Cat. No.	Type	Max. Cap.	Min. Cap.	Peak Voltage	Net Price
S2656	ZL-75-AH	75	2.7	750	\$1.02
S2657	ZL-100-AH	100	3	750	1.05
S2658	ZL-140-AH	140	3.5	750	1.89
S2659	ZL-180-AH	180	4.2	1000	.75
S2660	ZL-220-AH	220	5	1000	.75
S2661	ZL-250-AH	250	5.5	1000	.86
S2662	ZL-300-AH	300	6.5	1000	.90
S2663	ZL-350-AH	350	7.5	1000	.96
S2664	ZL-400-AH	400	8.5	1000	.96
S2665	ZL-450-AH	450	9.5	1000	.93
S2666	ZL-500-AH	500	10.5	1000	1.13
S2667	ZL-550-AH	550	11.5	1000	1.13

DUAL TRIM AIRS

Incorporates all of the excellent features of the single trim air. Ideal for push-pull exciter unit, portable ultra H.F. gear and laboratory equipment.

Type ES-4-BD for neutralizing mod-pul ZET and T50 type tubes.

Cat. No.	Type	Max. Cap.	Min. Cap.	Peak Voltage	Net Price
S2674	ED-75-AD	75	2.7	750	\$2.00
S2675	ED-100-AD	100	3	750	2.04
S2676	ED-140-AD	140	3.5	750	3.60
S2677	ED-180-AD	180	4.2	1000	1.56
S2678	ED-220-AD	220	5	1000	1.56
S2679	ED-250-AD	250	5.5	1000	1.62
S2680	ED-300-AD	300	6.5	1000	1.75
S2681	ED-350-AD	350	7.5	1000	1.86
S2682	ED-400-AD	400	8.5	1000	1.86
S2683	ED-450-AD	450	9.5	1000	2.16
S2684	ED-500-AD	500	10.5	1000	2.45
S2685	ES-1-SH	1	1.5	2500	2.16
S2686	ES-1-SH	1	1.5	2500	2.16

Neutralizing Condensers



For new low capacity tubes. Mycalex insulation.

Cat. No.	Type	Max. Cap.	Min. Cap.	Peak Voltage	Net Price
NA-4NS	4	2.5	1	2500	\$2.15
NA-6NS	6	4	1	2500	2.15
NA-10NS	10	6	1	2500	2.70
NA-15NS	15	7	1	2500	3.00
VZ-9RS	9	7	1	2500	5.40

Peak Voltage 2500.

Peak Voltage adjustable.

HIGH FREQUENCY DUALS

As ideal 5 or 10 meter capacitor for tubes of the 808 or 85T type.



Designed for ultra high frequency use. Works well in dialometer machines. Polished plates. Maximum peak 1000 volts.

Cat. No. S2689 Type NP-45-ND, Net Pr. \$3.60

Cat. No. S2690 Type NP-45-ND, without polished plates, slightly less than net voltage. Net Price... \$3.21

TRIM AIR BRACKET

A specially designed bracket for trim air condensers which is a 1/2" insulation on the chassis. Insulated from rotor. Very sturdy.

Cat. No. S2687 Net Price... 6c

FLEXIBLE COUPLING

Fig. 4 1/2" shaft. Insulation with recessed brass hub. Minimum shaft size 1/2" dia.

Cat. No. S2688 Type A Net Price... 36c

FLEXIBLE COUPLINGS

Made of flexible fiber with two 1/2" bushings mounted on shafts by means of screws.

No. S2653 Net Price... 21c

Same as above except insulation is mica.

No. S2654 Net Price... 29c

CARDWELL VARIABLE RANGE CONDENSER FOR MULTI-BAND TRANSMITTERS



Effectively balanced capacities that can be used in various series parallel combinations. For multi-band operation.

2 small sections in series for high frequency bands... 9 to 24 mmds.

2 large sections in series for medium frequency bands... 12.5 to 88 mmds.

1 large and 1 small section parallel for each half of a dual condenser for 180 meters... 18 to 111 mmds.

Cat. No. S2691—Type NE-100-70-X4 Net Price... \$13.20

HAMMARLUND CONDENSERS



MIDGET SINGLE AND DUAL VARIABLE CONDENSERS

These condensers are a result of long research; their superiority is apparent. Ideally suited for amateur work; also for aircraft, police car and marine work. The rotor and stator plates are made of brass .0025" thick. The shafts are 1/4" diameter and are adapted for jugging a number of these condensers together. Insulation is of bakelite. Both the single and dual condensers have round dual rear littings, assuring perfect alignment and dependability.



SINGLE CONDENSER MIDLINE PLATES

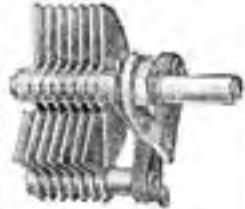
Cat. No.	Type No.	Max. Cap. Mmf.	Min. Cap. Mmf.	Net Price
X2442	MC-225-M	225	10	\$2.10
X2443	MC-250-M	250	11	1.80
X2444	MC-200-M	200	10	1.65
X2445	MC-150-M	150	8	1.50
X2446	MC-100-M	100	7	1.35
X2447	MC-75-M	75	6.5	1.20
X2448	MC-50-M	50	5	.96

Semi-Circular Plates

X2449	MC-140-S	140	8	\$1.50
X2450	MC-100-S	100	7.5	1.35
X2451	MC-75-S	75	7	1.20
X2452	MC-50-S	50	6	.96
X2453	MC-35-S	35	5	.90
X2454	MC-20-S	20	4.5	.84

"STAR" MIDGET CONDENSERS

Light in weight and strong and compact in construction. Low-loss, self-heating bakelite insulation. Straight line capacity type plates. Single hole mounting. Shaft 1/4" diameter. 5/16" mounting bushing. 1.9-1.6" wide by 1 1/2" high. "X" denotes spaced .001" air gap.



Cat. No.	Type No.	Max. Cap. Mmf.	Min. Cap. Mmf.	Net Price
X2469	SM-15	15	2	\$0.51
X2470	SM-25	25	2.5	.51
X2471	SM-50	50	4	.64
X2472	SM-100	100	6	.60
X2473	SM-140	140	7	.75
X2474	SM-175-X	175	8.5	.60
X2475	SM-200-X	200	9	.75

AIR PADDING CONDENSERS

Any dielectric condenser for use where extra space is at a premium. Will maintain 1/4" air constant capacity under any conditions of temperature, humidity or vibration. Insulated back.

Cat. No.	Type No.	Max. Cap. Mmf.	Min. Cap. Mmf.	Net Price
X2476	APN-25	25	3.0	\$0.78
X2477	APN-50	50	3.5	.90
X2478	APN-75	75	4.5	1.02
X2479	APN-100	100	5.5	1.14
X2480	APN-140	140	6.5	1.35

Neutralizing Condensers

A new type high-voltage neutralizing condenser offering the advantages of horizontal adjustment. T.Y.P.E. N-10 suitable for neutralizing tubes similar to T-55, BT, RK35, and HK41 and also for transmitting tubes. TYPE N-20 a heavy duty condenser ideal for neutralizing such tubes as HK254, 100P, RK30, and T200.

Cat. No.	Type No.	Cap. Range Mmf.	Net Price
X2510	N-10	2-10	\$1.80
X2511	N-20	2-20	3.90

Double-Spaced Single Condensers Midline Plates (Air Gap .0715)

Cat. No.	Type No.	Max. Cap. Mmf.	Min. Cap. Mmf.	Net Price
X2455	SD-50-MX	50	2	\$1.65
X2456	SD-35-MX	35	2	1.35
X2457	SD-20-MX	20	2	1.20

Semi-Circular Plates (Air Gap .0715)

X2458	SD-50-SX	50	2.5	\$1.65
X2459	SD-35-SX	35	2.5	1.35
X2460	SD-20-SX	20	2.5	1.20

Double-Spaced Dual Condensers (Air Gap .0715)

Cat. No.	Type No.	Max. Cap. Per Sec. Mmf.	Min. Cap. Per Sec. Mmf.	Net Price
X2461	MD-15-MX	15	6	\$2.10
X2462	MD-10-MX	10	6.5	2.10

"MX" Midline Plates
"SX" Semi-Circular Plates

DUAL CONDENSERS MIDLINE PLATES

Cat. No.	Type No.	Max. Cap. Per Sec. Mmf.	Min. Cap. Per Sec. Mmf.	Net Price
X2463	MD-15-M	15	7	\$2.40
X2464	MD-10-M	10	8	2.10
X2465	MD-5-M	5	5	1.80

Semi-Circular Plates

X2466	MD-15-S	15	8	\$2.40
X2467	MD-10-S	10	8.5	2.10
X2468	MD-5-S	5	5.5	1.80

MIDGET PADDER

Range 3 to 30 muf. Mounted on bakelite base. Size 4 1/2" x 5 1/2" x 1 1/2". Allow .001" dielectric. No. 42512
Net 18c

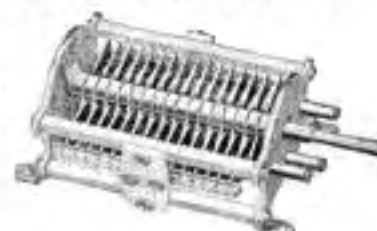


NEW SINGLE AND DOUBLE TRANSMITTING CONDENSERS

A new popular series of transmitting condensers for high frequency and ultra high frequency stations and low powered units. Plates are of aluminum.

Lodanite insulation and silver plated Beryllium contact wires assure lowest losses and lowest series resistance. Small size and light weight specially recommended for use in airplanes and other mobile or portable units.

GENERAL SPECIFICATIONS—VOLTAGE RATINGS ARE 500V. FOR "A" TYPES, 2000V. FOR "B" TYPES, AND 1000V. FOR "C" TYPES



"MTC" SINGLE CONDENSERS

Cat. No.	Type No.	Capacity Mmf.	Net Price
X2499	MTC-25-A	25 muf.	\$3.60
X2500	MTC-20-B	20 muf.	1.95
X2501	MTC-15-B	15 muf.	1.70
X2502	MTC-10-B	10 muf.	1.34
X2503	MTC-100-B	100 muf.	3.00
X2504	MTC-150-B	150 muf.	3.68
X2505	MTC-50-C	50 muf.	1.68
X2506	MTC-100-C	100 muf.	1.83
X2507	MTC-150-C	150 muf.	2.12
X2508	MTC-250-C	250 muf.	2.16
X2509	MTC-350-C	350 muf.	2.40

Polished round edged plates—.010" thick.
Polished round edged plates—.025" thick.
Standard type plates—.025" thick.

"MTCD" DUAL CONDENSERS

Cat. No.	Type No.	Cap. Per Sec. Mmf.	Cap. Per Sec. Mmf.	Net Price
X2491	MTCD-25-B	20 muf.	5	\$3.15
X2492	MTCD-20-B	20 muf.	7	3.45
X2493	MTCD-15-B	20 muf.	11	3.90
X2494	MTCD-100-B	100 muf.	21	5.25
X2495	MTCD-150-B	150 muf.	5	2.70
X2496	MTCD-100-C	100 muf.	11	3.00
X2497	MTCD-150-C	150 muf.	10	3.15
X2498	MTCD-250-C	250 muf.	25	3.60

Polished round edged plates .025" thick. .070" plate spacing.
Standard type plates .025" thick .011" plate spacing.

HAMMARLUND NEW MICRO CONDENSERS

A new series of ultra high frequency single and dual variable condensers with features affording the highest efficiency. Cathium plated, silvered brass plates and bakelite insulation insure stability, durability, and lowest losses. Noiseless in operation. Single hole in base mounting.



SINGLE CONDENSERS

Cat. No.	Type No.	Max. Cap. Mmf.	Min. Cap. Mmf.	Net Price
X2485	HF-15	17.5	3.0	\$0.75
X2486	HF-35	35	3.0	.90
X2487	HF-50	50	4.1	.96
X2488	HF-100	100	5.0	1.14
X2489	HF-140	140	6.7	1.35
X2490	HF-200-X	200	8.3	1.11

Double spaced

DUAL CONDENSERS

Cat. No.	Type No.	Max. Cap. Per Sec. Mmf.	Min. Cap. Per Sec. Mmf.	Net Price
X2481	HF-D-50	50	3.7	\$1.65
X2482	HF-D-100	100	5.2	1.95
X2483	HF-D-140	140	6.2	2.25
X2484	HF-D-200-X	200	8.0	1.95

Double spaced.

HAMMARLUND Chokes, Coil Forms, IF Transformers and Sockets

Iron Core IF. Transformers



These new Iron Core I.F. Transformers afford an extremely high gain per stage together with extremely sharp selectivity.

A single stage amplifier employing iron core transformers will provide as great sensitivity and selectivity as two stages employing ordinary types of transformers; so that special precautions must be taken when using them in two stage amplifiers. Therefore, they are offered in types for single stage and two stage amplifiers. Adjustable bias trimmers mounted on an Isolantite base. Overall size is 1 1/2" square by 1 1/2" high. Mounting 1 1/2" centers. Frequency range variable 440-470 kc, but peaked at 465 kc.

Cat. No.	Type	Peaked At	Application	Net Price
2400	ICT-1	465 Kc.	Single Stage Input	
2401	ICT-2	465 Kc.	Single Stage Output	
2402	ICT-3	465 Kc.	Two Stage Input	
2403	ICT-4	465 Kc.	Two Stage Interstage	
2404	ICT-5	465 Kc.	Two Stage Output	
Net Price ea.....				\$1.80

Standard I.F. Transformers

Designed for experimental and replacement purposes in superheterodynes. All transformers are of tuned grid, tuned plate type, with lattice wound coils impregnated to prevent moisture effects. Litz windings are used in the 465 kc. Aluminum shield can measures 2 1/2" outside diameter by 3 1/2" high. Mounting on 2" centers. T465 is adjustable between 440-470 kc, but peaked at 465 kc.



Cat. No.	Type	Peaked At	Net Price
2405	T465	465 kc.	\$0.97
2406	T465 C. T.*	465 kc.	.97
No. 2407 T89-465 (465 Kc. Best Oscillator)			
Net Price			.97

MIDGET I.F. TRANSFORMERS

Same as above except for size which is 1-7/16" square and 2 1/2" high mounting centers 1-5/16".

Cat. No.	Type	Peaked At	Net Price
2408	MT465	465 kc.	\$0.97
2409	MT465 C. T.*	465 kc.	.97
*Center tapped secondary for tubes requiring split input circuits.			

AIR TUNED I.F. TRANSFORMERS



Precision IF transformers of the tuned primary, tuned secondary type with both plate and grid coils of litz wire. Tuned to resonance by means of air dielectric variable condensers of special design. The coils have the exceptional "Q" of 115, a coupling coefficient of 0.77. The transformers providing a gain in excess of 200 per stage.

Standard transformers are designed for 78's and other tubes of this type.

such as 6K7 and 6D6's. Center tapped units are available for tubes requiring split input circuits. The shield can is 2-3/32" diameter by 5" high, mounted through bottom.

No. 2410-ATT-465 (465 k.c.) Net Price \$2.70

No. 2411-ATT-465-CT (Center-tapped 465 k.c.)

FLEXIBLE COUPLING

Permits random operation of any number of independent units without requiring exact shaft alignment. The shaft of the condenser are insulated from each other, allowing instruments in gang to be operated as independent electrical units. Overall diameter is 1 1/2".



No. 2412 Type FC	Net Price
	36c

MIDGET R.F. CHOKES

Small in size and so light in weight that it can be supported by its own leads.

The five universal wound piles are mounted on a 3/4" Isolantite core. Length across caps is 1 1/2"; diameter 3/4"; inductance 2.1 mh.; DC resistance 35 ohms; dist. capacity 1.35MF; 125 milliamperes.

No. 2413 Type CH-X	Net Price
	36c



Heavy Duty Transmitting Chokes

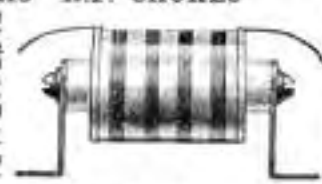
Designed for high power transmitters operating in the 20, 40, 80, and 160 meter amateur bands.

Inductance 2.5 mh. Distributed capacity less than 1.5 mmf. DC resistance 8 ohms. Maximum recommended DC (continuous) 500 milliamperes. Overall size (without brackets) 1-3/16" diameter by 2 1/2" long.

No. 2415 Type CH-500	Net Price
	\$1.05

"CH8" R.F. CHOKES

Designed particularly for short wave and ultra wave receivers and transmitters. Clock measures 1 1/2" x 1 1/2"; inductance 8 millihenries. DC resistance 10 ohms; distributed capacity 2 mmf.; current carrying capacity of 125 milliamperes.



No. 2416 Type CH-8.	Net Price
	66c



Short Wave Plug-In Coils

Maximum signal strength and greatest selectivity on all bands. Most favorable inductance to capacity (L/C) ratio on the important short wave bands. Four coils tuned by 140 mmf. condenser cover entire range from 17 to 270 meters. Only one additional coil required to cover broadcast band.

No. 2417-SWK-4 (Kit of four, 4 prong, 2 winding coils, range 17 to 270 meters)	Net Price
	\$1.80
No. 2418-SWK-6 (Kit of four, 6 prong, 3 winding coils, range 17 to 270 meters)	Net Price
	\$2.25
No. 2419-BCC-4 (4 prong, 2 winding coil for broadcast band, 250 to 560 meters)	Net Price
	\$0.75
No. 2420-BCC-6 (6 prong, 3 winding coil for broadcast band, 250 to 560 meters)	Net Price
	\$0.90

Cat. No.	Coil No.	Meters	4 prong	6 prong
2421	1	17-41	60c	75c
2422	2	32-75	60c	75c
2423	3	60-150	45c	60c
2424	4	125-270	45c	60c

SHORT WAVE MANUAL

A book brimming with short wave news and constructional details on the most popular SW receivers and power supplies as suggested and endorsed by the editors of leading radio journals.

No. 2414 SWM 38	Net Price
	6c



ISOLANTITE SOCKETS



Made of Isolantite for low loss losses. Mustproof side gripping contacts. Built-in panel or base mounting. Four, five, six, seven, and eight prong types. 2 1/2" long by 1 1/2" wide, standard 1-27/32 mounted centers.

No. 2425 Type S-4 (4 prong)	Net Price
No. 2426 Type S-5 (5 prong)	
No. 2427 Type S-6 (6 prong)	36c
No. 2428 Type S-7 (7 prong)	
No. 2429 Type S-8 (8 prong)	
(for small base, 7 prong tubes)	
No. 2430 Type S-8 (8 prong)	45c

LOW LOSS COIL FORMS

Made of XI-53 dielectric, low loss insulating material. The forms are groove ribbed for air spacing of windings. Flange grips for easy handling, and meter indexes for wave length inscription. Size 1 1/2" diameter by 2 1/2" long, exclusive of prongs.



No. 2431-SWF-4 (4 prong)	Net Price
No. 2432-SWF-5 (5 prong)	
No. 2433-SWF-6 (6 prong)	21c
No. 2434-SWF-7 (7 prong)	
No. 2435-SWF-8 (8 prong)	24c
Plug-In Transmitting Coil Forms	
Same as above except for size which is dia. 2 1/2" overall, length 3 1/2" exclusive of prongs.	
No. 2436-TCF-4 (4 prong)	Net Price
No. 2437-TCF-5 (5 prong)	42c
No. 2438-TCF-6 (6 prong)	42c
No. 2439-TCF-7 (7 prong)	
No. 2440-TCF-8 (8 prong)	



ISOLANTITE COIL FORMS

Isolantite affords efficient high frequency reception under all conditions. Equipped with convenient recessed black enameled wooden handle in which is inserted a removable paper disc. Numerous holes provided make drilling unnecessary. 1 1/2" diameter and 2 1/2" long exclusive of knobs and prongs.

Cat. No.	Type	Prongs
2436	CP4	4
2437	CP5	5
2438	CP6	6
Net Price, each.....		75c

Midget Isolantite Coil Forms

Same as above except supplied only in 5 prong, with no handle. Size, dia. 1 1/2", 2" long exclusive of prongs.

No. 2439 CFS-M (5 prong)	Net Price
	60c

ALUMINUM COIL SHIELD

This coil shield is a very effective general purpose shield. Made of heavy aluminum in two pieces. Slotted to afford easy handling. 3" dia. x 3 1/2" high.



Cat. No. 2440	
Type C83	
Net Price	30c

Acorn Tube Socket

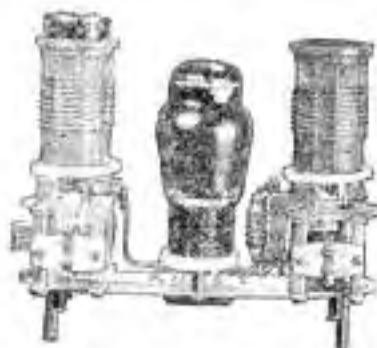
This Isolantite acorn tube socket is made to fit the RCA Type 971, 955, 850, 860, 861 so that tube fits only one way. Positive contacts.



Cat. No. 2441 Type S-800	Net Price
	90c

TRANSMITTING KITS — CONDENSERS — ACCESSORIES

OD-10 OSCILLATOR DOUBLER KIT



This "tri-tet" crystal oscillator and doubler kit is supplied with brackets and all mounting hardware as illustrated. Included is a special crystal mounting that fits into the top of the coil form, allowing the coil form and crystal to be changed in one operation. This kit contains one OD-10 foundation unit, two MTC-100C condensers, two 84 sockets, one 85 socket, one CHX choke, two SWP-1 coil forms.

Cat. No. **s2513**. Crystal Oscillator Doubler Kit as described above, less 82GG tube and crystal.

Net Price\$7.69

EXCITER TUNING UNIT



These handy exciter tuning units are ideal for use in transmitter excitors. Has two 37 mmf. "HF" type condensers mounted on an Isolantite block. These are double spaced and have a heavy shield plate between them. The blank coil forms is of low loss material $\frac{1}{2}$ " in diameter and 2" long. Supplied complete with heavy shield can, size 2" x $1\frac{1}{2}$ " x 4".

Cat. No. **s2516** TYPE ETU.

Net Price\$2.40

BD-40 BUFFER DRIVER KIT

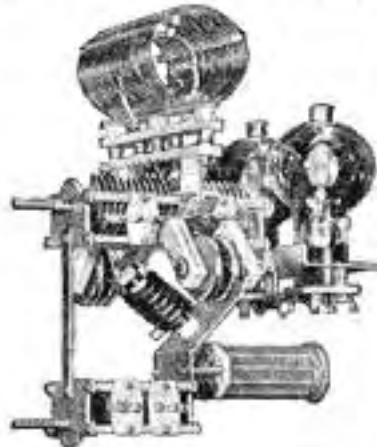


The BD-40 Buffer Driver Kit can be used to drive the PA-300 shown at the right. All parts are mounted together with brackets as illustrated. An RCA 807 or Raytheon RK-80 is employed. The output is 40 watts. Primarily designed as a driver but is also a very efficient low power transmitter. Perfectly shielded and excellently designed. Included in this kit are one BD-40 foundation unit, two MTC-100C condensers, two 84 sockets, one 85 socket, 1 CHX choke, eight SWP-1 coil forms. Complete instructions, hardware and brackets are supplied with this kit.

Cat. No. **s2514**. BD-40 Buffer Driver Kit as described above, less tube.

Net Price\$7.59

PA-300 POWER AMPLIFIER KIT



This Power Amplifier Kit enables the amateur to build a self-designed transmitter. The entire unit is self-supporting and can be bolted to the front panel with no chassis required, thus allowing very short connecting leads making the amplifier extremely efficient. An output of 300 watts is available. Popular triodes such as 807's, RK-37's, 155's, and RK-54's can be used. Included in this kit are one PA-300 foundation unit, one MTC-100H condenser, one MTCB-100C condenser, two N-10 neutralizing condensers, one CH-500 choke, two 84 sockets, one 85 socket, four SWP's coil forms. Complete instructions, mounting brackets, and all hardware supplied.

Cat. No. **s2515**. PA-300 Power Amplifier Kit as described above, less tube and coil.

Net Price\$16.77

CRYSTAL SOCKET

A very compact crystal socket designed to mount inside SWP coil form for changing coil and crystal in one operation. Isolantite base, measures only $1\frac{1}{2}$ " in diameter. Ideal for portable equipment. Two hole mounting centers $\frac{1}{2}$ ".



Cat. No. **s2517** Type XS-2.

Net Price 30c

POWER TUBE SHIELD

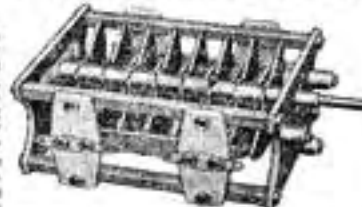
This tube shield is used in the BD-40 shown above, for use with tubes such as the 807, RK-39, 804, RK-20, and other similar tubes. Constructed of heavy aluminum, this shield is drilled for standard Hammond sockets and has silver-like satin finish. Dimensions $2\frac{1}{2}$ " x 3" long.

Cat. No. **s2518** Type PTS.

Net Price 24c

HAMMARFUND HEAVY-DUTY TRANSMITTING CONDENSERS

A new, moderately priced, heavy duty transmitting condenser, featuring heavy aluminum end plates, Isolantite cross-bars, non-inductive self-cleaning beryllium contacts, full floating rotor bearing, polished heavy aluminum plates accurately spaced. Available in a wide variety of capacities and working voltages, these condensers are ideal for modern up-to-date transmitters with power outputs ranging from 200 watts to 1 kw.



SINGLE CONDENSERS

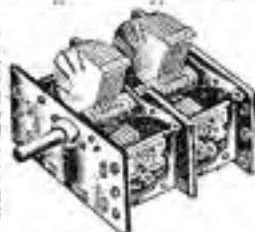
Cat. No.	Type No.	Cap. Mmf.	Voltage	Overall Lgth.	Net Price
s2519	TC-220-L	220	2000	4 1/2	\$2.70
s2521	TC-80-K	85	3750	2 1/2	2.70
s2522	TC-160-K	170	3750	4 1/2	3.90
s2523	TC-320-K	335	3750	4 1/2	4.80
s2524	TC-360-K	360	3750	5 1/2	5.70
s2525	TC-340-K	340	3750	6 1/2	6.00
s2526	TC-340-J	340	4250	6 1/2	6.12
s2527	TC-20-H	25	6000	2 1/2	2.10
s2528	TC-50-H	55	6000	4 1/2	3.60
s2529	TC-110-H	115	6000	6 1/2	5.40
s2530	TC-18-G	20	6750	2 1/2	3.12
s2531	TC-40-G	45	6750	4 1/2	4.20
s2532	TC-60-G	72	6750	5 1/2	5.28
s2533	TC-100-G	110	6750	7 1/2	6.72
s2534	TC-150-G	165	6750	10 1/2	8.88
s2535	TC-55-F	60	7500	5 1/2	4.80

SPLIT STATOR CONDENSERS

Cat. No.	Type No.	Cap. Mmf.	Voltage	Overall Lgth.	Net Price
s2537	TCD-80-L	85	3000	4 1/2	3.30
s2538	TCD-210-L	215	3000	5 1/2	4.95
s2539	TCD-90-K	95	3750	4 1/2	4.50
s2540	TCD-165-K	170	3750	6 1/2	6.60
s2541	TCD-325-K	335	3750	11 1/2	12.30
s2542	TCD-340-J	340	4250	11 1/2	11.40
s2543	TCD-50-H	55	6000	6 1/2	5.88
s2544	TCD-110-H	115	6000	11 1/2	9.60
s2545	TCD-40-G	45	6750	7 1/2	6.30
s2546	TCD-75-G	82	6750	11 1/2	8.70
s2547	TCD-55-F	60	7500	11 1/2	8.10

GANG CONDENSERS

These two and three gang variable condensers are designed for tuned radio frequency circuits or superheterodynes that have a padded oscillator circuit. Heavy metal ends. The rotor operates on ball bearings. Bakelite insulation. The two and three gang condensers are equipped with semi-variable trimmers on the side. Shaft is $\frac{1}{4}$ " diameter and $1\frac{1}{4}$ " long. Counter clockwise rotation. Dimensions $1\frac{1}{2}$ " high x $2\frac{1}{2}$ " wide. One gang $1\frac{1}{2}$ " long; two gang $2\frac{1}{2}$ " long; three gang $3\frac{1}{2}$ " long. Absolutely non-microphonic.



.000365 MFD. FOR TRF. OR PADDED OSCILLATORS IN SUPERS

Cat. No.	Gangs	Net Price
s2548	1	\$.78
s2549	2	.89
s2550	3	1.29

STANDARD CONCENTRIC CABLE

Can be supplied in $\frac{1}{4}$ " and $\frac{1}{2}$ " in diameter. Constructed with heavy strait beads in a soft copper tubing. Impedance is approximately 70 ohms and will not change with bending. Can be supplied in any length.



$\frac{1}{4}$ " DIA. CABLE

Cat. No.	Lgth.	Net Price
s2551	25 ft.	\$6.25
s2552	50 ft.	10.50
Price per foot, any length, 21c, less connector.		

Insulated Connector

A $\frac{1}{4}$ " concentric cable connector. Bakelite insulation. Weather proofed. $1\frac{1}{4}$ " leakage path. Cat. No. **s2555**. Net Price\$1.50

$\frac{1}{2}$ " DIA. CABLE

Cat. No.	Lgth.	Net Price
s2553	25 ft.	\$6.75
s2554	50 ft.	13.50
Price per foot, any length, 27c, less connector.		

Insulated Connector

A $\frac{1}{2}$ " cable connector. Ceramic insulation. $2\frac{1}{4}$ " leakage path. Cat. No. **s2556**. Net Price\$2.50

NATIONAL PRODUCTS

SEATITE SOCKETS



Net Price **\$0.24**

Made of ceramic with contacts that grip the coil tube firmly. Can be used for sub base insulating or above the base of the stand-off insulator supplied with socket.

No. **S6332** — 4 prong
No. **S6333** — 5 prong
No. **S6334** — 6 prong
No. **S6335** — 7 prong
No. **S6336** — 7 prong small
No. **S6337** — 8 prong

GRIP CLIPS



Easy to operate, never works loose, insures continuous electrical contact. Made in two sizes.

No. **S6330** — Metal Tubes.
Net Price, ea. **3c**
No. **S6331** — For 806 Tubes.
Net Price **6c**

6L6 NEUTRALIZING CONDENSER



The type NC600 is suitable for neutralizing 6L6's and similar type beam tubes. It has an adjustable range from 1/2 mfd. to 5 mfd.

Cat. No. **S6341**—Type NC-600
Net Price **27c**

NC800 NEUTRALIZING CONDENSER



NC 800 — A neutralizing condenser for 755, 357, 8K35, HP-300 and similar transmitting tubes. Both plates are insulated on insulating pillars.

No. **S6342**
Net **\$1.30**

COIL FORMS PLUG AND SOCKET

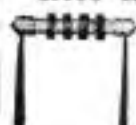


These insulating buffer coil forms are drilled for leads and may be used as shown or mounted on stand-off insulators. 2 sizes, the XR13A (1" x 3 1/2") and the XR13 (1 1/2" x 3 1/2"). The PB5 coil plug is attached by two screws to the coil form. The socket employs five side wiping contacts.

No.	Description	Net
S6350	XR13A Coil Form	\$0.36
S6351	XR13 Coil Form	.66
S6352	XR13 Buffer Coil Form Assembly	1.50
S6353	XR13A Buffer Coil Form Assembly	1.20
S6354	PB5 Plug	.45
S6355	XR5 Socket	.45

*Consists of coil form, plug and socket.

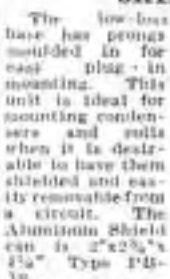
R100 R.F. CHOKES



Insulating mounting, continuous winding in foot sections. Inductance 25 mH, distributed capacity, 1 mfd., for transmitters and high frequency receivers.

No. **S6338** — 100
Net Price **36c**

PLUG-IN BASE AND SHIELD



The low-loss base has prongs moulded in for easy plug-in mounting. This unit is ideal for mounting condensers and coils when it is desirable to have them shielded and easily removable from a circuit. The Aluminum Shield can be 2"x2 1/2" x 1/2" Type PB-10.

No. **S6339**—3 prong.
No. **S6340**—4 prong.
Net Price, each **45c**

Interruption Frequency Oscillator Coil



Two separate inductances, closely coupled, in an aluminum shield. Is used for the interruption-frequency oscillator, in super-regenerative receivers.

No. **S6343** — ONE
Net Price **.90c**

FIXED TUNED EXCITER TANK

Mounted on the insulating base are two .25 mfd. condensers (2000 Volts — isolated from each other by an aluminum shield) and an R39 coil form (1 1/2" x 1" diameter). The assembly is enclosed in an aluminum can, 4" x 2 1/2" x 2 1/2". This unit is also available with or without Plug-In Base, which makes it ideal for conveniently and rapidly changing transmitting frequencies.



No. **S6347**—EXT (No Base).
Net **\$2.70**
No. **S6348**—EXTB (5 Prong Base).
No. **S6349**—EXTB (6 Prong Base).
Net Price **\$2.94**

ALADDIN POLYIRON I.F. TRANSFORMERS (IRON CORE) COILS

Aladdin R.F. and I.F. coupling devices utilize inductors consisting of a winding on a Polyiron core, thereby obtaining an advantage over similar devices employing air-core coils. An important feature of some of these devices is that various degrees of selectivity may be obtained by a relatively small change in the position of one Polyiron inductor with respect to another.

TYPE A ADJUSTABLE COUPLING I.F. TRANSFORMERS



"Polyiron" adjustable coupling I.F. transformer permits a variable degree of selectivity at each gain. An asset to any super's performance. Type-A.

Cat. No.	Type	Peak Freq.	Between	Use	Net Price
S6300	A100	465 kc	6A7-6D6	Converter	
S6301	A101M	465 kc	6A8-6K7	Converter	
S6302	A100	465 kc	6D6-6D6	Intermediate	\$1.76
S6303	A201	465 kc	6D6-75	Diode	
S6304	A200M	465 kc	6K7-6D6	Diode	
S6305	A1000	465 kc	—XTAL	XTAL Imp.	2.35
S6306	A2007	465 kc	6D6-75	F.W. Diode	

Polyiron I.F. Transformers

Like wound coils and copper shield results in high gain and selective H. F. unit. Few lost ultra trimmers. Copper shield 1 1/2" square, 2 1/2" high.

Cat. No.	Type	Peak Freq.	Between	Use	Net Price
S6307	C101M	465 kc	6A8-6K7	Converter	
S6308	C100M	465 kc	6K7-6K7	Intermediate	\$1.47
S6309	C200M	465 kc	6K7-6D6	Diode	
S6310	C350	465 kc	6K7 or 6D6	IFP	

BAND EXPANSION POLYIRON I.F. TRANSFORMERS

The purpose of band expansion is to admit a wide range of carrier frequency modulation, to obtain extreme selectivity or high fidelity response. Aluminum shield 2"x2 1/2", Mica trimmers, 75 band widths, require 3 position switch. 12 band widths, require 2 position switch.

Cat. No.	Type	Peak Freq.	Between	Use	Net Price
S6311	B102	465 kc	6A7-6D6	Converter	\$2.35
S6312	B101	465 kc	6A7-6D6	Converter	2.65
S6313	B2001	465 kc	6D6-75	Diode	2.00

AIR TRIMMED POLYIRON I.F. TRANSFORMERS

The purpose of this design is to provide the utmost freedom from frequency drift in communication type receivers. The use of Polyiron results in a high gain and a sharper frequency curve. Aluminum shield 1 1/2"x1 1/2".

Cat. No.	Type	Peak Freq.	Between	Use	Net Price
S6314	G101	465 kc	6A7-6D6	Converter	
S6315	G101M	465 kc	6A8-6K7	Converter	
S6316	G101A	465 kc	6K7-6K7	Intermediate	\$3.23
S6317	G201	465 kc	6D6-75	Diode	
S6318	G201M	465 kc	6K7-6D6	Diode	2.65
S6319	G208	465 kc	6K7-6D6	Diode	3.68
S6320	G101A	465 kc	—XTAL	XTAL Imp.	
S6321	G1001	1600 kc	6L7-6K7	Converter	4.70
S6322	G1000	1600 kc	6K7-6K7	Intermediate	
S6323	G1004	1600 kc	6K7-6D6	Diode	
S6324	G1005	1600 kc	—	Diode	

ALADDIN WAVE TRAP

The Aladdin wave trap is designed to be used in series between the aerial and antenna coil for the rejection of commercial interference at intermediate frequencies. The Aladdin wave trap is tuned to the interfering signal by varying the inductance of the coil, accomplished by moving the Polyiron core with an adjusting screw. Size of shield 1 1/2"x1 1/2" sq.

Cat. No. **S6325**—Type H4562.
Net Price **\$1.18**

POLYIRON ANTENNA—R.F. and Oscillator Coils

Antenna Coil

This Polyiron antenna coil is designed for automobile radio receiver antenna. Frequency range 1725 to 550 kc. Tuned with .000265 mfd. condenser. Square aluminum can 2 1/2"x2" high.

No. **S6326** —
Type **S6326** —
Net **\$1.18**

R.F. Coils

R. F. Intermediate coils are supplied in high gain types and will match the antenna coil to the left and the oscillator coil to the right. Tuned with .000265 mfd. condenser. Frequency range 1725 to 550 kc. Square aluminum shield 2 1/2"x2" high.

No. **S6327** —
Type **S6327** —
Net **\$1.18**

Oscillator Coils

For use with adjustable series padded 100 mfd. to super heterodynes having 300 kc. intermediate frequency. Wound with antenna and R. F. shield fixed at left. Tuned with a .000265 mfd. condenser. Frequency range 1725 to 550 kc. Square aluminum shield 2 1/2"x2" high. No. **S6328**—Type 3007.
Net **\$1.18**



Bud 6L6 Neutralizing Condenser

Cap. 1/2 to 5 mfd. For 6L6, 807, 8K40.
No. **S6344**
Net **59c**



Bud Stand-Off Rods

Solid shielded rod 1/2" dia. 14" long. For 6-32 screw at each end. 2 1/2" dia.
No. **S6345** — 1/2" dia.
No. **S6346** — 3/8" dia.

NATIONAL PRODUCTS

LOWER POWER TRANSMITTING CONDENSERS



For transmitters use in low power stages. Mounted either on panel, on chassis, or on two stand-off insulators. Straddle insulation.

Cat. No.	Type No.	Cap. Mmf.	Net. Price
56365*	T318-100	100	\$1.50
56366*	T318-150	150	1.65
56367*	T318-250	250	1.80
56368*	T318-300	300	2.16
56369*	T318-500	50-50	2.25
56370*	T318-1000	100-100	2.70
56371*	T318A-35	35	1.80
56372*	T318A-50	50	1.95

* Peak 1000 volts (alt gap .025")
* Peak 2000 volts (alt gap .005")

MEDIUM POWER TRANSMITTING CONDENSERS

TMC—Medium Power, Compact—Designed for use in the power stages of transmitters, where peak voltages are not over 2000. Plates extremely tight and arranged for mounting on panel, chassis or stand-off insulators. Straddle insulation. Alt gap .025".



Cat. No.	Type No.	Cap. Mmf.	Length	Net Price
56373*	TMC-50	50	2"	\$2.40
56374*	TMC-100	100	2 1/2"	2.70
56375*	TMC-150	150	4 1/2"	3.15
56376*	TMC-200	200	4 1/2"	3.90
56377*	TMC-1000	100-100	6 1/2"	4.50

* Peak 2000 volts.

TYPE "O" DIAL



The 2 1/2" dia. dial is circular-grained German silver bearing 8-100, 150° rotation and is fitted with a large finger grip knob. Fit 1/4" shafts.

No. 56378—Type O Net 90¢

BASSETT CONCENTRIC FEEDER (500 WATTS)



Bassett concentric feeder is the only flexible, factory sealed system that is impervious to rain, snow, sleet and condensation. The most complete transmission line to install that has ever been designed. 44 ohms.

No.	Feet	Net Price
56412	50	\$6.50
56413	75	9.00
56414	100	11.50

Line will handle 500 watts. Furnished with a sealed weather-proofed Y end. Type BCF.

1000 WATT FEEDER

No.	Feet	Net Price
56415	50	\$9.75
56416	75	12.75
56417	100	16.75

Any length furnished less cost. Net per ft. 17¢

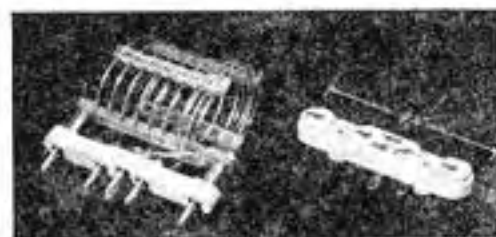


EXCITER COIL FORM—PLUG AND SOCKET

This XH16 coil form is universal and is built of Insulux, drilled for leads. The XH16 plug is easily attached for two screws and fits the same socket as the all-around coils listed below.

Cat. No. 56356—Type XH16 Coil Form	36¢
Cat. No. 56357—Type PB16 Plug	24¢
Cat. No. 56358—Type XH16 Socket	30¢
Cat. No. 56359—Type XH16 Assembly of Form, Plug and Socket	90¢

AIR WOUND BUFFER COILS



These coils are suitable for use in exciter buffers and low-powered finals. The series of four coils will tune over their respective bands with a 20 mmf. condenser. Available with either center link or end link.

Cat. No. 56360—10 meter coil	Specify End or Center Link
Cat. No. 56361—20 meter coil	
Cat. No. 56362—40 meter coil	
Cat. No. 56363—80 meter coil	

Net Price, each coil 90¢

SOCKET TO FIT THE ABOVE COIL

Cat. No. 56364—Type XH16	Net Price 30¢
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COTO 250 MA. CHOKE

COTO RF CHOKE—

Meets a demand for a choke capable of carrying more current than the popular 175 ma. type. Retaining all the features, it will pass 250 milliamperes with one heating. Inductance 2.2 mH; DC resistance, 18.5 ohms; size, 1 1/2" x 1/2".

Cat. No. 56488—Type CI-22	
Net Price	44¢



MIDGET R.F. CHOKES

Insulux mounting. Continuous. Five or winding in four sections. Inductance 2 1/2 mH; distributed capacity 1 mH. For push-pull and high frequency drivers.

No. 56409	Net Price 14¢
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BUD MIDGET RECEIVING CONDENSERS

A real value! Rotor and stator of hard drawn brass. Soldered in shaft. Assures low R.P. resistance and permanent alignment. Insulation is of Insulux.



Cat. No.	Max. Cap. Mmf.	Min. Cap. Mmf.	No. P's.	Net Price Ea.
56379	10	2	2	50¢
56380	15	3	3	50¢
56381	20	4	4	50¢
56382	25	5	5	56¢
56383	50	1	7	62¢
56384	80	6	11	71¢
56385	100	6	14	73¢
56386	140	7	19	79¢
56387	150	7	21	80¢

Dual Spaced Midget Condensers

The same construction as above but larger air gap .0005".

56388	0	2	2	50¢
56389	15	3	3	50¢
56390	20	4	4	73¢
56391	50	7	15	82¢

Insulux Ribbed Forms

Ideal for ultra Hi-Freq. Low loss rib for Doublet wire grip. Rib handle and drilled holes.

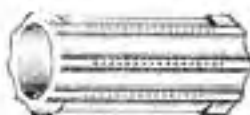


No. 56392	4 prong. Net..... 35¢
No. 56393	5 prong. Net..... 38¢
No. 56394	6 prong. Net..... 41¢

TRANSMITTING COIL FORM

Complete coil forms for winding. Threaded ring. Insulux. Adaptable for 25, 50, 80 and 100 turns. Threaded for winding and size wire up to No. 18. Holes provided for wires and mounting—easy to use.

Cat. No. 56395—2 1/2" O.D. x 5" long.	
Special Net Price	59¢
Cat. No. 56396—4" O.D. x 6 1/2" long.	
Net Price	\$1.18



BAKELITE TUBING



Genuine bakelite 1/16" wall. Smooth, natural color finish.

Cat. No.	O.D. Dia. Inch	Net Price Per Inch	Cat. No.	O.D. Dia. Inch	Net Price Per Inch
56397	1/8"	3¢	56403	1/4"	5¢
56398	3/16"	3¢	56404	5/16"	6¢
56399	1/4"	3¢	56405	3/8"	6¢
56400	5/16"	4¢	56406	7/16"	7¢
56401	3/8"	4¢	56407	1/2"	7¢
56402	7/16"	4¢			
56403	1/2"	5¢			

COTO TRANSMITTING CHOKE

Type CI-20—A heavy-duty choke for the power stage. Built in the 100, 80, and 40 meter bands. The effective impedance is high enough to make parallel plate feed practical. Current 600 mH. Inductance 1.4 mH; DC resistance, 11 ohms; Size, 3 1/2" x 1 1/2".

Cat. No. 56410

Type CI-21—Designed for maximum impedance in the 80, 40, and 20 meter bands. Straddle case, current 600 mH. Inductance, 1.1 mH; DC resistance, 6 ohms; Size, 3 1/2" x 1 1/2".

No. 56411	Net, each—CI-20 or CI-21	73¢
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CLOUGH-BRENGLE Precision Instruments

MEASURED PERFORMANCE WITH NO. 199

Accurately measured and certified receiver performance with the C-B Microvoltmeter No. 199.

Now you can prove that receivers have been restored 100% to original factory sensitivity as published in microvolts.

In this revolutionary instrument, with output accurately calibrated from less than $\frac{1}{2}$ to 100,000 microvolts, are features costing heretofore twice to twenty times the sum:

(1) Attenuator section on a massive foundation of heavy copper. (2) Hand-made, ultra-precision lattice-wound, non-inductive attenuator.

TOPS IN ACCURACY WITH VERNI-VIDER — NO. 110

Check these features as determining the real worth of a Signal Generator.

Accuracy—Does frequency check to $\frac{1}{2}\%$ at all dial points? Dial—Can it be read to 1/10% on all settings?

Stability—Does thermal shielding limit drift to $\frac{1}{2}\%$ over long periods of service? Are output and frequency unaffected by load changes and line variations?

Attenuation—Is it down to $\frac{1}{2}$ microvolt or better, and so accurate as to enable reliable gain measurements?

Leakage—Is no leakage perceptible adjacent

to a receiver with a sensitivity of $\frac{1}{2}$ microvolt or better?

Waveform—Are audio modulation and audio output truly sinusoidal? Range—Do fundamental frequencies extend to 30 mc.?

Model 110 checks 100% on all counts. Range—100 kc.-30 mc. Accuracy— $\frac{1}{2}\%$. Verni-Vider reads to 1/10%. Output— $\frac{1}{2}$ to 100,000 microvolts. Unmodulated r-f, modulated r-f (external or 400-cycle internal), and audio, 400-cycle. Attenuation—Verni-regulated ladder design. Drift—Held to 1/10%. Cable—Shielded coaxial. Finish—Dark green and silver. Size— $9\frac{1}{2} \times 15 \times 7$. Weight—23 lbs.

RIVALS COSTLIEST DESIGNS — MODEL OCX

Advantages of costliest signal generators, in accuracy, suppression of harmonics, reduction of stray, attenuation, stability and other factors of real merit are combined by Model OCX with outstanding ruggedness.

Hand calibration to ten or more points on each of five bands guarantees accuracy of $\frac{1}{2}\%$, while speed of direct reading is approximated through hand inscription on the front panel of over ninety most used frequencies.

With costlier C-B designs, Model OCX shares the exclusive advantages of auto-inductor band switching, by which circuit constants

are held identical for all coil combinations, while reduced wiring and contact resistance improve materially the Q of the circuit and so increase both frequency range and voltage output.

Range—100 kc.-30 mc. Accuracy— $\frac{1}{2}\%$. Verni-Vider reads to 1/10%. Output— $\frac{1}{2}$ to 100,000 microvolts. Unmodulated r-f, modulated r-f (external or 400-cycle internal), and audio, 400-cycle. Attenuation—Dual, continuously variable. Drift—Held to 1/10%. Cable—Shielded coaxial. Finish—Dark green and silver. Size— $9\frac{1}{2} \times 12 \times 7\frac{1}{2}$. Weight—18 lbs.

AUDIO OSCILLATOR NO. 79-C

Permits the modernization of receiver audio amplifiers, to meet improved listening standards, more especially as developed by the rapidly enlarging market for high-fidelity record reproduction through the addition of electric pick-ups to existing sets.

Existing audio deficiencies and the resultant amount of high or low frequency compensation required to lift reproduction to satisfactory level are quickly and accurately determined by an Audio Oscillator No. 79-C, with output variation less than plus or minus $\frac{1}{2}$ db from

75 to 10,000 cycles, and plus or minus 2 db above and below these limits.

Range—0-15,000 cycles. Accuracy—2%. Verni-Vider reads to 1/10%. Output—16 $\frac{1}{2}$ db, or 0-270 mw, into 300 or 5000-ohm impedance. Distortion—Less than 2%. Hum Level—58 db, below maximum output. Adjustment—Zero beat with electronic eye. Stability—Improved by thermal shielding. Finish—Dark green and silver. Size— $9\frac{1}{2} \times 13 \times 8$. Weight—20 lbs.

TWO TUBE TESTERS IN ONE — DYNATEST NO. 125

Accurately measuring the effect of signal voltage on plate current flow, Dynatest Model 125 provides a reliable index to mutual conductance of radio tubes, as a dependable gauge of actual operating merit.

Closely controlled leads and voltages are applied to each tube element, and the resultant plate current is measured in an accurately calibrated circuit to give a simple "Good-Bad" indication.

The Dynatest tube chart lists over 600 tubes, the largest number ever published. Yet, due to copyrighted numerical indexing and grouping, it is the fastest-finding chart as well.

Point-to-point check is made with hot cath-

ode for each element of every tube, even to pilot light taps on ballast tubes. Further, for tubes in critical circuits, sensitivity of test is increased several times.

Non-obsolescence is proved by performance, since more than 150 tubes have been added to the chart since it was first published, without a single revision in wiring or construction.

Finish—Dark green, gray and silver. Size, with cover, 11 $\frac{1}{2} \times 9\frac{1}{2} \times 5$. Weight, 12 lbs.

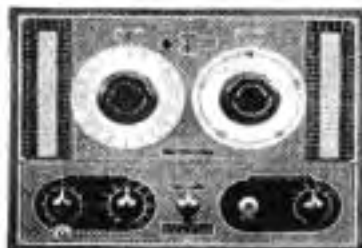
Cat. No. 8B104 Type 125.
Net Cash Price\$34.50
Deferred Plan, \$5.00 cash and \$4.50 for seven months.



Cat. No. 8B100 Type 199, including 5 tubes.
Net Cash Price\$95.00
Deferred plan \$10.00 cash and \$9.65 for ten months.



Cat. No. 8B101 Type 110, including tubes.
Net Cash Price\$49.50
Deferred plan, \$7.00 cash and \$7.60 for seven months.



Cat. No. 8B102 Model OCX, including tubes.
Net Cash Price\$34.50
Deferred plan, \$5.00 cash and \$4.50 for seven months.



Cat. No. 8B103 Type 79-C.
Net Cash Price\$59.50
Deferred plan, \$7.00 cash and \$6.00 for ten months.



Standard of Quality CLOUGH-BREngle



Cat. No. **8B105** Type 135.
Net Cash Price.....\$54.50
Deferred Plan, \$8.00 cash and \$6.00 for 10 months.



Cat. No. **8B106** Type 285.
Net Cash Price.....\$49.50
Deferred Plan, \$7.00 cash and \$7.00 for 7 months.



Cat. No. **8B107** Type 127, including 10 tubes.
Net Cash Price.....\$93.50
Deferred Plan, \$10.00 cash and \$9.50 for 10 months.

Anti-Capacity Demodulator 147 correctly brings the demodulator into the receiving circuit instead of vice versa.
Cat. No. **8B108**
Net Price \$9.75



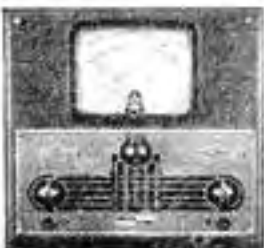
Graphoscope No. 128

ADDS CAPACITY AND DECIBEL RANGES

Twenty-nine ranges, including capacity and decibel, are selected with new speed and safety. D-C Sensitivity, 2000-ohms per volt. A-C, 1250.

D-C Volts—0-5-20-100-500-1000. A-C Volts—0-5-20-100-500-1000. D-C Mils.—0-5-10-100-Short Pos. Ohms—0-4-000. 0-40-000. 0-4 mega. With ext. battery, 0-20 mega. DB—15-50. 6 mm. 500-ohm level. A-C Output—Same as a-c volts. Accessories—Test prods and alligator clip. Finish—Dark green and silver. Size—9 1/4 x 9 1/4 x 4 1/2. Weight—8 lbs.

Cat. No. **8B111** Type 185, with snap-lock steel cover.
Net Cash Price.....\$29.50
Deferred Plan, \$5.25 cash and \$4.00 for 7 months.



Unimeter No. 185

FASTEST AND SIMPLEST UNI-CHECKER NO. 135

In addition to checking reliably and swiftly all tubes by Dynatest method (chart shows over 600 tubes—greatest number ever published) it provides most rapid and easy point-to-point check of all circuits and components, through only two switches and only two binding posts.

Twenty-nine ranges, covering every radio and sound service measurement, including capacity and power output, are incorporated in a new safety progression that virtually eliminates meter danger.

Special precision movement, adjusted to five positions, is accurate to 2% of full-scale on

d-c at 2000 o. p. v. Wide open scales are clearly separated by printing in different colors.

D-C Volts—0-5-20-100-500-1000. A-C Volts—0-5-20-100-500-1000. D-C Mils.—0-5-10-100-500-Short Pos. Ohms—0-4000-400,000-40 mega. Mfda.—0005-1. 05-10. DB—15-15. -34-25. +11-39. +25-53. +31-59. A-C Output—Same as a-c volts. Power—A-C line, with 30-volt compensation. Accessories—Test prods and clip. Cover and extra wall chart. Finish—Dark green and silver. Size—With steel cover, 9 1/4 x 15 x 5 1/4. Weight—18 lbs.

MOST RAPID AND FOOLPROOF—UNILYZER NO. 285

Only two rotary switches give instant connection for all tests at socket terminals and ground, including capacity, and output in a-c volts or db.

Work is speeded further by a new, copyrighted, quick-finding listing chart of over 450 receiving tubes, the greatest number ever published.

Selection of measuring functions and ranges is enormously simplified through only two switches, one for function and the other for range, with a single zero set for resistance and capacity scales.

Meter burn-out is eliminated by connecting the line cord of the receiver through the Uni-

lyzer so that set power is shut off when switching to resistance or capacity ranges, and by connecting the meter through safety test buttons.

Operation is optional either as an analyzer or point-to-point tester, with a full complement of accessories for each.

Ranges—Same as 135 Uni-Checker, with added provision for 4 1/2-volt internal battery to give ohms ranges of 0-4000, 0-400,000. Zero Set—Push button shorts terminals. Accessories—Analyzer cable, 8 adapters, test prods, and clip. Cover and extra wall chart. Finish—Dark green and silver. Size—With removable cover, 9 1/4 x 15 1/4 x 4 1/4. Weight—17 lbs.

BEST FOR DYNAMIC TEST—GRAPHOSCOPE NO. 127

Fastest, handiest and most efficient tool for modern dynamic testing, Uni-Signal Graphoscope No. 127 combines, in a single instrument of unprecedented ruggedness and compactness, all the advanced features of Graphoscope No. 126 and Uni-Signal Frequency Modulator No. 111.

Along with the latter it delivers only the wanted signal, free from harmonics. Further, without external time-base cables, it automatically centers and synchronizes the frequency modulated signal with the pre-set linear sweep to provide perfect trace stability and freedom from wandering.

Simplified grouping and complete absence of interaction between controls give quick and easy mastery of every function.

Sweep Width—Variable 0-50 kc., for stages badly misaligned and to give complete view of broad single-stage responses. Image Expansion—Enables close-up view as desired. Return Trace—Eliminated by positive suppressor circuit. Fidelity—Greatly superior because of combination of perfectly linear 120-cycle sweep and pure sinusoidal 50-cycle frequency modulation. Finish—Dark green and silver. Size—9 1/4 x 10 x 13. Weight—23 lbs.

GIVES ONLY THE WANTED SIGNAL



Uni-Signal No. 111

AUTOMATIC GOOD-BAD LEAKAGE TEST

Determinative leakage standards operate in a novel circuit to give automatic Good-Bad indication, with added, quick precision check. Tests all condensers in radio use.

Mfda.—000001-001-10-100. Ohms—10-10,000-10 mega. 0-500 mega. Leakage—0-500 mega. Power Factor—0-50 %. Transf. Turns Ratio—0-100. Accuracy—Improved by C-B precision potentiometer. Dial—Wide-open, read vertically. Snap-Leg—Tilts instrument at reading angle. Finish—Dark green and silver. Size—9 1/4 x 10 x 4 1/4. Weight—10 lbs.

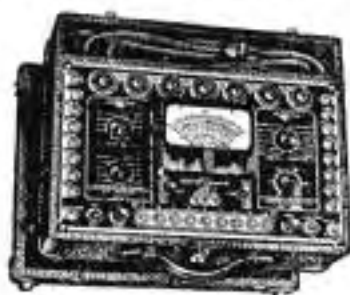
Cat. No. **8B112** Type 130, with all tubes.
Net Cash Price.....\$24.50
Deferred Plan, \$5.00 cash and \$3.75 for 6 months.



No. 130 A-C Bridge

SIMPSON PANEL METERS TEST EQUIPMENT

440 TEST MASTER



An all service tube and set tester for general servicing. Also magic eye and 624 tubes. Entirely AC operated. Ranges covered are 0-7.5, 20, 150, 300, 750, and 1500 Volts AC and DC. 0-5, 15, 75, and 300 MA. DC. 0 to 1000, 100,000 and 100 meg. —10 to 150 decibels (6 ranges). 0-15 Amps. DC. 0-30 MFDs.

Cat. No. **S1677** Model 440
Net Price **\$58.72**

AC-DC VOLT-OHM-MILLIAMMETER



A small pocket type AC-DC service instrument. Employs a Simpson 2" rectangular meter. Sensitivity 1000 ohms per Volt. Ranges: 0-10, 250 and 1000 AC Volts. 0-10, 50, 250 and 1000 DC Volts. 0-10, 50 and 250 DC MA. 0-1000, 400,000 and 100,000 ohms. Complete with test leads.

Cat. No. **S1678** Model 120
Net Price **\$13.97**

This 20,000 ohm per volt meter has been made available for those desiring to assemble their own testing equipment. Sensitivity of meter is 50 microamperes. With resistor and accessory kit listed below. Ranges available as follows: 0-2.5, 5, 10, 50, 250, and 1000 Volts AC or DC. 0-1, 10, 100, and 500 MA. DC. 0-50 and 100 microamperes DC. 0-25 amperes DC. —10 to 150 decibels (5 ranges). 0-4000, 400,000 and 40 mega. Meter has all of these ranges etched on the dial. Size 4 1/2" square.

Cat. No. **S1679** Model 28, Meter only. **\$16.17**
Net Price

Resistor and Accessory Kit with rectifier and output condenser mounted.

Cat. No. **S1680** **\$11.76**
Net Price

SIMPSON PANEL METERS



Type 258-358-558-1258
1358-1558

Simpson Meters are the only instruments in their price class incorporating soft iron pole pieces and bridge type construction. These design features are your assurance that Simpson instruments will remain uniformly accurate through years of service.



Type 278-378-578-1278
1378-1578

Models 278-378 and 578 are available with illuminated dials. Add 50c to the prices shown below and specify.

MODEL 258-358-558 in round Bakelite case, flange diameter 3 3/4", body diameter 2 3/4", depth overall 1 3/4".

MODEL 1258-1358-1558 in small round Bakelite case, flange diameter 2-5/16", body diameter 2-1/16", depth overall 1 3/4".

MODEL 278-378-578, in square Bakelite case, width 3", height 3 3/4", mounts in round hole, 2 3/4" in diameter.

MODEL 1278-1378-1578, 2-5/16" square, mounts in round hole, 2 3/4" in diameter.

"DC" MILLIAMMETERS

Type 258	Net Price	Type 278	Range	Type 1258	Net Price	Type 1278	Net Price
Cat. No.		Cat. No.	MA.	Cat. No.		Cat. No.	
S1600	\$5.07	S1613	0-1	S1626	\$4.25	S1639	
S1601	4.15	S1614	0-5	S1627	3.50	S1640	
S1602	4.15	S1615	0-10	S1628	3.50	S1641	
S1603	4.15	S1616	0-15	S1629	3.50	S1642	
S1604	4.15	S1617	0-25	S1630	3.50	S1643	
S1605	4.15	S1618	0-50	S1631	3.50	S1644	
S1606	4.15	S1619	0-100	S1632	3.50	S1645	
S1607	4.15	S1620	0-150	S1633	3.50	S1646	
S1608	4.15	S1621	0-200	S1634	3.50	S1647	
S1609	4.15	S1622	0-250	S1635	3.50	S1648	
S1610	4.15	S1623	0-300	S1636	3.50	S1649	
S1611	4.15	S1624	0-500	S1637	3.50	S1650	
S1612	4.15	S1625	0-1000	S1638	3.50	S1651	

"AC" VOLTMETERS

Type 558	Net Price	Type 578	Range	Type 1258	Net Price	Type 1278	Net Price
Cat. No.		Cat. No.	Volts	Cat. No.		Cat. No.	
S1652	\$4.15	S1653	0-10	S1658	\$3.50	S1661	
S1653	4.15	S1654	0-15	S1659	3.50	S1662	
S1654	5.07	S1657	0-150	S1660	4.25	S1663	

R.F. THERMOCOUPLE AMMETERS

Type 358	Net Price	Type 378	Range	Type 1358	Net Price	Type 1378	Net Price
Cat. No.		Cat. No.	Amps.	Cat. No.		Cat. No.	
S1664	\$7.19	S1667	1	S1670	\$6.20	S1673	
S1665	7.19	S1668	5	S1671	6.20	S1674	
S1666	7.19	S1669	5	S1672	6.20	S1676	

20,000 OHM PER VOLT FOUNDATION METER



WESTON

These instruments are distinguished for their fine workmanship and permanent dependability. Performance of the highest order. Very accurate. Flange 3 3/4" diameter; body 2 3/4" dia. 1" back of flange.



MODEL 301 DC MILLIAMMETERS

Cat. No.	Range	Net Each	Cat. No.	Range	Net Each
S1681	0-1	\$7.35	S1687	0-50	
S1682	0-5		S1688	0-100	
S1683	0-10		S1689	0-150	
S1684	0-15	6.61	S1690	0-200	\$6.61
S1685	0-20		S1691	0-300	
S1686	0-30		S1692	0-500	

MODEL 476 AC VOLTMETERS

Cat. No.	Range	Net Price	Cat. No.	Range	Net Price
S1693	0-15	\$6.61	S1694	0-150	\$8.26

SIMPSON PORTABLE INSTRUMENTS

Simpson's precision and calibration are incorporated in these portable instruments. Bridge type D'Arsonval movements. Accuracy 1/2 of 1% on DC and 1% on AC. Dimensions 2 1/2 x 5 1/2 x 3. Case of moulded Bakelite. Knife edge pointer and graduated scale.



DC MILLIAMPERES

Cat. No.	Range	Net Price
S1695	0-1	\$26.14
S1696	0-10	\$26.87
S1697	0-50	\$26.87
S1698	0-100	\$26.87
S1699	0-250	\$26.87
S1700	0-500	\$26.87

AC VOLTMETERS

Cat. No.	Range	Net Price
S1701	0-15	\$19.80
S1702	0-150	19.80
S1703	0-500	23.34
S1704	0-1000	28.77

DC VOLTMETERS

Cat. No.	Range	Ohms Per Volt	Net Price
S1705	0-15	100	\$23.34
S1706	0-150	200	23.34
S1707	0-500	500	29.60
S1708	0-1000	500	31.00

AC AMMETERS

Cat. No.	Range	Net Price Ea.
S1709	0-5	
S1710	0-10	
S1711	0-15	\$19.80
S1717	0-20	

RADIO SHACK SERVICE

Space does not allow a complete listing of Simpson or Weston instruments but we can supply you with any instruments of their manufacture on very short notice.



PANEL INSTRUMENTS AND TEST EQUIPMENT

VOLT-OHM MILLIAMMETER



Has two instruments, AC and DC, in volume size twin case. Resistance measurements have individual zero adjustments. Selector switch for all readings. Ranges as follows: DC 10-50-250-500-1000 volts at 25,000 ohms per volt; 1-10-30-250M A. Low ohms backup circuit, 1/2 to 500, 1500 ohms, 1% and 3 microamps. AC 10-50-250-500-1000 volts.

Cat. No. **51884** 1200-A
Net Price.....**\$23.35**

1200-E—25,000 ohms per volt DC milliammeters and resistance readings in 40 increments with this new super sensitive Volt-Ohm-Milliammeter. Instruments reads DC: 10-50-250-500-1000 volts at 25,000 ohms per volt; 1-10-30-250 milliamperes; low ohms, backup circuit, 1/2 to 1000; 10,000 ohms, 1 and 3 microamps; AC 10-50-250-500-1000 volts.

Cat. No. **51885** 1200-E
Net Price.....**\$30.55**

FREE POINT TESTER

For servicing sets using metal, glass-metal or glass tubes. Has five sockets with standard RMA markings. Panel also includes eight automatic switch type and ten single action jacks. Makes all series and parallel meter connections through the set sockets in all parts of the circuit. Used in conjunction with any Triplet Volt-Ohm-Milliammeter.

Cat. No. **51886** 1220-A
Net Price.....**\$10.78**

TUBE TESTER



Checks all receiving sets, plus broadcast types. The neon shorts test shows the slightest inter-element shorts and leakage. GOOD and BAD tests. AC meter for line volts adjustment. AC operated (60 cycles—110 volts). Up-to-date tube charts.

Cat. No. **51887** 1212
Net Price.....**\$21.56**



Type 326-336



Type 321-331

Triplet DC meters are the PAR-sonal type with an extra light moving coil and reinforced strong parts. The AC meters are the movable iron repulsion type. All are air damped. Extra light moving parts. Both AC and DC instruments have Sapphire jewel bearings. Finest workmanship to assure dependable performance. White enameled on metal dial. Molded compound zero adjuster. Accuracy 2%. All models listed are flange mount as illustrated. Molded compound case.

DC MILLIAMMETERS

Model	Body 2 1/4" Dia.	Depth 1 1/2". Flange 2 1/2".	Model	Body 2 1/4" Dia.	Depth 1 1/2". Flange 2 1/2".
Model 321	Model 321	Model 321	Model 321	Model 321	Model 321
Approx. Range	Res.	Cat. No.	Approx. Range	Res.	Cat. No.
0-1	25	51800	0-1	25	51800
0-1.5	25	51801	0-1.5	25	51801
0-5	25	51802	0-5	25	51802
0-10	25	51803	0-10	25	51803
0-15	25	51804	0-15	25	51804
0-30	25	51805	0-30	25	51805
0-50	25	51806	0-50	25	51806
0-100	25	51807	0-100	25	51807
0-150	25	51808	0-150	25	51808
0-200	25	51809	0-200	25	51809
0-250	25	51810	0-250	25	51810
0-300	25	51811	0-300	25	51811
0-500	25	51812	0-500	25	51812
0-750	25	51813	0-750	25	51813
0-1000	25	51814	0-1000	25	51814

DC VOLTMETERS

Model	Body 2 1/4" Dia.	Depth 1 1/2". Flange 2 1/2".	Model	Body 2 1/4" Dia.	Depth 1 1/2". Flange 2 1/2".
Model 321	Model 321	Model 321	Model 321	Model 321	Model 321
Approx. Range	Res.	Cat. No.	Approx. Range	Res.	Cat. No.
0-10	25	51845	0-10	25	51845
0-25	25	51846	0-25	25	51846
0-50	25	51847	0-50	25	51847
0-100	25	51848	0-100	25	51848
0-150	25	51849	0-150	25	51849
0-200	25	51850	0-200	25	51850
0-300	25	51851	0-300	25	51851
0-500	25	51852	0-500	25	51852
0-750	25	51853	0-750	25	51853
0-1000	25	51854	0-1000	25	51854

THERMO-COUPLE R.F. AMMETERS

Model	Body 2 1/4" Dia.	Depth 1 1/2". Flange 2 1/2".	Model	Body 2 1/4" Dia.	Depth 1 1/2". Flange 2 1/2".
Model 341	Model 341	Model 341	Model 341	Model 341	Model 341
Approx. Range	Res.	Cat. No.	Approx. Range	Res.	Cat. No.
0-1	25	51855	0-1	25	51855
0-2.5	25	51856	0-2.5	25	51856
0-5	25	51857	0-5	25	51857

AC VOLTMETERS

Model	Body 2 1/4" Dia.	Depth 1 1/2". Flange 2 1/2".	Model	Body 2 1/4" Dia.	Depth 1 1/2". Flange 2 1/2".
Model 321	Model 321	Model 321	Model 321	Model 321	Model 321
Approx. Range	Res.	Cat. No.	Approx. Range	Res.	Cat. No.
0-10	25	51858	0-10	25	51858
0-15	25	51859	0-15	25	51859
0-250	25	51860	0-250	25	51860

DC MICROAMMETERS

Model	Body 2 1/4" Dia.	Depth 1 1/2". Flange 2 1/2".	Model	Body 2 1/4" Dia.	Depth 1 1/2". Flange 2 1/2".
Model 321	Model 321	Model 321	Model 321	Model 321	Model 321
Approx. Range	Res.	Cat. No.	Approx. Range	Res.	Cat. No.
0-50	25	51872	0-50	25	51872
0-100	25	51873	0-100	25	51873
0-200	25	51874	0-200	25	51874
0-300	25	51875	0-300	25	51875

POWER LEVEL INDICATORS



Used to measure sound or noise levels in amplifiers for Public Address, Theaters, Broadcasting Studios. Standard or highly damped. Standard range reads up 0 and down 10 decibels, zero decibel at 1.73 volts, 500 ohm line, 0 milliwatts.

Cat. No. **51882** Model 421—Up 0 down 10, Net.....**\$12.91**
Cat. No. **51883** Model 425—Up 0 down 10, Net.....**\$11.76**

25,000 OHM PER VOLT METER KIT—7" METER



AC—DC FOUNDATION Instruments with 25,000 ohms per volt sensitivity DC—0-10-50-250-1000 volts at 25,000 ohms per volt; 0-50-250 microamperes; 1-10-50-250 milliamperes; 1/2 to 500 ohms, backup circuit; 20,000, 200,000 ohms and 2 megohms. AC—0-10-50-250-1000 volts at 1000 ohms per volt. Complete with all the necessary resistors and parts to complete kit, with case.

Cat. No. **51867** **\$23.81**
Net Price.....
Meter only, less parts and case.
Cat. No. **51868** **\$17.96**
Net Price.....

VOLT-OHM MILLIAMMETER



MODEL 600 Universal Pocket Volt-Ohm-Milliammeter. AC and DC voltage ranges: AC and DC 10-50-250-500-1000 volts at 1000 ohms per volt; 1-10-50-250 DC ma. Low ohms, 1/2 to 500; 1000 ohms to 250,000. Black molded panel and case; 2-1/16"x5/16"x2 1/4" deep. Self-contained battery. Test leads with alligator clips are included.

Cat. No. **51869** Mo. 600
Net Price.....**\$14.70**
Attractive leather carrying case available.
Cat. No. **51870** Model 600
Net Price.....**\$3.60**

SIGNAL GENERATOR



All Wave Direct Reading Signal Generator now has built-in trimmer calibrated coils. Accurate enough for servicing requirements. Six bands cover 120-50,000 Kc.—all fundamental. Fully stabilized. 400 cycle audio signal available.

Cat. No. **51871** 1202 for 110 volts—60 cycle AC operation.
Net Price.....**\$26.95**

TEST EQUIPMENT

TRIPLETT DELUXE SET TESTER

Model 1601



An outstanding Multi-Purpose Set Tester. DC Volts 10-50-250-500-1000-2000 at 25,000 ohms per volt; AC Volts 10-50-250-500-1000-2000 at 1000 ohms per volt; DC Microamperes 0-50; DC Milliamperes 1-10-50-250-500; DC Amperes 1-2-20; Resistances 0-500 low ohms; 0-20,000 ohms; 0-200,000 ohms; 2 and 20 megohms. Exclusive circuit development permits measurement of resistance without batteries.

Condenser Tester: Capacity quality tests .001 to .20 microfarads. Electrolytic leakage test. Free Point Tester: Makes all series and parallel meter connections through five sockets with standard R.M.A. markings. Decibel Meter—special chart permits decibel readings against volts from 20 to plus 55.

Modernistic square indicating instrument with front illumination. Shadowgraph meter for time voltage control.

Cat. No. S3900 Model 1601. Metal case.

Net Price

\$44.42

Available in Black leatherette case. (Add \$3.02 to above price.)

PRECISION AC-DC VOLT-OHM-DECIBEL-MILLIAMMETER

2500 Volts AC-DC

The Series 842L uses the large precision 4 1/2" square type meter incorporating easy reading scales and large numerals. The high sensitivity of the meter movement, 400 microamperes, permits overlapping resistance ranges up to and including 10 megohms. AC-DC voltage ranges at a sensitivity of 1000 ohms per volt.

Specifications — Five AC voltage ranges at 1000 ohms per volt; 0-10; 0-50; 0-250; 0-1000; 0-2500 volts. Five DC voltage ranges at 1000 ohms per volt; 0-10; 0-50; 0-250; 0-1000; 0-2500 volts. Mix DC current ranges: 0-1; 0-10; 0-50; 0-250 MA; 0-1; 0-10 Amps. Four resistance ranges: 0-400 ohms (20 ohms center) about method; 0-100,000 ohms (1000 ohms center); 0-1 Megohm (8000 ohms center); 0-10 Megohms (80,000 ohms center).

Note: Provisions for mounting ohmmeter power supply (8 1/2 and 45v. batteries) on inside of case. No external connections necessary.

Five Decibel ranges from -10 to +43dB; ODR: +14dB; +23dB; +40dB; +48dB. Five Output ranges: 0-10; 0-50; 0-250; 0-1000; 0-2500 volts.

Cat. No. S3907 Type 842L as illustrated less batteries and test leads. Net Price

\$21.95

MODEL 842P same meter as above in a walnut portable case.

Cat. No. S3908 Net Price

\$23.95

AC-DC VOLT-OHM-MILLIAMMETER



MODEL 736 Pocket Volt-Ohm-Milliammeter has AC and DC ranges, molded case with rounded corners, individual zero adjustment for resistance measurements and is furnished complete with accessories. Has a Triplett precision instrument. Readings are: AC and DC Volts 0-15-150-750; DC at 1000 ohms per volt; AC at 400 ohms per volt; DC Milliamperes, 0-15-150; Low Ohms, 1/2 to 1000; High Ohms, 0-100,000 at 1 1/2 volts.

Cat. No. S3909 Model 736 Net Price

\$11.76



READRITE PANEL METERS

Flush type, requiring 2-3/16" hole. Round style is nickel and square type is black enameled.

DC MILLIAMMETERS

Round Style
Cat. No.
S3913
S3915
S3917
S3919
S3921
S3923
S3925

Net Price

59c

Range
M.A.
0-15
0-25
0-50
0-100
0-150
0-200
0-300
0-400

Square Style
Cat. No.
S3914
S3916
S3918
S3920
S3922
S3924
S3926
S3928

Net Price

79c

5 1/4" Foundation Meter Volt-Ohms-Milliammeter

The following instrument is 0-1 DC Milliammeter (100 ohms internal resistance); reads 10-50-250-500-1000 volts; 1-10-50-250 milliamperes; low ohms, .2 to 500; high ohms to 100,000.

Cat. No. S3912 Model 521

Net Price

\$6.86



READRITE TUBE CHECKER



MODEL 421 has an approved emission circuit. Checks all receiving tubes. Meter shows test is positive and accurate. Tester incorporates dependable Readrite meter. Quarter oak case with removable cover.

Cat. No. S3911 Model 421

Net Price

\$15.88

TRIPLETT PUSH BUTTON TUBE TESTER

Model 1611



A Robot Tube Tester and Volt-Ohm-Milliammeter with simplified push-button controls. The tube testing circuit is the modified emission type and is constructed to RMA load requirements. Results show directly on the GOOD-BAD three-color scale. Neon shorts test indicates the slightest inter-element shorts and leakage. Separate plate tests on diodes and rectifiers. Checks any receiving tube, plus ballast types.

Volt-Ohm-Milliammeter ranges are:

250-500-1000 at 1000 ohms per volt; DC Milliamperes 0-1-10-50-250; Low Ohms, harkup circuit, 1/2 to 500; 200,000 ohms, 1.5 and 3 megohms. AC Volts 0-10-50-250-500-1000 at 400 ohms per volt. Operating instructions are on the rotating chart. AC meter for line volts adjustment. The attractive all-metal case has lustrous satin finish and stopping panel. Removable cover. Case size is 15 1/4" x 11 1/4" x 6 1/4", closed. AC operated, 60 cycles, 110 volts.

Cat. No. S3901 Model 1611.

Net Price

\$48.51

MODEL 1610 Tube Tester only is the same as Model 1611 described above but does not include the Volt-Ohm-Milliammeter section.

Cat. No. S3902 Model 1610.

Net Price

\$38.22

TRIPLETT DYNAMIC MUTUAL CONDUCTANCE TUBE TESTER

Model 1511

Model 1511 contained in quarter oak case with selective switch controls. Incorporates the highly developed dynamic mutual conductance circuit and volt-ohm-milliammeter. Rotating charts enable a quick selection of tube testing instructions. Tubes appear on chart at same time for ease. Case is 15 1/4" x 11 1/4" x 7 1/4". Illuminated instrument has a gold dial.

Cat. No. S3903

Model 1511.

Net Price

\$58.48

MODEL 1510 — Dynamic Mutual Conductance Tube Tester only.

Same as Model 1511 described above less Volt-Ohm-Milliammeter.

Cat. No. S3904 Model 1510. Net Price

\$48.68

Antenna — Keying — Sensitive and Time Delay Relays

SIGMA RELAY WITH A MU-SWITCH

This Sigma Type M relay is designed to permit the use of a low powered electron tube to control directly non-inductive loads up to one kilowatt and inductive loads up to one quarter kilowatt AC. Through its use a 20 or 50 tube having an output capacity of fifty milliwatts can be employed to govern alarm systems, counters, electrically actuated valves.

The load contacts are integral with a Tube Mu-Switch of the single pole, double throw type. The switch is rated at 10 amperes, non-inductive load, 115 volts AC.

The action is exceptionally rapid and positive. Provided with a five prong base for plug-in mounting in a standard vacuum tube socket, 2 1/2" in diameter and 3 1/2" high. Its dust proof housing, with transparent top, is finished in black crackle.



Input Characteristics at 50 Milliwatts				
Cat. No.	Field, Ohms	Volts	Milli-amperes	Net Price
S2832	2000	10.0	5.0	\$5.60
S2833	5000	15.8	8.1	6.00
S2834	8000	20.0	2.5	6.00

Other field resistances can be supplied on order.

SIGMA SENSITIVE RELAY



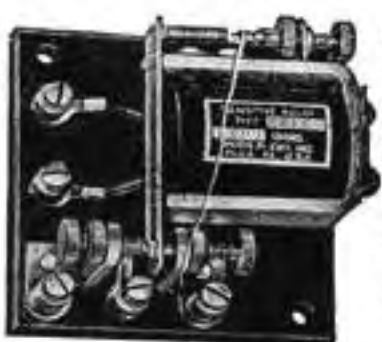
The Sigma S-B relay is a sensitive instrument that proves invaluable in electronic and delicate control applications. It is particularly adaptable to supervisory circuits and coupling to photo-electric systems. The input rating is only 4 milliwatts DC. Single pole, double throw switching is provided. The contacts are of silver. The Type S-B relay will handle 50 watts non-inductive load at 110 volts AC or, on low voltage, a maximum current of 1 ampere non-inductive load.

The five-prong base permits plug-in mounting in standard vacuum tube sockets, 2 1/2" in diameter and 3 1/2" high.

Input Characteristics at 4 Milliwatts				
Cat. No.	Coil Res. Ohms	Volts	Milli-amperes	Net Price
S2835	2000	2.83	1.41	\$4.00
S2836	5000	4.47	0.83	4.40
S2837	8000	5.65	0.71	4.40

Other field resistances can be supplied on order.

EBY SENSITIVE RELAY AND PHOTOELECTRIC CELL



The EBY Electric Eye is a new type photoelectric cell designed for long life, ruggedness, and sensitivity. Can be used in suitable circuits to operate relays and other devices. Plug-in to a standard 4-prong socket.

No. S2838 E12
Net Price ...\$2.94



ER-12 RELAY

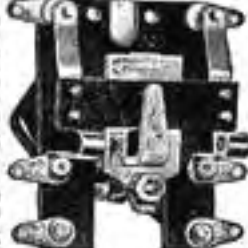
The EBY ER-12 Sensitive Relay is designed for direct current. Ideal for installation in photoelectric control equipment—vacuum tube amplifier circuits. The values of coil resistances are: 5,000 and 10,000 ohms. The relay is rated at 11.25 milliwatts for positive operation. It may be adjusted to as little as 1.25 milliwatts. Action is single-pole, double-throw with contacts rated to carry 2.5 amperes at 115 volts AC. At

sterling silver contacts. These contacts 115 volts DC, 1.5 amperes.			
Cat. No.	Coil Res.	Net Price	
S2839	5,000	\$3.82	
S2840	10,000	\$3.62	

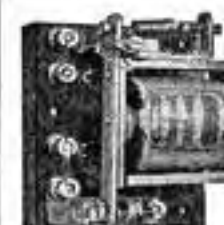
DUNCO RELAYS

Radio Relays

These relays have two isolated contacts for operation in low or high voltage circuits at any frequency. Outstanding features include low contact resistance, extremely fast operation, suitable for bug keying, high voltage suitable for use on autos, trains, planes, elevators, boats, etc.



Cat. No.	Type	Operates On	Net Price
S2819	RA1	2.5 V. AC	\$2.00
S2820	RA3	6.3 V. AC	2.00
S2821	RA15	115 V. AC	3.50
S2822	RD1	5 to 6 V. DC	2.00
S2823	RD15	10 to 15 V. DC	3.00



SENSITIVE RELAY

This ultra sensitive relay is designed for use where current is limited. The coil has a resistance of 10,000 ohms and is adjustable to operate between 1 to 18 Ma. DC. Contacts will carry 2 Amps. at 110 V. AC. Size 2 1/2" x 2 1/2".

Cat. No. S2824 Type CXB51.
Net Price\$5.50

WARD LEONARD ANTENNA CHANGE OVER RELAY



Automatic switching for the antenna for either transmission or reception. May also be used for switching directional antenna. Will handle frequencies up to 60 Mc. Micalex insulation. Silver-to-silver, 4 ampere contacts.

Cat. No. S2826 Type 507-532 6-8 V. DC.
Cat. No. S2827 Type 507-531 110 V. AC.
Net Price\$5.88

Heavy Duty Antenna Relay identical to the relay described above except that it is larger in size and the contacts will carry 15 amps. R.F.

Cat. No. S2828 507-521 110 V. AC Coil.
Net Price\$14.70

Heavy Duty Antenna Change Over and Break-In Relay. Exactly the same as the 507-521 described above except that it has 2 additional poles, one which is normally open and one is normally closed.

Cat. No. S2829 507-520 110 V. AC Coil.
Net Price\$16.17

MIDGET KEYING RELAY

This keying relay is suitable for speeds up to 40 wpm. Large silver contacts assure long life. Coil requires only 50 Ma. and 110 V. AC. Contacts will carry 6 Amps. 110 V. AC. Size 2 1/2" x 1 1/2" x 1 1/2".

Cat. No. S2800 Type ASBX 1.

Net Price\$3.85



OTHER DUNCO RELAYS

The relays listed below are of the same dimensions as that listed above and have the same type of contacts and same wattage coil.

Type	Appl. VDC	Cat. No.	Cat. No.	Cat. No.	Net Price
ABTX1	SPST*	S2801	S2802	S2803	\$3.85
ADBX1	DPST*	S2804	S2805	S2806	4.95
BSHX1	SPST	S2807	S2808	S2809	3.85
CBX1	SPST	S2810	S2811	S2812	4.68
CDX1	DPST	S2813	S2814	S2815	6.60
CEX1	SPST	S2816	S2817	S2818	9.60

*Double Break, others are single break.

Normally closed, others are normally open. These relays can be supplied in any voltage up to 115 V. AC or any voltage up to 90 V. DC at no extra cost on special order. For voltages from 90 V. DC to 115 V. DC add \$1.21 to the above prices. Specify voltage.

DUNCO TIME DELAY RELAY



This time delay relay is intended for transmitter use, designed to delay the plate current for 30 seconds after the filaments of the rectifiers are turned on. Provided with a snap-on housing and panel mounting studs. He-cycles in two minutes. Coil is for 110 V. 60 cycle AC. Contacts will carry 110 V. AC 6 Amps.

Cat. No. S2825 Type TD327.
Net Price\$8.80

GUARDIAN KEYING RELAY



Requires its operating current from any filament transformer winding, ranging from 5 to 16 volts AC or from any convenient DC source. Contacts are pure silver. Exceptionally speedy with clean make and break that will give the very best C.W. note and make copying easy. Mount direct to metal panel without danger of short.

Cat. No. S2830 Model K-100.
Net Price\$3.20

GUARDIAN BREAK-IN RELAY

Identical in appearance with the Keying relay above.

An absolute necessity for installation where the transmitter is located in another room from the receiver and key. A frequently employed installation is to have the K-100 connect the antenna and plate voltage to the receiver when open. Closing a toggle switch in the 110-volt circuit to the relay disconnects the receiver antenna and plate voltage, and at the same time connects the antenna to the transmitter and closes the 110-volt primary of the plate transformers. Action is D.P.D.T.

No. S2831 Model B-100.
Net Price\$4.40

THE ELECTRIC EYE IN THEORY AND PRACTICE

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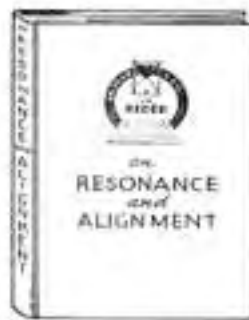
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Cat. No.	Type	Height	Net Price
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No. **52918**—Type 73. 15 1/4" high (body 14 1/4") base 2 1/4" square. Net Price..... **38c**

No. **52919**—Type 74. 16 1/4" high (body 15 1/4") base 2 1/4" square. Net Price..... **38c**

No. **52920**—Type 75. 17 1/4" high (body 16 1/4") base 2 1/4" square. Net Price..... **38c**

No. **52921**—Type 76. 18 1/4" high (body 17 1/4") base 2 1/4" square. Net Price..... **38c**

No. **52922**—Type 77. 19 1/4" high (body 18 1/4") base 2 1/4" square. Net Price..... **38c**

No. **52923**—Type 78. 20 1/4" high (body 19 1/4") base 2 1/4" square. Net Price..... **38c**

No. **52924**—Type 79. 21 1/4" high (body 20 1/4") base 2 1/4" square. Net Price..... **38c**

No. **52925**—Type 80. 22 1/4" high (body 21 1/4") base 2 1/4" square. Net Price..... **38c**

No. **52926**—Type 81. 23 1/4" high (body 22 1/4") base 2 1/4" square. Net Price..... **38c**

No. **52927**—Type 82. 24 1/4" high (body 23 1/4") base 2 1/4" square. Net Price..... **38c**

No. **52928**—Type 83. 25 1/4" high (body 24 1/4") base 2 1/4" square. Net Price..... **38c**

No. **52929**—Type 84. 26 1/4" high (body 25 1/4") base 2 1/4" square. Net Price..... **38c**

No. **52930**—Type 85. 27 1/4" high (body 26 1/4") base 2 1/4" square. Net Price..... **38c**

No. **52931**—Type 86. 28 1/4" high (body 27 1/4") base 2 1/4" square. Net Price..... **38c**

No. **52932**—Type 87. 29 1/4" high (body 28 1/4") base 2 1/4" square. Net Price..... **38c**

No. **52933**—Type 88. 30 1/4" high (body 29 1/4") base 2 1/4" square. Net Price..... **38c**

Johnson "Q" Antennas



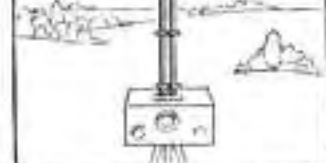
The ultimate in Amateur transmitter antenna systems. Provides 100% more radiation from same power than obtained with ordinary non-matched antenna feeder systems. No distortion of radiation pattern or angle. No exact or critical overall line lengths. Line may be several thousand feet long if desired. Glazed porcelain insulation. No deterioration or weathering. May be used with long wire harmonic radiators, directional beam and reflector systems. Kit includes following: suspension insulator, one length copper-weld antenna wire (1/4 wave length long), two lengths 1/4" aluminum tubing, a supply of splicing bars, a splicing template and complete instructions.

No. **52924**—10-Meter Kit. Net Price..... **\$4.62**

No. **52925**—20-Meter Kit. Net Price..... **\$7.20**

No. **52926**—40-Meter Kit. Net Price..... **\$13.29**

No. **52927**—5-Meter "Q" Antenna. Net Price..... **\$13.29**



Designed for convenient installation at a fixed station or under a variety of conditions in portable work. Consists of two 1/4" diameter aluminum tubes which form a half-wave radiator. Two 1/4-wave impedance matching tubes and four splicing bars of porcelain or Mycalex are also furnished. Lower ends of 1/4-wave tubes are fitted with heavy-duty combination binding-screw plugs, while upper ends have cast aluminum elbow fittings over which open ends of the antenna rods are slipped. Easily dismantled. Weighs only 15 lbs.

No. **52927**—Type 5Q 5-Meter Antenna complete with porcelain splicing bars. Net Price..... **\$4.12**

Metal Base Stand-Offs With Jacks

Same as above except with jack instead of bolt and nut.

Cat. No.	Type	Body Height	Net Price
52907	65	1 1/4"	12c
52908	66	2 1/4"	21c
52909	67	4 1/4"	32c

FEEDER SPREADERS

White glazed wet process porcelain, with grooves for line conductors and holes for tie-wires.

Cat. No.	Type	Length	Net Price
52937	132	2"	9c
52938	134	4"	12c
52939	136	6"	15c

CONE INSULATORS

The new cone shaped insulators have numerous applications in transmitter construction. The extremely low loss factor of this material make them particularly useful in mounting coils, condensers, tube sockets, etc., for high frequency applications. They are threaded at both ends and take common machine screws.



Cat. No.	Type	Ht.	Dia. Btm.	Dia. Top	Thread	Net Price
52928	600	5 1/4"	1 1/4"	1 1/4"	6-32	.07
52929	601	1"	1 1/4"	1 1/4"	8-32	.08
52930	601J	1"	1 1/4"	1 1/4"	74 Jack	.11
52931	602	1 1/4"	1 1/4"	1 1/4"	8-32	.10
52932	602J	1 1/4"	1 1/4"	1 1/4"	74 Jack	.14
52933	603	2"	1 1/4"	1 1/4"	10-32	.15
52934	603J	2"	1 1/4"	1 1/4"	74 Jack	.18
52935	604	3"	1 1/4"	1 1/4"	10-32	.21
52936	604J	3"	1 1/4"	1 1/4"	74 Jack	.29

INSULATORS AND ANTENNA SYSTEMS

BIRNBACH TRANSMITTING TUBE SOCKETS



Features include brass nickel plated shell, all brass hardware. Heavy side-wiping double spring phosphor bronze contacts. Porcelain base is of high quality; low absorption material in white.

Cat. No. **S5014** 50 Watt.
Net Price **73c**
Cat. No. **S5015** 10 Watt.
Net Price **50c**

BIRNBACH CONE INSULATORS

Improved physical and electrical qualities of this ceramic make it admirably suited for use in the construction of these Cone Standoff Insulators. A complete range of heights having threaded holes and jacks is available. Supplied with all hardware.



Cat. No.	Height	Threaded Bottom	Holes Top	Type No.	Net Price
S5027	1/2"	6-32	6-32	430	6c
S5028	1"	8-32	8-32	431	9c
S5029	1"	8-32	Jack	431J	12c
S5030	1 1/2"	10-32	10-32	432	12c
S5031	1 1/2"	10-32	Jack	432J	15c
S5032	2 1/2"	1/4-20	1/4-20	433	15c
S5033	2 1/2"	1/4-20	Jack*	433J	29c

*Large Jumbo Jack, others standard size.

BIRNBACH STAND-OFF INSULATORS

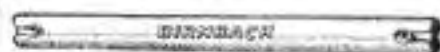


These high quality wet process porcelain insulators are supplied with complete hardware.

Cat. No.	Hgt.	Hardware	Type No.	Net Price	Per Ten
S5016	1/2"	6-32	405	4c	38c
S5017	1"	8-32	966	5c	44c
S5018	1"	Jack	966J	6c	...
S5019	1 1/2"	10-32	866	7c	...
S5020	1 1/2"	Jack	866J	9c	...
S5021	1 1/2"	Jack*	866SJ	21c	...

*Large Jumbo Type Jack. All others standard size.

TRANSMITTING ANTENNA INSULATORS



These insulators are of high tensile strength and low moisture absorption material.
No. **S5034**—7" long Net **29c**
No. **S5035**—12" long Net **41c**

FEEDER SPREADER



All edges rounded to prevent chafing of transmission lines. Made of low absorption, high tensile strength porcelain.
No. **S5036**—2" Long **7c**
No. **S5037**—4" Long **9c**
No. **S5038**—6" Long **12c**

BIRNBACH FEED-THRU INSULATORS



Highly vitrified, low absorption porcelain is used throughout. Strength is achieved by the proper proportions. Long insulating sleeves on the lower part of the insulator conductor.

Cat. No.	Height Above	Depth Below	Type No.	Hardware	Net Price
S5022	1/2"	1/2"	458	6-32	7c
S5023	1"	1/2"	478	10-32	12c
S5024	1"	1/2"	478J	Small	15c
S5025	1 1/2"	1/2"	4125	10-32	15c
S5026	1 1/2"	1/2"	4125J	Small	18c

BIRNBACH LEAD-IN INSULATORS

These insulators are used as transmitter and receiver lead-in insulators. Each cone is 2 1/2" high and made of low absorption, highly vitrified glazed porcelain.



Lead-in insulators have sufficient porcelain insulating bushings to insulate the entire threaded rod that goes through the partition or wall. Supplied with complete hardware as illustrated.

No. **S5039**—With 10" Rod.
Net Price **\$0.71**
No. **S5040**—With 15" Rod.
Net Price **\$0.88**

ALL WAVE NOISE REDUCING AERIALS

RCA MAGIC WAVE ANTENNA



Reduces noise on the Broadcast Band and Short Wave Bands—from 530 to 23,000 KC. Consists of one antenna coupling transformer, one receiver coupling transformer, 60 feet antenna wire, 45 feet transmission cable, ground wire, five insulators, and one ground clamp.
Cat. No. **S5041** Complete Kit Type 9812. Net Price.....**\$4.17**

RCA SPIDER WEB ANTENNA 12 to 2100 and 4 to 2100 Meters



The first truly all-wave antenna, multiple-tuned to all bands, with built-in coupling transformer that automatically selects the proper segments for the desired band. Provides a tremendously increased signal to the receiver, reduces noise on all short wave bands, and brings in stations you have never heard before.

The RCA Spider-web Antenna comes complete, all connections soldered, ready to erect. Requires a span of only 38 feet.

Clearance of 12 feet. 12 to 2100 meters.
No. **S5042**. Net Price **\$5.37**
Extending range to 4 meters making 5 antennas in one.
No. **S5043** RCA High Frequency Kit. Net Price **\$0.90**

RCA MODEL 395 ANTENNA

An inexpensive noise reducing antenna kit, factory assembled and soldered. Will operate with all types of receivers. Easy to install. Requires a stretch of 49 feet for installation. Effective over a very wide frequency range. Consists of two antenna wire coils, 45 ft. of transmission line, one junction box, two strain insulators, one receiver coupler, two coupling unit links, two half-it knobs and a ground clamp. Supplied with complete instructions for installation.



Cat. No. **S5044** Model 395.
Net Price **\$2.37**

A REAL ANTENNA VALUE!

Universal All-Wave Doublet Antenna System

Especially designed for Philco, Spartan, Zenith, RCA, Bruno, Crosley, Stewart Warner, General Electric, Emerson, and other all-wave receivers. This doublet antenna greatly increases the signal strength of most receivers. It is very effective in reducing noise especially on the short-waves. Consists of two doublet coils of antenna wire soldered to the porcelain weather-proof junction box, to which is connected 50 ft. of weather-proofed transmission line, one screw-eye insulator, two porcelain insulators and one lightning arrester.



Cat. No. **S5045**.
Special Net Price **\$1.47**

BIRNBACH FEED-THRU INSULATOR (Extra Long)

Cat. No.	Height Above	Depth Below	Type No.	Hardware	Net Price
S5050	2 1/2"	1/2"	4175	1/4-20	29c
S5051	2 1/2"	1/2"	4175J	Large	44c



CABLES SHIELDING --- HOOKUP AND MAGNET WIRE

EO-1 TRANSMISSION CABLE



EO-1: Minus Insulated Transmission Cable. Very heavy (about 1/2 dia.) for high power transmitters. Low capacity—about 75 ohms impedance.

No. **S2107**
Special Net Price, **\$0.03**
Per Foot

Multi-Conductor Rubber Covered Cable

A high quality rubber cable supplied in 2, 3, 4, 5 wire conductors each of No. 18 standard rubber jacket copper wire. Weatherproofed and very flexible. Ideal for connecting speakers outdoors.



Cat. No.	Conductors	Per Ft.	100 Ft.
S2109	2	2 1/2¢	\$2.15
S2110	3	3 1/2¢	2.70
S2111	4	4¢	3.25
S2112	5	5¢	4.15

RUBBER COVERED SHIELDED CABLE



Consists of individual flexible stranded No. 18 tinned copper conductors, each insulated with a heavy wall of colored rubber for easy identification. Tinned copper shield woven over all conductors and then cotton wrapped. Heavy tough rubber coat outside.

Cat. No.	Conductors	Net Per Ft.	100 Ft.
S2173	2	3 1/2¢	\$3.40
S2174	3	4¢	3.45
S2175	4	5¢	4.90
S2176	5	7¢	6.90

BATTERY CABLE



Individual rubber insulated stranded conductors, cotton braided and color coded, twisted and twisted together, and with outer serving of brown cotton. Used for connecting dynamic speakers, public address systems, analyzers, etc.

Cat. No.	Conductors	Net Per Ft.	100 Ft.
S2177	2	2¢	\$1.95
S2178	3	2 1/2¢	2.45
S2179	4	3 1/2¢	3.10
S2180	5	4¢	3.50
S2181	7	5¢	3.95
S2181A	8	5 1/2¢	4.95

SHIELDED WIRE



Stranded tinned copper conductor with wall of live rubber over which a tinned copper braid is woven.

Cat. No.	Size	Feet	Net Price
S2182	18	50	\$0.49
S2183	18	100	.96
S2184	18	50	1.81
S2185	18	100	3.00

BIRNBACH MAGNET WIRE



Made of thoroughly annealed pure copper wire. Genuine Italian silk used on silk insulated and unbleached cotton for insulated wire. The enameled type has a routing of extra flexible enamel of high dielectric strength. All come in continuous lengths in spools.

Plain Enameled

Cat. No.	Size	No. Ft.	Net
S2075	14	25	20¢
S2076	16	63	23¢
S2077	18	101	24¢
S2078	20	159	25¢
S2079	22	253	26¢
S2080	24	402	27¢
S2081	26	640	31¢
S2082	28	1013	34¢
S2083	30	1602	38¢
S2084	32	2543	41¢
S2085	36	6310	56¢

Push Back Hook-Up Wire

Consists of push back non-fraying insulation, thoroughly saturated in moisture-proof compound. Effective in reducing leakage. Available in solid and stranded and in 5 colors—red, blue, yellow, black and green.

DOUBLE COTTON

Cat. No.	Size	No. Ft.	Net
S2086	14	30	25¢
S2087	16	61	27¢
S2088	18	96	30¢
S2089	20	150	33¢
S2090	22	234	36¢
S2091	24	362	43¢
S2092	26	558	52¢
S2093	28	842	61¢
S2094	30	1311	79¢
S2095	32	1880	90¢
S2096	36	3881	\$1.40

Double Silk Covered

Cat. No.	Size	No. Ft.	Net
S2097	18	49	26¢
S2098	18	78	29¢
S2099	22	120	30¢
S2100	24	196	31¢
S2101	26	310	37¢
S2102	28	468	45¢
S2103	30	775	50¢
S2104	32	1207	65¢
S2105	36	2668	\$1.17



CRYSTAL MICROPHONE CABLE



Single conductor braided copper extremely flexible. Cellulose Acetate treated textile insulation, saturated in high dielectric lacquer. Closely woven tinned copper shield over which is heavy rubber jacket.

No. **S2106** **\$0.04**
Net, Per Ft. **\$0.04**
100 Ft. **\$2.00**

APPROVED CENTER RIP LAMP CORD



Rubber jacketed with each conductor separately insulated in tough rubber sheath which splits exactly down the center when pulled apart. Conductors are No. 18 stranded copper with cotton wrap. Black.

No. **S2108** **\$1.20**
Net, Per Foot **\$1.20**
100 Feet **\$1.20**

TRANSMISSION CABLE



Very efficient for double noise reducing antenna. Low capacity—impedance about 75 ohms to match flat top. Twisted pair of stranded copper conductors with heavy wall of rubber and outer weatherproof braid.

Cat. No. **S2194**—50 Ft.
Net Price **\$4.95**
Cat. No. **S2195**—100 Ft.
Net Price **\$9.50**

AC-DC ANTENNA WIRE

For indoor aerials, flexible, brown masticized rubber. No. **S2196** 25 Ft. **\$0.12**
Net, Per Foot **\$0.12**
No. **S2197** 100 Ft. **.45**
Net, Per Foot **.45**

RUBBER COVERED LEAD-IN WIRE



Solid No. 18
Solid copper No. 18 conductor— with special grade live rubber compound wall for outdoor use.
No. **S2198** 50 Ft. **\$0.20**
Net, Per Foot **.40**
No. **S2199** 100 Ft. **.33**
Net, Per Foot **.33**

Stranded No. 18
Same as above except for stranded conductor.
No. **S2200** 50 Ft. **\$0.22**
Net, Per Foot **.44**
No. **S2201** 100 Ft. **.44**
Net, Per Foot **.44**

Solid Tinned Wire

For wiring transmitters and winding coils. Easily soldered.
No. **S2202** 10 27¢ **\$1.03**
No. **S2203** 12 18¢ **.59**
No. **S2204** 14 11¢ **.38**
No. **S2205** 16 9¢ **.32**

AUTO RADIO SHIELDED LEAD-IN



Stranded tinned copper conductor insulated with rubber and braided with cotton to 1/2" dia. with tinned copper, braid overall.

No. **S2186** **\$0.07**
Net, Per Ft. **\$0.07**

TEST LEAD WIRE



A very flexible kinkless test lead wire with a high quality insulation consists of 64 strands of tinned copper wire.

No. **S2187**—25 Ft. Red—Black
No. **S2188**—25 Ft. Red—Black
Net Price, Each **\$0.29**

BRAIDED TINNED COPPER SHIELDING



Very flexible, closely woven. Ideal for interference shielding.

Cat. No.	Size	Ft.	50 Ft.
S2189	1/4"	2¢	\$0.95
S2190	3/8"	3¢	1.40
S2191	1/2"	4¢	1.95

7MM HIGH TENSION CABLE



Standard 7 millimeter wire, with a lacquered braid overall covering.
No. **S2192** **\$0.03**
Net, Per Ft. **\$0.03**
No. **S2193** 100 Ft. **\$2.50**

WIRE AND ANTENNA EQUIPMENT

Airplane Insulators



Glazed porcelain strain insulators.
No. **s2024**
Net Price, each.....3c
10 for 28c

GLASS INSULATORS



Made of crystal clear glass. Smooth surface prevents collection of dirt and ice.
No. **s2025**—3 1/4" long.
Net Price, each.....3c
10 for 27c

Screw-Eye Insulators

White glazed porcelain with heavy cadmium-plated (rust-proof) steel screws.
No. **s2026**—2 inch.
Net Price, each.....2 1/2c
No. **s2027**—7 inch.
Net Price, each.....4c

CLAMP GROUND



Presses current metal. With oil third paint to make standard.
No. **s2028**
Net, each.....6c
10 for 46c

DIAL CABLE PHOSPHOR BRONZE

For drum dials—42 strands phosphor bronze wire over a steel thread center.
No. **s2036**—45 Ft. Spool. **\$.74**
No. **s2037**—100 Ft. Spool. **2.50**

SPAGHETTI TUBING

Highest quality, very flexible. Glossy finish. Will fit up to No. 12 Wire. 39" lengths.
Cat. No. Color
s2038 Red
s2039 Black
s2040 Green
s2041 Blue
s2042 Yellow
s2043 Brown
Net Price per length...6c

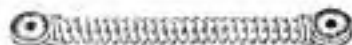


VIS-O-GLOW LIGHTNING ARRESTER



Neon Tube Arrester. Very sensitive and will carry heavy discharges. Carries \$100 Fire Insurance. Made of crystal clear glass. Single and Duplex.
No. **s2044**—Single.
Net Price, each.....59c
No. **s2045**—Duplex.
Net Price, each.....82c

SPRING AERIAL ADJUSTER



Corrects excessive sag of antenna. Prevents swinging and swaying. Consists of two hooks with porcelain rings interconnecting with powerful compression spring. Cadmium plated.
No. **s2047** Net Price.....18c

SOLID AND STRANDED ENAMELED AERIAL WIRE

This antenna wire is ideal for all types of antennas. It is hard drawn and has a very heavy coat of enamel. Will stretch very little.

7 STRANDS NO. 22

Cat. No. **s2001**—50 Ft. Net Price.....23c
Cat. No. **s2002**—100 Ft. Net Price.....45c
Cat. No. **s2003**—300 Ft. Net Price.....90c



SOLID NO. 14 12, 10

50-Foot Rolls			100-Foot Rolls			200-Foot Rolls		
Cat. No.	Gauge Size	Net Ea.	Cat. No.	Gauge Size	Net Ea.	Cat. No.	Gauge Size	Net Ea.
s2004	14	20c	s2007	14	35c	s2010	14	\$.68
s2005	12	29c	s2008	12	53c	s2011	12	.99
s2006	10	47c	s2009	10	90c	s2012	10	1.73

COPPERWELD ENAMELED WIRE

A copper clad steel core wire. Especially useful where no stretching can be allowed.

100-Foot Rolls			150-Foot Rolls			200-Foot Rolls		
Cat. No.	Gauge Size	Net Ea.	Cat. No.	Gauge Size	Net Ea.	Cat. No.	Gauge Size	Net Ea.
s2013	14	\$.73	s2016	14	\$1.08	s2019	14	\$1.43
s2014	12	1.12	s2017	12	1.68	s2020	12	2.22
s2015	10	1.62	s2018	10	2.43			

FILAMENT HOOK-UP WIRE



A very high quality rubber-covered stranded wire for many applications to carry heavy current. Supplied in red and black.
No. 14 Stranded Cur. Cap. 15 amps.
No. **s2029**—Red 50 Ft. Coil
No. **s2030**—Black 40c
No. 12 Stranded Cur. Cap. 20 amp.
No. **s2031**—Red 25 Ft. Coil
No. **s2032**—Black 60c

TRANSMITTING ANTENNA INSULATORS



White glazed, wet process porcelain. Combine remarkable strength with very low loss. Have high dielectric strength. All 1" diameter.
Cat. No. Lath. Net Price
s2033 7" 18c
s2034 12" 26c
s2035 20" 34c

BIRNBACH NAIL-IT KNOBS



Glazed white porcelain. Grooves for two wires. Dia. 1 1/4".
No. **s2048**
Net Price, each.....2c

INSULATED STAPLES

For receiving lead-in, ground and other installation wires. Box of 100.
No. **s2058**
Net Per Box.....10c



TRANSPPOSITION BLOCKS

1% ± 2%. For doublet antenna transmission lines. Made of wet process. White porcelain.
Cat. No. **s2059**
Special Net Price.....4c
10 for 36c

BIRNBACH LIGHTNING ARRESTER



Black glazed porcelain. Nickel-plated hardware. Although low in price, this is a quality arrester.
No. **s2021** Net Price.....7c

LEAD-IN STRIPS



Covered with heavy black cotton braid, weather-proofed by several coats of Duro lacquer. Clip connectors each end.

No. **s2022**—Single
Net 4c
No. **s2023**—Doublet
Net 9c

PORCELAIN WALL TUBES



6 inches long.
Cat. No. **s2061**
Net Price.....3c

BIRNBACH DOUBLET LIGHTNING ARRESTER



Air gap type—the standard for good installations of doublet antenna. Black glazed porcelain with nickel-plated hardware.
No. **s2046**
Net Price, each.....18c

TEST PRODS

Needle Tip Prods



Prods equipped with shocks to hold standard type phonograph needles. Can be easily changed. Will make contact through insulation or pitch. Red and black fibre handles are 5 1/2" long, and 3/4" thick, having red and black knirkless wire 50" long, with Spade Lugs, or Phone Tips.
No. **s2049**—With phone tips.
No. **s2050**—With spade lugs.
Net Price, each.....29c

PHONE TIP TEST PRODS

Same as above except phone tip prods.
No. **s2051**—With phone tips.
No. **s2052**—With spade lugs.
Net Price, each.....29c

PILOT LIGHT SOCKETS

No. **s2056**—Three Lug.
No. **s2057**—Clip Type.
Net, each.....5c
Package of 10.....45c



RADIO SHACK SERVICE

We can supply you with practically any kind of wire at lowest prices. If you do not see what you want, write for quotation.

PANELS, CHASSIS CABINETS AND RACKS

STANDARD RACK PANELS

19" Long



Made in accordance with standard specifications. Will fit relay racks that are drilled to either Amateur or Western Electric standards. Constructed of $\frac{1}{8}$ " steel with a baked black crackle finish. Available in 12 standard sizes listed below.

Cat. No.	Width	Net Price
S6202	1 1/2"	\$.39
S6203	2 1/4"	.44
S6204	3 1/4"	.49
S6205	4 1/4"	.54
S6206	5 1/4"	.59
S6207	6 1/4"	.69
S6208	7 1/4"	.79
S6209	8 1/4"	.89
S6210	9 1/4"	1.09
S6211	10 1/4"	1.19
S6212	11 1/4"	1.29
S6213	12 1/4"	1.29

METER PANELS FOR RELAY RACKS



Made of same material and the same finish as the rack panels listed above but with holes for meter. Supplied with either 3 or 5 holes for 2" or 3" meter. Size is 5 1/4" high by 19" long.

Cat. No.	No. Holes	Net Price
S6239	3	\$.97
S6240	5	1.44
S6241	3	.97
S6242	5	1.44

TABLE RELAY RACKS



Intended for table mounting. Mounting holes are accurately spaced on 1 1/2" centers. Finished in black ripple enamel, and shipped knocked down. Fit all standard rack panels. No. S6259 25" H, 20" W, 13" D, panel space 21" x 19". Net Price ...\$3.82. No. S6260 32" H, 30" W, 13" D, panel space 28" x 19". Net Price ...\$5.00.

RELAY RACK BRACKETS

Steel brackets finished in crystalline lacquer. Used to reinforce racks, chassis and panels.

No. S6261 5" Base Brackets (Per Pair).	33c
No. S6262 7" Base Brackets (Per Pair).	49c
No. S6263 9" Base Brackets (Per Pair).	65c



PORTABLE CABINETS



Size 12 x 7 x 6.	No. S6264	Net \$1.68
Size 15 x 7 1/2 x 7.	No. S6265	Net \$2.21
Size 18 x 10 x 7.	No. S6266	Net \$1.85

STANDARD RELAY RACKS

NET PRICE \$12.05

PANEL SPACE 7 1/4"

Cat. No. S6200

73 1/4" HIGH

These sturdy steel racks are constructed of $\frac{1}{8}$ " steel, with spot welded corners. Finished in black ripple enamel. Racks are for use with standard 19" long panels, and are accurately drilled for mounting holes every 1 1/2". Holes tapped for 10-32 thread. Substantially braced base to prevent wobble and to keep units in correct alignment.



Same relay rack as above except that holes are drilled and tapped to accommodate either Western Electric or Amateur panels. Cat. No. S6201. Net Price\$13.50

HINGED STEEL CABINETS



These cabinets are finished in a beautiful baked black crackle. Equipped with a full piano hinge. Front and back panels are removable. Shipped knocked down. Supplied with all hardware.

Cat. No.	Dim. H. L. D.	For Chassis	Net Price
S6243	12 x 8 x 8	2 x 7 x 2	\$1.76
S6244	12 x 10 x 8	2 x 9 x 2	1.65
S6245	12 x 14 x 8	2 x 13 x 2	2.36
S6246	12 x 18 x 11	10 x 14 x 3	2.94
S6247	12 x 18 x 11	10 x 17 x 3	3.53

STEEL CABINETS FOR RACK PANELS

Constructed of $\frac{1}{8}$ " steel. Finished in black ripple enamel. A heavy door with latch for access to chassis. Sides and back louvered for ventilation. Supplied with all hardware. All cabinets 19" wide. Cat. No. S6252 SC128—For single 8 1/2" panel. Has door in top. 13" deep. Net Price\$4.75. Cat. No. S6253 SC1713—For two 8 1/2" panels. Has door in top and on rear panel. 17 1/2" high and 13" deep. Net Price\$8.50. Cat. No. S6254 SC2613—For three 8 1/2" panels. Has door on rear panel. 26 1/2" high and 13" deep. Net Price\$9.50. Cat. No. S6255 SC3513—For four 8 1/2" panels. Has door on rear panel only. Size 35 x 19 x 13" deep. Net Price\$10.70.

Steel Brackets



Black crackle finish. $\frac{1}{8}$ " steel.	No. S6256	8" base.	Net Price 44c
	No. S6257	11" base.	Net Price 59c
	No. S6258	13" base.	Net Price 69c

CRACKLE FINISHED AND CADMIUM PLATED CHASSIS FOR RELAY RACKS



These chassis are made of No. 26 gauge cold rolled steel; 4 solid sides with welded corners; bottom edges are folded inside with a $\frac{1}{8}$ " lip. A very high-grade finish of baked crackle lacquer or Cadmium plating. All are 17" long to fit standard relay racks.

Cat. No. Crackle Finish	Cat. No. Cadmium Plated	Dimensions W L D	Net Price Each
S6214	S6215	7 x 17 x 2	63c
S6216	S6217	7 x 17 x 3	66c
S6218	S6219	10 x 17 x 2	69c
S6220	S6221	10 x 17 x 3	75c
S6222	S6223	12 x 17 x 2	79c
S6224	S6225	12 x 17 x 3	85c
S6226	S6227	13 x 17 x 3	89c

CADMIUM PLATED CHASSIS FOR GENERAL PURPOSES



These chassis are identical in construction to the chassis listed above except for sizes and are available only in a Cadmium finish.

Cat. No.	Dimensions W L D	Net Price
S6228	8 1/2 x 9 x 1 1/2	35c
S6229	8 x 10 x 2	39c
S6230	8 x 14 x 3	49c
S6231	7 x 7 x 2	39c
S6232	7 x 9 x 2	42c
S6233	7 x 11 x 2	45c
S6234	7 x 13 x 2	49c
S6235	7 x 15 x 2	49c
S6236	10 x 12 x 3	65c
S6237	10 x 14 x 3	69c
S6238	10 x 22 x 3	89c

*Available in crackle finish also at same price. Specify finish.

ENCLOSED RELAY RACKS

Constructed of heavy steel finished in black ripple enamel. Holes drilled for standard 19" panels every 1 1/2". Holes have 10-32 thread. Sides have louvers to provide ample ventilation. Back panel in form of a door with heavy latch; has two screen sections for additional ventilation. Comes knocked down, with all necessary nuts, bolts and washers. Easy to assemble. Ideal for the professional type amateur transmitter.



Cat. No.	Overall Size	Panel Space	Net Price
S6248	42 x 21 x 18 1/4"	36 1/2"	\$20.87
S6249	60 1/2 x 21 x 18 1/4"	54 1/2"	27.64
S6250	82 1/2 x 21 x 18 1/4"	77"	33.81

Cat. No. S6251 Rack Shelf: Made to fit above racks. Is 12" deep and 1" high. Finished same as racks. Net Price\$1.85

SICKLES, COILS, CONDENSERS AND SHIELDS

IRON CORE R.F. COILS



The use of the new powdered iron cores in properly designed antenna and R.F. units results in an improvement in selectivity and gain by materially raising the "Q". A high impedance primary for unit-form gain. 1700 to 550 KC. tuner with .000365 condenser. Shield size $1\frac{1}{2}'' \times 1\frac{1}{2}'' \times \frac{3}{4}''$.

Cat. No. **S8400** Antenna Coil, Cat. No. **S8401** R.F. Coil, Net Price ea. **\$8.25**
Oscillator to match above coils for 455 KC. I.F. transformers, Cat. No. **S8402** Air Core, Net Price **.73c**

TWO-BAND TUNING UNIT

This unit consists of the band switch, tuning coils and all the necessary trimming and padding condensers. Completely wired and mounted on a small chassis designed for single hole mounting. Each kit is pre-aligned at the factory, requiring no other adjustments. Designed to tune with .000365 mfd. to cover the foreign short-wave band, 18 to 52 meters and the American broadcast band 1700 to 550 KC.

Cat. No. **S8415** Type TU-265-8 less I.F. Transformer, Net Price **\$3.53**
Cat. No. **S8416** Same kit as above complete with two matched I.F. transformers, Net Price **\$5.29**

WAVE TRAPS



A wave trap for I.F., amateur, and powerful broadcast stations. Efficient coil to provide maximum rejection. Iron core used in all except amateur frequencies. Supplied in dual model. Installation very simple, only two connections. Shield can $1\frac{1}{2}'' \times 1\frac{1}{2}'' \times \frac{3}{4}''$.

Cat. No.	Freq. KC.	Net Price
S8418	*400 to 500	
S8419	*550 to 1500	
S8420	14000	
S8421	7000	
S8422	3500	
S8423	1700	
S8424	*400-500 and 550-1500	\$1.32

TRIMMER CONDENSER TYPE ILC



semi-variable trimmer condenser, mica di-electric. Mounted on Isolantite.

Cat. No.	Cap. mfd.	Net Price
S8443	2-12	1.02
S8444	3.5-30	1.02
S8445	25-50	1.26

PADDING CONDENSERS TYPE HC



mica trimmers, mounted on a ceramic form, $\frac{1}{2}'' \times \frac{1}{2}''$. Adjusting screw slotted at both ends.

Cat. No.	Min. Cap.	Max. Cap.	Net Price
S8446	17	80	21c
S8447	45	175	21c
S8448	110	300	24c
S8449	250	525	24c
S8450	420	800	27c
S8451	825	1050	27c
S8452	850	1500	29c

Iron Core Air Trimmed I.F. Transformers



A new line of I.F. transformers embodying iron cores for exceptional gain and selectivity. Air trim features with iron cores result in an ideal I.F. transformer for communication receivers. Size of shield $1\frac{1}{2}'' \times 1\frac{1}{2}'' \times \frac{3}{4}''$.

Cat. No.	Freq. KC.	Net Price
S8403	450 Input	
S8404	450 Output	
S8405	1000 Input	
S8406	1000 Output	\$2.65

Iron Core Mica Tuned I.F. Transformer

For those who wish to take advantage of the exceptional qualities of iron core construction at a moderate cost, iron core R.F. components result in high gain, increased signal and lower set noise. Improved selectivity. Available only in 450 KC. Shield size $1\frac{1}{2}'' \times 1\frac{1}{2}'' \times \frac{3}{4}''$.

Cat. No. **S8412** Input, Cat. No. **S8413** Output, Net Price **\$1.18**

BAND EXPANDING I.F. TRANSFORMERS (Iron Core)



Variable selectivity I.F. transformer electrically variable. Only a two position switch required. Two of these units may be used very efficiently to provide single signal selectivity for the "QRM".

ridges bands and by a turn of the switch the receiver is converted for reception of high fidelity programs of the finest quality. Equipped with mica trimmers. Size of shield $1\frac{1}{2}'' \times 1\frac{1}{2}'' \times \frac{3}{4}''$. Stocked in 450 KC. only. Cat. No. **S8435** Type 670, Net Price **\$1.76**

SPECIAL COIL VALUES! AC-DC TRF COILS

High gain bank wound Hts coils. High impedance primaries. Tunes from 1750 police signal to 55 KC with a .000365 tuning condenser. Each coil mounted on angle bracket. Antenna and R.F. coil matched very closely.

Cat. No. **S8453** Antenna coil, Cat. No. **S8454** R.F. coil, Net Price ea. **.25c**
Kit of two matched coils, Cat. No. **S8455**, Net Price **.49c**

SHIELDED TRF COILS



High gain bank wound Hts coils. High impedance primary. Covers 1750 KC. to 550 KC. Tunes with .000365 condenser. Supplied in matched sets of two or three coils. Cat. No. **S8456** Ant. Coil, Cat. No. **S8457** R.F. coil, Net Price ea. **.25c**

OSCILLATOR COILS

Tunes from 110 to 550 meters. For use with .000365 tuning condenser.

Cat. No.	I.F. Freq. KC.	Net Price
S8458	175 KC.	29c
S8459	450 KC.	29c

CRYSTAL FILTER I.F. TRANSFORMERS (Air Trimmed)



The crystal filter provides the ultimate in selectivity for use in the crowded amateur bands. May be used in any of the various radio handbooks. The use of 1400 KC. crystal permits a variable selectivity crystal filter from 200 to 8000 cycles with the crystal in the circuit at all times. Supplied in pairs—one input and one output. Size of shields $1\frac{1}{2}'' \times 1\frac{1}{2}'' \times \frac{3}{4}''$. Free literature available on request.

Cat. No.	Freq. KC.	Net per Pair
S8407	455-465	
S8408	1600	\$4.41

NOISE SILENCER AIR TRIMMED TRANSFORMER

For use in the noise silencer circuit designed by James Lamm, details of which appear in the A.R.R.L. handbook. This unit is the exact duplicate of the original as recommended by the designer. Shield size $1\frac{1}{2}'' \times 1\frac{1}{2}'' \times \frac{3}{4}''$. Available only in 450 KC.

Cat. No. **S8414**, Net Price **\$1.76**

MIDGET CONDENSERS



This Sickles midget variable condenser fits many applications as it is the smallest variable condenser available. Mounted on Isolantite, $\frac{1}{4}''$ shaft.

Cat. No.	Cap. Range	Net Price
S8436	2-9 mmf.	47c
S8437	*3-10 mmf.	69c
S8438	3-14 mmf.	61c
S8439	3-19 mmf.	63c
S8440	4-28 mmf.	59c
S8441	5-35 mmf.	65c
S8442	5-44 mmf.	71c

BEAT FREQUENCY OSCILLATOR (Air Trimmed)



A beat frequency oscillator is an essential part of every communication receiver and a very useful addition to any air-wave receiver. Each BFO unit contains the grid condenser and grid leak inside the shield. The tuning condenser is an air trimmer type with an extended rotor shaft for adjustment.

Cat. No.	Freq. KC.	Net Price
S8409	455-465	
S8410	1600	\$2.06

BEAT FREQUENCY OSCILLATOR MICA TUNED

Same as above except mica trimmer. Size of shield can $1\frac{1}{2}'' \times 1\frac{1}{2}'' \times \frac{3}{4}''$. Available only in 450 KC.

Cat. No. **S8411**, Net Price **\$1.03**

Interruption Frequency Oscillator Coil



Designed for quench oscillators used in ultra high frequency super-regenerative receivers. Wound on low loss Isolantite form.

Cat. No. **S8417** Type 1201, Net Price **.59c**

R.F. Chokes



General purpose receiving chokes available from 1 to 82 milli-henries. Wound on Isolantite form. Solder lug terminals.

Cat. No.	Ind. MH.	DC Res.	Net Price
S8425	1	10	11c
S8426	2	14	13c
S8427	3	20	13c
S8428	4.25	27	15c
S8429	5.5	40	16c
S8430	10	70	21c
S8431	18	92	27c
S8432	25	110	29c
S8433	40	150	35c
S8434	85	200	44c

COIL AND TUBE SHIELDS



These shields are made of natural aluminum and equipped with spade bolts for mounting.

Cat. No.	Size	Type	Shape	Net Price
S8460	2x4	63	square	12c
S8461	1 1/2 x 4	60	square	9c
S8462	3 1/2 x 1 1/2 x 1 1/2	61	oblong	9c
S8463	2 1/2 x 4	20	round	9c
S8464	1 1/2 x 4	14	round	9c
S8465	1 1/2 x 3 1/2	10	round	9c
S8466	1 1/2 x 2	4	round	9c

TRANSMITTING TUBE SHIELDS

For use with tubes such as 802 and 807 to prevent oscillation in amplifier stages. Supplied for permanent or removable mounting.

Cat. No.	Size	Type	Net Price
S8467	2 1/2 x 2 1/2	B	24c
S8468	2 1/2 x 2 1/2	A	29c

KNIFE - ROTARY - SELECTOR - AND TOGGLE SWITCHES

H-H TOGGLE SWITCHES

These Toggle Switches are approved by the First Underwriters and will carry 2 amp. at 125 V. or 1 amp. at 250 V. Two lock nuts included.



Single Pole—Single Throw		
Cat. No.	Size	Net Price
S3054	1/2"	17c
S3055	3/4"	21c
S3056	1"	23c

Single Pole—Double Throw		
Cat. No.	Size	Net Price
S3057	1/2"	22c
S3058	3/4"	23c
S3059	1"	26c

Double Pole—Single Throw		
Cat. No.	Size	Net Price
S3060	1/2"	24c
S3061	3/4"	27c
S3062	1"	30c

Double Pole—Double Throw		
Cat. No.	Size	Net Price
S3063	1/2"	37c
S3064	3/4"	42c
S3065	1"	45c

H & H ROTARY SWITCHES

Positive contact at 2 amp. 125 V. — 1 amp. at 250 V. Shaft is 1" long. Lock nuts supplied.

Cat. No.	Type	Net Price
S3066	SPST	17c
S3067	SPDT	24c
S3068	DPST	35c
S3069	DPDT	40c

C-H HEAVY DUTY SWITCH

Underwriters' approved. Will carry 15 amp. 125 V. 10 amp. 250 V. Ideal for transmitters. Double pole single throw. Bakelite construction, screw terminals, 1/2" shank.

Cat. No. S3070. Net Price 85c

SPECIAL TOGGLE SWITCH

Manufactured by GE. Makes one independent circuit as it breaks one independent circuit. Can be used for a comparison switch where circuits have to be isolated. Can also be used as a SPDT switch. Bakelite construction. 1/2" shank, 2 amps. 125 V. each circuit.

Cat. No. S3071. Net Price 29c

Miniature Switches

Black Bakelite base — nickel plated hardware.

Cat. No.	Description	Net Price
S3072	SPST	9c
S3073	SPDT	15c
S3074	DPST	21c
S3075	DPDT	26c

"OFF" AND "ON" TOGGLE SWITCH PLATE

For use with any standard panel type toggle switch.

Cat. No. S3080. Net Price 2c

CENTRALAB ISOLANTITE TRANSMITTER SWITCHES

Designed exclusively for the amateur. Isolantite insulation throughout for circuit stability and high efficiency. All types have four positions. Adjustable stops. Will operate in transmitters rated up to 100 watts and at potentials up to 1000 volts DC. Knob included.



Cat. No.	Type	Poles	Positions	Sections	Net Price
S3000	2540	1	4	1	\$1.00
S3001	2541	2	4	2	1.59
S3002	2542	3	4	3	2.29
S3003	2543	4	4	4	2.35
S3004	2540	2	4	5	3.65

Knob Plate . . . Special: numbered 1-4 for these switches only.

Cat. No. S3005 Type K-102. Net Price 12c

CENTRALAB STANDARD ISOLANTITE SWITCHES

Similar to the popular Centralab Bakelite switches but with Isolantite insulation. Use in high frequency circuits for minimum loss. Adjustable stop terminals choice of number of positions for any switch.

Cat. No.	Type	Gangs	Poles	Positions	Net Price
S3006	2501	1	1	2 to 6	\$1.00
S3007	2502	1	1	2 to 11	
S3008	2503	1	2	2 to 5	
S3009	2507	1	3	2 to 6	
S3010	2511	2	2	2 to 6	1.59
S3011	2512	2	2	2 to 11	
S3012	2513	2	4	2 to 5	
S3013	2517	2	6	2 to 6	
S3014	2521	3	3	2 to 6	2.29
S3015	2522	3	3	2 to 11	
S3016	2523	3	6	2 to 5	

DIAL PLATES for above switches.

Cat. No. S3017	Numbered 1-5	Each 9c
Cat. No. S3018	Numbered 1-6	
Cat. No. S3019	Numbered 1-10	
Cat. No. S3020	Numbered 1-11	

CENTRALAB SELECTOR SWITCHES



All Centralab Selector Switches are supplied with an "adjustable stop". These switches are supplied in the shorting and non-shorting types. BAR Knob included.

Cat. No. Shorting	Cat. No. Non-Shorting	Gangs	Poles	Positions	Net Price
S3021	S3022	1	1	2 to 6	\$.59
S3023	S3024	1	1	2 to 11	.68
S3025	S3026	1	2	2 to 5	.73
S3027	S3028	1	3	2 to 6	.79
S3029	S3030	1	4	2	.85
S3031	S3032	2	2	2 to 6	.94
S3033	S3034	2	2	2 to 11	1.03
S3035	S3036	2	4	2 to 5	1.18
S3037	S3038	2	6	2 to 6	1.24
S3039	S3040	2	6	2	1.32
S3041	S3042	3	3	2 to 6	1.29
S3043	S3044	3	3	2 to 11	1.38
S3045	S3046	3	6	2 to 5	1.47
S3047	S3048	4	4	2 to 6	1.62
S3049	S3050	4	4	2 to 11	1.76
S3051	S3052	4	6	2 to 5	2.10

CIRCUIT SELECTOR SWITCH

May be used as a single or double throw switch from 1 to 4 poles. Non-shorting type Bar knob included. Overall dimensions 1/2" x 1/2".

Cat. No. S3053 Type 1430. Net Price 44c



CENTRALAB SELECTOR SWITCH INDICATOR PLATES



Designed to be used with the above switches. 1 1/2" in diameter. Black background, natural aluminum numerals.

Cat. No.	Between No.	No.	Net Price
S3093	00	1-5	9c
S3094	20	1-6	
S3095	30	1-10	
S3096	40	1-11	
S3097	50	1-4	12c

PUSH BUTTON SWITCHES



Uniformly tempered steel. Cadmium plated springs that retain their tension permanently.

Positive contacts, non-corrosive. Bakelite knobs. Fully insulated. Mount in a single 1/2" hole on panels up to 1/8".

Cat. No.	Type	Net Price
S3076	SPST	53c
S3077	SPDT	59c
S3078	DPST	71c
S3079	DPDT	88c

Non-locking will be supplied. If locking type is desired add 1c to Cat. No.

KNIFE SWITCHES

Moulded Bakelite base and handle. Blades and Contacts Brass, nickel plated.



Cat. No.	Description	Net Price
S3081	SPST	.32
S3082	SPDT	.38
S3083	DPST	.44
S3084	DPDT	.50
S3085	SPDT	.77
S3086	DPST	.88
S3087	DPDT	.94
S3088	SPST	1.27
S3089	SPDT	1.32

FEDERAL ANTI-CAPACITY SWITCHES



Designed for low capacity between letters. Positive contacts.

Cat. No.	Type	Net Price
S3090	DPST	\$1.65
S3091	DPDT	1.65
S3092	DPDT	1.90

PORCELAIN BASE KNIFE SWITCHES

Wet processed white porcelain base. Insulated handle. Hardware brass, plated.



Cat. No.	Type	Net Price
S3098	SPST	10c
S3099	SPDT	12c
S3100	DPST	17c
S3101	DPDT	19c

CENTRALAB CIRCUIT OPENING SWITCH

12 positions, continuous rotation. Inserts a meter in any one of 12 different circuits keeping remaining 11 circuits closed. Easily wired in circuit. Wiring instructions included.

Cat. No. S3102 Type 1442. Net Price\$2.65

LOW PRICES! CONDENSERS AND AUTO RADIO ACCESSORIES

COMPACT DRY ELECTROLYTIC CONDENSERS



SQUARE CARTON

Single and dual dry Electrolytic condensers contained in wax impregnated rectangular carton, sealed against moisture and humid conditions. Dual sections are made of two single units entirely insulated from each other with separate six-inch color coded leads, permitting their use in many applications.

DC Working V. 200 Peak 250

Cat. No.	Cap. Mfd.	Dimensions	Net Price
99751	8	2 1/4 x 1 1/4 x 1/4	29c
99752	12	2 1/4 x 1 1/4 x 1/4	35c
99753	16	2 1/4 x 1 1/4 x 1/4	38c
99754	8-8	2 1/4 x 1 1/4 x 1	41c
99755	8-16	2 1/4 x 1 1/4 x 1	50c

DC Working V. 475 Peak V. 525

Cat. No.	Cap. Mfd.	Dimensions	Net Price
99756	8	2 1/4 x 1 1/4 x 1	34c
99757	12	2 1/4 x 1 1/4 x 1	47c
99758	16	2 1/4 x 1 1/4 x 1	51c
99759	8-8	2 1/4 x 1 1/4 x 1	54c

STANDARD SIZE DRY ELECTROLYTIC CONDENSER

Hermetically sealed cardboard cases. Single and dual section electrolytic condensers with convenient wire terminal leads coded for polarity and capacity.



DC WORKING V. 450 PEAK V. 525

Cat. No.	Cap. Mfd.	Dimensions	Net Price
99760	4	3 1/4 x 1 1/4 x 1/4	27c
99761	8	3 1/4 x 1 1/4 x 1/4	34c
99762	16	3 1/4 x 1 1/4 x 1 1/8/16	51c
99763	4-4	3 1/4 x 1 1/4 x 1/4	48c
99764	4-8	3 1/4 x 1 1/4 x 1/4	51c
99765	8-8	3 1/4 x 1 1/4 x 1/4	54c

DC Working V. 475 Peak V. 600

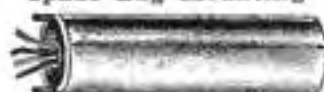
Cat. No.	Cap. Mfd.	Dimensions	Net Price
99766	4	3 1/4 x 1 1/4 x 1/4	41c
99767	8	3 1/4 x 1 1/4 x 1/4	49c

AC-DC REPLACEMENT ELECTROLYTIC CONDENSERS

Same construction as above. Working volts 250 (*25).

Cat. No.	Cap. Mfd.	No. Leads	Net Price
99768	16-16	4	70c
99769	16-8 *10-10	6	80c
99770	16-12 *10-10	6	90c
99771	8-16 *10-10	6	96c

REPLACEMENT DRY ELECTROLYTIC CONDENSERS Spade Lug Mounting



Hermetically sealed with Wax of high melting point. Contained in an aluminum finished case with two reinforced spade lugs for easy mounting. Six-inch color coded leads for polarity and capacity. Mfg. Centers 1 1/8" - 1 1/4" - 1 1/2" - 1 3/4" - 1 7/8" - 2".

Cat. No.	Cap. Mfd.	Wkg. Volts	Net Price
99772	4-8	450	54c
99773	8-8	450	60c
99774	8-16	450	66c
99775	12-16	500	63c
99776	14-8 x 16-16	200 x 25	85c
99777	16-8 x 16-16	200 x 25	87c
99778	16-12 x 16-16	200 x 25	90c

In spite of the low price of the condensers described on this page, you may be assured that they are as fine an electrolytic as can be made.

SPECIAL TRANSMITTING CONDENSER



2 MFDS.
2000 VOLTS
NET PRICE \$1.49

Cat. No. 99760
Oil treated and thoroughly impregnated. Especially designed for amateurs. Has excellent power factor and capacitance characteristics. Tested at 5,000 volts DC; working volts. 2,000 DC.

TUBULAR DRY ELECTROLYTIC CONDENSERS

Cartridge type double carton hermetically sealed, moisture-proof construction. 2 1/2" leads. Superior value and high in quality. Small in size and high safety factor.



Working V. 25

Cat. No.	Cap. Mfd.	Size	Net Price
99779	5	2 1/4 x 1/4	16c
99780	10	2 1/4 x 1/4	16c
99781	25	2 1/4 x 1/4	22c
99782	5-5	2 1/4 x 1/4	24c
99783	10-10	2 1/4 x 1/4	29c

Working V. 50

Cat. No.	Cap. Mfd.	Size	Net Price
99784	5	2 1/4 x 1/4	18c
99785	10	2 1/4 x 1/4	20c
99786	25	2 1/4 x 1/4	24c

Working V. 150

Cat. No.	Cap. Mfd.	Size	Net Price
99787	4	2 1/4 x 1/4	18c
99788	8	2 1/4 x 1/4	20c
99789	12	2 1/4 x 1/4	22c
99790	16	2 1/4 x 1/4	24c
99791	20	2 1/4 x 1/4	27c
99792	30	2 1/4 x 1/4	28c

Working V. 475

Cat. No.	Cap. Mfd.	Size	Net Price
99793	4	2 1/4 x 1/4	24c
99794	8	2 1/4 x 1/4	27c

TUBULAR PAPER CONDENSERS

Non-inductive - oil treated and thoroughly impregnated against moisture absorption. Built to rigid specifications. Leads soldered to ends and sealed to prevent corrosion.

WORKING VOLTS 400 DC

Cat. No.	Cap. Mfd.	Dimensions	Net Price
99797	.05	1 1/4 x 1/4	6c
99798	.02	1 1/4 x 1/4	6c
99799	.01	1 1/4 x 1/4	8c
99800	.01	1 1/4 x 1/4	10c
99801	.01	1 1/4 x 1/4	15c
99802	.01	1 1/4 x 1/4	20c

WORKING VOLTS 600 DC

Cat. No.	Cap. Mfd.	Dimensions	Net Price
99803	.001	1 1/4 x 1/4	7c
99804	.002	1 1/4 x 1/4	7c
99805	.003	1 1/4 x 1/4	7c
99806	.004	1 1/4 x 1/4	7c
99807	.005	1 1/4 x 1/4	7c
99808	.006	1 1/4 x 1/4	7c
99809	.007	1 1/4 x 1/4	7c
99810	.008	1 1/4 x 1/4	7c
99811	.009	1 1/4 x 1/4	7c
99812	.01	1 1/4 x 1/4	7c
99813	.01	1 1/4 x 1/4	7c

On orders of 10 or more tubular paper condensers you may deduct 10% from the above prices. May be sent.

UPRIGHT DRY ELECTROLYTIC ALUMINUM CAN CONDENSERS

For use with older type receivers. Mounting clamp included.

Working Volts 450 DC

Cat. No.	Cap. Mfd.	Size	Net Price
99814	8-8	3 1/4 x 2 1/4	.65
99815	8-16	3 1/4 x 2 1/4	.83
99816	8-8-8	3 1/4 x 2 1/4	.97
99817	9-9-9	3 1/4 x 2 1/4	1.36



INVERTED ALUMINUM CAN DRY ELECTROLYTIC CONDENSERS



Hermetically sealed dry electrolytic condensers contained in a drawn aluminum can for stud mounting. Available in single or dual units. Dual sections have separate negative and positive leads to permit either common negative or common positive use. Wire leads are coded for polarity and capacity.

DC Working V. 450 Peak V. 525

Cat. No.	Cap. Mfd.	Dimensions	Net Price
99818	8	3 1/4 x 1 1/4	42c
99819	12	3 1/4 x 1 1/4	56c
99820	16	3 1/4 x 1 1/4	68c
99821	4-4	3 1/4 x 1 1/4	52c
99822	4-8	3 1/4 x 1 1/4	60c
99840	8-8	3 1/4 x 1 1/4	72c

COMPACT INVERTED CAN ELECTROLYTICS

Same construction as above except smaller, for use where space is at a premium.

WORKING VOLTS 450 DC

Cat. No.	Cap. Mfd.	Size	Net Price
99823	4	3 1/4 x 1	36c
99824	8	3 1/4 x 1	42c
99825	12	3 1/4 x 1	56c
99826	16	3 1/4 x 1	68c

GENERATOR-AMMETER FILTER CONDENSER

Enclosed in a metal case with a mounting bracket. Eliminates noise in auto radio installations.



Cat. No.	Cap. Mfd.	Net Price
99827	1/2 mfd.	19c
99828	1 mfd.	24c

AUTO RADIO SUPPRESSORS



These suppressors are for use in eliminating spark plug noises that are picked up by auto radios.

Cat. No.	Fig.	Application
99829	A	Spark plug type.
99830	B	Short spark plug type.
99831	C	Distributor type.
99832	D	Ford V-8 type, only one needed.
99833	E	Cable type.
99843	F	Elbow type.

Net Price, each, any style..... 11c

FUSE RETAINER

Cadmium-plated separable metal container for fusing a line. Used extensively for auto sets. Takes 1" or 1 1/4" fuses. Also suitable for aerial connector. Separates easily.



Cat. No.	Net Price
99835	8c
12 for	80c

SHIELDED CONNECTOR

Antenna Coupler in auto radios. 1 1/4" x 1 1/4" dia. For coupling antenna. No fuses.



Cat. No.	Net Price
99836	6c
12 for	65c

JOHNSON TRANSMITTING EQUIPMENT AND SPECIAL VALUES!

SENSATIONAL VALUE! Phono-Motor



This is an unusually low price for such a high quality phono-motor. 78 rpm. Single speed. Complete with 10" turntable. Only 3/4" below mounting plate.
Cat. No. **g9601**
Net Price..... **\$3.95**

POWER TRANSFORMERS



Designed for replacement in midsize radios. Size 2 1/2" x 3" x 3 1/2". Mounting centers 2 1/2" x 2".

FOR 4 TUBES FOR 2 1/2 V. TUBES

Primary 115 V. at 50-60 cycles;
secondary 650 V. at 40 Ma., C.T.;
2 1/2 V. at 1.75 amps, C.T.; 5 V.
at 3 amps.
Cat. No. **g9609**
Net Price..... **69c**

5.3 V. TUBES

Primary 115 V. at 50-60 cycles;
secondary 650 V. at 40 Ma., C.T.;
5.3 V. at 1.6 amps, C.T.; 5 V. at
2 amps.
Cat. No. **g9610**
Net Price..... **73c**

FOR 3 TUBES 2 1/2 V. TUBES

Primary 115 V. at 50-60 cycles;
secondary 650 V. at 40 Ma., C.T.;
2 1/2 volt at 7 amps, C.T.; 5 V. at
2 amps.
Cat. No. **g9615**
Net Price..... **93c**

5.3 V. TUBES

Primary 115 V. at 50-60 cycles;
secondary 650 V. at 40 Ma., C.T.;
5.3 V. at 2 amps, C.T.; 5 V. at
2 amps.
Cat. No. **g9616**
Net Price..... **95c**

FIELD SUPPLIES



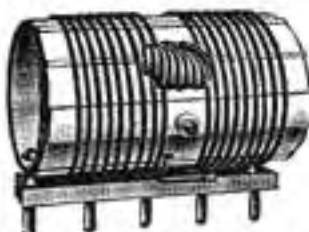
Suitable for one large or two small dynamic speakers with field coils up to 2500 ohms. Delivers 100 mls. at 125 V. Uses an 80 rectifier.
No. **g9611**—Type F80

Net, less tube..... **\$2.65**
HEAVY DUTY FIELD EXCITER

Designed for use with two or four dynamic speakers with fields from 1,000 to 2,500 ohms. Output 200 mls. 110 V. DC. Uses a 52X rectifier. Operates on 110 V. AC, 50-60 cycles.
Cat. No. **g9612**
Net, less tube..... **\$5.58**

NEW JOHNSON TRANSMITTING COILS AND COIL FORMS

"Hi-Q" inductors, wire wound on ceramic forms, effectively resist temperature, atmospheric and mechanical conditions which damage coils supported by thermo-plastic material. Dielectric losses are negligible, owing to the high quality porcelain employed, and its ribbed form. Featured is its rotating coupling coil at the electrical center of the inductor, enabling exact adjustment of coupling in intermediate or output circuits. Available from 10 to 160 meters and in power ratings of 250 and 750 watts, respectively. 10 to 80 meters inductors tuned out with a 100 MMF. condenser; 160 meter tunes with a 150 MMF. condenser.



WITH OR WITHOUT ROTATING LINK COIL

250 WATTS — LENGTH 4-1/8"

With Link Coil	Without Link Coil
Cat. No.	Cat. No.
Net Price	Net Price
660 \$1.56	670 \$.65
661 1.62	671 .71
662 1.68	672 .76
663 1.85	673 .94
664 1.91	674 1.00

Coil Form only—less link coil for 10, 20 and 40 meter bands.
Cat. No. **666** Net Price..... **35c**

Coil Form only—less link coil for 80 and 160 meters.
Cat. No. **667** Net Price..... **38c**

Plug-in Strip—with prongs to fit above coil forms.
Cat. No. **668** Net Price..... **59c**

Jack Mounting Base—with jacks to fit above plug-in base.
Cat. No. **669** Net Price..... **69c**

750 WATTS — LENGTH 6 1/4"

With Link Coil	Without Link Coil
Cat. No.	Cat. No.
Net Price	Net Price
680 \$2.26	690 \$.97
681 2.37	691 1.03
682 2.43	692 1.09
683 2.58	693 1.23
684 2.66	694 1.36

Coil Form only—less link coil for 10, 20 and 40 meter bands.
Cat. No. **686** Net Price..... **56c**

Coil Form only—less link coil for 80 and 160 meter.
Cat. No. **687** Net Price..... **59c**

Plug-in Strip—with prongs to fit above coil forms.
Cat. No. **688** Net Price..... **88c**

Jack Mounting Base—to fit the above plug-in base.
Cat. No. **689** Net Price..... **88c**

75 WATT PLUG-IN COILS WITH LINK COILS AND CERAMIC COIL FORMS



A series of small inductors for exciter and most power amplifier stages. Wound on ribbed, low-loss, low-absorption high grade porcelain, glazed all over, with rounded ribs to prevent wire slipping. Inductors are supplied complete with center or end links. Available for all bands from 10 to 160 meters. Rated at 75 watts. 10 to 80 meter inductors tune with 100 mmf. condenser. The 160 meter inductors tune with 150 mmf. condenser.



Cat. No.	Cat. No.	Band	Net
Link in Center	Link at Bottom	Meters	Price
640	650	10	59c
641	651	20	62c
642	652	40	85c
643	653	80	88c
644	654	160	71c

4 prong coil form only.
Cat. No. **646** Net Price..... **35c**

5 prong coil form only.
Cat. No. **647** Net Price..... **44c**

JOHNSON MIDGET CON- DENERS



Designed to fit in the above coil forms to make a compact coil and condenser exciter unit.

Cat. No.	Capacity	Net
No.	Max. Min.	Price
25112	25 3.5	\$.79
50112	50 4.5	.88
75112	75 5.5	.97
100112	100 7	1.06

SHAFT COUPLING



A compression shaft coupling. Will not burr shaft. Very strong.
No. **258**
Net, each..... **9c**

GRID CAP



Large size grid cap to fit transmitting tubes and 800's.
No. **854**
Net, each..... **6c**

NEW DYNAMIC MICROPHONE

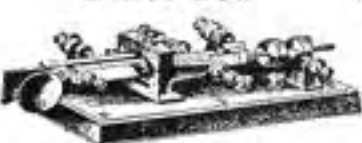


Net Price, **\$5.88**

Cat. No. **g9600**

This new natural voice dynamic microphone is equal in performance to many of the more expensive type of microphones. Furnished complete with an 8' cord and transformer to match high impedance amplifier input or grid. Features incorporated are wide range, high sensitivity. Fits in the palm of your hand or sets on desk. Rugged construction.

KENCO BUG



Limited Quantity

A standard model automatic telegraph key. Made of the finest parts. Adjustable weights to govern speed. Heavy contacts.
Cat. No. **g9602**
Net Price..... **\$3.95**

AC-DC RECEIVER FILTER CHOKE



Ideal replacement chokes. Rated at 10 Hys, 30 Ma, 1 1/2" high, 2 1/2" long, 1 1/4" deep.
No. **g9603**
Net Price..... **23c**

MICROPHONE TRANSFORMERS

1 AND 2 BUTTON
Primary 280 ohms each side of center tap for single or double button mikes. Secondary to match grid.

Cat. No. **g9605**
Net Price..... **82c**

5-INCH MAGNETIC SPEAKER



Beautiful tone. Heavy magnet. 5" in diameter. Lug connections.
No. **g9606**
Net **95c**

Mounted in Walnut Cabinet with 5' cord.
No. **g9607** Net..... **\$2.45**

5-INCH DYNAMIC SPEAKER

A ruggedly constructed high quality 5" dynamic speaker. Ideal for AC-DC radios. 3,000 ohm field. Transformer matches a 43 or 251A tube.
Cat. No. **g9608**
Net Price..... **\$1.29**

LAST MINUTE ITEMS

NEW JOHNSON 2 BAND "Q" BEAM ANTENNA



A Matched Impedance, Two Band Beam Antenna. 4 db. gain on fundamental. Approximately 6 db. on second harmonic. Easy to construct—easy to erect. No critical matching steps to adjust—all calculations made at factory. For any two adjoining harmonically related bands from 80 to 2 1/2 meters inclusive. The efficiency of the world-famous Johnson "Q" and the gain of closely spaced elements. Compact—only 1/2 wave length at fundamental.

Cat. No.	Covers Bands	Net Price
S9708	5 and 10 meters	\$9.24
S9707	10 and 20 meters	14.40
S9708	20 and 40 meters	26.58
S9709	40 and 80 meters	49.47

WIRELESS RECORD PLAYER

Plays Records Through Radio with No Connections



This record player has a self-contained oscillator which transmits through the antenna of the radio, permitting identical tone from your radio as that broadcasted by large stations. Will operate within 25 ft. of the radio. Simple to connect. Requires no technical knowledge to install. A high quality synchronous motor and crystal pickup. Plays records up to 12".

STANDARD MODEL

Contained in a metal case without cover. Size 5" x 15" x 12".

No. S9731
Type A-58.
Net \$11.98

DELUXE MODEL

Contained in a hand-rubbed walnut cabinet. 8 1/2" x 14" x 14". Illustrated.

No. S9732
Type A-57
Net \$17.98

AMPHENOL STANDARD RECEPTACLE



Moulded bakelite insulation, phosphor bronze contacts. Available in male or female. Underwriters approved. For 15 amps. at 125 volts, 10 amps. at 250 volts. 1/2" high by 1 1/4" diameter. Fits in standard Amphphenol socket hole. Keyed to prevent turning. Supplied with retainer ring. Also available with mounting plate.

Cat. No.	Type No.	Net Price
S9724	61-F	Female less plate.....19c
S9725	61-M	Male less plate.....19c
S9726	61-F1	Female with plate.....21c
S9727	61-M1	Male with plate.....21c

CONDENSER VALUE! GENERAL ELECTRIC PYRANOL CYLINDRICAL CAN FILTER TRANSMITTING CONDENSER



These new cylindrical condensers are hermetically sealed and provided with ceramic insulators and an adjustable clamp-type mounting bracket; can be mounted in any position. The stable characteristics of Pyranol, as compared with ordinary insulating oils, assure long operating life. These capacitors may be operated continuously at voltages up to 10 per cent above the rated value. Dia. 2 1/4".

Cat. No.	Type No.	Cap. Mfd.	Volts DC	Net Price
S9700	23F60	2	600	\$1.32
S9701	23F62	4	600	1.76
S9702	23F64	2	1000	1.62
S9703	23F66	4	1000	2.20
S9704	23F68	2	1500	2.20
S9705	23F71	2	2000	2.50

G.T.C. PEE WEE TRANSMITTER



A complete 25 watt crystal controlled transmitter. Power and all on one chassis. Operates on 5 bands, 10-20-40-80 and 160 meters. Ideal also for an exciter or portable transmitter. Supplied in kit form. Easily assembled and wired.

Kit consists of all necessary resistors, condensers, miscellaneous parts, crystal for operation in the 40 meter band which can be used on 20 and 10 meters with additional coils, tubes, coil form, meter, etc.
Cat. No. S9717
Net Price..... \$19.95

6 VOLT BATTERY PEE WEE TRANSMITTER (Built-in Power Supply)

For motor boats, yachts, automobiles and trailers. Same kit as described above except for use on a 6 volt storage battery. With plate power supply built in. Current drain 9 amps. Fully loaded, 1.4 amps at standby. Supplied complete. Full instructions.

Cat. No. S9718
Net Price..... \$21.95

AMPHENOL CO-AXIAL CABLE

A new low-loss cable for transmitting high frequencies inches or miles with incredible efficiency. Unequalled for radio and test instrument construction, antenna leads, photo-electric cell transmission, public address work, any place where high frequencies must be carried without radiation or pickup with a minimum loss.

ELECTRICAL CHARACTERISTICS OF CO-AXIAL CABLE: Characteristic Impedance, 82.5 ohms. Loss per ft., .0009 db. Inductance per ft., .1 microhenry. Capacity per ft., .115 mmf. Resistance per ft., .024 ohms.

CONSTRUCTION SPECIFICATIONS: No. 14 tinned solid copper wire strung with Amphphenol Ultra-Low-Loss Insulating Beads, then shielded with a woven tinned copper shell, finally covered with two separate cotton beads. The inner braid impregnated with a special non-drying waterproof compound and the heavy black outer braid treated with wax, doubly guarding against all adverse climatic conditions. Weight, 1 oz. per foot. Outside diameter, 13/32".

Cat. No. S9710—Type 73 Co-Axial Cable.
Net Price, per ft. 35c
Cat. No. S9720—Type 73 Insulating beads only.
Net Price, per 100 59c

LOW PRICES!



FILAMENT TRANSFORMERS

Cat. No.	Type No.	Volts	Filament Amps	Net Price
S9710	FT-1	2.5 CT.	3	\$.73
S9711	FT-2	6.3 CT.	1.2	.73
S9712	FT-3	2.5 CT.	6	.88
S9713	FT-4	6.3 CT.	2.5	1.03
S9714	FT-5	2.5 CT.	10	1.03
S9715	FT-6	5 CT.	5	1.03
S9716	FT-7	7 1/2 CT.	3	.88

THE NEW RME-70 COMMUNICATION RECEIVER

So new that an illustration wasn't available when this catalog went to press. A companion model to the RME-68. Features incorporated are a new and larger illuminated meter, new Iron Core I.F. Transformers, automatic noise suppressor, break-in relay control circuit, improved audio characteristics, one-stage radio frequency amplifier, 10 tubes, streamlined cabinet design.

Cat. No. S9729—Model RME-70, complete with speaker to match.
Net Price..... \$138.60
SEE PAGE 38 FOR EASY PAYMENT PLAN.

Record Player with Built-In Amplifier and Speaker

Has a powerful phone motor, magnetic pickup, volume control, and built-in amplifier with speaker. Play up to 12" records. Handsome brown leatherette carrying case 14 1/2" x 7 1/2" x 1 1/2". 110 V. 60 cycles.

No. S9730
Net Pr. \$16.95



CO-AXIAL CABLE CONNECTOR



An ultra-low-loss connector especially designed for Co-Axial Cable—Insulation is Amphphenol "912". Coupling ring to lock male and female together. Use of connector employing other than Amphphenol "912" insulation will nullify the high efficiency of Co-Axial transmission lines.

Cat. No.	Type No.	Use	Net Price
S9721	90-M	Male Cable Type	Ex.
S9722	90-F	Female Cable Type	\$1.18
S9723	90-C	Female Chassis Type	

NOW YOU CAN PURCHASE on our EASY PAYMENT PLAN

WHAT YOU CAN BUY ON OUR EASY PAYMENT PLAN

Radio Receivers
Communication Receivers
Test Equipment

SOUND SYSTEMS
Transmitters
Rotary Converters

AC-DC Electric Plants
Pre-Selectors
Recording Equipment

PLAY WHILE YOU PAY

The qualifications necessary to purchase on our Time-Payment Plan are:—You must be of legal age, or if under legal age, parent or guardian must sign application; be of good character and

have a steady source of income. The only references required are the names of two people or firms with whom you have had business dealings.

RECEIVER AND TRANSMITTER TIME PAYMENT SCHEDULE

	Down Payment	6 Mos. Payment	12 Mos. Payment
Hallcrafters S-17 Receiver.....	\$25.50	\$17.33	\$9.00
Hallcrafters S-17 Receiver and Speaker	27.50	19.06	9.90
Hallcrafters SX-17 Receiver* and Speaker.....	32.50	21.06	10.53
Hallcrafters S-16 Receiver.....	19.00	14.67	7.33
Hallcrafters SX-16 Receiver*.....	21.00	16.20	8.10
Hallcrafters SX-16 Receiver* and Speaker.....	23.00	18.00	9.00
Hallcrafters Challenger II Receiver.....	12.00	12.50	6.25
Hallcrafters Challenger II Xtal Receiver*.....	15.00	13.43	6.73
Hallcrafters Challenger II Xtal Receiver* and Speaker	19.00	14.07	7.33
Hallcrafters Challenger II Xtal Receiver*, Speaker, S Meter.....	19.00	16.20	8.10
Hallcrafters Dual Diversity Receiver Complete	80.00	63.30	31.35
Hallcrafters Dual Diversity Receiver with Console Cabinet as illustrated on front cover.....	100.00	79.66	36.66
Hallcrafters Champion Receiver	9.50	7.33	—
Hallcrafters Champion Receiver and S Meter	9.50	9.16	—
Hallcrafters Sky Buddy Receiver.....	5.50	4.83	—
Hallcrafters 5-10 Receiver	12.50	10.43	5.23
Hallcrafters 5-10 Receiver with Meter.....	15.50	11.73	5.96
Hallcrafters Marine Receiver.....	11.50	9.73	4.88
Hallcrafters HT 1 Transmitter.....	40.00	27.90	13.85
Hallcrafters HT 2 Transmitter.....	40.00	24.50	12.10
Hallcrafters HT 3 Transmitter.....	79.00	55.98	27.99
RME 69 Receiver*.....	34.20	21.19	10.59
RME 70 Receiver* with Speaker.....	27.70	19.57	10.15
Hammarlund SP110 Receiver	33.00	36.35	18.75
Hammarlund SP110X Receiver*.....	41.00	38.08	19.64
Hammarlund SP110S Receiver	33.00	36.35	18.73
Hammarlund SP110SX Receiver*.....	41.00	38.08	19.64

* Supplied with crystal.

GENERAL TIME PAYMENT SCHEDULE

Total of Purchase	Down Payment	6 Months Per Month	12 Months Per Month	Total of Purchase	Down Payment	6 Months Per Month	12 Months Per Month
\$30.00	\$6.00	\$4.26	—	\$150.00	\$30.00	\$21.20	\$11.00
40.00	8.00	5.65	—	160.00	32.00	22.61	11.74
50.00	10.00	7.06	\$3.66	170.00	34.00	24.02	12.47
60.00	12.00	8.48	4.40	180.00	36.00	25.44	13.20
70.00	14.00	9.89	5.13	190.00	38.00	26.85	13.94
80.00	16.00	11.30	5.87	200.00	40.00	28.26	14.67
90.00	18.00	12.72	6.60	210.00	42.00	29.68	15.40
100.00	20.00	14.13	7.34	220.00	44.00	31.09	16.14
110.00	22.00	15.54	8.07	230.00	46.00	32.50	16.87
120.00	24.00	16.96	8.80	240.00	48.00	33.92	17.60
130.00	26.00	18.37	9.53	250.00	50.00	35.33	18.33
140.00	28.00	19.78	10.26				

HOW TO FIGURE THIS TIME PAYMENT SCHEDULE ON ODD AMOUNTS

The general time payment schedule listed above gives you an idea of how this plan works. If the item or items you desire to purchase figure up to an amount not shown in the table above, use the following formula for determining the down payment and the monthly payment:

The down payment is 20% of the cash price, leaving an unpaid balance on which 6% is added for the 6-month schedule or 10% added for the 12-month schedule. Add the carrying charges to the unpaid balance and divide by the number of months you would require to pay it.

TOBE FILTERETTES



RAZOR FILTERETTE

Designed to stop radio noise from electric shavers. Underwriters approved.

No. S8301 Net. \$9

FILTERETTE JUNIOR



For portable home radio appliances — vacuum cleaners, hair dryers, etc. Underwriters approved.

No. S8335 Net. 73c

UTILITY FILTERETTE

For motors, mercury rectifiers, chargers, welders and heaters. Housed in steel knock-out boxes. Install in 2- or 3-wire circuits.

Cat. No.	Model	Volts	Net Price
S8304	A-2-P	AC-DC 110	\$3.82
S8305	B-2-P	220	4.41
S8306	#20	*600	14.70

*DC only.



RADIO LINE FILTER (All Wave)

For eliminating all-wave radio noise reaching the receiver through its power line connection. Contains specially designed all-wave inductances. Must not be confused with cheap condenser filters.

No. S8300 RF-2. Net. \$2.79



OIL BURNER FILTERETTE

Eliminates all oil burners to kill ignition interference. Mounted in cut-out box. Will carry 2.5 amp. at 110 volts AC or DC. In installation instructions furnished.

No. S8303 Net. \$4.67



HIGH EFFICIENCY NOISE FILTER

Specially designed for portable appliances producing street noise. A plug-in unit. Carries 2 amperes at 110 volts AC or DC.

No. S8302 Net. \$2.79

UNIVERSAL FILTERETTE

Capacitive-inductive all-wave filterette. Use on motors, generators, farm lighting equipment, converters, chargers, etc. Housed in cut-out boxes. For complete noise elimination on all waves. Bigger models available from factory stock. Units below for 110 volts A.C. or D.C.

Cat. No.	Model	Amps.	Net Price
S8317	110	5	\$4.41
S8318	151	10	7.06
S8319	172	20	10.58



BURGESS BATTERIES

The Standard No. better made. Cells are in one-piece drawn zinc cans, moisture-proof wrapped, then cemented into one solid block. This block is again protected with moisture-proof wrapping, thoroughly sealed and wrapped with the well-known black striped Burgess Container.

Cat. No.	Factory No.	Volt	Net Wt.	List Price	Std. Price	Single Net Price	Net Ex. in Std. Pkg.
SUPER "B" BATTERIES							
S8320	21208	45	10 1/2	\$3.20	0	\$2.22	\$2.02
STANDARD "B" BATTERIES							
S8321	10388	45	10 1/2	\$2.55	0	\$1.00	\$1.73
S8322	2206	45	0 1/2	1.85	0	1.39	1.26
S8323	5508	45	4	1.50	5	1.14	1.04
S8324	4156	22 1/2	2 1/2	.70	4	.56	.51
ULTRA COMPACT "B" BATTERIES							
S8325	230N	45	2	\$1.79	6	\$1.27	\$1.15
"C" BATTERIES							
S8326	5508	4 1/2	1 1/2	\$.48	4	\$.31	\$.28
S8327	2376	4 1/2	1 1/2	.40	10	.30	.27
S8328	5548	7 1/2	1	.65	4	.48	.44
S8329	5156	22 1/2	2	.90	4	.67	.61
LITTLE SIX COMPACT "A" BATTERY							
S8330	49TH	1 1/2	1 1/2	\$.28	20	\$.20	\$.26
S8331	*4FA	1 1/2	1 1/2	.40	20	.33	.30

*Radio A Battery.

PIONEER 110V AC-DC ELECTRIC PLANT

300 Watt

"AC"

200 Watt

"DC"

NET \$59.00

Cat. No. S8307

1 in 2 incorporated features are, an Barker, a pole generator, direct-ly connected to crankshaft of engine. Engine is a cycle single cylinder, air cooled, 1/2 H.P. with mechanical governor to maintain constant speed of 1800 RPM. Shielded ignition. Push button starting. Operates 12 to 16 hours on one gallon of gas — compact design. Overall dia. 19 1/2" long, 15" high, 14" wide. Type BD6.

Filter is recommended if the above plant is to be used to operate a radio.

Cat. No. S8308 Type BDF. Net Price \$3.53



PIONEER DYNAMOTOR

In mobile or portable work for trucks and police cars these power supply units are unaffected by vibration and deliver pure DC with negligible ripple. Prices shown below are for dynamotors without filters. The illustration shows the dynamotor with filter. Add \$11.47 to the prices below for filter. Width 4 1/2", height 4 1/2".

Cat. No.	Type	Output Volts	Output M.A.	Input Volts	Input M.A.	Ltgh.	Net Price
S8309*	KW329	200	100	0	7.5	5 1/2"	\$20.58
S8310*	KW243	300	150	0	14.0	6 1/2"	23.52
S8311*	KW256	350	175	0	15.2	6 1/2"	24.70
S8312*	KW428	400	200	0	14.2	6 1/2"	24.70

*Weight 7 1/2 lbs. (Weight 8 1/2 lbs.)

PIONEER ROTARY CONVERTERS

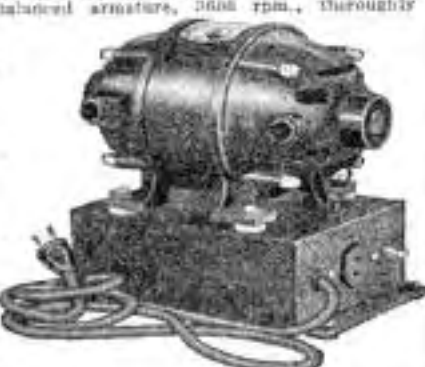
A dependable power conversion for all ordinary uses. Large DC dynamotor, dynamically balanced armature, 2600 rpm., thoroughly impregnated. Filter included as illustrated. Ideal for radio sets, 110 V. DC to 110 V. AC, 60 cycles.

100 WATTS
Cat. No. S8313.
Type 1113
Net Price \$26.75

150 WATTS
Cat. No. S8314.
Type 1115
Net Price \$29.69

200 WATTS
Cat. No. S8315.
Type 1120
Net Price \$32.93

300 WATTS
Cat. No. S8316.
Type 1120
Net Price \$35.87



THE NEW MU-SWITCH

A quick acting light pressure switch. The superiority of the Mu-Switch is due to the contact pressure increasing rather than decreasing just before traverse of the switch leaf. Extreme stability of contact for either light or heavy pressures. Will operate on a minimum of 4 oz. pressure. Conservatively rated at 10 amps, 110 volts A.C., and will carry safely non-inductive loads of 1200 watts. Inductive loads of 1/2 H.P. can be safely handled at 110, 220, or 440 volts A.C. D.C. rating is 1 amp. at 110 volts.



Cat. No. S8332 Normally open.
Cat. No. S8333 Normally closed.
Net Price, either type \$1.00
Cat. No. S8334 SPDT.
Net Price \$1.20

TOBE ELECTROLYTIC - TUBULAR AND TRANSMITTING CONDENSERS



COMPACT DRY ELECTROLYTIC CONDENSERS

Contained in inverted aluminum can for single hole mounting. Condensers insulated from can, 6" long coded negative and positive leads. Surge peak voltage 525; DC working voltage 450.

Cat. No.	Type No.	Cap. Mfd.	Dimen. Dia. Lgth.	Net Price
S9400	C8514	4	1x2 1/2	50c
S9401	C8518	8	1x3 1/2	62c
S9402	C85112	12	1x4 1/2	82c
S9403	C85116	16	1x4 1/2	91c

INVERTED CAN DRY ELECTROLYTICS

Single and dual section condensers contained in inverted aluminum can for single hole stud mounting. Condensers insulated from can. Dual sections for separate negative and positive leads allowing its use where this feature is necessary. Hermetically sealed and moisture proof.



Peak Volts 525—Working Volts 450 DC				
Cat. No.	Type No.	Cap. Mfd.	Dimensions Dia. Lgth.	Net Price
S9404	C814	4	1 1/2 x 3 1/4	\$.50
S9405	C818	8	1 1/2 x 3 1/4	.62
S9406	C8112	12	1 1/2 x 3 1/4	.82
S9407	C8116	16	1 1/2 x 3 1/4	.91
S9408	C8124	24	1 1/2 x 3 1/4	1.09
S9409	C8130	30	1 1/2 x 3 1/4	1.26
S9411	C844	4-4	1 1/2 x 3 1/4	.76
S9412	C848	4-8	1 1/2 x 3 1/4	.85
S9413	C858	8-8	1 1/2 x 3 1/4	.94

Peak Volts 600—Working Volts 475 DC				
Cat. No.	Type No.	Cap. Mfd.	Dimensions Dia. Lgth.	Net Price
S9414	C818	8	1 1/2 x 3 1/4	\$.88
S9415	C812	12	1 1/2 x 3 1/4	1.20
S9416	C816	16	1 1/2 x 3 1/4	1.35
S9417	C8124	24	1 1/2 x 3 1/4	1.47
S9418	C8130	30	1 1/2 x 3 1/4	1.74
S9419	C858	8-8	1 1/2 x 3 1/4	2.12



Surge-Proof Filter-Mite Condensers

The Tobe Filter-Mite Condenser is a new development in paper capacitor design. Available in plug-in or standard style. Extremely small in size. Ideal for electronic and communication devices where space is at a premium. Processed in interanal.



and communication devices where space is at a premium. Processed in interanal.

Working Volts 600 DC				
Plug-In	Net Price	Cap. Mfd.	Standard	Net Price
Cat. No.			Cat. No.	
S9498	\$.82	.65	S9504	\$.53
S9499	.88	.75	S9506	.69
S9500	.94	.85	S9507	.71
S9501	1.09	1.0	S9508	.94
S9502	1.38	2.0	S9510	1.35
S9503	2.03	4.0	S9511	1.97

ELECTROLYTIC PLUG-IN CONDENSERS

Plug-in electrolytic condensers with a UX 4 prong base. Makes condensers as readily interchangeable as tubes.

	Peak V. 600—Work V. 475			
	Cat. No.	Cap. Mfd.	Dimen. Dia. Hgt.	Net Price
	S9524	8	1 1/2 x 3 1/4	\$ 1.03
	S9525	16	1 1/2 x 3 1/4	1.56
	S9526	8-8	1 1/2 x 3 1/4	1.56

TOBE CONDENSER BRIDGE ANALYZER



A condenser bridge and analyzer for quick, accurate and easy measurement of capacity, resistance, power factor and leakage. Operation is simple, quick, and laboratory standard results instantly obtained. Features: Accurate power factor lead, 0-50%. Direct reading control dial. Decade range switch. Sensitivity control allows adjustments of balanced sensitivity. AC measurement of resistance values 1 ohm to 1,000,000 ohms. Capacitance values 10 mfd. to 100 mfd. Leakage test. Short circuit test. Condenser analyzer voltage control calibrated in volts. Direct reading of leakage currents 1, 3, and 5 Ma. The desired working voltages. Accuracy guaranteed to within 5%.

Contained in a rugged steel case attractively finished in baked gray wrinkle enamel. Built-in power supply. For 110 V. 60 cycles. Complete with tubes and neon indicator.

Cat. No. S9524.
Net Price \$32.50

Compact Carton Dry Electrolytic Condensers

Single and dual dry electrolytic condensers contained in hermetically sealed rectangular cartons with mounting flanges. Coded leads 6" long. Dual condensers have separate negatives and positives permitting universal use in replacement work.

Peak Volts 200—Working Volts 150 DC				
Cat. No.	Type No.	Cap. Mfd.	Dimensions L W D	Net Price
S9444	EC204	4	2 1/2 x 1 1/2 x 1/2	38c
S9445	EC208	8	2 1/2 x 1 1/2 x 1/2	47c
S9446	EC212	12	2 1/2 x 1 1/2 x 1/2	56c
S9447	EC216	16	2 1/2 x 1 1/2 x 1/2	62c
S9448	EC220	20	2 1/2 x 1 1/2 x 1/2	71c
S9449	EC244	4-4	2 1/2 x 1 1/2 x 1/2	53c
S9450	EC248	4-8	2 1/2 x 1 1/2 x 1/2	71c
S9451	EC2516	8-16	2 1/2 x 1 1/2 x 1/2	79c

Peak Volts 525—Working Volts 450 DC				
Cat. No.	Type No.	Cap. Mfd.	Dimensions L W D	Net Price
S9452	EC304	4	2 1/2 x 1 1/2 x 1/2	38c
S9453	EC308	8	2 1/2 x 1 1/2 x 1/2	44c
S9454	EC312	12	2 1/2 x 1 1/2 x 1/2	56c
S9455	EC316	16	2 1/2 x 1 1/2 x 1/2	62c
S9456	EC320	20	2 1/2 x 1 1/2 x 1/2	71c
S9457	EC344	4-4	2 1/2 x 1 1/2 x 1/2	71c
S9458	EC348	4-8	2 1/2 x 1 1/2 x 1/2	79c
S9459	EC358	8-8	2 1/2 x 1 1/2 x 1/2	88c

Peak Volts 600—Working Volts 475 DC				
Cat. No.	Type No.	Cap. Mfd.	Dimensions L W D	Net Price
S9460	EC304	4	2 1/2 x 1 1/2 x 1/2	68c
S9461	EC308	8	2 1/2 x 1 1/2 x 1/2	76c
S9462	EC312	12	2 1/2 x 1 1/2 x 1/2	\$1.00

Paper Tubular Surge-Proof Condensers

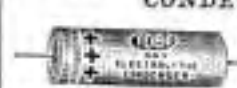
These surge-proof tubular capacitors are double-vacuum-impregnated, non-inductively wound of the purest foil. Ideal for radio frequency and audio frequency by-pass service. Tested at five times their rated voltage.

400 Volts Working			600 Volts Working		
Cat. No.	Cap. Mfd.	Net Price	Cat. No.	Cap. Mfd.	Net Price
S9463	.01	9c	S9470	.001	9c
S9464	.02	9c	S9471	.002	9c
S9465	.05	9c	S9472	.003	9c
S9466	.1	12c	S9473	.004	9c
S9467	.25	15c	S9474	.005	9c
S9468	.5	21c	S9475	.006	9c
S9469	1.0	29c	S9476	.01	9c
You may deduct			S9477	.02	12c
10% from these net			S9478	.03	12c
prices when ordering			S9479	.1	15c
10 or more paper			S9480	.25	21c
tubular condensers at			S9481	.5	29c
one time					

You may deduct 10% from these net prices when ordering 10 or more paper tubular condensers at one time.

Due to limited space, we are unable to list all of the parts manufactured by Tobe, but we can supply any of their products on short notice.

TUBULAR DRY ELECTROLYTIC CONDENSERS



Tobe Tubular Electrolytic Condensers are of the finest quality. To prevent moisture absorption they are completely wax filled in one container and encased in an outer container for additional protection. Mechanic opens and tap corrosion are eliminated. Single section units have a lead at each end, dual units have two positive leads at one and a common negative at the other.

Peak Volts 35—Working Volts 25 DC				
Cat. No.	Type No.	Cap. Mfd.	Dimensions Dia. Lgth.	Net Price
S9420	ET3040	4	3/8 x 1 1/2	24c
S9421	ET310	10	3/8 x 1 1/2	34c
S9422	ET325	25	3/8 x 1 1/2	39c
S9423	ET350	50	3/8 x 1 1/2	38c
S9424	ET3205	5-5	3/8 x 1 1/2	35c
S9425	ET3210	10-10	3/8 x 1 1/2	35c

Peak Volts 75—Working Volts 50 DC				
Cat. No.	Type No.	Cap. Mfd.	Dimensions Dia. Lgth.	Net Price
S9426	ET3005	5	3/8 x 1 1/2	27c
S9427	ET3010	10	3/8 x 1 1/2	27c
S9428	ET3035	35	3/8 x 1 1/2	32c
S9429	ET3050	50	3/8 x 1 1/2	41c
S9430	ET3205	5-5	3/8 x 1 1/2	38c
S9431	ET3210	10-10	3/8 x 1 1/2	38c

Peak Volts 200—Working Volts 150 DC				
Cat. No.	Type No.	Cap. Mfd.	Dimensions Dia. Lgth.	Net Price
S9432	ET204	4	3/8 x 1 1/2	24c
S9433	ET208	8	3/8 x 1 1/2	27c
S9434	ET212	12	3/8 x 1 1/2	29c
S9435	ET216	16	3/8 x 1 1/2	32c
S9436	ET224	24	3/8 x 1 1/2	35c
S9437	ET230	30	3/8 x 1 1/2	38c

Peak Volts 525—Working Volts 450 DC				
Cat. No.	Type No.	Cap. Mfd.	Dimensions Dia. Lgth.	Net Price
S9438	ET304	4	3/8 x 1 1/2	32c
S9439	ET308	8	3/8 x 1 1/2	35c
S9440	ET312	12	1 3/32 x 1 1/2	44c
S9441	ET316	16	1 3/32 x 1 1/2	63c

Peak Volts 600—Working Volts 475 DC				
Cat. No.	Type No.	Cap. Mfd.	Dimensions Dia. Lgth.	Net Price
S9442	ET304	4	3/8 x 1 1/2	53c
S9443	ET308	8	1 1/2 x 1 1/2	62c

PAPER REPLACEMENTS FOR ELECTROLYTIC CONDENSERS



Tobe paper electrolytic condensers identical in appearance and physical dimensions as most electrolytic condensers for which these units are to replace. Will stand high peak service. Ideal for low power transmitters, amplifiers and any application where uninterrupted and dependable service is required. Available in inverted single hole mounting aluminum can or a rectangular impregnated cardboard carton. Dual units have separate leads.

and communication devices where space is at a premium. Processed in interanal.

Type PR Rectangular Carton				
Cat. No.	Type No.	Replaces Cap. Mfd.	Work Volts	Net Price
S9482	PR404	4	450	\$.53
S9483	PR408	8	450	.87
S9484	PR434	4-4	450	.88
S9485	PR438	8-8	450	1.12
S9486	PR604	4	600	.71
S9487	PR608	8	600	1.03
S9488	PR644	4-4	600	1.18
S9489	PR688	8-8	600	1.56

Type PRG Round Can				
Cat. No.	Type No.	Replaces Cap. Mfd.	Work Volts	Net Price
S9490	PRG04	4	600	\$.79
S9491	PRG08	8	600	1.03
S9492	PRG44	4-4	600	1.32
S9493	PRG88	8-8	600	1.65

TRANSMITTING FILTER CONDENSERS

Oil processed transmitting condensers are ideal for severe humidity and high temperature conditions. Contained in single hole mounting aluminum can. One terminal is insulated. Insulating washer supplied to insulate from chassis.

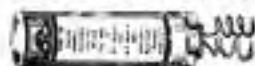
Type PRG Round Can				
Cat. No.	Type No.	Replaces Cap. Mfd.	Work Volts	Net Price
S9494	MR62	2	600	\$ 1.32
S9495	MR64	4	600	1.76
S9496	MR102	2	1000	1.62
S9497	MR150	2	1500	2.65





CORNELL - DUBILIER

MIDGET CAN DRY ELECTROLYTIC CONDENSER



These standard foil dry electrolytic condensers are contained in an aluminum can designed for inverted mounting—wire leads—a great space saver. Available in single and multiple sections. Separate negative and positive leads allowing either common negative or common positive use.

Working 450 V. D.C.—Peak 525 V.					
Cat. No.	Type No.	Cap. Mfd.	Size L. x D.	Net Price	
S6520	KR-304	4	1 x 1 1/2	.50	
S6521	KR-308	8	1 x 1 1/2	.62	
S6522	KR-310	10	1 x 1 1/2	.91	
S6523	KR-348	4-8	1 1/2 x 1 1/2	.85	
S6524	KR-348	8-8	1 1/2 x 1 1/2	.94	
S6525	KR-3810	8-10	1 1/2 x 1 1/2	1.32	
S6526	KR-3888	8-8	1 1/2 x 1 1/2	1.35	

LUG TERMINAL CAN TYPE ELECTROLYTIC CONDENSERS



Instead of the usual wire leads these condensers have lugs for connections. The aluminum container is grounded and is the common negative connection.

Working Volt. 450—Peak Volt. 525					
Cat. No.	Type No.	Cap. Mfd.	Size L. x D.	Net Price	
S6547	EP-9040	4	2 1/2 x 1 1/2	.50	
S6548	EP-9080	8	2 1/2 x 1 1/2	.62	
S6549	EP-9081	8	2 1/2 x 1 1/2	.62	
S6550	EP-9120	12	2 1/2 x 1 1/2	.82	
S6551	EP-9160	16	2 1/2 x 1 1/2	.91	
S6552	EP-9404	4-4	4 1/2 x 1 1/2	.79	
S6553	EP-9408	4-8	4 1/2 x 1 1/2	.85	
S6554	EP-9808	8-8	4 1/2 x 1 1/2	.94	

ALUMINUM CAN DRY ELECTROLYTIC CONDENSERS



Standard size dry electrolytic condensers employing a high facination process which insures long dependable service—wire leads. Available in single and dual sections, the dual sections having separate negative and positive leads.

Working 450 V.—Peak 525 V.					
Cat. No.	Type No.	Cap. Mfd.	Size L. x D.	Net Price	
S6555	EH-9040	4	2 1/2 x 1 1/2	.50	
S6556	EH-9080	8	2 1/2 x 1 1/2	.62	
S6557	EH-9120	12	2 1/2 x 1 1/2	.82	
S6558	EH-9160	16	2 1/2 x 1 1/2	.91	
S6559	EH-4420	4-4	4 1/2 x 1 1/2	.76	
S6560	EH-4800	4-8	4 1/2 x 1 1/2	.85	
S6561	EH-8800	8-8	4 1/2 x 1 1/2	.94	

MOULDED MICA CONDENSERS

300 volts DC
Ideal for use as padding units, plate blocking, grid stop, RF by-pass and tuned filter capacitors. Type 1W is 1/2 x 1/2 x 1/8 in. Type 5W is 1/2 x 1/2 x 3/16 in.

Cat. No.	Type No.	Cap. Mfd.	Net Price	
S6567	SW5V8	.00005	.09	
S6568	SW5Q1	.00001	.09	
S6569	SW5Q25	.00025	.09	
S6570	SW5Q3	.0003	.09	
S6571	SW5Q4	.0004	.09	
S6572	SW5Q5	.0005	.09	
S6573	SW5T1	.0001	.09	
S6574	SW5T2	.0002	.12	
S6575	SW5T25	.00025	.12	
S6576	SW5T3	.0003	.12	
S6577	1WS5T5	.0005	.12	
S6578	1WS5D1	.001	.15	
S6579	1WS5D2	.002	.18	
S6580	1WS5D3	.003	.24	
S6581	1WS5D4	.004	.26	
S6582	1WS5D5	.005	.29	
S6583	1WS5D6	.006	.35	

BEAVER TUBULAR ELECTROLYTIC CONDENSER



A new development in small electrolytic condensers. Hermetically sealed. Will fit in a very small area conveniently.

Cat. No.	Type No.	Working Volts	Cap. Mfd.	Net Price	
S6500	BR-445	450	4	.32	
S6501	BR-845	450	8	.35	
S6502	BR-435	350	4	.29	
S6503	BR-835	350	8	.32	
S6504	BR-1335	350	12	.41	
S6505	BR-1635	350	16	.47	
S6506	BR-435	250	4	.26	
S6507	BR-835	250	8	.29	
S6508	BR-1225	250	12	.38	
S6509	BR-1625	250	16	.44	
S6510	BR-2025	250	20	.47	
S6511	BR-4025	250	40	.56	
S6512	BR-415	150	4	.24	
S6513	BR-815	150	8	.26	
S6514	BR-1215	150	12	.29	
S6515	BR-1615	150	16	.32	
S6516	BR-2015	150	20	.35	
S6517	BR-4015	150	40	.38	
S6518	BR-102	25	10	.24	
S6519	BR-332	25	25	.29	

MOULDED MICA TRANSMITTING CONDENSERS



Highly perfected mica condensers that readily mount in any position. Designed with the most precise care.

Test 1000 V. DC Working 600 V. DC			Test 1000 V. DC Working 600 V. DC		
Cat. No.	Cap. Mfd.	Net Price	Cat. No.	Cap. Mfd.	Net Price
S6584	.00005	.21	S6617	.00005	.24
S6585	.0001	.21	S6618	.0001	.24
S6586	.0002	.21	S6619	.0002	.24
S6587	.00025	.21	S6620	.00025	.24
S6588	.0005	.21	S6621	.0005	.24
S6589	.001	.24	S6622	.001	.29
S6590	.002	.27	S6623	.002	.29
S6591	.003	.32	S6624	.003	.35
S6592	.004	.32	S6625	.004	.35
S6593	.005	.32	S6626	.005	.41
S6594	.01	.46	S6627	.01	.50
S6595	.02	.71	S6628	.02	.67
			S6629	.02	1.09
			S6630	.05	2.25

Test 2500 V. DC Working 1200 V. DC			Test 2500 V. DC Working 1200 V. DC		
Cat. No.	Cap. Mfd.	Net Price	Cat. No.	Cap. Mfd.	Net Price
S6596	.00005	.33	S6631	.00005	.41
S6597	.0001	.33	S6632	.0001	.41
S6598	.0002	.35	S6633	.00025	.41
S6599	.00025	.35	S6634	.001	.53
S6600	.0005	.35	S6635	.002	.79
S6601	.001	.44	S6636	.003	.91
S6602	.002	.46	S6637	.004	.91
S6603	.003	.71	S6638	.005	1.03
S6604	.004	.88	S6639	.01	1.03
S6605	.005	.88	S6640	.01	1.65
S6606	.006	1.00	S6641	.02	2.32
S6607	.01	1.38			

Test 5000 V. DC Working 2500 V. DC			Test 5000 V. DC Working 2500 V. DC		
Cat. No.	Cap. Mfd.	Net Price	Cat. No.	Cap. Mfd.	Net Price
S6608	.00005	.41	S6642	.00005	.53
S6609	.0001	.41	S6643	.0001	.53
S6610	.0002	.53	S6644	.0002	.81
S6611	.00025	.53	S6645	.00025	.81
S6612	.0005	.73	S6646	.0005	.73
S6613	.001	.88	S6647	.001	.88
S6614	.002	1.32	S6648	.002	1.32
S6615	.003	1.62	S6649	.003	1.62
S6616	.004	1.85	S6650	.004	1.85
			S6651	.005	1.94
			S6652	.006	2.06
			S6653	.01	2.41

Extra 10% discount on order for 10 or more tubular condensers shown on right column—any assortment.

MIDGET ELECTROLYTIC CONDENSERS



A compact, dependable electrolytic condenser having excellent electrical characteristics. Available in single and multiple units. The multiple units have separate negative and positive leads allowing use in common negative and common positive circuits.

200 V. DC Working Voltage					
Cat. No.	Type No.	Cap. Mfd.	Size	Net Price	
S6532	JR-204	4	2 1/2 x 1 1/2	.38	
S6533	JR-208	8	2 1/2 x 1 1/2	.47	
S6534	JR-210	10	2 1/2 x 1 1/2	.53	
S6535	JR-212	12	2 1/2 x 1 1/2	.56	
S6536	JR-210	16	2 1/2 x 1 1/2	.62	
S6537	JR-248	4-8	2 1/2 x 1 1/2	.67	
S6538	JR-248	8-8	2 1/2 x 1 1/2	.73	
S6539	JR-2816	8-16	2 1/2 x 1 1/2	.83	

450 V. DC Working Voltage

Cat. No.	Type No.	Cap. Mfd.	Size	Net Price	
S6540	JR-504	4	2 1/2 x 1 1/2	.44	
S6541	JR-508	8	2 1/2 x 1 1/2	.56	
S6542	JR-512	12	2 1/2 x 1 1/2	.76	
S6543	JR-544	4-4	4 1/2 x 1 1/2	.71	
S6544	JR-548	4-8	4 1/2 x 1 1/2	.79	
S6545	JR-588	8-8	4 1/2 x 1 1/2	.88	
S6546	JR-5810	8-10	4 1/2 x 1 1/2	1.12	

CARDBOARD CONTAINER DRY ELECTROLYTIC CONDENSERS



With Mounting Flanges—Flat hermetically sealed containers, measuring only 1/4" to 3/4" long. Low power factor, low leakage and long life. Color coded wire leads. WORKING VOLTAGE 450 V. D.C. SEPARATE LEADS. NO COMMON.

Cat. No.	Type No.	Cap. Mfd.	Net Price	
S6562	EH-9400L	4	.44	
S6563	EH-9800L	8	.56	
S6564	EH-9404SL	4-4	.71	
S6565	EH-9408SL	4-8	.79	
S6566	EH-9808SL	8-8	.88	

DWAF TIGER TUBULAR CONDENSERS



A compact and dependable non-inductive condenser that is oil-saturated and wax-impregnated. Is moisture-proof and has a low power factor. Wire leads are soldered and firmly anchored.

TEST VOLTAGE 800 V. DC 400 V. DC WORKING					
Cat. No.	Type No.	Cap. Mfd.	Size	Net Price	
S6654	DT-481	.01	1 3/16 x 7/16	9c	
S6655	DT-482	.02	1 3/16 x 7/16	9c	
S6656	DT-483	.03	1 3/16 x 7/16	9c	
S6657	DT-485	.05	1 3/16 x 7/16	9c	
S6658	DT-4P1	.1	1 7/16 x 9/16	12c	
S6659	DT-4P25	.25	2 x 1 1/16	15c	
S6660	DT-4P5	.5	2 x 1 1/16	21c	
S6661	DT-1W1	1	2 x 1	29c	

TEST VOLTAGE 1200 V. DC
600 V. DC WORKING

Cat. No.	Type No.	Cap. Mfd.	Size	Net Price	
S6662	DT-6T1	.0001	1 3/16 x 7/16	9c	
S6663	DT-6T5	.00025	1 3/16 x 7/16	9c	
S6664	DT-6T5	.0005	1 3/16 x 7/16	9c	
S6665	DT-6D1	.001	1 3/16 x 7/16	9c	
S6666	DT-6D2	.002	1 3/16 x 7/16	9c	
S6667	DT-6D3	.003	1 3/16 x 7/16	9c	
S6668	DT-6D4	.004	1 3/16 x 7/16	9c	
S6669	DT-6D5	.005	1 3/16 x 7/16	9c	
S6670	DT-6D6	.006	1 3/16 x 7/16	9c	
S6671	DT-681	.01	1 3/16 x 7/16	9c	
S6672	DT-682	.02	1 7/16 x 7/16	9c	
S6673	DT-683	.03	1 7/16 x 7/16	12c	
S6674	DT-685	.05	1 7/16 x 9/16	12c	
S6675	DT-6P1	.1	2 x 1 1/16	15c	
S6676	DT-6P25	.25	2 x 1	21c	
S6677	DT-6P5	.5	2 x 1	29c	

TRANSMITTING CONDENSERS

CORNELL-DUBILIER "DYKANOL" TRANSMITTING FILTER CONDENSERS (PYRANOL)



These oil-filled TFL condensers are hermetically sealed in steel containers employing the latest C-D laboratory development, "Dykanol," these condensers are non-inflammable. Supplied with high glazed porcelain terminal assemblies. The assembly of these units, as to sealing and insulation, is an important factor which does not enter into the manufacture of the ordinary oil-filled condensers. Universal mounting.

Cat. No.	Type No.	Cap. Mfd.	Dimensions H W D	Net Price
WORKING VOLTAGE 500 VOLTS D.C.				
S6678	TFL-5000	2	2 1/2 x 1 1/2 x 1 1/2	\$2.06
S6679	TFL-5010	1	3 1/2 x 2 1/2 x 1 1/2	2.65

WORKING VOLTAGE 1000 VOLTS D. C.				
S6680	TFL-10020	2	4 1/2 x 2 1/2 x 1 1/2	2.35
S6681	TFL-10040	4	4 1/2 x 2 1/2 x 1 1/2	2.94
S6682	TFL-10100	10	4 1/2 x 2 1/2 x 1 1/2	5.29

WORKING VOLTAGE 1500 VOLTS D.C.				
S6683	TFL-15020	2	4 1/2 x 2 1/2 x 1 1/2	2.94
S6684	TFL-15040	4	4 1/2 x 2 1/2 x 1 1/2	4.12
S6685	TFL-15100	10	4 1/2 x 2 1/2 x 1 1/2	8.82

WORKING VOLTAGE 2000 VOLTS D.C.				
S6686	TFL-20020	2	4 1/2 x 2 1/2 x 1 1/2	3.23
S6687	TFL-20040	4	4 1/2 x 2 1/2 x 1 1/2	5.29
S6688	TFL-20100	10	4 1/2 x 2 1/2 x 1 1/2	10.88

WORKING VOLTAGE 2500 VOLTS D.C.				
S6689	TFL-25010	1	5 1/2 x 2 1/2 x 1 1/2	4.70
S6690	TFL-25020	2	4 1/2 x 2 1/2 x 1 1/2	7.64
S6691	TFL-25040	4	4 1/2 x 2 1/2 x 1 1/2	10.58
S6692	TFL-25100	10	5 1/2 x 2 1/2 x 1 1/2	26.46

WORKING VOLTAGE 3000 VOLTS D.C.				
S6693	TFL-30010	1	4 1/2 x 2 1/2 x 2 1/2	7.06
S6694	TFL-30020	2	4 1/2 x 2 1/2 x 2 1/2	8.82
S6695	TFL-30040	4	4 1/2 x 2 1/2 x 2 1/2	12.94

WORKING VOLTAGE 5000 VOLTS D.C.				
S6696	TFL-50010	1	4 1/2 x 2 1/2 x 4 1/2	14.70
S6697	TFL-50020	2	5 1/2 x 2 1/2 x 4 1/2	18.82

CORNELL-DUBILIER TLA OIL-FILLED TRANSMITTING CONDENSERS



Hermetically sealed in round aluminum containers, the Type TLA paper filter capacitors are Dykanol impregnated and filled. One terminal insulated, other grounded to container. For mounting in any position.

Cat. No.	Type No.	Cap. Mfd.	Size	Net Price
WORKING VOLTAGE 500 VOLTS D. C.				
S6698	TLA-50020	2	2 1/2 x 1 1/2	\$1.32
S6699	TLA-5010	1	4 1/2 x 1 1/2	1.76

WORKING VOLTAGE 1000 VOLTS D. C.				
S6700	TLA-10010	1	2 1/2 x 1 1/2	1.32
S6701	TLA-10020	2	4 1/2 x 1 1/2	1.62

TLA-D Add 15c to above prices if condenser is to be insulated from case internally.

New Cornell-Dubilier "TQ" Dykanol Transmitting Condensers

Type TQ are genuine Dykanol, fire-proof transmitting filter capacitors that can be mounted vertically or inverted by means of the mounting ring supplied. Equipped with heat porcelain terminals. Cylindrical can.

Cat. No.	Type No.	Cap. Mfd.	Cap. Volts D.C.	Net Price
S6782	TQ-10020	2	1,000	\$1.62
S6783	TQ-10040	4	1,000	2.20
S6784	TQ-15020	2	1,500	2.20
S6785	TQ-20020	2	2,500	2.50

SANGAMO MICA CONDENSERS



Highest grade mica condenser with molded bakelite case. Ample safety above rated voltage. Capacities are extremely accurate.

Type A-10 1000 V. D. C. Test

Cat. No.	Cap. Mfd.	Net Price
S6750	.00005	.24
S6751	.0001	.24
S6752	.00015	.24
S6753	.0002	.24
S6754	.00025	.24
S6755	.0003	.24
S6756	.001	.29
S6757	.0015	.29
S6758	.002	.29
S6759	.003	.35
S6760	.004	.35
S6761	.005	.41
S6762	.006	.50
S6763	.01	.66
S6764	.02	1.09
S6765	.03	1.47
S6766	.04	1.91
S6767	.05	2.26

Type A-50 5000 V. D. C. Test

Cat. No.	Cap. Mfd.	Net Price
S6768	.00005	.33
S6769	.0001	.33
S6770	.00015	.59
S6771	.0002	.61
S6772	.00025	.61
S6773	.0003	.73
S6774	.001	.88
S6775	.0015	1.14
S6776	.002	1.32
S6777	.003	1.62
S6778	.004	1.85
S6779	.005	1.94
S6780	.006	2.06
S6781	.01	2.41

CORNELL-DUBILIER MICA TRANSMITTING CONDENSERS



High voltage mica transmitting condensers in porcelain containers. Loss of power flowing through capacitors 1/20 that of film glass dielectric condensers. Capacity remains constant at high frequencies and high temperatures. For amateur plate blocking and tank applications. Dimensions: 3 1/2" between mounting holes, 3 1/2" high overall, 2" deep.

Cat. No.	Type No.	Cap. Mfd.	Max. Temp.	Net Price
S6709*	21A-80	.00005	2	\$2.20
S6710*	21A-80	.0001	5	2.20
S6711*	22A-80	.00025	7	2.20
S6712***	22C-80	.0005	7	2.20
S6713*	23A-80	.0005	8	2.50
S6714***	21C-80	.001	8	2.50
S6715*	21A-80	.001	9	2.94
S6716***	22C-80	.002	8	3.09
S6717*	22A-80	.002	9	3.83
S6718***	25C-80	.005	8	4.11
S6719**	25B-80	.005	10	5.59
S6720**	11C-80	.01	10	5.59

* Max. D. C. Volts 15,500.
** Max. D. C. Volts 10,000.
*** Max. D. C. Volts 7,000.

CORNELL-DUBILIER "SILVER MIKE" CONDENSERS



This new moulded silver plated mica construction permits low temperature coefficient. Exceptionally high "Q". Practically no capacity drift. Capacity tolerance plus 2% or better. Tested at 1000 V. D.C.

Cat. No.	Cap. Mfd.	Net Price for Tolerance
S6702	.00001	\$.32 .25 .24
S6703	.000025	.32 .28 .24
S6704	.00005	.32 .28 .24
S6705	.0001	.32 .28 .24
S6706	.00025	.46 .43 .35
S6707	.0005	.70 .64 .54
S6708	.001	1.17 1.08 .88

TOBE MICRANOL TRANSMITTING CONDENSERS



The Tobe Micranol Transmitting Condenser is guaranteed unconditionally for one year. Incorporated in this condenser are the finest in material and engineering design. Processed in oil and completely sealed in a beautiful gray enamel finish. Encased in a rectangular metal housing with a universal mounting bracket which permits mounting condenser upright or for subpanel use. The insulators are wet processed and made of the same material as the power insulators that stand 100,000 volts. Will stand a surge test 2 1/2 times their working voltage. Dimensions 2 1/2 x 2 1/2 x 1 1/2".

made of the same material as the power insulators that stand 100,000 volts. Will stand a surge test 2 1/2 times their working voltage. Dimensions 2 1/2 x 2 1/2 x 1 1/2".

Cat. No.	Cap. Mfd.	Working Volts D.C.	Net Price
S6744	1	1000	\$1.47
S6745	2	1000	1.91
S6746	1	2000	1.67
S6747	2	2000	2.47
S6748	1	5000	3.53
S6749	2	5000	6.47

GENERAL ELECTRIC PYRANOL TRANSMITTING CONDENSERS

General Electric D-C Transmitter Capacitors are filled and treated with Pyranol, a non-inflammable, non-explosive dielectric which has extraordinary insulating and dielectric qualities, and its use makes possible an unusually small and compact unit for all trans-mitter capacitor ratings.



The lacquer-finished cases are hermetically sealed. Porcelain bushings and clamp-type mounting feet are included. Can be mounted in any position. These units are suitable for continuous operation at voltages up to 10 per cent above the rated values.

Cat. No.	Type No.	Cap. Mfd.	Dimensions H W D	Net Price
500 Volts D. C.				
S6727	22P1	1	2 1/2 x 1 1/2 x 1 1/2	\$1.62
S6728	22P2	2	4 1/2 x 1 1/2 x 1 1/2	2.06
S6729	22P4	4	4 1/2 x 1 1/2 x 2 1/2	2.65

1000 Volts D. C.				
S6730	22P10	1	2 1/2 x 1 1/2 x 1 1/2	1.76
S6731	22P15	2	5 1/2 x 1 1/2 x 1 1/2	2.35
S6732	22P15	4	5 1/2 x 1 1/2 x 2 1/2	2.94
S6733	22P17	10	5 1/2 x 1 1/2 x 2 1/2	3.79

2000 Volts D. C.				
S6734	22P20	1	4 1/2 x 1 1/2 x 2 1/2	2.65
S6735	22P21	2	5 1/2 x 1 1/2 x 2 1/2	3.23
S6736	22P23	4	5 1/2 x 1 1/2 x 2 1/2	5.19
S6737	22P27	10	5 1/2 x 1 1/2 x 2 1/2	10.84

5000 Volts D. C.				
S6738	22P40	2	5 1/2 x 1 1/2 x 2 1/2	7.64
S6739	22P41	4	5 1/2 x 1 1/2 x 2 1/2	10.58

3600 Volts D. C.				
S6740	22P43	2	6 1/2 x 1 1/2 x 2 1/2	8.82
S6741	22P44	4	7 1/2 x 1 1/2 x 2 1/2	12.94

5000 Volts D. C.				
S6742	22P40	1	6 1/2 x 1 1/2 x 2 1/2	14.70
S6743	22P50	2	8 1/2 x 1 1/2 x 2 1/2	18.82

OIL-FILLED TUBULAR CONDENSERS

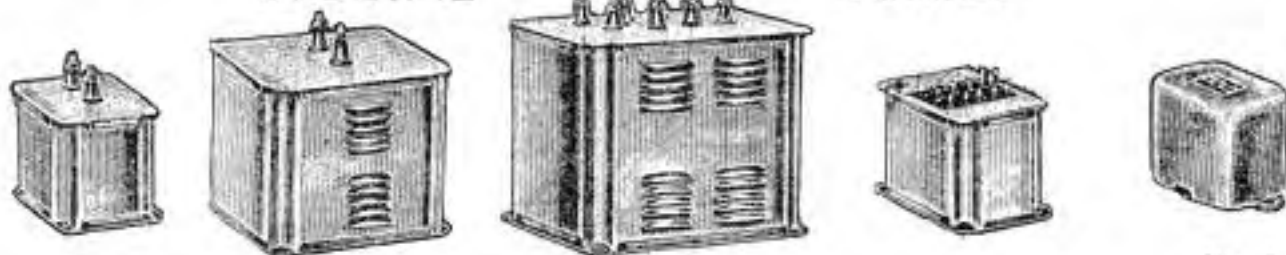


Cat. No.	Type No.	Cap. Mfd.	Size L x H	Net Price
Tubular Oil Units—2500 Volts D.C.				
S6721	VC-81	.01	1 1/2 x 1 1/2	\$.18
S6722	VC-815	.015	1 1/2 x 1 1/2	.21
S6723	VC-82	.02	1 1/2 x 1 1/2	.24
S6724	VC-83	.03	2 1/2 x 1 1/2	.29
S6725	VC-85	.05	2 1/2 x 1 1/2	.32
S6726	VC-101	.1	2 1/2 x 1 1/2 x 1 1/2	.44



CHOKES - MODULATION FILAMENT - PLATE - TRANSFORMERS

SPECIAL SERIES



Figures G3 to G11

PLATE TRANSFORMERS PRIMARY 115V.—50/60 CYCLES

Cat. No.	Type No.	High Voltage	DC Voltage*	DC Current	Mfg. Fig.	Net Price	Type	H	W	D
S8038	8-44	515-525-0-525-575	470/430	200 Ma.	G-9	\$5.59	G-1	1 1/2"	2 1/4"	1 1/4"
S8039	8-45	900-750-0-750-900	750/650	200 Ma.	G-8	3.82	G-2	2 5/16"	2 1/4"	1 15/16"
S8040	8-46	1080-750-0-750-1080	815/600	200 Ma.	G-9	5.59	G-3	2 1/2"	2 1/4"	1 1/4"
S8041	8-47	1500-1250-1000-0-1000-1250-1500	1275/1050/825	200 Ma.	G-10	7.06	G-4	2 15/16"	3 1/4"	2 5/16"
S8042	8-48	1500-1250-1000-0-1000-1250-1500	1300/1075/850	200 Ma.	G-11	11.47	G-5	3 1/2"	3 1/4"	2 1/2"
S8043	8-49	2100-1800-1500-0-1500-1800-2100	1815/1540/1275	200 Ma.	G-11	10.58	G-6	4 1/2"	4 1/4"	3 1/2"
S8044	8-50	2600-2300-0-2300-2600	2325/2175	200 Ma.	G-11	12.64	G-7	5 1/2"	5 1/4"	4 1/2"
							G-8	6 1/2"	6 1/4"	5 1/2"
							G-9	7 1/2"	7 1/4"	6 1/2"
							G-10	8 1/2"	8 1/4"	7 1/2"
							G-11	9 1/2"	9 1/4"	8 1/2"

* Based on two-section filter for 200 Ma. and 300 Ma. units, single-section filter for 500 Ma. units, both choke input.

SINGLE FILAMENT TRANSFORMERS

PRIMARY TAPPED 105, 115 VOLTS—50/60 CYCLES

Cat. No.	Type No.	Secondary Volts	Secondary Current	Insulation	Mfg. Fig.	Net Price
S8045	8-53	2.5 VCT	10 A.	1,500 V.	G-3	\$1.32
S8046	8-54	5 VCT	4 A.	2,500 V.	G-3	1.32
S8047	8-55	6.3 VCT	3 A.	1,500 V.	G-3	1.32
S8048	8-56	7.5 VCT	2 A.	1,500 V.	G-3	1.32
S8049	8-57	2.5 VCT	10 A.	10,000 V.	G-5	1.76
S8050	8-58	2.5 VCT	20 A.	10,000 V.	G-5	2.35
S8051	8-59	5.0 VCT	10 A.	5,000 V.	G-5	2.06
S8052	8-60	5.0 VCT	22 A.	10,000 V.	G-7	4.41
S8053	8-61	7.5 VCT*	8 A.			
		6.3 VCT		3,000 V.	G-5	2.06
S8054	8-62	10 VCT*	10 A.	3,000 V.	G-5	2.35
S8055	8-63	14 VCT*	10 A.	5,000 V.	G-7	4.41
		12 VCT				
		11 VCT				

* Single winding tapped.

MULTIPLE FILAMENT TRANSFORMERS

PRIMARY TAPPED 105, 115 VOLTS—50/60 CYCLES

Cat. No.	Type No.	Fil. 1 C.T.	Fil. 2 C.T.	Fil. 3 C.T.	Mfg. Fig.	Net Price
S8056	8-64	2.5 V.-5A	2.5 V.-5A	5 V.-4A	G-5	\$2.35
S8057	8-65	2.5 V.-5A	5 V.-4A	6.3 V.-3A	G-5	2.35
S8058	8-66	2.5 V.-10A	7.5 V.-0.5A		G-5	2.35
S8059	8-67	5 V.-6A	6.3 V.-3A		G-5	2.35
S8060	7-68	5 V.-3A	6.3 V.-4A	7.5 V.-5A	G-5	2.65
S8061	8-69	6.3 V.-2A	7.5 V.-0.5A		G-5	2.65
S8062	8-70	6.3 V.-2A	6.3 V.-5A		G-5	2.65
S8063	8-71*	2.5 V.-6A	2.5 V.-6A	2.5 V.-12A	G-7	4.41
S8064	8-72	5 V.-3A	5 V.-3A	5 V.-5A	G-5	2.94

* Insulation 10,000 volts, all others 3,000 volts.

FILTER, SWINGING, AND AUDIO CHOKES

Cat. No.	Type	Application	Inductance	Current	Resistance	Mfg. Fig.	Net Price
S8065	8-23	Audio	500 Hy.	5 Ma.	6000 ohms	G-2	\$1.32
S8066	8-24	P.P.	500 Hy.				
		Choke	C.T.	5 Ma.	4000 ohms	G-2	1.47
S8067	8-25	Filter	20 Hy.	20 Ma.	500 ohms	G-2	1.18
S8068	8-26	Filter	15 Hy.	60 Ma.	250 ohms	G-2	1.18
S8069	8-27	Filter	30 Hy.	75 Ma.	350 ohms	G-4	1.62
S8070	8-28	Filter	20 Hy.	100 Ma.	350 ohms	G-4	1.62
S8071	8-29	Filter	10 Hy.	125 Ma.	95 ohms	G-4	1.62
S8072	8-30	Swinging	5/25 Hy.	125 Ma.	95 ohms	G-4	1.62
S8073	8-31	Filter	20 Hy.	225 Ma.	150 ohms	G-5	2.06
S8074	8-32	Swinging	5/25 Hy.	225 Ma.	120 ohms	G-5	2.06
S8075	8-33	Filter	20 Hy.	300 Ma.	90 ohms	G-7	2.94
S8076	8-34	Swinging	5/25 Hy.	300 Ma.	90 ohms	G-7	2.94
S8077	8-35	Filter	20 Hy.	400 Ma.	85 ohms	G-8	3.82
S8078	8-36	Swinging	5/25 Hy.	400 Ma.	85 ohms	G-8	3.82
S8079	8-37	Filter	20 Hy.	550 Ma.	60 ohms	G-9	5.29
S8080	8-38	Swinging	5/25 Hy.	550 Ma.	60 ohms	G-9	5.29

UNIVERSAL MODULATION TRANSFORMER

Will match any modulator tubes to any RF load.

Cat. No.	Type No.	Audio Power	Mfg. Fig.	Net Price
S8081	8-18	15 watts	G-3	\$2.06
S8082	8-19	25 watts	G-4	2.81
S8083	8-20	55 watts	G-5	3.82
S8084	8-21	110 watts	G-7	5.88
S8085	8-22	250 watts	G-9	8.23

UNIVERSAL DRIVER TRANSFORMERS

Cat. No.	Type No.	Application	Mfg. Fig.	Net Price
S8086	8-8	Single driver plate to pushpull grids	G-3	\$1.62
S8087	8-9	Pushpull driver plates to grids of 6 tubes R tubes up to 400 watts output.	G-4	2.20
S8088	8-10	Pushpull 60, 60C triode, 6C5, or similar plates to 42's, 2A2's or 6L6's, self or fixed bias.	G-5	2.06

PLATE AND FILAMENT TRANSFORMERS

PRIMARY 115 V.—50/60 CYCLES

Cat. No.	High Voltage	DC Voltage*	Rect. Fil.	Fil. No. 1 C.T.	Fil. No. 2 C.T.	Mfg. Fig.	Net Price
S-39	400-400-0-400-400	480/310	5V.-3A.	2.5V.-6A	6.3V.-4A	G-8	\$3.23
S-40	525-525-0-525-525	480/310	5V.-3A.	6.3V.-3A	6.3V.-2A	G-7	3.53
S-41	600-0-600	480/310	5V.-3A.	6.3V.-3A	6.3V.-2A	G-7	3.53
S-42	600-525-0-525-600	475	5V.-3A.	6.3V.-3A	6.3V.-2A	G-8	5.00
S-43	525-0-525	400	5V.-3A.	6.3V.-3A	6.3V.-2A	G-9	7.06
	450 Ma.		5V.-3A.	6.3V.-3A	6.3V.-2A		
	40-0-40		5V.-3A.	6.3V.-3A	6.3V.-2A		
	200 Ma.		5V.-3A.	6.3V.-3A	6.3V.-2A		

* Based on two-section filter, choke input.

UNIVERSAL BIAS TRANSFORMERS

The DC voltages shown are based at 200 Ma.—single section filter—choke input—120 ohm choke. Lower values of DC will increase the output voltage somewhat.

PRIMARY 115 V.—50/60 CYCLES

Cat. No.	Type No.	Application	DC Current	Mfg. Fig.	Net Price
S8094	8-51	With supply and bias voltage from 15 to 100 volts DC with in approximately 6% of desired value	200 Ma.	G-3	\$2.94
S8095	8-52	With supply and bias voltage from 75 to 400 volts DC with in approximately 6% of desired value	200 Ma.	G-7	4.12



TRANSMITTING AND PUBLIC ADDRESS EQUIPMENT



G-3



G1 to G4



PA1



PA2



PA3



PA4

DIMENSIONS

PA-1	1-15/16x2-7/16	PA-4	3-1/4x4-1/4
PA-2	2-7/16x3-1/16	PA-5	7-5/8x5-1/8
PA-3	3-1/16x4-3/16	PA-6	7-1/4x7-1/4

CLASS "A" INPUT TRANSFORMERS

Cat. No.	Type No.	Application	Ratio	Mfg. Fig.	Net Price
S9000	S-1	1 plate to 1 grid	8-1	G-2	\$1.32
S9001	S-2	1 plate to 2 grids	2-1	G-2	1.47
S9002	S-3	1 plate to 1 or 2 grids compact type	4-1	G-1	1.18
S9003	S-4	1 plate to 2 grids wide range response	1-1	G-3	2.06
S9004	PA-131	1 plate to 1 grid	2-1	PA-1	2.65
S9005	PA-132	1 plate to 2 grids	2-1	PA-1	2.94
S9006	PA-133	2 plate to 2 grids	1-1	PA-1	3.53
S9007	PA-233	2-6C5, 2-56 to 6L6, PA3		PA-1	3.53

MIKE-LINE-MIXER TO GRID TRANSFORMERS

Cat. No.	Type No.	Application	Ratio	Mfg. Fig.	Net Price
S9008	S-5	Single or double button mike or line to 1 grid hum-bucking type	16-1	G-2	\$1.76
S9009	S-6	Single or double button mike or line to 1 grid compact type	16-1	G-1	1.18
S9010	S-7	Single plate and carbon mike to one or two grids	2-1	G-2	2.06
S9011	PA-134	500, 200, or 50 ohm line to single grid		PA-1	3.82
S9012	PA-135	500, 200, or 50 ohm line to P.P. grids		PA-1	4.41
S9013	PA-136	Single plate or pickup and carbon mike to 1 or 2 grids		PA-1	4.41

LINE TO LINE — LINE TO SPEAKER

Cat. No.	Type No.	Cap. Watts	Prim. Ohms	Sec. Ohms	Mfg. Fig.	Net Price
S9014	S-12	15	500, 2000, 4000	2,4,5,15	G-2	\$2.06
S9015	S-13	30	500, 2000, 4000	2,4,5,15	G-4	2.65
S9016	PA-137	15	50, 200, 500	50, 200, 500	PA-1	3.23

TUBE TO LINE TRANSFORMERS

Cat. No.	Type No.	Application	Prim. Ohms	Sec. Ohms	Mfg. Fig.	Net Price
S9017	S-11	Single 56, 6C5	10,000	200, 500	G-2	\$1.76
S9018	PA-140	Single 864, 56, 55, 30	10,000	50, 200, 500	PA-1	3.82
S9019	PA-141	P.P. 864, 56, 30, 6C5	20,000	50, 200, 500	PA-1	4.41

UNIVERSAL OUTPUT TRANSFORMERS TO LINE AND VOICE COILS

Cat. No.	Type No.	Prim. Ohms	Sec. Ohms	Cap. Watts	Mfg. Fig.	Net Price
S9020	S-14	2500, 4000, 7000, 10000	2,8,15,300	10	G-2	\$1.91
S9021	S-15	4000, 5000, 10000	2,8,15,300	12	G-2	2.06
S9022	S-16	2000, 4000, 6000, 10000	2,8,15,300	30	G-4	2.79
S9023	S-17	3300, 3800, 5000	2,8,15,300	55	G-5	3.82

AUDIO CHOKES

Cat. No.	Type No.	Int. Hen.	Max. DC MA.	DC Res.	Mfg. Fig.	Net Price
S9024	PA-45	250	15	4500	PA-1	\$2.65
S9025	PA-48C	100	50	2500	PA-1	2.65

DIMENSIONS

G-1	1-1/2x2x1-1/4	G-4	2-15/16x3-1/4x5-5/16
G-2	2-5/16x2-1/4x1-5/16	G-5	2-1/2x3-1/4x4-9/16
G-3	2-1/2x2-1/4x2-1/4		

PLATE TRANSFORMERS

Primaries for 100, 115, 220, 250 volts, 50/60 cycles. For reduced power secondary voltages can be reduced to half by using 220 v. Pri. on 110 V.

Cat. No.	Type No.	Sec. AC Volts	DC Volts	DC Ma.	Mfg. Fig.	Net Price
S9033	PA-300	625-515-0-515-625	800/400	200	PA-3	\$5.88
S9034	PA-301	580-530-300-0-200-530-580	475/425/250	500	PA-4	8.23
S9035	PA-302	950-750-0-750-950	800/610	325	PA-4	10.00
S9036	PA-303	1500-1235-400-1235-1500	1250/1000	300	L W H	14.70
S9037	PA-105	1500-1250-0-1250-1500	1250/1050	750	UTR	29.40
S9038	PA-304	1500-1235-0-1235-1500	1250/1000	800	14 11 9 1/4	38.22
S9039	PA-118	1750-1500-0-1500-1750	1500/1250	1000	UTR	44.69
S9040	PA-305	2400-1750-0-1750-2400	2000/1500	300	16 1 1/2 5 1/2	20.58
S9041	PA-306	2400-1750-0-1750-2400	2000/1500	500	14 11 9 1/4	38.22
S9042	PA-307	3500-3000-2400-0-2400-3500	3000/2500/2000	300	13 11 9 1/4	35.28
S9043	PA-308	3500-3000-2400-0-2400-3500	3000/2500/2000	500	15 11 9 1/4	49.98
S9044	PA-309	3500-3000-2400-0-2400-3500	3000/2500/2000	1000	17 14 11 1/4	79.38
S9045	PA-310	4000-3500-3000-0-3000-4000	4000/3500/3000	800	15 14 11 1/4	61.74

INPUT OR SWINGING CHOKES

Cat. No.	Type No.	Ind. Hen.	DC M.A.	DC Res.	Mfg. Fig.	Net Price
S9026	PA-41	5/25	200	100	PA-2	\$2.65
S9027	PA-101	5/25	15-150	115	PA-2	2.94
S9028	PA-103	5/25	20-200	110	PA-3	4.70
S9029	PA-105	6/50	25-250	80	PA-4	7.06
S9030	PA-100	5/25	75-500	80	PA-3	11.76

SMOOTHING CHOKES

S9031	PA-40	12	200	110	PA-2	2.65
S9032	PA-44	30	100	275	PA-2	2.35

FILAMENT TRANSFORMERS

Cat. No.	Type No.	Fil. Volts	Fil. Amps.	Mfg. Fig.	Volts Insul.	Net Price
S9052	PA-124*	2.5 C.T.	10	PA-2	5000	\$4.41
S9053	PA-126*	2.5 C.T.	20	PA-2	10000	5.20
S9054	PA-131*	5 C.T.	20	PA-3	10000	8.23
S9055	PA-132*	7.5 C.T.	6.5	PA-2	5000	6.47
S9056	PA-124*	10 C.T.	7	PA-3	10000	7.06
S9057	PA-126*	14 C.T.	12.5	PA-4	5000	11.76

* Primary tapped at 100, 115, 220, 250 AC 50/60 cycles. Others have 115V primary.

CLASS "A" AND "B" OUTPUT TRANSFORMERS

Cat. No.	Type No.	Type Tube	Class	Plate to Plate Ohms	Ohms Sec.	Mfg. Fig.	Net Price
S9046	PA-15	PP 50, 45 43, 211, 2931	A	8000	1,5,3,5,8 16,200,500	PA-2	\$4.12
S9047	PA-16	PT 2A5	AB	3000*	1,5,3,5,8 5000 16,200,500	PA-3	4.12
S9048	PA-19	PP 50, 6B5 49, 53, 46	A	8000	1,5,3,5,8 16,200,500	PA-2	4.12
S9049	PA-110	PT 210, 47 2A5, 42	A	20000	1,5,3,5,8 16,200,500	PA-2	4.12
S9050	PA-21, 01	PT 6L6	AB	6600	1,5,3,5,8 16,200,500	PA-4	5.88
S9051	PA-41, 61	PP 6L6	AB1	3800*	1,5,3,5,8	PA-4	8.82

* Self Bias, 7.60 watts output. 1 35-40 watts output. These transformers incorporate the new UTC Feedback Winding, which reduces harmonic distortion, increases available power and reduces resistance tremendously. No resistors or condensers are necessary.



REPLACEMENT AUDIO AND POWER TRANSFORMERS AND CHOKES



Fig. M3

Fig. M1

VARITAP POWER TRANSFORMERS—UNIVERSAL MOUNTING—FIG. M1

Cat. No.	Type No.	High Voltage	DC MA.	Rect. Fil.	Fil. 1 C.T.	Fil. 2 C.T.	Dimensions W D H	Net Price
99080	R-1	325-0-325	40	5V-2A	6.3V-2A or 2.5V-4A	—	3x2 1/2 x 2 1/2	\$1.47
99081	R-2	350-0-350	70	5V-2A	6.3V-2.5A or 2.5V-5A	—	3 1/2 x 2 1/2 x 2 1/2	1.76
99082	R-3	350-0-350	95	5V-2A	6.3V-4.5A or 2.5V-4.5A	2.5V-9A	3 1/2 x 2 1/2 x 2 1/2	2.36
99083	R-4	375-0-375	120	5V-4A	6.3V-5A or 2.5V-5A	2.5V-15A	4 1/2 x 2 1/2 x 2 1/2	2.94
99084	R-5	385-0-385	180	5V-4A	6.3V-5A or 2.5V-6A	6.3V-5A	4 1/2 x 2 1/2 x 2 1/2	3.53

ALL ABOVE transformers supplied with universal mounting brackets. 115V. primary 50-60 cycles.

UPRIGHT MOUNTING POWER TRANSFORMERS—FIG. M2

Cat. No.	Type No.	High Voltage	DC MA.	Rect. Fil.	Fil. 1 C.T.	Fil. 2 C.T.	Dimensions W D H	Net Price
99085	R-11	350-0-350	75	5V-8A	6.3V-5A or 2.5V-5A	2.5V-8A	3 1/2 x 2 1/2 x 2 1/2	\$2.50
99086	R-12	375-0-375	100	5V-8A	6.3V-4A or 2.5V-4A	6.3V-2A or 2.5V-8A	3 1/2 x 2 1/2 x 2 1/2	3.09
99087	R-13	425-0-425	200	5V-8A	6.3V-5A or 2.5V-5A	6.3V-8A or 2.5V-12A	5 1/2 x 2 1/2 x 2 1/2	4.41

115V. Primary 50-60 cycles.

HALF SHELL POWER TRANSFORMERS—FLUSH MOUNTING—FIG. M3

Cat. No.	Type No.	High Voltage	DC MA.	Rect. Fil.	Fil. 1 C.T.	Fil. 2 C.T.	Dimensions W D H	Net Price
99088	R-6	300-0-300	50	5V-2A	6.3V-2A or 2.5V-5A	—	3x2 1/2 x 2 1/2	\$1.47
99089	R-7	350-0-350	75	5V-3A	6.3V-3A or 2.5V-5A	2.5V-8A	3 1/2 x 2 1/2 x 2 1/2	1.91
99090	R-8	375-0-375	100	5V-3A	6.3V-4A or 2.5V-4A	2.5V-10A	3 1/2 x 2 1/2 x 2 1/2	2.50
99091	R-9	400-0-400	125	5V-3A	6.3V-4A or 2.5V-4A	6.3V-2A or 2.5V-10A	4 1/2 x 2 1/2 x 2 1/2	3.23
99092	R-10	425-0-425	200	5V-3A	6.3V-5A or 2.5V-5A	6.3V-3A or 2.5V-12A	4 1/2 x 2 1/2 x 2 1/2	3.82

115V. Primary 50-60 cycles.

SMOOTHING, SWINGING, AND AUDIO CHOKES—FIG. M4

Cat. No.	Type No.	Inductance	Current	Resistance	W	D	H	M	Net Price
99093	R-14	12 Hys.	400MA	250 ohms	2 1/2	1 1/2	1 1/2	2 1/2	\$.53
99094	R-15	15 Hys.	500MA	450 ohms	2 1/2	1 1/2	1 1/2	2 1/2	.63
99095	R-16	20 Hys.	600MA	600 ohms	2 1/2	1 1/2	1 1/2	2 1/2	.65
99097	R-18	10 Hys.	75MA	250 ohms	2-3/16	1 1/2	1 1/2	2 1/2	.71
99098	R-19	15 Hys.	100MA	450 ohms	2-3/16	1 1/2	1 1/2	2 1/2	.71
99099	R-20	8 Hys.	100MA	300 ohms	4 1/2	2	2 1/2	3 1/2	1.18
99100	R-21	5/25 Hys.	100MA	100 ohms	4 1/2	2	2 1/2	3 1/2	1.18
99101	R-22	500 Hys.	5MA	8000 ohms	2-3/16	1 1/2	1 1/2	2 1/2	1.03
99102	R-26	15 Hys.	250MA	100 ohms	Mfg. Dim.	C	Fig. M5		2.94
99103	R-31	30 Hys.	200MA	250 ohms	Mfg. Dim.	A	Fig. M5		1.47
99104	R-32	30 Hys.	150MA	100 ohms	Mfg. Dim.	B	Fig. M5		1.32

MIKE, AUDIO, DRIVER AND OUTPUT TRANSFORMERS—FIG. M4

Cat. No.	Type No.	Application	Dimensions, In.	W	D	H	M	Net Price
99105	R-33	1 plate* to 1 grid 4:1 ratio	2 1/2 x 1 1/2 x 1 1/2	2 1/2	1 1/2	1 1/2	2 1/2	\$.71
99106	R-34	1 plate* to 2 grids 2:1 ratio	2 1/2 x 1 1/2 x 1 1/2	2 1/2	1 1/2	1 1/2	2 1/2	.73
99107	R-35	Mike to 1 grid 17:1 ratio	2 1/2 x 1 1/2 x 1 1/2	2 1/2	1 1/2	1 1/2	2 1/2	.88
99108	R-36	30, 40, etc. to class B 19, 40	2 1/2 x 1 1/2 x 1 1/2	2 1/2	1 1/2	1 1/2	2 1/2	.88
99109	R-37	R.F. Output, Class B 19, 40, 70, 80 to 2500 and 5000 ohms	2 1/2 x 1 1/2 x 1 1/2	2 1/2	1 1/2	1 1/2	2 1/2	.94
99110	R-38	Any tubes up to 10 watts to any voice coil, .1 to 30 ohms	2 1/2 x 1 1/2 x 1 1/2	2 1/2	1 1/2	1 1/2	2 1/2	.88
99111	R-39	10 watt 250, 500, 1500 ohms to 2, 8, 15 ohms	2 1/2 x 1 1/2 x 1 1/2	2 1/2	1 1/2	1 1/2	2 1/2	.94
99112	R-40	25 watt 250, 500, 1500 ohms to 2, 8, 15 ohms	4 1/2 x 2 1/2 x 2 1/2	4 1/2	2 1/2	2 1/2	3 1/2	1.47

*Will match tubes like 27, 27, 56, 6CG triodes, 6C5.

VARITAP INPUT AND OUTPUT TRANSFORMERS—FIG. M5

Cat. No.	Type No.	Application	Description	Dim.	Net Price
99113	R-23	1 plate* to 1 grid	3 1/2:1 ratio	A	\$1.03
99114	R-24	1 plate* to 2 grids	2:1 ratio	A	1.09
99115	R-25	2 plates* to 2 grids	1.5:1 stepup for Class A triodes	A	1.18
99115A	R-26	Driver, 1 plate to 2 grids	1.5:1 stepdown for Class AB Single 42, 2A3, 6P6, 45, 46 to AB 6L6's, 42's, 2A5's, 6P6's	A	1.18
99116	R-27	15 watt Universal Output	All tubes in any voice coil from .1 to 30 ohms	A	1.03
99117	R-28	35 watt Universal Output	All tubes to any voice coil from .1 to 30 ohms	H	1.47
99117A	R-29	Mike to grid	Single or double button mike or line to 1 grid	A	1.09

*Will match tubes like 27, 27, 56, 6CG triodes, 6C5.

AMPLIFIER POWER TRANSFORMERS

Cat. No.	Type No.	High Voltage	DC MA.	Rect. Fil.	Fil. 1 C.T.	Fil. 2 C.T.	Fil. 3 C.T.	Mfg. Fig.	Net Price
99118	PA-427	425-0-425	125	5V-3A	6.3V-2A	6.3V-2A	2.5V-5A	PA-3	\$5.88
99119	PA-429	600-0-600	250	5V-3A	6.3V-3A	2.5V-3A	2.5V-5A	PA-4	8.82
99120	PA-428	450-0-450	250	5V-3A	6.3V-4A	6.3V-2A	2.5V-5A	PA-4	8.23
99121	PA-431	500-0-500	500	5V-6A	6.3V-2A	6.3V-5A	2.5V-5A	PA-5	13.23

*Tapped for either voltage.



Fig. M2

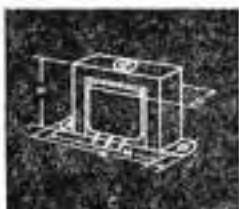


Fig. M4



Fig. M5



LINEAR
STANDARD



AUDIO COMPONENTS



*High Permeability Cast Shield—maximum shielding from inductive pickup.

*True Hum-Balancing Cell Structure—maximum neutralization of stray fields.

*Balanced Variable Impedance Line—permits highest fidelity on every tap of a universal unit—no line reflections or transverse coupling.

*Reversible Mounting—permits above chassis or sub-chassis wiring.

*Full Electrostatic Shielding Between Windings—
brought out to separate terminal

*Multiple Coil Semi-Toroidal Coil Structure—mini-mum distributed capacity and leakage reactance

*Precision Winding—accuracy of windings, 1% perfect balance of inductance and capacity; exact impedance reflection.

*Hipermet Alloy—a stable high permeability nickel-titanium alloy material.

*High Fidelity—UTC Linear Standard transformers are the only audio units with a guaranteed uniform response, from 20 to 20,000 cycles plus 1 db.

OVERALL DIMENSIONS

$$1.8-1 \quad 1-15/10 \approx 8-7/10$$
$$1.84 \pm 0.22 \pm 11/16 \text{ vs } 2.11/16$$

1.88:3 4-2012 10-10-2012

生/組: 4 枚葉: 6 枚葉: 2

1.28-4	12.50	3	14.50
1.40-5	7.12	6	7.12

UTC LINEAR STANDARD components represent the closest approach to the ideal transformer from the standpoint of uniform response, low wave form distortion, high efficiency, thorough shielding and dependability.

The multiple tap windings used on input to grid, plate to line, mixing and output audio transformers make possible a wide combination of impedance mismatches without impairing the audio range or efficiency of each unit.

UTC engineers have spent considerable time studying the many annoying turn pickup difficulties which are prevalent in high gain A.C. operated amplifying equipment. As a result, a special grade of high permeability cast iron has been developed to house all UTC Linear Standard units.

In addition, low level input transformers use the new ETV and quadruple also shields thus making possible a transformer with the lowest iron pickup of any available commercially.

PLATE, CRYSTAL, PHOTOCELL AND BRIDGING TO LINE TRANSFORMERS

Cat. No.	Type No.	Application	Prim. Imp.	Sec. Imp.	Mfg. Etc.	Net Price
S6006	L8-50	Single plate to multiple line	8,000/15,000	50, 125, 300, 250, 333, 500	L8-1	8.82
S6007	L8-51	Push pull low level plates to multiple line	8,000/15,000 each side	50, 125, 300, 250, 333, 500	L8-1	8.82
S6008	L8-37	Crystal microphone or pickup to multiple line	100,000	50, 125, 300, 250, 333, 500	L8-1	8.82
S6009	L8-38	Crystal microphone or pickup to multiple line, with internal equalizer	100,000	50, 125, 300, 250, 333, 500	L8-1	11.76
S6011	L8-150	Bridging transformer from 50 to 500 ohm line to multiple line	4,000 bridging	50, 125, 300, 250, 333, 500	L8-1	8.82
S6012	L8-151	Bridging transformer from 50 to 500 ohm line to multiple line	10,000 bridging	50, 125, 300, 250, 333, 500	L8-1	8.82

DRIVER TRANSFORMERS

Cat. No.	Application	Primary Impedance	Reflected Sec. Imp.	Mfg. Pric	Net Price
L5-19	Single plate in PP grade like 7A5, 50, 46, 61A, 6.	800 to 1500 ohms; split primary	95000 ohms; turn ratio 1.25:1 ea. side; split; 7-1100	L5-1	\$8.82
L5-25	PP plates in PP grade.	800 to 1500 ohms; split primary	100000 ohms over all; 25000 ohms ea. side. Turn ratio 1.3:1, split. 7-1100	L5-1	10.58
L5-7	PP 30, 625 or similar plates 15 A primary, 125 A 2's, 670 A 3A's	800 to 1500 ohms	45 primary turns; pedance turns ratio 1.5:1 several	L5-1	12.94
L5-47X	Driver from push pull 2A's, 6A5C's, or 600A's in Class B 48A's, 502A's 805's, or 2N120's	800 to 1000 ohms	1.1 ohm impedance turns ratio, Pri/1/2 Sec. 2:2:1	L5-1	12.94
L5-49	Push pull parallel 2A's, 5A5's, or 200A tubes to four 825, 702A, 805 or 2N120 tubes.	800 to 2000 ohms	.625 pri. imped; skew turns ratio. Pri/1/2 Sec. 6:6:1	L5-1	17.64

HIGH LEVEL MATCHING TRANSFORMERS

Cat. No.	Type No.	Application	Primary Imp. Ohms	Secondary Ohms	Misc. Fns.	Net Price
s6013	LS-33	High level line matching 15 watts	50,125,200, 250,332,500	10,20,30,30,30, 10,15,20,30,30, 125,200,250, 332,500	LS-3	\$8.82
s6014	LS-34	High level line matching 20 watts	50,125,200, 250,332,500	10,20,30,30,30, 10,15,20,30,30, 125,200,250, 332,500	LS-3	11.76

INTERSTAGE AUDIO TRANSFORMERS

Cat. No.	Imp. Ohms	Secondary Imp. Ohms	Shielding and hum reduction	Size, Pcs.	Net Price
LS-20*	50-500 5000-15000	60,000 2:1 turn ratio	Dual alloy shield—74dB	LS-1	\$5.88
LS-21†	50-500 5000-15000	125,000—turn ratio 1.5:1	Dual alloy shield—74dB	LS-1	7.64
LS-22‡	5000-15000	35,000 ohms sec. turn ratio 1.0:1	Alloy casting —74dB	LS-2	12.94
LS-24§	50-125-500 250-500-5000 5000-15000	60,000 ohms 2:1 turn ratio	Dual alloy shield—74dB	LS-1	11.76

OUTPUT TRANSFORMERS TO LINE OR SPEAKER

Cat. No.	Type No.	Type	Primary Imp. Ohms	Secondary Imp. Ohms	Mag. Freq.	Net Price
6015	L8-52	Push pull 245,250,5V6, 62 or 2A5A vacuum tube as shown	8,000 ohms	500,325,250, 200,125,50, 30,20,15,10, 7.5,5,2.5,1.2	L8-2	\$11.76
6016	L8-54	Same as above	8,000 ohms	500,325,250, 200,125,50, 30,20,15,10, 7.5,5,2.5,1.2	L8-2	8.23
6017	L8-53	Push pull 2A3's, 6A5G's 300A's, 275A's,6A3's	5,000 ohms plate to plate and 2,000 ohms plate to plate	500,325,250, 200,125,50, 30,20,15,10, 7.5,5,2.5,1.2	L8-2	11.76
6018	L8-57	Same as above	8,000 ohms plate to plate and 2,000 ohms plate to plate	500,325,250, 200,125,50, 30,20,15,10, 7.5,5,2.5,1.2	L8-2	8.23
6019	L8-58	Push pull parallel 2A3's, 6A5G's, 300A's,6A3's	2,500 ohms plate to plate and 1,200 ohms plate to plate	500,325,250, 200,125,50, 30,20,15,10, 7.5,5,2.5,1.2	L8-2	17.64
6020	L8-61	Push pull 6BE,6AG,55, 6BX,71A,50, 50,85, C class B46,50's	10,000 ohms plate to plate and 8,000 ohms plate to plate	500,325,250, 200,125,50, 30,20,15,10, 7.5,5,2.5,1.2	L8-2	11.76
6021	L8-63	Same as above	10,000 ohms plate to plate and 6,000 ohms plate to plate	500,325,250, 200,125,50, 30,20,15,10, 7.5,5,2.5,1.2	L8-2	8.23
6023	L8-61	Push pull 6LE, 60 bias, in- termediate frequency winding for stabilized feedback	8,000 ohms plate to plate	500,325,250, 200,125,50, 30,20,15,10, 7.5,5,2.5,1.2	L8-2	17.64

MIXING TRANSFORMERS

Cat. No.	Primary Imp. 30mm	Secondary Imp. 30mm	Shielding and Burn reduction	Mfg. Fig.	Net Price
LS-30	20,125,500	250,325,500	Shielding - 180	LS-8	\$8.82
LS-30X	20,125,500	250,325,500	Quadruple alloy shield - 62141	LS-1	11.76
LS-31	20,50,250,500 each primary	250,325,500	Burn alloy shield - 73141	LS-1	11.76
LS-31X	20,50,250,500 each primary	250,325,500	Quadruple alloy shield - 62141	LS-1	14.70

LOW IMPEDANCE TO GRID TRANSFORMERS

LOW IMPEDANCE TO GRID TRANSFORMERS					
Cat. No.	Primary Imp. Ohms	Secondary Imp. Ohms	Shielding and Hum reduction	Mfg. Ptg.	Net Price
LS-10	50,125,200, 250,323,500	60,000 ohms in two sections	Dual alloy shield—74dB	LS-1	\$8.82
LS-10X	50,125,200, 250,323,500	50,000 ohms	Quadruple alloy shield—92dB	LS-1	11.76
LS-12	50,125,200, 250,323,500	12,000 ohms overall in two sections	Dual alloy shield—71dB	LS-1	11.76
LS-12X	50,125,200, 250,323,500	50,000 ohms overall in two sections	Quadruple alloy shield—92dB	LS-1	14.70
LS-15X	50,50,200, 250 ohms each primary	50,000 ohms overall in two sections	Quadruple alloy shield—92dB	LS-1	14.70
LS-181	50,125,200, 250,323,500	50,000 ohms overall in two	Alloy casting —50dB	LS-2	12.94



HIPERM ALLOY TRANSFORMERS



THE UTC Hiperm alloy audio and power transformers are specifically designed for portable and compact service. While light in weight and small in dimensions, neither dependability nor fidelity has been sacrificed. The frequency characteristics of the Hiperm alloy audio units are uniform from 30 to 20,000 cycles. These units are similar in general design and characteristics to the Linear Standard audio units, and illustrate a Hiperm alloy pickup from case.



The outer case is of high conductivity alloy finished in high polish black enamel. Through the use of trapped metallic inserts, these transformers can be mounted with the terminals either up or down, and with no waste space. A hum balanced coil structure is used on all audio units to insure minimum pickup. The electrostatic shields are brought out to separate terminals on the terminal strip.

OVERALL DIMENSIONS

H1 Case 1 7/8" x 2 3/8" x 3
H2 Case 2 1/4" x 3 x 3 1/4"

INTERSTAGE AUDIO TRANSFORMERS

Cat. No.	Application	Primary Impedance	Secondary Impedance	Min. Fig.	Net Price
HA-105	Single plate to single grid	8000 to 15000 ohms	60000 ohms 2:1	H-1	\$5.29
HA-106	Single plate to P.P. grids	8000 to 15000 ohms	150000 ohms 1.5:1 ratio	H-1	6.47
HA-104	Single 2A3, 50, 6L6, etc. to P.P. grids	8000 to 15000 ohms	95000 ohms 1:1 turn ratio 1.25:1 overall	H-1	7.64
HA-107	P.P. plates to P.P. grids	8000 to 15000 ohms	35000 ohms each secondary 1.5:1 turn ratio	H-2	8.82
HA-109	P.P. 2A3, 50, 6L6, etc. to P.P. grids	8000 to 15000 ohms	25000 ohms each sec. Turn ratio 1.2:1 overall	H-2	8.82

LOW IMPEDANCE TO GRID AND MIXING TRANSFORMERS

Cat. No.	Application	Primary Imp. Ohms	Secondary Impedance	Min. Fig.	Net Price
HA-100	Low impedance mike, pickup or multiple line to grid	50,125, 250,300, 300,500	60,000 ohms in 2 sections	H-1	\$7.35
HA-100X	Same as above	Same as above	Same as above	H-1	10.29
HA-101	Low impedance mike, pickup, or multiple line to push pull grids	50,125, 250,300, 300	120,000 ohms overall in 2 sections	H-1	8.82
HA-101X	Same as above	Same as above	Same as above	H-1	11.76
HA-103A	Low impedance mike, pickup, or parallel mixer to grid	25,50, 10,15,25, 40,55,80	60,000 ohms in 2 sections	H-1	8.82
HA-108	Mixing, low impedance mike, pickup, or multiple line	50,125, 250,300, 300,500	50,125,200, 250,325,500	H-1	7.35
HA-108X	Same as above	Same as above	Same as above	H-1	10.29
HA-130X	Three isolated lines or built in one or two grids with tri-ally internal shield	20,50, 250,250	60,000 ohms overall in 2 sections each primary	H-1	11.76

*With tri-ally internal shield to effect very low hum pickup.

OUNCER HI-FIDELITY AUDIO UNITS



The new UTC OUNCER series represents the same in compact quality transformer practice. These units weigh approximately one ounce and those which do not meet D. C. have high fidelity characteristics suitable for broadcast and similar applications. The OUNCER transformers are ideal for marine, air, aircraft, glider, portable, powered service, and similar applications.

The overall dimensions of these units are 1 1/2" diameter by 1 1/2" height, including lugs. Mounting is effected by two screws, opposite the terminal board side, spaced 1 1/2".

The frequency response of these units is uniform from 30 to 15,000 cycles. The useful range of the 0-14 and 0-15 units is 150 to 4,000 cycles. Due to the very small size of the transformers, hum pickup is comparatively low.

OUNCER HIGH FIDELITY AUDIO UNITS

Cat. No.	Application	Prim. Imp.	Sec. Imp.	Net Price
0-1	Mike, pickup or line to 1 grid	50,200,300	50,000	\$5.88
0-2	Mike, pickup or line to 2 grids	50,200,300	50,000	5.88
0-3	Dynamic mikes to 1 grid	7.5,30	50,000	5.29
0-4	Single plate to 1 grid	8000 to 15000	60,000	4.70
0-5	Single plate to 1 grid, DC in Pri.	8000 to 15000	60,000	4.70
0-6	Single plate to 2 grids	8000 to 15000	65,000	5.29
0-7	Single plate to 2 grids, DC in Pri.	8000 to 15000	95,000	5.29
0-8	Single plate to line	8000 to 15000	50,200,300	5.88
0-9	Single plate to line, DC in Pri.	8000 to 15000	50,200,300	5.88
0-10	Push pull plates to line	8000 to 15000	50,200,300	5.88
0-11	Crystal mike or pickup to line	50000	50,200,300	5.88
0-12	Mixing and matching	50,200	50,200,300	5.29
0-13	Reactor, 200 Hys.—no D.C.; 50 Hys.—2 MA, DC, 6000 ohms	200	55 megohms	4.12
0-14	50:1 mike or line to 1 grid	8000 to 15000	1 megohm	5.88
0-15	10:1 single plate to 1 grid	8000 to 15000	1 megohm	5.88

FILTER AND AUDIO CHOKES

Cat. No.	Inductance	DC Current	DC Resistance	Min. Fig.	Net Price
HC-115	Series—100 Hg	2.5 MA	7000 ohms	H-1	\$5.00
	Parallel—100 Hg	5 MA	1750 ohms		
HC-116	Series—600 Hg	8 MA	4600 ohms	H-2	8.82
	Parallel—150 Hg	10 MA	1600 ohms		
HC-117	60 Hg	15 MA	2000 ohms	H-1	5.00
HC-127	60 Hg	40 MA	1600 ohms	H-2	8.82

PLATE, CRYSTAL, AND PHOTOCELL TO LINE TRANSFORMERS

Cat. No.	Application	Prim. Imp. Ohms	Sec. Imp. Ohms	Min. Fig.	Net Price
HA-111	Crystal microphone or pickup, to multiple line	100,000	50,125,200, 250,325,500	H-1	\$7.35
HA-111F	Crystal microphone or pickup, to multiple line with internal equalizer	100,000	50,125,200, 250,325,500	H-1	10.29
HA-112	Photocell, high-mu triode, diode or unbalanced detector in multiple line	100,000	50,125,200, 250,325,500	H-1	7.35
HA-113	Single plate to multiple line	8,000 to 15,000	50,125,200, 250,325,500	H-1	7.35
HA-114	Push pull low level plates to multiple line	8,000 to 15,000	50,125,200, 250,325,500	H-1	7.35

POWER TRANSFORMERS

Cat. No.	Prim. Voltage	High Voltage	Fluorescent Windings	Min. Fig.	Net Price
HP-122	115	220-0-220	6.3 V.C.T.—1A	H-2	\$5.88
		13 MA	6.3 V.C.T.—1.2A		
HP-123	115	220-0-220	6.3 V.C.T.—1A	H-2	8.82
		25 MA	6.3 V.C.T.—1.2A		

ULTRA COMPACT AUDIOS

The UTC Ultra compact light-weight units are ideal where portability or size is of paramount importance. Through the use of new design methods, high fidelity is obtainable in all individual units, the frequency response being 20dB from 30 to 20,000 cycles in all units. All units employ true hum balanced coil structure, which combined with a high conductivity outer case, afford a maximum of inductive shielding.

Ultra compact audio units weigh only 3 1/2 ounces and have overall dimensions of 1 1/2" x 1 1/2" x 1 1/2".



ULTRA COMPACT HI-FIDELITY AUDIO UNITS

Cat. No.	Application	Primary Impedance	Secondary Impedance	Net Price
A-10	Low impedance mike, pickup, or multiple line to grid	50,125,200, 250,325,500	60,000 ohms	\$5.88
A-12	Low impedance mike, pickup, or multiple line to push pull grids	50,125,200, 250,325,500	60,000 ohms overall in 2 sections	5.88
A-14	Dynamic microphone to one or two grids	50 ohms	60,000 ohms overall in 2 sections	5.29
A-16	Single plate to single grid	8,000 to 15,000 ohms	60,000 ohms 2:1 turn ratio	4.70
A-18	Single plate to 2 grids	8,000 to 15,000 ohms	60,000 ohms overall, 2:1:1 turn ratio overall	5.29
A-20	Mixing, low impedance mike, pickup, or multiple line to multiple line	50,125,200, 250,325,500	50,125,200, 250,325,500	5.88
A-24	Single plate to multiple line	8,000 to 15,000 ohms	50,125,200, 250,325,500	5.88
A-26	Push pull low level plates to multiple line	8,000 to 15,000 ohms each side	50,125,200, 250,325,500	5.88
A-27	Crystal microphone to multiple line	100,000 ohms	50,125,200, 250,325,500	5.88
A-30	Audio choke, 200 henrys @ 2 MA 4000 ohms DC, 75 henrys @ 4 MA 1500 ohms DC, inductance with no DC 450 henrys			4.12



VARIMATCH AND VARITRAN TRANSFORMERS



PA1



PA2



PA3



PA4



PA5

VARIMATCH TRANSFORMERS NEVER BECOME OBSOLETE

VARIMATCH MODULATION TRANSFORMERS

The Varimatch transformer will not only match PRESENT available modulator tubes, but any tube that may be released at a FUTURE date. These transformers will also match the line impedance output of PA or similar amplifiers direct to the Class C tubes.

Cat. No.	Type No.	Cap. Audio Watts	With Modulate	Mfg. Fig.	Net Price
S8000	VM-0	12	25 Watts	PA-1	\$2.94
S8001	VM-1	20	60 Watts	PA-2	4.70
S8002	VM-2	60	120 Watts	PA-3	7.35
S8003	VM-3	120	250 Watts	PA-4	11.76
S8004	VM-4	300	600 Watts	PA-5	19.11
S8005	VM-5	600	1 KW	UTS	41.16

The secondaries of all Varimatch transformers are designed to carry the Class C plate current.

VARIMATCH DRIVER TRANSFORMERS

Cat. No.	Type No.	From Plates	To Grids	Mfg. Class Fig.	Net Price
S8006	PA-51AX	*45, *6L6, *45, *59, *2A3, *49, *37, *74, *6C6, *6C3, *50, *2A5, *42, *45	40, 59, *19, 79, *19, 45, 2A5, 42	B PA-1	\$3.23
S8007	PA-53AX	42, 45, 50, 59, 2A3 or 6L6	210, 801, RK18, 25T, 800, 838, 203A, 50T, 35T	B PA-2	4.41
S8008	PA-59AX	500, 500 or 50 ohm line to	805, 828, 203A, 800, RK18, 801	B PA-2	4.41
S8009	PA-258AX	P.P. PAIR, 2A3P.P. PAIR, 805, 45, 50, 59, 6L6, 838, 203A, 100T, 845	250T, HF200	B PA-3	10.29
S8010	PA-512	500, 500 or 50 ohm to	250T, HF300, HF200 or 845	B PA-3	11.76

*Single tubes. All others push pull.

VARIMATCH OUTPUT TRANSFORMERS

Ideally suited for P.A. work. These universal output transformers will match any output tubes within its power limits to 500, 300, 150, 75, 37.5, and 18.75 ohms.

Cat. No.	Type No.	Cap. Audio Watts	Mfg. Fig.	Net Price
S8011	PVM-1	12 max.	PA-1	\$2.94
S8012	PVM-2	20 max.	PA-2	4.70
S8013	PVM-3	60 max.	PA-3	7.35
S8014	PVM-4	120 max.	PA-4	11.76
S8015	PVM-5	300 max.	PA-5	19.11

VARIMATCH LINE TRANSFORMERS

These Varimatch Units will match any voice coil or group of voice coils up to a 500 ohm line. Impedance range is from .2 to 75 ohms in 50 combinations. Varimatch Autoformers will match one to ten 500 ohm lines or LVM 500 ohm windings to the 500 ohm output of an audio amplifier. The autoformers are tapped at 500, 250, 100, 125, 150, 83, 71, 62, and 50 ohms.

Cat. No.	Type No.	Cap. Audio Watts	Mfg. Fig.	Net Price
S8016	LVM-1*	15 max.	PA-1	\$2.65
S8017	LVM-2*	40 max.	PA-2	4.12
S8018	LVM-3*	15 max.	PA-3	5.88
S8019	LVM-10**	15 max.	PA-1	2.65
S8020	LVM-11**	30 max.	PA-2	4.12
S8021	LVM-12**	60 max.	PA-3	5.88
S8022	LVM-13**	120 max.	PA-4	10.58
S8023	LVM-14**	300 max.	PA-5	14.70

*Varimatch transformer.

**Varimatch autoformer.

VARIPOWER AUTOFORMERS

These units are designed to serve three functions, namely, to effect reduced power for transmitting operation, to take care of line voltage variations from 85 to 130 volts, and to permit minor voltage variations from other transformers. Taps are provided at 55, 75, 95, 100, 105, 110, 125, 120, 125, and 130 volts. Output voltages from 0 to 130 volts in 5 V. steps can be obtained.

Cat. No.	Type No.	Rating	Net Price
S8029	VA-1	150 watt output	\$3.53
S8030	VA-2	250 watt output	4.41
S8031	VA-3	500 watt output	5.88
S8032	VA-4	1000 watt output	8.82
S8033	VA-5	2000 watt output	11.76

STEP DOWN LINE TRANSFORMERS



Designed to reduce the line voltage from 220-240 to 110-120 V. or increase the line voltage from 110-120 to 220-240. Supplied with cord and plug. Built-in receptacles to plug in any device. Operates on 50-60 cycles.

Cat. No.	Type No.	Rating	Net Price
S8034	CS-100	85 watt	\$2.65
S8035	CS-121	125 watt	3.23
S8036	CS-102	175 watt	3.82
S8037	CS-123	250 watt	4.41

VARITRAN VOLTAGE CONTROL UNIT

The VARITRAN makes possible continuously variable output voltage, using a sliding contact riding over the turns of an auto-transformer. Standard units are designed for 115 volt input, 0-130 volts continuously variable output. Complete with cord, plug, and switch.

FEATURES

Smooth control
High efficiency
Excellent regulation
Low cost

APPLICATIONS

Motor control
Heat control
Rectifier control
Light control
Line voltage control



Cat. No.	Type No.	Watts	Max. Rating	Net Price
S8024	V-1	570	5 amp.	\$9.80
S8025	V-2*	570	5 amp.	8.82
S8026	V-3*	850	7.5 amp.	13.72
S8027	V-4*	1250	7.5 amp.	19.60
S8028	V-5*	2000	17.5 amp.	31.36

*Unused with terminal board and provisions for mounting.



POWER AMPLIFIER KITS

15 WATT AMPLIFIER KIT



Cat. No. **g9060**—Type S-15A

Net Price.....

Kit of tubes for above amplifier (1-6J7, 1-6C5, 2-6V6G, 1-83)

Cat. No. **g9061**—3 tubes.

Net Price.....

\$23.52

\$4.34

g-15A—The S-15A audio amplifier is an ideal medium power amplifier for P. A. and modulator service delivering 15 watts of audio power. The power supply and audio amplifier are combined on one compact chassis. High gain, sufficient for crystal microphone operation, is effected through proper choice of tubes, including 6V6G tubes in the output stage. High impedance dual input is provided for either low or high gain, using standard jacks. A universal output plug is supplied at the back of the unit. A tone control is mounted on the common etched panel which sets off the modern beauty of the slate-gray crinkle chassis. The tubes required are one 6J7, one 6C5, two 6V6G's and one 83. This kit is supplied completely mounted, ready to wire, less dust cover and tubes. (Including all components, accessories, etched plate, etc. Size 17" long x 7" wide x 8" high.

Kit is available with universal modulation transformer.

Cat. No. **g9062**—Type S-15M

Net Price.....

Kit is available with 2A3 output tubes and additional stage of amplification, line and voice coil output.

Cat. No. **g9063**—Type S-15A

Net Price.....

\$23.52

\$24.70

25 WATT AMPLIFIER KIT

g-25A—The S-25A audio amplifier has been designed specifically for high power P. A. and modulator field. This unit employs 6L6 tubes in the output stage to obtain 25 watts of undistorted power. The circuit is simple but highly efficient, effecting sufficient gain in three stages to operate from crystal or similar microphones. The tone and volume controls are mounted with the dual high impedance, high and low gain input jacks on one etched panel. A universal output plug is provided on the back of the chassis. The power supply is unusually rugged and employs a two-section filter for optimum regulation and hum reduction. The kit is normally supplied with universal voice coil output impedances. The tubes required are one 6J7, one 6C5, two 6L6's and one 83. The S-25A kit is supplied completely mounted, ready to wire, less tubes, including all components, accessories, dust cover, etched plate, etc. Size 17" long x 7" wide x 9 1/2" high.

Cat. No. **g9064**—Type S-25A as described above.

Net Price.....

Amplifier kit is available with universal modulation transformer.

Cat. No. **g9065**—Type S-25M

Net Price.....

\$29.40

\$29.40

Kit of tubes for above kit (1-6J7, 1-6C5, 2-6L6, 1-83)

Cat. No. **g9066**—3 tubes.

Net Price.....

\$4.88



100 WATT MODULATOR AMPLIFIER

WILL MODULATE A 200 WATT TRANSMITTER

g-100—The S-100 audio amplifier is an ideal inexpensive unit for amateur use. Four highly efficient stages are employed, permitting crystal microphone input and 100 watt undistorted output. Four 6L6 tubes are employed in the output stage for maximum tube economy and minimum plate potential. Fixed bias is employed on the output stage, permitting peak power handling ability appreciably over the normal rating. A modern etched panel sets off the attractive appearance of the gray crinkle cabinet, which is similar to that of the 8X-80 and 8X-200 transmitter kits. Tone and volume controls are provided. High impedance, high or low gain, dual input is arranged using standard jacks. A Special Series universal modulation transformer is employed to effect maximum flexibility for matching any RF stage. Tubes required are one 6J7, one 6C5, two 6F6's, four 6L6's, three 83's. The kit is supplied completely mounted, ready to wire, less tubes and dust cover, including all components, accessories, etched plate, etc. Size, less cabinet, 17" long x 12" wide x 9 1/2" high; with cabinet, 18" long x 13" wide x 13 1/2" high.

Kit of tubes for above modulator (1-6J7, 1-6C5, 2-6F6, 4-6L6, and 3-83)

Cat. No. **g9068**—11 tubes.

Net Price.....

\$10.84

Cat. No. **g9067**—Type S-100 as described above.

Net Price.....

\$51.45



NEW BEAM POWER-COMPRESSOR AMPLIFIER KITS

The new improved UTC P. A. amplifier and modulator kits incorporate every advanced circuit feature desirable for P. A. and amateur work. A stable system of volume limiting (compression) is used on all amplifier kits. Volume limiting in amplifier equipment is ideal for the home and P. A. application inasmuch as the equipment can be operated at high levels without any fear of blasting on peaks of power. The actual maximum power output is limited to the capabilities of the amplifier or speaker equipment. An important feature for P. A. service is the fact that the changes in level encountered when a speaker moves toward the microphone are minimized by the amplifier compression. In Modulator work the limiting action minimizes the tendency for over-modulation due to sudden increase of input signals.



Simultaneously, the signal level setting can be appreciably higher due to the compressor action with the result that higher percentages of modulation are obtained, and the actual effective power of the transmitter may be increased to the equivalent of twice the rating.

Four input jacks provide for dual input (high or low gain) to both channels of the mixer. Vari-tone equalizer is incorporated to equalize high frequencies or low frequencies, as desired. Vari-match output transformers are employed in kits for P. A., modulator and driver service. The output impedances on P. A. kits are 500, 200, 15, 8, 5, 3 and 1 1/2 ohms.

The kits are provided complete with panels, covers, resistors, condensers, sockets, jacks, etc. All components are completely mounted and ready to wire. Complete constructional details and diagrams are furnished.

10 WATTS

P-10D 10 watt compressor driver amplifier, self-bias, 10 watts undistorted output, sufficient to drive any class AB or class B amplifier of 100 watt to 350 watt rating. The ideal driver, incorporating compression, low reflected drive impedance, multi-channel input, high gain, and Vari-tone equalizer. Audio and power units on one chassis for rack or cabinet mounting. Four jack, dual channel, high impedance input, two high gain (117 DB), two low gain (77 DB). Vari-tone equalizer and compression controls. Vari-match driver transformer incorporated as output unit. Tubes required for the kit: 2-6J7, 1-6N7, 1-6C5, 2-2A3, 1-823, and 1-618.

Cat. No. **g9064**—Type P-10D

Net Price.....

\$38.22

P-10A—Ideal 10 watt home amplifier. Same as above, but with P.A. Vari-match output transformer to 500, 15, 8, 5, 3, 1 1/2 ohms.

Cat. No. **g9070** **\$38.22**

Net Price.....

15 WATTS

P-15A Public address amplifier kit, self bias, 15 watts undistorted output, audio and power units on one chassis. Four jack, dual channel, high impedance input; two high gain (120DB), two low gain (80DB). Vari-tone equalizer and compression controls. Output impedance for line and voice coils as specified. Tubes required for P-15A or P-15M kit: 2-6J7, 1-6N7, 1-6C5, 2-6V6, 1-83, 1-618.

Cat. No. **g9071** **\$36.75**

Net Price.....

P-15M Modulator amplifier kit, self bias, 15 watts undistorted output, same as P-15A but with Vari-match modulation output having impedances of 270, 500, 1440, 2760, 2900, 3700, 4000, 5650, 5800, 6900, 8400, 11000, 12000.

Cat. No. **g9072** **\$36.75**

Net Price.....

30 WATTS

PA-1A kit, self bias, 30 watts undistorted output, audio and power units on separate chassis for rack or cabinet mounting. Four jack, dual channel, high impedance input, two high gain (120DB), two low gain (80DB). Vari-tone equalizer and volume limiting (compression) controls. Output impedance for line and voice coil as above. Tubes required for PA-1A or P-1M kits are: 2-6J7, 1-6N7, 2-6C5, 2-6L6, 1-83, 1-618.

Cat. No. **g9073** **\$51.45**

Net Price.....

P-1M Modulator amplifier kit, same as above but for modulation purposes. Vari-match modulation output has the following impedances: 200, 405, 1180, 2350, 2400, 3000, 4000, 4670, 4750, 5650, 7000, 9100, 9500.

Cat. No. **g9074** **\$51.45**

Net Price.....

50 WATTS

P-1A Public address amplifier kit, fixed bias, 50 watts undistorted output, audio and power units on separate chassis for rack and cabinet mounting. Four jack, dual channel, high impedance input, two high gain (120 DB), two low gain (80 DB). Vari-tone equalizer and compression controls. Has Vari-match public address output for line or voice coils, as specified. Tubes required for the P-1A or P-1M kit: 2-6J7, 1-6N7, 2-6C5, 2-6L6, 1-83, 1-80, 1-618.

Cat. No. **g9075** **\$57.33**

Net Price.....

P-1M Modulator amplifier kit, same as above, but has Vari-match modulation output having impedances of 330, 660, 2050, 3740, 4100, 7000, 7500, 8200, 12000, 12600, 15000, 16100, 21500, 22800 on the 3800 ohm plate to plate terminals. Also has 237, 1200, 1750, 2760, 3270, 5200 ohms on the 4600 ohm plate to plate input terminals.

Cat. No. **g9076** **\$57.33**

Net Price.....

OHMITE DIVIDOME Vitreous Enamelled Semi- Variable Resistors



Resistor wire is wound over a porcelain core. Vitreous enamel covers the surface and protects the unit against both mechanical and electrical injury. A heavy slide along one side of unit is left hard to make contact with the "ball point" on the adjustable lug. Wire is always tight. Mounting brackets supplied.

25 Watts. Size 2" x 4 1/16". Mounting Centers 2 3/16".

Cat. No.	Res. Ohms	Max. Curr. Mills.	Net Price	Cat. No.	Res. Ohms	Max. Curr. Mills.	Net Price
X3332	1	5,000		X33350	750	182	
X3333	2	2,500		X33351	1,000	158	
X3334	5	1,000		X33352	1,250	141	
X3335	10	500		X33353	1,500	129	
X3336	25	200		X33354	2,000	112	
X3337	50	100		X33355	2,500	105	
X3338	100	50		X33356	3,000	100	
X3339	250	25		X33357	3,500	91	
X3340	500	12.5		X33358	4,000	79	
X3341	750	7.07		X33359	5,000	70	
X3342	1,000	5.00		X33360	7,500	57	
X3343	1,250	4.00		X33361	10,000	50	
X3344	1,500	3.33		X33362	12,000	44	
X3345	2,000	2.50		X33363	15,000	34	
X3346	2,500	2.00		X33364	20,000	26	
X3347	3,000	1.67		X33365	25,000	21	
X3348	4,000	1.25					
X3349	5,000	1.00					

50c

50c

56c

65c

50 Watts. Size 4" x 4 1/16". Mounting Center 4 3/16".

Cat. No.	Res. Ohms	Max. Curr. Mills.	Net Price	Cat. No.	Res. Ohms	Max. Curr. Mills.	Net Price
X3366	1	5,000		X3382	2,500	142	
X3367	2	2,500		X3383	3,000	129	
X3368	5	1,000		X3384	3,500	120	
X3369	10	500		X3385	4,000	112	
X3370	25	200		X3386	4,500	105	
X3371	50	100		X3387	5,000	100	
X3372	100	50		X3388	6,000	91	
X3373	250	25		X3389	7,000	83	
X3374	500	12.5		X3390	7,500	81	
X3375	750	7.07		X3391	8,000	79	
X3376	1,000	5.00		X3392	10,000	73	
X3377	1,250	4.00		X3393	12,000	64	
X3378	1,500	3.33		X3394	15,000	57	
X3379	2,000	2.50		X3395	20,000	44	
X3380	2,500	2.00		X3396	25,000	34	
X3380A	3,000	1.67		X3402	60,000	29	
X3381	3,500	1.43		X3403	80,000	25	
X3382	4,000	1.25		X3404	100,000	21	
X3383	4,500	1.11					
X3384	5,000	1.00					
X3385	5,500	.91					
X3386	6,000	.83					
X3387	6,500	.79					
X3388	7,000	.73					
X3389	7,500	.70					
X3390	8,000	.67					
X3391	8,500	.64					
X3392	9,000	.61					
X3393	9,500	.58					
X3394	10,000	.56					
X3395	10,500	.53					
X3396	11,000	.51					
X3397	11,500	.48					
X3398	12,000	.46					
X3399	12,500	.44					
X3400	13,000	.42					
X3401	13,500	.40					

79c

88c

\$1.00

\$1.18

75 Watts. Size 6" x 4 1/16". Mounting Centers 7".

Cat. No.	Res. Ohms	Max. Curr. Mills.	Net Price	Cat. No.	Res. Ohms	Max. Curr. Mills.	Net Price
X3405	1	5,000		X3422	4,000	137	
X3406	2	2,500		X3423	4,500	129	
X3407	5	1,000		X3424	5,000	120	
X3408	10	500		X3425	5,500	112	
X3409	25	200		X3426	6,000	105	
X3410	50	100		X3427	6,500	100	
X3411	100	50		X3428	7,000	91	
X3412	250	25		X3429	7,500	83	
X3413	500	12.5		X3430	8,000	79	
X3414	750	7.07		X3431	8,500	73	
X3415	1,000	5.00		X3432	9,000	67	
X3416	1,250	4.00		X3433	9,500	61	
X3417	1,500	3.33		X3434	10,000	56	
X3418	2,000	2.50		X3435	10,500	51	
X3419	2,500	2.00					
X3420	3,000	1.67					
X3421	3,500	1.43					

\$1.03

\$1.18

\$1.32

\$1.47

100 WATTS

6 1/2" x 4 1/16" Mounting Centers 7 1/4"

Cat. No.	Res. Ohms	Max. Curr. Mills.	Net Price
X3436	1,000	31.6	\$1.18
X3437	5,000	14.1	
X3438	10,000	10.0	
X3439	15,000	8.1	
X3440	20,000	7.0	
X3441	25,000	6.0	
X3442	30,000	5.1	
X3443	35,000	4.5	
X3444	40,000	3.9	
X3445	45,000	3.4	
X3446	50,000	3.0	
X3447	55,000	2.7	
X3448	60,000	2.4	
X3449	65,000	2.2	
X3450	70,000	2.0	
X3451	75,000	1.8	
X3452	80,000	1.7	
X3453	85,000	1.6	
X3454	90,000	1.5	
X3455	95,000	1.4	
X3456	100,000	1.3	
X3457	105,000	1.2	

\$1.18

\$1.32

\$1.47

\$1.62

200 WATTS

10 1/2" x 4 1/16" Mounting Centers 11 1/4"

Cat. No.	Res. Ohms	Max. Curr. Mills.	Net Price
X3447	1,000	11.7	\$1.76
X3448	5,000	5.8	
X3449	10,000	4.1	
X3450	15,000	3.1	
X3451	20,000	2.4	
X3452	25,000	2.0	
X3453	30,000	1.7	
X3454	35,000	1.5	
X3455	40,000	1.3	
X3456	45,000	1.2	
X3457	50,000	1.1	
X3458	55,000	1.0	
X3459	60,000	.9	
X3460	65,000	.8	
X3461	70,000	.7	
X3462	75,000	.6	
X3463	80,000	.6	
X3464	85,000	.5	
X3465	90,000	.5	
X3466	95,000	.4	
X3467	100,000	.4	

\$1.76

\$2.06

ADJUSTABLE LUGS

For Above Dividome



No. X3458-For 11.50" dia. resist. Net 6c
No. X3459-For 12.50" dia. resist. Net 9c
No. X3460-For 13.50" dia. resist. Net 9c

OHMITE



OHMITE WIRE WATT 1 Watt Wire Wound Resistors

Wound over case of special insulating material. Wire ends locked and brazed to terminal lugs, resulting in freedom from noise. 1 1/2" spaced wire leads. RMA color coded. Accuracy within 5 per cent. Size 1 1/2" x 1 1/2".

Cat. No.	Res. Ohms	Max. Curr. Mills.	Max. Volts	Cat. No.	Res. Ohms	Max. Curr. Mills.	Max. Volts
X3301	125	80	11	X3316	3,500	30	50
X3302	150	81	12	X3317	4,000	18	54
X3303	200	70	14	X3318	4,500	16	60
X3304	250	63	15	X3319	5,000	15	63
X3305	300	57	17	X3320	5,500	14	66
X3306	350	51	18	X3321	6,000	13	72
X3307	400	45	20	X3322	6,500	12	75
X3308	450	40	22	X3323	7,000	11	80
X3309	500	36	24	X3324	7,500	10	90
X3310	550	32	26	X3325	8,000	9	100
X3311	600	28	28	X3326	8,500	8	110
X3312	650	25	30	X3327	9,000	7	120
X3313	700	22	32	X3328	9,500	6	130
X3314	750	20	34	X3329	10,000	5	140
X3315	800	18	36	X3330	10,500	4	150
X3316	850	16	38	X3331	11,000	3	160

\$.15

"BROWN DEVIL"

Vitreous Enamelled Resistors

Real Vitreous enamel coating. Resistor mounted for dependability. Size 10-watt: 1 1/2" x 1 1/2" 30 watt: 2" x 1 1/2".



10 WATT SIZE

Cat. No.	Res. Ohms	Max. Curr. Mills.	Max. Volts	Cat. No.	Res. Ohms	Max. Curr. Mills.	Max. Volts
X3461	1	3,150	30	X3486	800	111	50
X3462	2	2,250	24	X3487	900	100	54
X3463	3	1,825	20	X3488	1,000	90	60
X3464	5	1,350	16	X3489	1,250	72	66
X3465	7	1,125	14	X3490	1,500	60	72
X3466	10	900	12	X3491	1,750	51	78
X3467	15	675	9	X3492	2,000	45	84
X3468	20	540	8	X3493	2,250	40	90
X3469	25	450	7	X3494	2,500	36	96
X3470	30	375	6	X3495	2,750	32	102
X3471	35	315	5	X3496	3,000	30	108
X3472	40	270	4	X3497	3,250	28	114
X3473	45	225	4	X3498	3,500	26	120
X3474	50	180	3	X3499	3,750	24	126
X3475	55	150	3	X3500	4,000	22	132
X3476	60	135	3	X3501	4,250	21	138
X3477	65	112	2	X3502	4,500	20	144
X3478	70	90	2	X3503	4,750	19	150
X3479	75	75	2	X3504	5,000	18	156
X3480	80	60	2	X3505	5,250	17	162
X3481	85	51	2	X3506	5,500	16	168
X3482	90	45	2	X3507	5,750	15	174
X3483	95	38	2	X3508	6,000	14	180
X3484	100	32	2	X3509	6,250	13	186
X3485	110	27	2				

\$.24

20 Watt Brown Devil

Cat. No.	Res. Ohms	Max. Curr. Mills.	Max. Volts	Cat. No.	Res. Ohms	Max. Curr. Mills.	Max. Volts
X3510	3	2,000	10	X3530	4,000	25	200
X3511	10	1,414	7	X3531	5,000	20	250
X3512	25	894	3.5	X3532	6,000	17	300
X3513	50	707	3.5	X3533	7,500	14	375
X3514	75	548	2.8	X3534	10,000	11	500
X3515	100	444	2.2	X3535	12,500	9	625
X3516	150	365	1.8	X3536	15,000	8	750
X3517	200	316	1.6				
X3518	250	283	1.4	Net Price			38
X3519	300	258	1.2				
X3520	350	230	1.0	X3537	20,000	5	1,000
X3521	400	212	.9	X3538	25,000	4	1,250
X3522	500	196	.8	X3539	35,000	3	1,750
X3523	700	163	.7	X3540	40,000	2.5	2,000
X3524	750	163	.7				
X3525	800	158	.7	Net Price			44
X3526	1,000	141	.6				
X3527	1,250	126	.5	X3541	80,000	1.5	4,000
X3528	1,500	115	.5	X3542	75,000	.9	3,750
X3529	1,750	107	.4	X3543	50,000	0.5	2,500
	2,000	100	.4	X3544	100,000	.5	5,000
Net Price			32	Net Price			65

OHMITE POWER LINE CHOKES



Designed to suppress power line feedback interference of radio frequency from cathodyne or transmitter.

Cat. No.	Type	Micro-Henries	Current Rating	Leads	Net Price
S7200	Z-20	12.0	5 Amp.	4"	\$.88
S7201	Z-21	14	10 Amp.	6 1/2"	1.47
S7202	Z-22	16.5	20 Amp.	8 1/2"	2.12



OHMITE R.F. PLATE CHOKES

These chokes are wound over ceramic tubes and coated with special moisture-resisting enamel.

Cat. No.	Type	Band Meters	Micro-Henries	Leads	Net Price
S7203	Z-3	5	5.4	1 1/2"	\$.15
S7204	Z-2	10-20	25	3"	.44
S7205	Z-2	20-40	95	0"	.65
S7206	Z-4	20, 40, 80 and 160	225	6 1/2"	1.47

OHMITE VITREOUS ENAMELED RHEOSTATS



All porcelain vitreous enameled, wire wound, insulated shafts. Single hole mounting, 5/8" hole. Besides the models listed below, we can furnish the 25, 100, 150, 200 and 500-watt sizes, if desired. Write for prices.

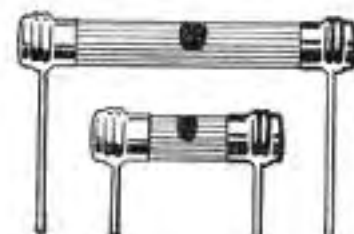
MODEL "J"—50 WATT

Discussed 2 1/4" depth behind panel 1 1/4"

Cat. No.	Total Ohms	Max. Curr. Mils	Net Price	Cat. No.	Total Ohms	Max. Curr. Mils	Net Price
S7207	0.5	10,000	\$2.94	S7220	150	675	\$2.65
S7208	1	7,070		S7221	225	475	
S7209	2	5,000		S7222	300	405	
S7210	4	3,500	\$2.65	S7223	500	245	\$2.79
S7211	6	2,880		S7224	800	250	
S7212	8	2,500		S7225	1,000	225	
S7213	12	2,010	\$2.94	S7226	1,000	175	\$2.94
S7214	16	1,700		S7227	2,000	140	
S7215	22	1,500		S7228	3,500	115	
S7216	30	1,100	\$2.94	S7229	5,000	90	\$2.94
S7217	40	1,000		S7230	8,000	70	
S7218	60	750		S7231	10,000	50	
S7219	125	625					

Centralab

CARBON RESISTORS



These Centralab carbon resistors are very uniformly made.

The resistance material is surrounded by a shock-proof ceramic providing strength and protection. The 1 1/2 watt size is 1/4" x 1 1/4". The 1 watt size is 1/4" x 1".

In ordering, specify the desired resistance. All resistors are RMA color coded and have leads 1 1/2" long.

Res. Ohms	Res. Ohms	Res. Ohms	Res. Ohms	Res. Ohms
100	1,700	10,000	50,000	400,000
200	2,000	12,000	55,000	500,000
300	2,500	15,000	60,000	750,000
400	3,000	18,000	70,000	1 Meg.
500	3,500	20,000	75,000	1.5 Meg.
600	4,000	22,000	100,000	2 Meg.
750	5,000	28,000	125,000	3 Meg.
800	6,000	30,000	150,000	4 Meg.
900	7,500	35,000	200,000	5 Meg.
1,000	8,500	40,000	250,000	
1,200	10,000	45,000	300,000	

1 1/2 watt size Type S18.

Cat. No. S7289 Net Price.....12c

Cat. No. S7290 Net Price.....11c

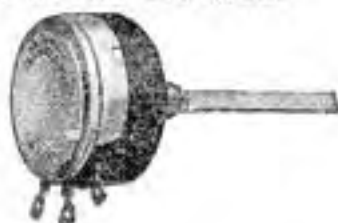
NEON TUNING WAND

A sensitive current measuring tube for use with amateur transmitters. Current is indicated by the length of glow along the 6" electrode. Measures back currents above 150 volts. Excellent for resonance indications, tuning, and modulation indication. With two clips.

Cat. No. S7232 Net Price.....\$1.50

CLAROSTAT WIRE-WOUND CONTROLS

A dependable rheostat or potentiometer for delicate control purposes. Yet capable of handling considerable current. Clarostat wire-wound controls are the logical choice. Available up to 100,000 ohms.



Net Price Ea.

Cat. No.	Type	Ohms	Application
S7233	W-1	50	Std. Pot.
S7234	W-2	100	Std. Pot.
S7235	W-3	250	Std. Pot.
S7236	W-4	500	Std. Pot.
S7237	W-5	1,000	Std. Pot.
S7238	W-6	2,500	Std. Pot.
S7239	W-7	5,000	Std. Pot.
S7240	W-8	10,000	Std. Pot.
S7241	W-9	1,000	Customized Ant.
S7242	W-10	1,000	C Bias Rheo.
S7243	W-11	2,500	Std. Pot.
S7244	W-12	2,500	Customized Ant.
S7245	W-13	2,000	C Bias Rheo.
S7246	W-14	2,000	Sc. Grid and Phono.
S7247	W-15	2,000	Std. Pot.
S7248	W-16	2,000	Ant. and C-1 Tube
S7249	W-17	2,000	C Bias Rheo.
S7250	W-18	2,000	Sc. Grid and Phono.
S7251	W-19	5,000	Std. Pot.
S7252	W-20	5,000	Ant. and C-1 Tube
S7253	W-21	5,000	C Bias Rheo.
S7254	W-22	5,000	Sc. Grid and Phono.
S7255	W-23	7,500	Std. Pot.
S7256	W-24	7,500	Ant. and C-1 Tube
S7257	W-25	7,500	C Bias Rheo.
S7258	W-26	7,500	Sc. Grid and Phono.
S7259	W-27	10,000	Std. Pot.
S7260	W-28	10,000	Ant. and R.F. Coil
S7261	W-29	10,000	Ant. and C-1 Tube
S7262	W-30	10,000	C Bias Rheo.
S7263	W-31	10,000	Sc. Grid and Phono.
S7264	W-32	15,000	Std. Pot.
S7265	W-33	15,000	Ant. and C-1 Tube
S7266	W-34	15,000	C Bias Rheo.
S7267	W-35	15,000	Sc. Grid and Phono.
S7268	W-36	20,000	Std. Pot.
S7269	W-37	20,000	Ant. and C-1 Tube
S7270	W-38	20,000	C Bias Rheo.
S7271	W-39	20,000	Sc. Grid and Phono.
S7272	W-40	25,000	Std. Pot.
S7273	W-41	25,000	Sc. Grid and Phono.
S7274	W-42	30,000	Std. Pot.
S7275	W-43	40,000	Std. Pot.
S7276	W-44	50,000	Std. Pot.

S7277 W-45 50,000 Sc. Grid and Phono.

S7278 W-47 75,000 Std. Pot.

S7279 W-49 100,000 Std. Pot.

All the controls listed above are equipped so that a SPDT switch can be attached to the back and be operated from the shaft of the control.

Cat. No. S7280

Net Price.....29c

Ohmite Band Switch

Band-switching may be provided in all stages of a transmitter, making possible



complete front of band control. Exceptionally efficient because of their low-loss, porcelain construction, low contact resistance, and high current carrying ability. Small in size for use in crystal oscillator and compact low-powered stages. May safely be used in power amplifier and output circuits up to 1 KW rating. Switch has three contacts. Complete with knob and mounting bracket.

No. S7281-BC-3 \$1.76

Net Price.....

LINE CORD RESISTORS

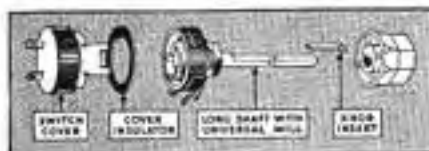
For
AC-DC
Sets



Consists of line cord into which has been incorporated a third element, which reduces line voltage to that required by tubes. Eliminates heat from set also.

Cat. No.	Voltage Drop	Ohms
S7282	18.0 to 24.0	250
S7283	25.0 to 31.5	250
S7284	32.0 to 44.5	250
S7285	45.0 to 52.0	250
S7286	55.0 to 61.0	180
S7287	62.0 to 68.0	180
S7288	69.0 to 75.2	180
Net Price		29c

Centralab VOLUME CONTROLS



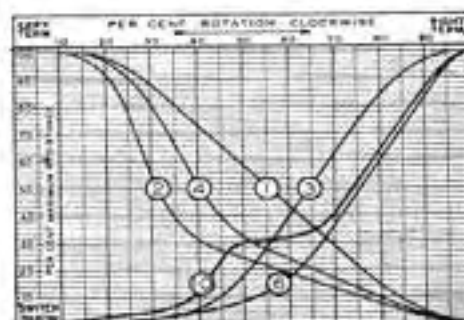
Centralab controls have important design features. The exclusive "wall type" resistor provides uniform current distribution. Centralab's exclusive non-rubbing contact guarantees long life and smooth rotation.

Cat. No.	Type No.	Application	Resistance Ohms	Curve
56854	V-100	Filament	2	1*
56855	V-102	Filament	4	1*
56856	V-104	Filament	6	1*
56857	V-106	Filament	8	1*
56858	V-108	Filament	10	1*
56859	V-109	Filament	15	1*
56860	V-110	Filament	20	1*
56861	V-111	Filament	25	1*
56862	V-112	Filament	30	1*
56863	V-114	Filament	40	1*
56864	V-116	Filament	50	1*
56865	V-117	Filament	60	1*
56866	V-118	Music	75	1*
56867	V-121	Music	100	1*
56868	V-123	Music	200	1*
56869	V-125	Music	300	1*
56870	V-126	Music	400	1*
56871	V-127	Music	500	1*
56872	V-128	Music	500	1**
56873	V-129	Music	700	1*
56874	V-130	Music	1,000	1*
56875	V-131	Music	1,000	1**
56876	V-132	Music	2,000	1*
56877	V-133	Music	2,000	1**
56878	V-134	Music	3,000	1*
56879	V-135	Music	3,000	1**
56880	V-136	Music	4,000	1*
56881	V-137	Music	4,000	1**
56882	V-138	Music	5,000	1*
56883	V-139	Music	5,000	1**
56884	V-140	Music	5,000	1**
56885	V-141	Music	7,500	1*
56886	V-142	Music	7,500	1**
56887	V-143	Music	10,000	1*
56888	V-144	Music	10,000	1**
56889	V-145	Music	10,000	1**
56890	V-146	Music	10,000	1**
56891	V-147	Music	10,000	1**
56892	V-148	Music	15,000	1**
56893	V-149	Music	15,000	1**
56894	V-150	Music	20,000	1**
56895	V-151	Music	25,000	1**
56896	V-152	Music	25,000	1**
56897	V-153	Music	25,000	1**
56898	V-154	Music	50,000	1**
56899	V-155	Music	50,000	1**
56900	V-156	Music	50,000	1**
56901	V-157	Music	75,000	1**
56902	V-158	Music	75,000	1**
56903	V-159	Music	100,000	1**
56904	V-160	Music	100,000	1**
56905	V-161	Music	150,000	1**
56906	V-162	Music	200,000	1**
56907	V-163	Music	200,000	1**
56908	V-164	Music	250,000	1**
56909	V-165	Music	500,000	1**
56910	V-166	Music	500,000	1**
56911	V-167	Music	750,000	1**
56912	V-168	Music	1 Meg.	1**
56913	V-169	Music	2 Megs.	1**
56914	V-170	Music	2 Megs.	1**

Net Price, each, any size.....59¢

* Wire-Wound Element.
** Composition Element.

1 For one tube,
2 For two tubes.



ATTACHABLE SWITCHES



Switches for Centralab controls above.

No.	Type	Net Price
56963	SPST	29¢
56964	DPST	35¢
56965	SPDT	35¢



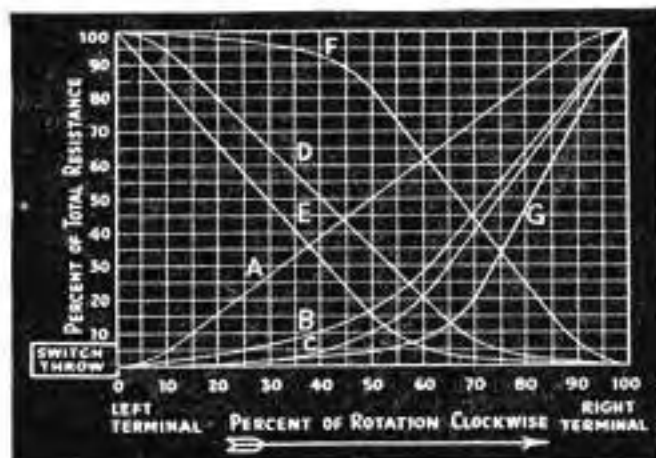
Metalized Controls

New IRC Volume Controls are a logical adaptation of the famous IRC Metalized Type Resistance principle to variable resistor use. They feature the proven 5-Finger "Knee Action" Silent Element Contact plus the exclusive Silent Spiral Connector. The Controls afford the utmost in Stability, Quietness, Permanence and Uniformity to prescribed taper.



Cat. No.	Type No.	Application	Resistance Ohms	Taper
56918	11-103	Voltage Divider	500	A
56919	11-108	Voltage Divider	1,000	A
56920	11-110	Voltage Divider	2,000	A
56921	11-112	Voltage Divider	3,000	A
56922	11-113	Voltage Divider	4,000	A
56923	11-114	Voltage Divider	5,000	A
56924	11-115	Voltage Divider	5,000	C
56925	11-116	Voltage Divider	7,500	A
56926	11-117	Voltage Divider	10,000	A
56927	11-118	Voltage Divider	10,000	C
56928	11-119	Voltage Divider	10,000	D
56929	11-120	Voltage Divider	10,000	F
56930	11-121	Voltage Divider	15,000	D
56931	11-122	Voltage Divider	15,000	F
56932	11-123	Voltage Divider	20,000	F
56933	11-124	Voltage Divider	25,000	A
56934	11-125	Voltage Divider	25,000	D
56935	11-126	Voltage Divider	25,000	F
56936	11-127	Voltage Divider	50,000	A
56937	11-128	Voltage Divider	50,000	C
56938	11-129	Voltage Divider	75,000	C
56939	11-130	Voltage Divider	75,000	D
56940	11-131	Voltage Divider	100,000	A
56941	11-132	Voltage Divider	100,000	C
56942	11-133	Voltage Divider	200,000	A
56943	11-134	Voltage Divider	200,000	D
56944	11-135	Voltage Divider	250,000	C
56945	11-136	Voltage Divider	250,000	D
56946	11-137	Voltage Divider	500,000	A
56947	11-138	Voltage Divider	500,000	C
56948	11-139	Voltage Divider	1 Meg.	C
56949	11-140	Voltage Divider	2 Megs.	C
56950	11-141	Voltage Divider	3 Megs.	C
56951	11-142	Voltage Divider	5 Megs.	A
56952	11-143	Voltage Divider	7 Megs.	A
56953	11-144	Potentiometer	10 Megs.	A

Net Price, each, any size.....59¢
* A 300-ohm RT-1/2 (1/2-Watt) Insulated Metalized Resistor is included without additional charge with every Control indicated by an asterisk (*) for use as external grid bias resistor.
1 For one tube. 2 For two tubes.



ATTACHABLE SWITCHES

These switches fit the standard IRC volume and tone controls listed above and are easily attached.

Cat. No.	Type	Net Price
56954	SPST	29¢
56955	DPST	35¢
56956	SPDT	35¢

IRC ULTRA HIGH RANGE FIXED RESISTORS

Cat. No.	Res. Megohms	Net Price
56957	100	\$.67
56958	250	.67
56959	500	.67
56960	1,000	.97
56961	5,000	.97
56962	10,000	1.26

For high voltage applications. Moisture-proof fixed resistors; 100 to 10,000 megohms. Standard tolerance 20%. 3/4 x 11/32. Max. Volts 1000, Type MG-2.



INSULATED METALIZED AND WIRE WOUND RESISTORS

INSULATED METALIZED RESISTORS



Small — light — high voltage insulation, usable anywhere without fear of shorting. IRC famous metallized resistance element sealed in moisture-proof insulation. Noise-free, crack-proof. Color coded and marked. Long wire leads. When ordering specify resistance.

Res. Ohms	Res. Ohms	Res. Ohms	Res. Ohms	Res. Ohms	Res. Ohms	Res. Ohms	Res. Ohms
100	150	200	250	300	350	400	450
500	600	700	800	900	1,000	1,200	1,500
2,000	2,500	3,000	3,500	4,000	4,500	5,000	5,500
6,000	6,500	7,000	7,500	8,000	8,500	9,000	9,500
10,000	11,000	12,000	13,000	14,000	15,000	16,000	17,000
18,000	20,000	22,000	24,000	26,000	28,000	30,000	33,000
36,000	40,000	45,000	50,000	55,000	60,000	65,000	70,000
75,000	80,000	90,000	100,000	110,000	120,000	130,000	150,000
175,000	200,000	220,000	250,000	280,000	300,000	330,000	360,000
400,000	450,000	500,000	550,000	600,000	650,000	700,000	750,000
800,000	900,000	1,000,000	1,200,000	1,500,000	2,000,000	2,500,000	3,000,000

No. **6811**—RT— $\frac{1}{2}$ " long x $\frac{1}{8}$ " diameter, $\frac{1}{2}$ watt stocked in all ranges in the above list from 100 ohms to 20 megohms. Specify size.

Net Price Each.....10¢
No. **6812**—RT— $\frac{1}{4}$ " long x $\frac{1}{8}$ " diameter, $\frac{1}{4}$ watt stocked in all ranges in the above list from 100 ohms to 20 megohms. Specify size.

Net Price Each.....12¢
No. **6813**—RT— $\frac{1}{4}$ " long x $\frac{1}{8}$ " diameter, $\frac{1}{4}$ watt stocked in all ranges in the above list from 100 ohms to 20 megohms. Specify size.

Net Price Each.....18¢

PRECISION RESISTORS

Designed to meet the most exacting demands for accuracy and durability. Especially adapted for use as meter multipliers, and shunts in increasing the range of single range voltmeters and milliammeters, and for other equipment such as faders, gain control-pads, etc. Normal tolerance is 1%.



Cat. No.	Res. in Ohms	Net Price	Cat. No.	Res. in Ohms	Net Price
6814	1	.50	6828	10,000	.94
6815	10	.50	6829	20,000	.79
6816	25	.50	6830	25,000	.79
6817	50	.50	6831	30,000	.79
6818	100	.50	6832	75,000	.94
6819	250	.50	6833	100,000	1.08
6820	500	.50	6834	150,000	1.39
6821	1,000	.50	6835	200,000	1.39
6822	2,000	.53	6836	250,000	1.53
6823	3,000	.53	6837	300,000	1.69
6824	4,500	.59	6838	400,000	1.75
6825	5,000	.59	6839	500,000	2.00
6826	7,500	.59	6840	750,000	2.65
6827	10,000	.59	6841	1,000,000	3.09

Resistance Analyzer and Indicator

A calibrated variable resistor instrument for general use in all kinds of resistance work. Continuously variable from 0 to 1 meg. Fuse protected. Its many uses are voltmeter multiplier, test volume or tone control, calibrated attenuator and voltage divider. Direct reading scale. Complete instruction manual furnished with each analyzer.

No. **6842**. Net.....\$4.85

RESIST-O-CABINET

This new all-metal cabinet free with your purchase of 50 resistors as listed. Contains the following resistors: Type RT— $\frac{1}{2}$ " x $\frac{1}{8}$ "—1 ea. 1M, 5M, 25M and 50M ohms; .1, .25 and .5 meg.; Type RT— $\frac{1}{4}$ " x $\frac{1}{8}$ "—1 ea. 40M and 75M ohms; 15 and 2 meg.; 2 ea. 1M, 500, 2M, 2500, 5M, 15M and 25M ohms; 1 and 2 meg.; 3 ea. 10M and 50M ohms; .1, .25 and .5 meg.; Type AB (10 watt fixed) 1 ea. 1M, 1500, 2500 and 5M ohms; 2 ea. 10M, 15M and 25M ohms; Type ABA (10 watt adjustable) 1 ea. 1M, 2500, 5M and 10M ohms. No. **6843**. Net.....\$8.91



WIRE WOUND FIXED RESISTORS

These cement coated power wire wound resistors will stand the overloads and assure you long life, moisture proof and great mechanical strength. Wound on a ceramic core. This, coupled with the cement coating, makes it impervious to moisture, permitting difficult services such as naval, marine, and aircraft applications. Accurate to within 5%.



Type AB 10 Watt Fixed Resistors $1\frac{3}{4}$ " x $5\frac{1}{16}$ "

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
1	15	150	400	1,500	2,500	10,000	25,000
2	20	250	500	2,000	4,000	12,000	30,000
3	25	250	600	2,250	5,000	12,500	35,000
5	50	500	750	2,500	7,500	15,000	40,000
10	100	250	1,000	3,000	8,000	20,000	50,000

Cat. No. **6800** Type AB. Be sure to specify resistance.

Net Price, any size.....24¢

Type DG 20 Watt Fixed Resistors 2" x $9\frac{1}{16}$ "

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
1	100	500	1,250	3,500	9,000	25,000	60,000
5	150	400	1,500	4,000	10,000	30,000	75,000
10	200	500	2,000	5,000	12,500	35,000	80,000
25	250	750	2,500	6,000	15,000	40,000	100,000
50	500	1,000	3,000	7,500	20,000	50,000	

Cat. No. **6801** From 1 to 15,000 ohms.

Net each.....38¢

Cat. No. **6802** From 20,000 to 50,000 ohms.

Net each.....44¢

Cat. No. **6803** From 60,000 to 100,000 ohms.

Net each.....59¢

ADJUSTABLE POWER RESISTORS

To meet those applications of a highly dependable wire wound resistor. Will stand the gaff in any climate—from the heat and humidity of the tropics to the icy cold of the arctic. Accurate within 5%. All supplied with mounting brackets as shown and with one slider tap. Extra slider hands for the 25, 50, and 80 watt resistors; net price, 6¢. Extra slider hands for the 100 and 200 watt resistors; net price, 9¢. Specify for what resistor hands are desired.



Type DHA 25 Watt Adjustable $2\frac{1}{4}$ " x $9\frac{1}{16}$ "

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
1	15	100	500	800	2,000	4,000	12,000
3	25	150	400	1,000	2,500	5,000	15,000
5	50	200	500	1,250	3,000	7,500	20,000
10	75	250	750	1,500	3,500	10,000	25,000

Cat. No. **6804** From 1 to 5,000 ohms.

Net each.....50¢

Cat. No. **6805** From 7,500 to 15,000 ohms.

Net each.....56¢

Cat. No. **6806** From 20,000 to 25,000 ohms.

Net each.....65¢

Type EPA 50 Watt Adjustable $4\frac{1}{4}$ " x $3\frac{1}{4}$ "

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
1	75	250	750	1,500	4,000	15,000	40,000
10	100	300	800	2,000	5,000	20,000	50,000
25	150	400	1,000	2,500	7,500	25,000	60,000
50	200	500	1,250	3,000	10,000	30,000	75,000

Cat. No. **6807** From 5 to 5,000 ohms.

Net each.....\$.79

Cat. No. **6808** From 7,500 to 25,000 ohms.

Net each......88

Cat. No. **6809** From 30,000 to 50,000 ohms.

Net each.....1.00

Cat. No. **6810** 80,000 and 75,000 ohms.

Net each.....1.18

Type ESA 80 Watt Adjustable $6\frac{1}{4}$ " x $3\frac{1}{4}$ "

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
5	100	400	1,500	3,500	10,000	20,000	50,000
10	200	500	2,000	4,000	15,000	35,000	60,000
25	250	750	2,500	5,000	20,000	40,000	80,000
50	300	1,000	3,000	7,500	25,000	45,000	0.1 meg.

Cat. No. **6844** From 5 to 5,000 ohms.

Net each.....\$ 1.03

Cat. No. **6845** From 7,500 to 25,000 ohms.

Net each.....1.18

Cat. No. **6846** From 30,000 to 50,000 ohms.

Net each.....1.32

Cat. No. **6847** From 60,000 ohms to 0.1 meg.

Net each.....1.47

Type HAA 100 Watt Adjustable $6\frac{1}{4}$ " x $1\frac{1}{4}$ "

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
100	500	1,500	3,000	7,500	15,000	30,000	60,000
200	750	2,000	4,000	8,000	20,000	40,000	75,000
400	1,000	2,500	5,000	10,000	25,000	50,000	0.1 meg.

Cat. No. **6848** From 100 to 5,000 ohms.

Net each.....\$ 1.18

Cat. No. **6849** From 7,500 to 25,000 ohms.

Net each.....1.32

Cat. No. **6850** From 30,000 to 50,000 ohms.

Net each.....1.47

Cat. No. **6851** From 60,000 ohms to 0.1 meg.

Net each.....1.62

Type HOA 200 Watt Adjustable $10\frac{1}{4}$ " x $1\frac{1}{4}$ "

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
500	2,000	5,000	10,000	20,000	30,000	50,000	75,000
1,000	2,500	5,000	10,000	25,000	40,000	60,000	0.1 meg.

Cat. No. **6852** From 500 to 10,000 ohms.

Net each.....\$ 1.76

Cat. No. **6853** From 15,000 ohms to 0.1 meg.

Net each.....2.06

JEWELS, KNOBS, BULBS AND ACCESSORIES

TUNING INDICATOR



Equip sets not having tuning indicators with the new magic eye. Extremely accurate and sensitive. Only 3 connections are necessary. Complete with scrubbing plate, brackets, cable and instructions.

No. 81734 Test tubes **\$0.73**

Net Price

No. 81735 Raytheon 6ES for 4V tubes.

No. 81736 Raytheon 2ES for 2 1/2 tubes.

Net Price **\$0.73**

Each

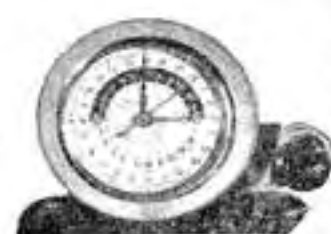
CALL LETTER LAPEL PIN

W10NF

A very nice, clean cut Lapel Pin with Your Call Letters, cut from Nickel Silver, mounted on a black bag. Each pin has a screw button on back, with room to keep pin in position in your coat lapel or pocket. Letters will keep bright and shiny. They stand out fine on coat lapel or pocket. Just the thing to wear at Hamfests. Requires 15 days for delivery.

No. 81745 **\$0.50**

Net Price



Gordon
World-
Wide
Electric
Clock

Attractively colored dials, plainly marked with GMT and standard time scale which directly tells the local standard time in twenty-four principal countries and cities around the globe. Clock is also equipped with a second hand. Self-starting, quartz crystal, genuine Waltham movement. Case is mounted in a panel hole size 3-11/16". Complete with a 6-foot wall cord plus. For 110 volt. 60 cycle A.C. only.

Cat. No. 81755 **\$3.82**

Net Price

MAZDA PILOT LIGHT BULBS

Clear tubular bulbs with miniature screw base. Finest quality. A 100% for every radio use.

Cat. No.	Volts	Net Each	Net for 10
81757	2 1/2	6c	54c
81758	3 1/2	6c	54c
81759	3 1/2	6c	54c
81760	6.3	6c	54c
81761	11.5		

Victor 22... 23c



DIAL LITE OR COLOR CODING ENAMEL KIT



Handy for servicemen and experimenters. In convenient form, sockets, resistors, condensers, and dial lites. Contains five bottles of enamel, green, blue, yellow, red and solvent.

Cat. No. 81762 Dial Lite Kit **\$0.29**

Net Price

Cat. No. 81763 Color Coding Kit **\$0.29**

Net Price

COTO CONTROL WHEEL



A dial and indicator for radio transmitter and commercial applications. Two sizes available with choice of nameplates listed below.

Cat. No.	Size Dia.	Net Price
81730	2 1/2"	\$1.18
81731	3 1/2"	1.47

Name plates for the above wheels supplied in oscillator, oscillator plate, buffer, buffer plate, doubler, doubler plate, buffer doubler plate, grid, plate, tank, neutralizer, power amplifier, grid, power amplifier plate, antenna. Specify by name.

No. 81732—For large size wheel.

No. 81733—For small size wheel.

Net Price **\$0.09**

Each

1/4" SHAFT BUSHING



For fitting a 1/4" shaft through the panel.

No. 81756

Net Price **\$0.50**

PILOT LIGHT JEWEL AND BRACKET

Sturdily made. Take standard bulbs. Mounts in 1/2" hole in panel up to 1-1/4".



No. 81764

Clear

No. 81765

Red

No. 81766

Green

No. 81767

Amber

Net Price, ea. **\$0.15**



JEWEL AND MOUNTING NUT

No. 81768—Clear
No. 81769—Red
No. 81770—Green
No. 81771—Amber

Net. Each. **\$0.10**

JEWEL AND BRACKET HORIZONTAL MOUNTING



This assembly has a 1/2" jewel. Available in 7 different colors. In Diamond cut. Pilot bulb may be removed from the front panel.

Cat. No.	Color	Net Price Each
81772	Amber	
81773	Blue	
81774	Crystal	
81775	Green	
81776	White	
81777	Red	
81778	Yellow	

\$0.24

1" PILOT LIGHT ASSEMBLY

Similar in Construction to Horizontal Mounting Above

Available in red, oval, blue, green and amber pilot bulb. Is removable from front panel. Supplied with ratchet screw base. Add M after Cat. No. if miniature screw base is desired instead.

Cat. No.	Color	Net Price Each
81788	Red	
81789	Oval	
81790	Blue	
81791	Green	
81792	Amber	

\$0.54

FINGER GRIP KNOBS



The same type of knobs as used on the above dials, but of various sizes. For 1/4" shafts.

Cat. No.	Size Dia.	Size Dia.	Net Price
81737	1 1/2"	A	\$0.17
81738	1 3/4"	B	.23
81739	1 7/8"	B	.23
81740	2"	C	.28
81741	2 1/8"	C	.34
81742	2 1/4"	A	.37
81743	2 1/2"	B	
81744	2 3/4"	D	

MOULDED BAKELITE KNOBS



These knobs are constructed of moulded bakelite. Fitted for 1/4" shaft with set screw included. All knobs are accurately centered and finished in a permanent lacquer finish that will last indefinitely. Supplied in an attractive walnut finish.

Cat. No.	Size Dia.	Size Dia.	Net Price
81746	A	1 1/2"	\$0.06
81747	B	1 3/4"	.09
81748	B	1 7/8"	.10
81749	C	2"	.12
81750	C	2 1/8"	.09
81751	D	2 1/4"	.09
81752	D	2 1/2"	.07

*Only supplied in black, red, green, brown and white. Specify color.

BAR KNOBS



Made of moulded black bakelite with set screw for 1/4" shaft.

Cat. No.	Size Dia.	Size Dia.	Net Price
81753	A	1 1/2"	\$0.07
81754	B	1 3/4"	.07
81755	B	1 7/8"	.09

*Supplied in Walnut finish also. Specify finish.

ONE-INCH JEWEL ASSEMBLY

This panel light assembly has a pure white bulb's eye but is available in 4 different colors which show only when bulb is lit. Supplied only with ratchet screw base. To be used with 115 V. bulb. Bulb is accessible through front panel.



Cat. No.	Color	Net Price Each
81782	Amber	
81783	Blue	
81784	Green	
81785	Red	
81786	White	
81787	Yellow	

\$0.59



G-E Neon Glow Lamps

Brilliant red glow. Both electrodes glow on A.C.—one remains dark on D.C. Used in testers as pilot light, etc. Voltages listed are minimum striking. Except 1/2 watt, all standard Edison Medium Screw Base 105-115V. A.C. or D.C.

Cat. No.	Wattage	Net Price Each
81779	1/2 watt	
81780	Medium 1/2 watt	.36c
81781	1 watt	.36c
81782	2 watt	.45c
81783	Medium 2 watt	.36c

DIALS - NAME PLATES AND CRYSTAL SETS

GORDON NAMEPLATES



Made of brass with chromium characters, supplied with self-tapping screws.

Oscillator	Antenna
Oscillator Tank	Antenna Tuning
Crystal	Ground
Crystal Osc. Plate	Neut. Condenser
Crystal Osc. Grid	Plate Voltage
Triode Osc.	Filament Voltage
Triode Plate	Key
Triode Grid	Screen Current
Cathode Tun. Cond.	Power C.W.
Transmitter	DC. Ohm
Buffer	Send
1st Buffer Plate	Receive
2nd Buff. Pl. Tank	Send, Receive
1st Buffer Grid	Speech Amplifier
1st Buff. Gr. Tank	Class B Modulator
2nd Buffer Plate	Class A Modulator
2nd Buff. Pl. Tank	Microphone
2nd Buff. Grid	Microphone Cur.
2nd Buff. Grid Tank	Gain Control
1st Buff. Dblr. Plate	Volume
1st Buff. Dblr. Pl. Tank	Mute
2nd Buff. Dblr. Grid	Best Oscillator
2nd Buff. Dblr. Gr. Tank	A.C. Input
2nd Buff. Dblr. Plate	A.C. Output
2nd Buff. Dblr. Pl. Tank	Regeneration
Power Amp. Plate	Speaker
2nd Buff. Dblr. Pl. Grid	Radio
2nd Buff. Dblr. Gr. Tank	Tone
2nd Buff. Dblr. Gr. Tank	Input
Amplifier	Output
P. A. Plate Tank	500 Ohm Input
Power Amp. Grid	500 Ohm Output
P. A. Grid Tank	

Be sure to specify markings.
 N. 88503—2 1/2" x 3/4". Net. ea. 10c
 No. 88504—1 1/2" x 3/4". Net. ea. 6c

LABORATORY DIALS WITH FINGER GRIP KNOBS



Cat. No.	Degree	Calibra. line	Size	Net Price
88500	150	0-100	1"	\$1.03
88501	180	0-100	1 1/2"	.73
88502	270	0-100	2"	.73

VERNIER DIAL

Black polished bakelite. 1 1/2" x 2 1/4". Universal scale 0-100. Has lock bushing for 1/4" shaft. 100-50 C.W.

No. 88519
 Net Price 40c



PLANETARY DRIVE

A 7:1 vernier and 1:1 direct drive action. It uses an internal vernier dial its ratio is multiplied by the ratio of the dial. Furnished complete with two knobs.

No. 88520
 Net Price 99c

DIAL PLATES

Made of aluminum, black finish with reverse numerals and calibrations. Gives the receiver or transmitter a professional appearance.



Cat. No.	Diameter	Dia. Dial	Calibra. tion	Net Price
88505	2 1/2"	2 1/2"	0-100	21c
88506	1 1/2"	1 1/2"	0-100	21c
88507	1 1/2"	1 1/2"	0-100	21c
88508	1 1/2"	1 1/2"	0-100	15c
88509	2 1/2"	2 1/2"	0-100	15c
88510	2 1/2"	2 1/2"	0-100	15c
88511	1 1/2"	1 1/2"	0-100	15c

CHROME SILVER PLATES

Same as above except finished chrome silver, satin finish, black filled lettering and calibrations.

Cat. No.	Diameter	Dia. Dial	Calibra. tion	Net Price
88512	1 1/2"	1 1/2"	0-100	28c
88513	2 1/2"	2 1/2"	0-100	28c
88514	1 1/2"	1 1/2"	0-100	48c
88515	2 1/2"	2 1/2"	0-100	48c
88516	1 1/2"	1 1/2"	0-100	57c
88517	2 1/2"	2 1/2"	0-100	57c

JOHNSON HANDLE INDICATORS



Professional type controls with molded bakelite handles. Scales are etched and finished in black and silver 0-100 divisions.

No. 88518
 For 1/4" shafts.
 Net 59c

CROWE 5 1/4" SLIDE RULE DIAL



A new style, beautiful rectangular full vision tuning unit. Pointer travel: 5 1/4". Ratio, 9:1. Cord driven. Scale calibrated in kilocycles for three bands. A second dialing 4" x 3 1/2". For use with 1/4" or 3/4" shafts. Supplied with brown finished acetone plate and pilot light socket.

Cat. No. 88527 Counter clock-wise condenser.
 Net Price, each \$2.59

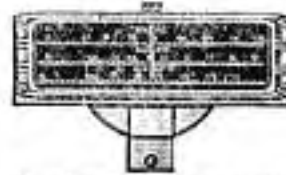
CROWE 7 1/4" DELUXE SLIDE RULE DIAL



This all wave tuning dial is calibrated from 18,000 to 550 kc. in three bands, and in addition is also calibrated to 81 major broadcast stations, Ratio, 12:1. Scale, pyralin. Requires opening 3 1/2" x 7 1/4". Supplied with antique finish acetone plate and pilot light socket.

Cat. No. 88522—Counter clock-wise condenser.
 Net Price, each \$3.53

CROWE 7 1/8" SLIDE RULE DIAL



An attractive full vision tuning unit. Requires panel opening 1 1/2" x 7 1/8". Pyralin scale. For use with 1/4" or 3/4" shaft. Calibrated in kilocycles from 18,000 to 550 kc. in three bands. Supplied with antique finished acetone plate and pilot light socket.

Cat. No. 88529 Counter clock-wise condenser.
 Net Price, each \$2.82

CROWE 9" SLIDE RULE DIAL

This dial is identical in construction to the dial illustrated above except that the pointer travel is 9".

Cat. No. 88524 Counter clock-wise condenser.
 Net Price, each \$3.76

Vernier Dial

Nickel silver dial, 2 1/2" dia. Calibrated 0 to 100, 1/4" shaft hole, with pointer.
 No. 88526
 Less knob.
 Net. 88c



CRYSTAL RADIO RECEIVERS THE SELECTIVE

Designed to give the most efficient results and possessing unusual selectivity. Reception is loud and clear without distortion.

No. 88535
 Net \$2.35



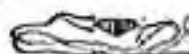
THE SUPERTONE



Ideal for receiving loud and clear signals. Very simple to operate. Glass enclosed detector. Standard with crystal.

No. 88537 Net 69c

DOUBLE HEADPHONE CORDS



Flexible replacement cord for headphones. Fit any type phones. 5 ft. long.

No. 88531 With pin tips at both ends.

No. 88532 With pin tips at one end and spade tips at the other end.

Net Price, ea., either style. 24c

THE BLACKBIRD

This is a selective crystal set. It is very efficient and easy to operate. Housed in crystalline finish metal cabinet, with an enclosed crystal detector.

No. 88536
 Net \$1.62



GLASS ENCLOSED CRYSTAL DETECTOR



A glass enclosed dust proof crystal detector. Fixed at factory but easily adjustable. Includes crystal.

No. 88538
 Net 22c

BRUSH HUSH-A-TONE

The Brush Hush-A-Tone is intended for use with most types of radio receivers. Particularly designed for use under a pillow so that one's neighbors may have the pleasure of listening while lying on a pillow. Easily connected.



Cat. No. 88530
 Net Price \$2.94

PLUGS, SOCKETS, CONNECTORS AND ACCESSORIES

FULLY SHIELDED MULTIPLE CABLE CONNECTOR



A New improved cable connector. A drawn steel shell protects the connector and carries threads and coupling ring. It will withstand rough usage and exposure. Positive contacts. The male connector shells have a key and the female connector shells have a keyway for permanent polarity.

CABLE TYPE, MALE (Carries Coupling)

Cat. No.	Type	Prongs	Net Price
S1368	04M	4	\$.73
S1369	05M	5	.73
S1370	06M	6	.73
S1371	08M	8	.73
S1372	012M	12	1.18

CABLE TYPE, FEMALE (Carries Coupling Threads)

Cat. No.	Type	Prongs	Net Price
S1373	04F	4	\$.73
S1374	05F	5	.73
S1375	06F	6	.73
S1376	08F	8	.73
S1377	012F	12	1.18

CHASSIS TYPE, FEMALE (Carries Coupling Threads)

Cat. No.	Type	Prongs	Net Price
S1378	P04F	4	\$.73
S1379	P05F	5	.73
S1380	P06F	6	.73
S1381	P08F	8	.73
S1382	P012F	12	1.18

SHIELDED COMPACT CABLE CONNECTORS



Interchangeable compact connectors are ideal for microphone and sound work. Available in 3 or 4 prong. Equipped with spring to protect cable.

CABLE TYPE, MALE (Carries Coupling)

Cat. No.	Type	Prongs	Net Price
S1383	MC3M	3	59c
S1384	MC4M	4	65c

CABLE TYPE, FEMALE (Carries Coupling Threads)

Cat. No.	Type	Prongs	Net Price
S1385	MC3F	3	59c
S1386	MC4F	4	65c

CHASSIS TYPE, FEMALE (Carries Coupling Threads)

Cat. No.	Type	Prongs	Net Price
S1387	PC3F	3	29c
S1388	PC4F	4	32c

EBY BINDING POST

Moulded bakelite, non-removable head. 1/4" Dia. Screw 5/32". 3/4" long. Plain.

S1387 Net, each.....9c

Do not split your orders. Due to limited space we cannot list all radio products, but can supply them at the current catalog prices.

CABLE CONNECTORS Male and Female



Standard socket and plug with black enameled metal cap that snaps on. Rubber grommet protects wire. Ideal for speakers and mike.

MALE CONNECTORS

Cat. No.	Prongs	Net Price
S1300	4	15c
S1301	5	15c
S1302	6	15c
S1303	7	15c
S1304	8	15c
S1305	11	18c
S1306	12	18c

FEMALE CONNECTORS

Cat. No.	Prongs	Net Price
S1307	4	15c
S1308	5	15c
S1309	6	15c
S1310	7	15c
S1311	8	15c
S1312	11	18c
S1313	12	18c

CABLE CONNECTORS



Used with above series of connectors. Just remove the rubber grommet, slip this grip into place and tighten the screws against the cable. Positive and dependable. Cat. No. S1353 Type GC4. Net Price ea.....8c

FULLY SHIELDED MIKE CONNECTORS



A completely shielded indestructible contact which cannot be accidentally pulled apart. Designed to permit instant connection or disconnection of cables. The slide set screw contacts the shield of the cable, allowing a completely shielded connection. Accommodates cables to 5/16" in diameter.

Connector shown at left is type MCIF female, which connect to either of the other two. The middle connector type MCIM is for portable use, and the left connector type PCIM is to be mounted on the chassis. No. S1354 MCIF (Female). Net Price.....29c. No. S1355 MCIM (Male). Net Price.....24c. No. S1356 PCIM (Chassis). Net Price.....18c.

LUG TERMINAL STRIPS

Cat. No.	Terminals	Net Price
S1357	2	10c
S1358	3	16c
S1359	4	18c
S1360	5	32c
S1361	6	35c

FAHENSTOCK CLIPS



Holds wire in secure contact. Ideal for temporary hookups. No. S1362 Net Per Doz...10c

CLIPTITE SOCKETS



Minimized bakelite with long contacts making perfect connections. Socket comes with adaptor plate that replaces any waller socket.

Cat. No.	Prongs	Net Price
S1314	4	7c
S1315	5	7c
S1316	6	7c
S1317	7	7c
S1318	8	7c
S1319	9	7c
S1320	10	10c

STEATITE CLIPTITE SOCKETS



Steatite sockets have an exceptionally high electrical resistivity and low moisture absorption. Breakage, a common fault in Ceramic sockets, is entirely eliminated because of the metal adaptor.

Cat. No.	Prongs	Net Price
S1321	4	24c
S1322	5	24c
S1323	6	24c
S1324	7	24c
S1325	8	24c
S1326	9	24c
S1327	10	24c

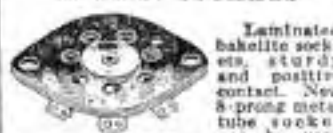
BAKELITE SOCKETS



One piece bakelite suitable for backboard of sub-panel mounting 1 11/16" mt. centers.

Cat. No.	Prongs	Net Price
S1328	4	15c
S1329	5	15c
S1330	6	15c
S1331	7	22c
S1332	8	23c

WAPER SOCKETS



Laminated bakelite sockets, sturdy and positive contact. New 8-prong metal tube socket can be used on all types of metal tubes. 1 1/4" Dia. Centers.

Cat. No.	Prongs	Net Price
S1333	4	5c
S1334	5	5c
S1335	6	5c
S1336	7	5c
S1337	8	5c

SCREW TERMINAL STRIPS



Cat. No.	Terminals	Net Price
S1338	4	8c
S1339	5	10c
S1340	6	13c
S1341	7	16c
S1342	8	18c
S1343	9	19c

NEW AMPHENOL ULTRA LOW LOSS SOCKETS



The new Amphenol Super-Mip ultra low loss sockets are especially designed for high frequency use. The body is made of transparent polystyrene No. 512. New grounding lug as shown. Mounting centers 3/8". Positive contacts. Supplied only in metal style. No. S1344 8 prong only. Net Price.....29c

NEW MOULDED-IN- PLATE SOCKETS

Similar in appearance to above low loss sockets. Unequaled in strength, efficiency and economy. These new Amphenol "Mip" sockets are very strong and compact in size. Rugged construction with perfect insulation. Mounting centers 1 1/4". Also available in 3 and 11 prongs to receive the male plug listed on this page.

Cat. No.	Prongs	Net Price
S1345	4	6c
S1346	5	6c
S1347	6	6c
S1348	7	7c
S1349	8	7c
S1350	9	9c
S1351	11	12c

ADAPTOR SHELL

Adaptor shell with slots to fit the male cable connector and the cliptite sockets. Plug-in socket can be snapped into place after being wired. Height 1 1/4". Any number of prongs in the plug or socket can be used for any combination. Cat. No. S1363. Net Price ea.....9c

MOULDED TWIN TIP JACKS



Made to fit standard tip jacks. Bakelite insulation. Cat. No. S1364. Net Price ea.....4c. 5 for.....18c

SINGLE TUBE PRONG PLUG

Moulded bakelite finger grips, in either Black, Gray or Red. Specify colors wanted. Cat. No. S1365 3/32. Net Price 5c. S1366 1/8. S1367 5/32.

TWIN BINDING POST



No markings on binding posts. 2" long. 1/4" wide. S1388 Net, each.....21c

TRIPLE BINDING POST

No markings on binding posts. S1389 Net, each.....27c

JACKS - PLUGS - FUSES - HARDWARE - CLIPS

MIDGET JACKS



Compact size. Requires $\frac{1}{8}$ " mounting hole. Bakelite insulation.

No. **s3830** Type 1 Open Circuit
Net Price 14¢

No. **s3831** Type 2A Closed Circuit
Net Price 14¢

DOUBLE PHONE PLUG



Black bakelite mounting. Screw terminal. Hardware brass. Nickel plated.

Cat. No. **s3832**
Net Price 19¢

Three-Wire Mike Plug

Identical in appearance to above except that it has 3 contacts.

Cat. No. **s3833**
Net Price 39¢

TWO-WAY PORTABLE JACKS



Made to receive the two-way plug listed above.

Cat. No. **s3834**
Net Price 35¢

SHIELDED TWO AND THREE-WAY PLUGS

Same construction as the plugs described above but with nickel plated brass barrel.

No. **s3835** Two way.
Net Price 59¢

No. **s3836** Three way.
Net Price 69¢

PLAIN PHONE TIPS



Cat. No. **s3846**
10 for 6¢
100 for 50¢

Insulated Binding Post



Hole for wire. Banana plug fits in top of post. Available in six different colors—red, black, green, blue, yellow, and purple. Specify color.

Cat. No. **s3847**
Net Price ea. 7¢

TEST LEAD KIT



Leatherette pocket case. Universal in that insulated fittings are provided for every type of testing. One pair test leads 60" long. One end has insulated phone tips and the other end insulated removable banana type plugs. Extra fittings are all removable, making the test lead universal in application.

Cat. No. **s3848** Type 1005.
Net Price \$1.32

Grid Clips

No. **s3849** for Metal Tubes.
No. **s3850** for Glass Tubes.
Net 10 for 8¢
100 for 60¢



1000-Piece Radio Hardware Assortment

Consists of very popular size nuts, wood screws, machine screws, washers, lock washers, and grommets.

Cat. No. **s3801**
Net Price 95¢

INSTRUMENT LITTLEFUSES

Designed especially for the protection of delicate test equipment. Glass enclosed; $1\frac{1}{2}$ " x $\frac{1}{4}$ ". For use up to 250 V. AC or DC.

Cat. No.	Rating Amps.	Max. Load M.A.	Max. Load M.A.	Volts Meter Ohms Per Volt	Applications	Thermo-Comptex Types	Net Price
s3802	1/200	5	500	per 1000	Galvanometer	0-5	18¢
s3803	1/100	10	116	1000	Up to 0-1	0-10	12¢
s3804	1/50	25	20	500-1000	0-10	0-25	12¢
s3805	1/25	50	5.0	100-500	0-25	0-80	12¢
s3806	1/8	100	5.0	20-100	0-25	0-115	9¢
s3807	1/4	200	6.2	10-20	0-150	0-500	9¢
s3808	3/8	300	3.0	5-10	0-250	0-500	9¢
s3809	1/2	400	2.5	3-5	0-500	0-100	9¢
s3810	3/4	500	.40		0-500	0-500	9¢
s3811	1	1000	.25		0-750	0-1000	6¢
s3812	1 1/2	1500	.15		0-1000	0-1500	6¢
s3813	2	2000	.14		0-1500	0-2000	6¢

FUSE MOUNTING



Black bakelite base, $1\frac{1}{2}$ " x $\frac{1}{4}$ " overall. Long terminal, nickel plated clip.

Cat. No. **s3814** Designed to fit the Littlefuses listed above.

Cat. No. **s3815** For 3AG fuses listed below, $2\frac{1}{2}$ " x $\frac{1}{4}$ ".
Net Price, either type 9¢

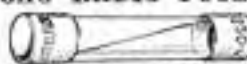
FUSE CLIPS



Standard clips for all Type 3AG and Instrument Littlefuses.

No. **s3818**
Per Pair 3¢
5 Pair 12¢

3AG RADIO FUSES



Glass enclosed, $1\frac{1}{4}$ " x $\frac{1}{4}$ ". Ideal for line fuses.

Cat. No.	Amp. Rating	Max. Watts	Net Price	10 For
s3819	1	60	5¢	42¢
s3820	1 1/4	80	5¢	42¢
s3821	2	150	5¢	42¢
s3822	3	200	5¢	42¢
s3823	5	250	5¢	42¢
s3824	10	250	5¢	42¢
s3825	15	250	5¢	42¢
s3826	20	250	5¢	42¢

Carter Flat Plug



Designed for use where equipment is to be kept from protruding from panel.

No. **s3827**
Net Price 35¢

A
2
L
B.



KIT

A hardware assortment that consists of assorted sizes of screws, nuts, wood screws, self-tapping screws, and washers. All units are of popular sizes.

Cat. No. **s3800**
Net Price 33¢

INSULATED TIP JACKS

For standard phone tips. Colored head $7/16$ " in dia. New improved springs hold phone tips very tight. Available in six beautiful lustrous colors—red, black, green, blue, yellow, and purple. Specify color.

Cat. No. **s3837**
Net Price ea. 6¢

INSULATED JACKS FOR BANANA OR PHONE TIPS

Similar in appearance to the jack listed above. Will fit standard phone tips or banana type plugs. Mounts in $\frac{1}{4}$ " dia. hole. Complete with insulated washer. Available in six beautiful lustrous colors—red, black, green, blue, yellow and purple. Specify color.

Cat. No. **s3838**
Net Price ea. 8¢

Insulated Banana Jacks

Made to receive banana plugs of the TR type. Fits panels up to $\frac{1}{4}$ " thick. Shoulder washer included for insulating on metal panels.

Available in six colors—red, black, green, blue, yellow, and purple. Specify color.

Cat. No. **s3839**
Net Price ea. 6¢

Plain Phone Tip Jacks

Made of nickel plated brass. A strong spring assures perfect contact. Fits in $\frac{1}{4}$ " mounting hole.

Cat. No. **s3840**
12 for 30¢

Insulated Banana Plug

Provides secure contact on four sides. Handle is made of a beautiful insulating high lustrous finished material. Screw connection. Available in six colors—red, black, green, blue, yellow, purple. Specify color.

Cat. No. **s3841**
Net Price ea. 6¢

INSULATED SOLDERLESS PHONE TIPS

Insulated handle in six different colors—red, black, green, blue, yellow and purple. Length $1\frac{1}{2}$ ". No tools required to connect wiring. Specify color.

Cat. No. **s3842**
Net Price ea. 6¢

PLAIN SOLDERLESS PHONE TIPS

Same as above except handle is not insulated.

Cat. No. **s3843**
Net Price 4¢

Insulated Alligator Clips

Ideal for service bench. Can be soldered without removing insulation. Banana plug fits into handle. $3\frac{1}{2}$ " long. Available in six different colors—red, black, green, blue, yellow, and purple. Specify color.

No. **s3844** Insulated.
Net Price 8¢
No. **s3845** Plain $2\frac{1}{2}$ " long.
Net Price 4¢

CLIPS, CONNECTORS, LACQUERS AND ACCESSORIES

MUELLER BATTERY CLIPS

Standard and Cad. in 1/2 in. spaced. For interlocking track and full channel connection. 1 1/2" long 5 strips - 2" 10 strips. Screw connection.

No. **3700** 1 1/2" long 5 strips. 4¢
Type 15. Net, Each. 29¢
10 for 2.90

No. **3701** 2" long 10 strips. 5¢
Type 18B. Net, Each. 32¢
10 for 3.20

HEAVY DUTY CLIPS



Same construction as above but with lead covered copper band to protect spring.

No. **3702** 2 1/2" long 25 strips. 7¢
Type 21A. Net, Each. 59¢
10 for 5.90

No. **3703** 4" long 5 strips. 13¢
Type 21A. Net, Each. 1.08
10 for 10.80

No. **3704** 6" long 100 strips. 39¢
Type 11A. Net, Each. 3.90
10 for 39.00

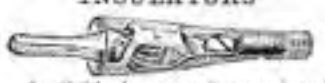
ALLIGATOR CLIPS



A real test clip for getting into tight places. Teeth mesh very closely, secure connection. Banded end to fit banana plugs.

No. **3705** Type 53. 80.05
Net Price. 39¢
Each 10 for 3.90

ALLIGATOR CLIP INSULATORS



Available in two colors, red and black, to fit the above clips.

No. **3706** Black Type 57. 80.06
No. **3707** Red Type 57. 28¢
Net Price. 28¢
Each 10 for 2.80

Radio Frequency

Solid Copper Clip



Will not heat in radio frequency circuits.

No. **3708** Type 45C. 80.06
Net 54¢
Each 10 for 5.40

No. **3709** Type 47. 80.07
Net Price. 57¢
Each 10 for 5.70

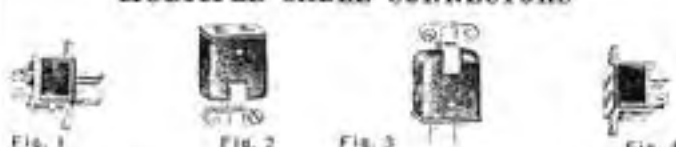
CLOSE MESH CLIP



Available in lead coated steel or solid copper. Ideal for laboratory.

No. **3710** Steel Type 27. 80.08
Net. 80.14
No. **3711** Copper Type 27C. 80.14
Net. 80.14
Each 10 for 8.01

MULTIPLE CABLE CONNECTORS



With these plugs and receptacles any combination may be used, a plug of either male or female type may be used with a male or female chassis connector or the male and female plugs may be used in a portable connection. Nerved to allow contact only one way.

SHIELDED FEMALE CONNECTOR—Fig. 2

Cat. No.	Contacts	Type No.	Net Price
3712	2	8-592-FHT	13¢
3713	3	8-593-FHT	13¢
3714	4	8-594-FHT	16¢
3715	6	8-596-FHT	21¢
3716	8	8-598-FHT	24¢
3717	10	8-510-FHT	29¢
3718	12	8-512-FHT	32¢

SHIELDED MALE PLUG Fig. 3

Cat. No.	Contacts	Type No.	Net Price
3726	2	P-302-FHT	12¢
3727	3	P-303-FHT	13¢
3728	4	P-304-FHT	15¢
3729	6	P-306-FHT	18¢
3730	8	P-308-FHT	21¢
3731	10	P-310-FHT	25¢
3732	12	P-312-FHT	28¢

CHASSIS MOUNTING Female Connector Fig. 4

Cat. No.	Contacts	Type No.	Net Price
3719	2	8-592-AH	9¢
3720	3	8-593-AH	11¢
3721	4	8-594-AH	13¢
3722	6	8-596-AH	17¢
3723	8	8-598-AH	20¢
3724	10	8-510-AH	24¢
3725	12	8-512-AH	27¢

Chassis Mounting Male Connector Fig. 1

Cat. No.	Contacts	Type No.	Net Price
3733	2	P-302-AH	9¢
3734	3	P-303-AH	10¢
3735	4	P-304-AH	12¢
3736	6	P-306-AH	15¢
3737	8	P-308-AH	17¢
3738	10	P-310-AH	21¢
3739	12	P-312-AH	23¢

TUBE SHIELDS



Type A is a 2-piece bright aluminum shield, designed to fit 66, 67, 68, 69 type tubes. Base mounting centers 1 1/2" dia., 4 1/2" high overall. Well ventilated.

Cat. No. **3740** 80.09
Net Price, Each. 75¢
10 for 7.50

Type B is single fitting and consists of two identical halves, silver, cap, and base. Designed for small and large dome shaped tubes. Mounting centers of base 1 1/2"

Cat. No. **3741** for short types. 27, 38, 55, etc.
Cat. No. **3742** for long types. 28B, 31, 55, etc.

Cat. No. **3743** for short tubes without grid rods. 38, 56, 67, 70.

Net Price, 80.05
Each 45¢
10 for 4.50

Type C is a cap shield for metal tubes that require extreme shielding.

Cat. No. **3744** 80.05
Net Price, Each. 45¢
10 for 4.50

Insulating Cambrie

5000 VOLT INSULATING CAMBRIE
10,000 V. breakdown. Ideal for protecting against and preventing static. 2 1/2" x 3 1/2" x .010 in. thick.

No. **3756** 29¢
Net 2.90

GRILL CLOTH

High quality. Beautiful pattern.

No. **3757** 18" x 20" 44¢
Net 4.40

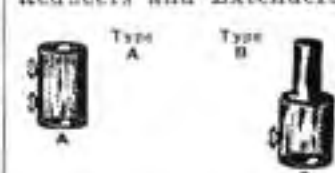
ALUMINUM COIL SHIELDS

A very effective R.F. shield with base. Available in two sizes.

No.	Dia.	Lat.
3745	2 1/2"	3"
3746	3 1/2"	3 1/2"

Net, either size 10¢

Shaft Couplings, Reducers and Extenders



Cat. No.	Insulated Brass	Type	Size
3760	3761	B	1/2" to 1"
3762	3763	B	1" to 1 1/2"
3764	3765	A	1 1/2" to 2"
3766	3767	A	2" to 2 1/2"
3768	3769	A	2 1/2" to 3"

Net Price, 80.09
Each 80.09

Brass and Insulated Shafting

Insulated	Brass	Type	Size
3770	3771	1"	13¢
3772	3773	1 1/2"	25¢

1000 Piece Radio Hardware Assortment

Containing 1000 pieces of assorted radio hardware, including: nuts, bolts, rivets, washers, spacers, lock washers, fiber washers, rubber grommets, etc.

No. **3774** Type 5550 90¢
Net 9.00

WRINKLE FINISH VARNISH

"As used by Manufacturers of Professional Radio Equipment."



Requires no baking, can be brushed or sprayed. Professional results. Available in 2 colors, black and silver 280V.

Black No.	Silver No.	Size	Net Price
3746	3747	1/2 pt.	24¢
3748	3749	1 pt.	65¢
3750	3751	1 pt.	\$1.15

CRYSTAL FINISH LACQUER

A black air drying, professional finish on all metal. Easy to apply.

No.	Size	Net Price
3752	1/2 pt.	21¢
3753	1 pt.	62¢
3754	1 pt.	\$1.18

COIL DOPE

Specially prepared for coating and binding coil windings. Ready to use in place. Fast-drying and non-inductive.

No.	Size	Net Price
3755	1/2 pt. bottle.	21¢



SPEAKER SHIMS

These Spanish style speaker shims allow adjustment of speakers to be made in a few minutes. Very flexible. Four each are furnished in case, 3025, 3006, 3008 and 01 in.

No.	Size	Net Price
3758	2 oz. bottle.	80.38

Speaker Cement

Specially prepared for repairing speakers.

No. **3759** 2 oz. bottle. 29¢
Net 2.90



FRICTION TAPE

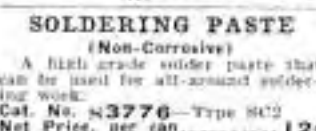
Guaranteed against drying. Proves all the AXTON specifications except package.

No. **3775** 1 in. 80.09
Net 8.09

SOLDERING PASTE (Non-Corrosive)

A high grade solder paste that can be used for all-around soldering work.

Cat. No. **3776**—Type 802. Net Price, per can. 12¢



HOLE PUNCHES — SOLDERING IRONS AND TOOLS

WYCO HOLE CUTTER



Adjustable
1/8" to 3/8"
dia. holes. For
sheet metal,
bakelite, fibro,
etc. Self-
tightening. Fits
in 1/4" tool bits
or 1/4" Electric
Drill Chuck.

Cat. No.
s2714
Net Price
\$1.95

UTICA TOOLS



DIAGONAL CUTTING PLIERS

Drop forged from alloy steel. Hardened and tempered in oil. Special narrow nose for radio use.

Cat. No. **s2700** Type 41-5".
Net Price **\$.98**
Cat. No. **s2701** Type 41-6".
Net Price **1.18**

LONG NEEDLE NOSE SIDE CUTTING PLIERS



This is a long fine spring tempered nose side cutting plier, drop forged from alloy steel with hand honed cutting edge.

Cat. No. **s2702** Type 655-6".
Net Price **\$1.15**
Cat. No. **s2703** Type 655-7".
Net Price **1.24**

Same pliers as above but less cutters.
Cat. No. **s2704** Type 1033-6".
Net Price **.98**
Cat. No. **s2705** Type 1033-7".
Net Price **1.08**

ELECTRICIANS' PLIERS



An ideal tool for electrical work. Forged from alloy steel and skillfully tempered. A keen cutting edge.

Cat. No. **s2706** Type 50-5".
Net Price **.74c**
Cat. No. **s2707** Type 50-6".
Net Price **81c**
Cat. No. **s2708** Type 50-8".
Net Price **.98c**

PAWOOD HOLE CUTTERS



Heavy duty tool type 5 for brass or electric drill. Cuts holes 1" to 3/4" diameter in steel, bakelite or wood.

Type 4 circle cutter similar to type 5 shown above only round shank cuts holes 1/2" to 4" in diameter.

Type 2 for lighter duty work. Cuts holes 1" to 4" in diameter.

No. **s2709** Round Shank Type 5.
No. **s2710** Square Shank Type 5.
Net Price **\$1.88**
No. **s2711** Type 4.
Net Price **1.25**
No. **s2712** Type 2.
Net Price **1.10**

BRACH TESTO-LITE



Ideal for locating blown fuses, high resistance leaks, condenser, transformer trouble, and indicating AC or DC current. Operates on 100 to 250 volts. Insulated rubber covered leads.

Cat. No. **s2713**.
Net Price **\$1.10**

GREENLEE HOLE PUNCH



These new type hole punches will make of large holes in any metals up to No. 10 gauge. This tool is operated by turning the screw with a wrench until the hole is cut thru. Available in 3 sizes listed below.

Cat. No.	Size Hole	Net Price
s2715	1/8"	\$1.62
s2716	1/4"	1.88
s2717	3/8"	2.13

HOLE PUNCH FOR CLIP TIE SOCKET

These punches are designed for use with the Amphenol or clip tie sockets. Punches a tapered hole in chassis to accommodate the special sockets. Simple to use. A hammer is the only other tool necessary. Made in two sizes, 1.170" or 1.320".



Cat. No.	Size	Net
s2718	1.170"	\$2.94
s2719	1.320"	2.94



PAWOOD SOCKET HOLE PUNCH

These hole punches are made of die hardened steel and oil tempered. Cuts clean round holes in sheet metal up to No. 16 gauge. Made in U.S.A.

No.	Size	Net
s2720	3/8"	\$1.67
s2721	1/2"	
s2722	5/8"	
s2723	1 1/8"	

Square Hole Shearing Punch

Will cut any size straight sided hole. Holes for mounting. Cutting plate is 1 1/2" long. Ideal for cutting transformer holes, etc.

Cat. No. **s2724**.
Net Price **\$5.58**



PLIER VALUES DIAGONAL PLIERS



Made of forged tool steel. Hardened and tempered cutters.

ters. 5 1/2" overall.
Cat. No. **s2730**.
Net Price **32c**

LONG NOSE PLIERS



Made of hardened steel with side cutters. 5 1/2" long. Excellent made and fitted.
Cat. No. **s2731**.
Net Price **32c**

ALL PURPOSE PLIERS



Handy pliers. A sturdy, heavy tool. Has twisted jaws that will not slip.
Cat. No. **s2732**.
Net Price **1.9c**

"ESICO" SOLDERING IRONS



These famous Esico irons with one piece blue steel cases. Mahogany handles, replaceable forged copper tips. Underwriter approved cord with unbreakable rubber plug. Guaranteed for one year. For use on 100-150 V. AC or DC current.

No. **s2725** Nick Nack, 55 watts.
Net Price **.65c**
No. **s2726** Midget, 65 watts.
Net Price **\$1.03**
No. **s2727** Junior, 100 watts.
Net Price **\$1.62**
No. **s2728** Trophy, 150 watts.
Net Price **\$2.94**

Copper tip replacement for the midget or junior irons above.
Cat. No. **s2729**.
Net Price **18c**

Turn Tight Socket Wrenches



Hardened steel. Cadmium plated with sturdy black handle. Ideal for all service work. Hexagon rod shanks. Hollowed at ends. Socket fits over extended screws.

No.	Length	Net Each
s2733	8" Long	\$0.10
s2734	10" Long	
s2735	12" Long	
s2736	14" Long	
s2737	16" Long	
s2738	18" Long	
s2739	Kit of 6	52c
s2740	9" Long	\$0.12
s2741	11" Long	
s2742	13" Long	
s2743	15" Long	
s2744	17" Long	
s2745	19" Long	
s2746	Kit of 6	62c

Lock Socket Wrench and Screw Driver Set



Efficient socket wrench supplied with a knurled socket and extensions to extend the length of handle to 4" straight extension and a 6" L-shaped extension. Screw driver blade made of hardened steel, has a patented locking device. Hardened wooden handle.
No. **s2747** Complete Set.

Net Price **69c**

PANEL BUSHING



A plated brass panel bushing for shafts 1/4" dia. Fit panels 1/8" thick. Less shift.

No. **s2750**. Net **9c**

TOOLS AND MISCELLANEOUS ACCESSORIES

HAND DRILL

Black finished handle, polished steel shank and chuck. A practical low priced hand drill. Drill chuck drills from 1/8" to 1 1/4". Sturdy construction. Cat. No. **33618**.
Net Price 32c

2 SPEED BREAST DRILL



A sturdy dependable 2 speed breast drill with a 3-jawed steel chuck which holds up to 1/2" round shank drills. Machine cut gears. Mahogany finished handle. Length 16 1/2".
Cat. No. **33619**.
Net Price \$1.98

PISTOL GRIP HACK SAW



A well made nickel plated hack saw frame. Adjustable to fit various size blades. Supplied with 8" blade.
Cat. No. **33620**.
Net Price 35c

HACK SAW BLADES

First quality hack saw blades.
No. **33621** 8" - Net Price Per Doz. 45c
No. **33622** 10" - Net Price Per Doz. 55c
No. **33623** 12" - Net Price Per Doz. 65c

INSULATED SCREW DRIVERS



Particularly shaped to fit into set screws of knobs. Transparent unbreakable amber colored handle. Length 4 1/2". Specially hardened blades.
Cat. No. **33624**.
Net Price 9c

HANDY RADIO WRENCH SET



This set is made of high grade steel with case hardened sockets. A hard wood handle fits screw driver socket and 5 wrench sockets, size 1/4", 3/8", 1/2" and 3/4".
Cat. No. **33626** Complete Set.
Net Price 36c

KESTER RADIO SOLDER



Most core radio solder.
Cat. No. **33627**.
Net Price, Per Tin 17c
Cat. No. **33628**.
Net Price, Per Lb. 57c

XCELITE SHOCKLESS SCREW DRIVERS



These screw drivers are made of the finest alloy steel and have an amber handle that is shock-proof and cannot break.

Cat. No.	Size	Type	Net Price
33600	3/8" x 4"	R-184	29c
33601	3/8" x 6"	R-186	33c
33602	3/8" x 8"	R-188	36c
33603	3/8" x 10"	R-1810	39c
33604	1/2" x 3"	R-2103	43c
33605	1/2" x 4"	R-2104	52c
33606	1/2" x 6"	R-144	52c
33607	1/2" x 8"	R-148	59c
33608	5/16" x 8"	R-5308	39c

XCELITE NUT DRIVERS SHOCK-PROOF — BREAK-PROOF

Similar in appearance to the above screw drivers except that it has socket to fit over nuts. Dump socket. Made of the finest alloy steel. All socket wrenches 6" long.

Cat. No.	Nut Size	Type	Net Price Each
33609	1/8"	6	43c
33610	7/32"	7	
33611	1/4"	8	
33612	9/32"	9	
33613	5/8"	10	
33614	1 1/8"	11	56c
33615	1 1/4"	12	
33616	1 1/2"	14	
33617	1 3/4"	16	

SCREWS AND NUTS

Round head steel each in metal plated and brass nickel plated.

Cat. No.	Size	Net Per 100
33630	1/4" x .32	20c
33631	5/16" x .32	25c
33632	3/8" x .32	34c
33633	1/2" x .32	36c
33634	3/4" x .32	11c
33635	1" x .32	13c
33636	1 1/4" x .32	14c
33637	1 1/2" x .32	16c
33638	1 3/4" x .32	24c
33639	2" x .32	14c
33640	2 1/4" x .32	17c
33641	1 1/2" x .32	22c

HEXAGON NUTS

Cadmium plated steel and nickel plated brass.

Cat. No.	Size	Net Per 100
33644A	6-32 x 1/4"	20c
33644	6-32 x 1/2"	15c
33645	8-32 x 1/2"	17c

OVAL HEAD RACK SCREWS AND WASHERS

Nickel plated brass, size 10-32 x 1/2".

Cat. No. **33642** for 10 screws.
Net Price 4c

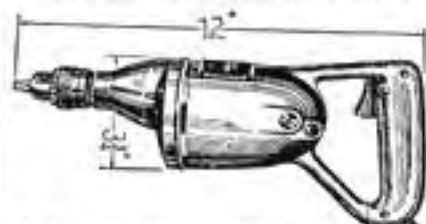
Cat. No. **33643** for 10 washers.
Net Price 5c

TINNED SOLDERING LUGS



No. **33659** Type 1.
No. **33660** Type 2.
No. **33661** Type 3.
No. **33662** Type 4.
No. **33663** Type 5.
Net Per 100 18c

SIGNAL ELECTRIC DRILL



A high quality standard duty electric drill. Durable cast aluminum alloy housing. A special lock permits drilling in close quarters. A three jaw key type chuck which handles up to 1/2" drill. An all-around useful tool in the workshop. Supplied with an 8 ft. heavy duty rubber covered cord and plug. For 115 V. AC-100 operation.
Cat. No. **33625** Type 025.
Net Price\$12.43

TWIST DRILLS

Made of high grade alloy steel. Ten to a set. Sizes 3/64 to 1/4".

Cat. No. **33629**.
Net Price, Per Set...39c



RUBBER GROMMETS

Insulates holes in metal panels, chassis.



Cat. No.	Fits Hole	Per Doz.
33646	1/8"	7c
33647	3/16"	9c
33648	1/4"	10c
33649	5/16"	12c
33650	3/8"	14c
33651	1/2"	16c
33652	5/8"	18c

PURE GUM RUBBER GROMMETS

Cat. No.	Fits Hole	Per Doz.
33653	1/8"	12c
33654	3/16"	14c
33655	1/4"	16c
33656	5/16"	18c
33657	3/8"	20c
33658	1/2"	23c

BATTERY CLIPS



Cat. No.	Length	Type	Net Ea.
33672	2"	A	3c
33673	2 1/2"	A	4c
33674	1 1/2"	B	3c
33675	2"	B	3c
33676	2 1/2"	B	5c
33677	3 1/2"	B	7c

SOLDERING IRON TIPS

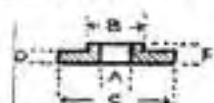


To replace American Beauty, Eisco and others.

Cat. No.	Size	Net Ea.
33678	A x 2 1/2"	30c
33679	A x 1 1/2"	38c
33680	1/2" x 3/4"	45c

EXTRUDED INSULATING WASHERS

With protruding burr. For insulating screws, jacks, etc. from metal panel.



Cat. No.	Hole	Fits	Dimensions	Per 100
33665	3/8"	No. 4 Screw	7/32" x 3/64" x 5/64"	10
33666	1/2"	No. 6 Screw	7/32" x 3/64" x 5/64"	10
33667	1 1/8"	No. 8 Screw	15/64" x 3/64" x 5/64"	10
33668	1 1/4"	No. 10 Screw	9/32" x 3/64" x 5/64"	10
33669	1/2"	Shaft	1/2" x 1/16" x 3/32"	Per 100
33670	1/2"	Shaft	1/2" x 1/16" x 3/32"	90c
33671	1/2"	Shaft	1/2" x 1/16" x 3/32"	90c

BUZZERS - KEYS AND PRACTICE SETS

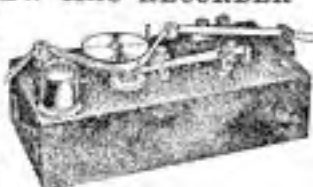
THE NEW MAC AUTO



Transmits code at any desired speed up to 100 wpm. Light from exciter lamp into photo-cell interrupted by linked dots and dashes on $\frac{1}{8}$ " white paper slip. Will key local oscillator, sounder or transmitter. Ideal for learning code or to increase speed of any operator. Complete with tubes, photo-cell and relay.
Cat. No. **3202** Mac Auto
Net Price **\$29.75**

THE NEW MAC RECORDER

This new Mac automatic recorder is as efficient as most recorders selling for many times the price. Check your own or any other operator's sending, visually; then run through auto and hear it. Will regularly record about 100 wpm.
Cat. No. **3203** Mac Recorder
Net Price **\$29.75**



AUTO AND RECORDER TAPE PULLER

This tape puller allows the tape to be fed through the Mac Auto or Recorder at any desired speed.
Cat. No. **3210**
Net Price **\$12.00**

DELUXE MODEL MAC-KEY



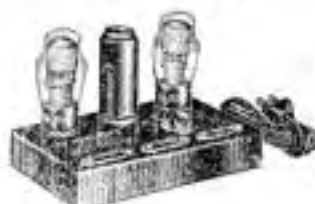
Made on a one-piece casting for rhythmical vibrationless sending. Equipped with the new Mac Dot Stabilizer. Contacts are $\frac{3}{16}$ ". Platinum carry current instead of bearings. All hardware Chromium plated. Base is of beautiful Marbleite. Circuit closing switch.
Cat. No. **3200** Mac-Key
Net Price **\$9.50**

STANDARD MODEL MAC-KEY



Same design and construction as the Deluxe Model described above except for a black crackle finish base, nickel-plated hardware. $\frac{3}{32}$ " contacts; no switch; and no dot stabilizer.
Cat. No. **3201** Mac Standard
Net Price **\$7.50**

THE NEW MAC AUDIO OSCILLATOR



This Audio Oscillator is ideal for code practice. Equipped with a fine control supplying notes at 400, 800, and 1,600 cycles. Will operate on 110 volts AC or DC. Tubes included (two 6X2G's and one metal ballast tube).
Cat. No. **3204** Mac Osc.
Net Price with tubes **\$5.95**

MAC PRACTICE SET

This straight key with $\frac{3}{16}$ " contacts is made on a heavy cast base. Equipped with a Mac Hammer battery and a 100,000 ohm $\frac{1}{2}$ watt resistor. Will operate on 7 or 45 volt battery.
Cat. No. **3205**
Net Price **\$2.95**



Hummer only, less key.
Cat. No. **3206** Net Price **\$1.50**

MAC DELUXE KEY



Over-sized cast brass base. Chromium plated. Contacts $\frac{3}{16}$ ". With switch.
Cat. No. **3207** Mac Deluxe
Net Price **\$2.25**

MAC PROFESSIONAL



Beautifully polished brass cast base. Main lever designed for perfect balance. With switch.
Cat. No. **3208** Mac Pro.
Net Price **\$1.80**

MAC COMMERCIAL



Made on a crackle finished brass base. Chromium plated lever. Contacts $\frac{3}{16}$ ".
Cat. No. **3209** Mac Com.
Net Price **\$1.50**

MAC AMATEUR



This perfectly balanced key is ideal for a beginner. Black crackle and chromium plated finish.
Cat. No. **3210** Mac Amateur
Net Price **\$1.20**

SIGNAL TELEGRAPH INSTRUMENTS

BEGINNER'S KEY



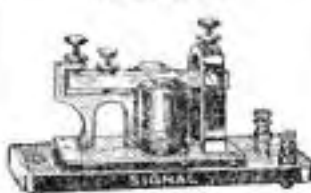
Scientifically correct but inexpensive in price. Has black metal base and is mounted on a mahogany finished wood base. Key lever is nickel plated. Model B-11-K.
No. **3216**
Net Price **\$1.32**

PRACTICE SET



Set consists of key and high frequency buzzer mounted on mahogany finished wood base. Code is printed on plate and fastened to base. Buzzer is adjustable. Model P-5.
No. **3215**
Net Price **\$2.00**

SOUNDER



4 Ohms Resistance
Cat. No. **3213-M10**
Net Price **\$1.76**

HEAVY DUTY



Standard wireless key designed to carry heavy currents. All brass construction with lacquer finish. Furnished with $\frac{3}{16}$ " coin silver contacts. Navy type key knob.
No. **3211**
Net Price **\$2.26**

TELEGRAPH KEY



Preferred by skilled operators and beginners. The base, equipped with binding posts, is brass with a lacquer finish. Key lever is nickel plated. Furnished with platinum contact points. Model M-100.
No. **3218**
Net Price **\$1.76**

LEARNER SET



Aluminum sounding bar with black lacquered steel sounder plate. Key lever nickel plated. Mounted on mahogany finished wood base. Model M-110-4 ohms.
No. **3217**
Net Price **\$2.94**

R-50



Heavy cast base, well-insulated black crackle finish. $\frac{1}{4}$ " silver contacts.
Cat. No. **3220** R-50
Net Price **88¢**

R-64

R-64 $\frac{1}{4}$ " contacts.
No. **3212**
Net Price **\$2.50**

H. F. BUZZER

Adjustable and has a 45,000 ohm resistance of 3 ohms. Model R-60.
No. **3214**
Net Price **82¢**



JENSEN "PM" AND ELECTRO DYNAMIC SPEAKERS

ELECTRO DYNAMIC SPEAKERS



The Jensen 8 inch RS line covers a wide pattern of speakers for most types of receivers and replacement use. The "RS" group meets the demand for a line speaker and is furnished in performance in the price range. The "RS" line provides a high quality speaker for the more particular application. All speakers are supplied with transformer, but with basket for mounting same. Universal transformers for speakers listed below.

3-INCH SPEAKERS (Voice Coil 4 Ohms)				
Cat. No.	Type	Field	Net Price	
56131	1115-S	8 volt		
56132	1115-S	400	\$1.35	
56133	1115-S	1000		
56134	1115-S	2000	\$1.71	

8-INCH SPEAKERS (Voice Coil 4 Ohms)				
Cat. No.	Type	Field	Net Price	
56135	1115-S	8 volt		
56136	1115-S	150	\$1.61	
56137	1115-S	1000		
56138	1115-S	1000		
56139	1115-S	2750		
56140	1115-S	1000	\$2.35	
56141	1115-S	1800		
56142	1115-S	2000		

8-INCH SPEAKERS (Voice Coil 4 Ohms)				
Cat. No.	Type	Field	Net Price	
56143	1115-S	1000		
56144	1115-S	1000	\$2.29	
56145	1115-S	2000		

MEDIUM POWER 12" SPEAKERS (Voice Coil 4 Ohms)				
Cat. No.	Type	Field	Net Price	
56149	1115-S	8 volt		
56150	1115-S	400	\$5.15	
56151	1115-S	1250		
56152	1115-S	2500		

HEAVY DUTY 8"-10"-12" SPEAKERS
With extra steel field coils. All have 8 ohm voice coils.

8-INCH SPEAKERS				
Cat. No.	Type	Field	Net Price	
56153	1115-S	450		
56154	1115-S	1000		
56155	1115-S	1000	\$4.27	
56156	1115-S	2500		

10-INCH SPEAKERS				
Cat. No.	Type	Field	Net Price	
56157	1115-S	450		
56158	1115-S	1250	\$5.29	
56159	1115-S	2500		

12-INCH SPEAKERS				
Cat. No.	Type	Field	Net Price	
56160	1115-S	8 volt		
56161	1115-S	650		
56162	1115-S	1250	\$6.32	
56163	1115-S	2500		

Jensen Universal Transformers to Match Above Speakers

Plate transformer for Types 115-S, RS, RS, and RS listed above, adjustable to 2000, 1500, 1000 and 10,000 ohms, no center tap. Cat. No. 56164-Type ZY1000.

Plate transformer for Types 115-S, RS, RS, and RS listed above, adjustable to 500, 1000, 1500 and 2000 ohms. Cat. No. 56165-Type ZY2000.

Net Price, either transformer... **50c**

Adjustable push pull plate (center tapped) transformer for the above speakers. Cat. No. 56166-Type ZY1010.

Net Price... **80c**

Plate transformer for Types 115-S, RS, RS, and RS listed above, adjustable to 2000, 1500, 1000 and 10,000 ohms, each side center tap. Cat. No. 56167-Type ZY1010.

Net Price, either transformer... **80c**

Plate transformer for Type 115-S listed above, adjustable to 2000, 1500, 1000 and 10,000 ohms, each side center tapped. Cat. No. 56168-Type ZY2000.

Net Price, either transformer... **\$1.32**

Plate transformer for Types 115-S, RS, RS, and RS listed above, adjustable to 2000, 1500, 1000 and 10,000 ohms, each side center tap. Cat. No. 56169-Type ZY1010.

Net Price, either transformer... **\$1.32**

JENSEN 5"-6"-8" PM DYNAMIC SPEAKERS



Cat. No.	Type	Field	V.C.	Net Price
56100	1115-S	2"	4 ohms	\$1.50
56101	1115-S	2"	4 ohms	\$1.94
56102	1115-S	2"	4 ohms	2.73

Plate transformer adjustable to 2000, 1500, 1000, and 10,000 ohms, each side center tap. Cat. No. 56103-Type ZY1010.

Net Price, either transformer... **80c**

Plate transformer adjustable to 2000, 1500, 1000, and 10,000 ohms, each side center tap. Cat. No. 56104-Type ZY2000.

Net Price, either transformer... **80c**

Plate transformer adjustable to 2000, 1500, 1000, and 10,000 ohms, each side center tap. Cat. No. 56105-Type ZY1010.

Net Price, either transformer... **80c**

HEAVY DUTY "PM" DYNAMIC SPEAKERS

Jensen PM dynamic speakers have a large magnet and a large voice coil for added power handling.

These 5"-6"-8" speakers are ideal for use in the home or in the office.

PM1000-S, PM1000-R, PM1000-L, and PM1000-R are high quality speakers designed for use in the home or in the office.

PM1000-S, PM1000-R, PM1000-L, and PM1000-R are high quality speakers designed for use in the home or in the office.

PM1000-S, PM1000-R, PM1000-L, and PM1000-R are high quality speakers designed for use in the home or in the office.

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PM1000-S, PM1000-R, PM1000-L, and PM1000-R are high quality speakers designed for use in the home or in the office.

JENSEN CONCERT ELECTRO DYNAMIC SPEAKERS



Handles 12 Watts

Models A-12 and B-12-N available in two designs. High Fidelity and Standard. The High Fidelity design is recommended where operation and listening conditions permit the reproduction of extended high frequencies. In this design, good response is maintained up to 15,000 cycles. Standard Fidelity design has the more conventional response characteristic with high frequency roll-off at approximately 5,000 cycles.

A-12 power handling capacity: 12 watts continuously, peaks of 15 watts; B-12-N 10% less. Voice coil impedance—8 ohms. Cone diameter 12 1/2". Supplied with 1000-ohm transformer.

HIGH FIDELITY

Cat. No.	Type	Field	Net Price
56173	B-12-N	1250	\$7.41
56174	B-12-N	2500	
56175	A-12	1250	\$10.14
56176	A-12	2500	

STANDARD FIDELITY

Cat. No.	Type	Field	Net Price
56177	B-12-N	1250	\$7.41
56178	B-12-N	2500	
56179	A-12-N	1250	\$10.14
56180	A-12-N	2500	

TRANSFORMERS TO MATCH SPEAKERS ABOVE

Jensen Universal Transformers available in two styles to match plate or push pull.

Plate transformer for single tube or push pull, adjustable to 2000, 1500, 1000 or 10,000 ohms, no center tap.

Cat. No. 56181-ZY1000.

Net Price, either transformer... **\$1.62**

RADIO SHACK SERVICE

Radio Shack not present a complete listing of all Jensen speakers, but we can supply you with all products of their manufacture, such as loudspeaker speakers, baffles and field supplies.

12-IN. CONCERT PM DYNAMIC SPEAKERS

Models A-12PM and B-12-N are 12" speakers. Available in standard and high fidelity design. High fidelity design is recommended where operation and listening conditions permit the reproduction of extended high frequencies. In this design, good response is maintained up to 15,000 cycles. Standard fidelity design has the more conventional response characteristic with high frequency roll-off at approximately 5,000 cycles. The PM-12B has 20% less handling power than the A-12PM. Voice coil impedance, 8 ohms.

The A-12 PM field magnet is comparable in power to an electrodynamic field magnet of 15 watts. Supplied with transformer, but provided with bracket for mounting transformer. Prices for transformer shown below.

Cat. No.	Application	P.M. No.	Net Price
56119	Standard Fidelity	12B	\$14.70
56120	High Fidelity	12B	14.70
56121	Standard Fidelity	A12PM	20.43
56122	High Fidelity	A12PM	20.43
56123	Standard Fidelity	12B	17.64
56124	High Fidelity	12B	17.64

Plate transformer adjustable to 2000, 1500, 1000 and 10,000 ohms each side of center tap. Cat. No. 56127-Type ZY1010.

Net Price, either transformer... **\$1.62**

MICROPHONES — STANDS — SPEAKERS

Turner Streamlined Crystal



Microphone

A professional looking bullet type crystal microphone that will reproduce from 30 to 8000 cycles. Ideal for close talking. Output level -55 db. Semi-directional. Finished in rich ebony and flashing and flashing of low capacity

chrome. Furnished with 8 ft. shielded crystal mike cable.

Cat. No. **g7025** Type 30-30.

Net Price\$13.23

AMPERITE KONTAK MIKE

New Ampertite Kontak Musicians All string instruments such as violin, guitar, ukulele, double bass, piano, etc. Gives an ordinary violin the volume and depth of a Strad. No string changes, no drilling, attached without tools. Operated with either high or low gain amplifiers. Can be used on most radio sets manufactured since 1935. Response -40 to 9000 cps. Output -48 db. Equipped with 25 ft. cable. High impedance connects direct to grid. Professional Models.

Cat. No. **g7027** Type SKH.

Net Price\$7.06

Footpedal—designed to operate with Ampertite model SKH. affords volume effects desired by solists.

Cat. No. **g7028**.

Net Price\$4.70

CHROME DESK STAND



A non-adjustable chrome finish desk stand. 9" high. 2 lb. base with three rubber feet. Swivel joint allows tilting of microphone.

No. **g7033**.

Net Price \$2.20

Desk Stand

A modernistic desk stand, beautifully finished in black crackle. Octagon shaped ring. 5 1/2" in diameter. Overall height 9". Complete with springs.

No. **g7034**

Type 817.

Net\$1.32



MIKE STAND



A rugged black crackle finish mike stand. Base 6" in dia. Stem chrome plated. 8" high. 1/2" thread.

No. **g7035**

Net\$1.32

Stand Switch

Stand mounting on-off switch. 1/2" thread.

No. **g7036**.

Net\$1.47



A REAL MIKE VALUE! TURNER TORPEDO CRYSTAL MICROPHONE



Net Price **\$8.97**
Cat. No. **g7024**.

This Turner Type 55 Torpedo Type Crystal Microphone is fully equal in performance to the most expensive crystal microphones. Beautifully streamlined with an aircraft aluminum and telephone black. Output level -60 db. Semi-directional with a minimum of feedback. Frequency response flat through entire range. Supplied with 8 ft. of low capacity mike cable. Threaded to fit 3/4-27 stand.

ELECTRO VOICE MODERNISTIC DYNAMIC MICROPHONE

A dynamic microphone having striking beauty and extreme flexibility of operation. Frequency response 40-10,000 cycles. Output -65 db. Threaded to fit 3/4-27 stand. Plug connector for cable. Supplied with 20 ft. of rubber covered shielded cable. Finished in light gummetal. Can be operated vertically for non-directional pickup or tilted for directional work.

Cat. No. **g7029** Type 628.

Net Price\$16.17



MIKE STAND ADAPTOR



Cat. No. **g7030**.

Net Each 44c

Made to bring cable thru side instead of thru stand. Threaded for 3/4-27 male and female.

Professional Mike Stand

The new professional microphone stand is a combination of beauty and convenience. Finished in durable lacquered gummetal, the graceful modernistic lines blend with modern studio surroundings. The triangular base finds its own level, so matter how uneven the floor may be. Extends from 42" to 59". Weight 18 lbs. Standard 1/2-27 thread.

No. **g7037**

Net\$9.40



JR. FLOOR STAND

NET \$4.41

Cat. No. **g7038**

Model B10 — Medium weight studio floor stand equipped with automatic clutch and 10" black crystalline base. Illustrated at left, stem chrome plated brass tubing, 9 lbs. weight. Fits all standard microphones with 1/2-27 thread.



JENSEN PERI-DYNAMIC SPEAKERS

MODEL KM



An important development in speaker baffle combinations, incorporating both peri-dynamic and base reflex principles which allow almost infinite baffle results in a limited space. Acoustically correct enclosures with matched speakers provide the utmost in wide range reproduction. The KM Model is recommended for general high quality performance with extended low frequency range. Supplied less transformer.

No.	Speaker Used	Size	Weight	Net
g7040	PM3C	24 "x17 1/2" x11 1/2"	31 lbs.	\$14.41
g7041	PM10C	24 "x21 1/2" x12 1/2"	45 lbs.	18.26
g7042	PM12C	30 1/2" x23 1/2" x12 1/2"	53 lbs.	21.81
g7043	PM12B	28 1/2" x23 1/2" x12 1/2"	58 lbs.	26.96
g7044	A12PM	30 1/2" x23 1/2" x12 1/2"	66 lbs.	33.87
g7045	PM15B	33 1/2" x25 1/2" x13 1/2"	82 lbs.	31.62

JENSEN UNIVERSAL OUTPUT TRANSFORMERS

For use with the above Jensen speakers. Line transformers match 500, 1000, 1500 and 2000 ohm line to voice coil. Plate transformers match any tubes, single or P.P., to voice coils.

Cat. No.	Type No.	For Speaker	Net Price
g7047	LINE ZY2001	PM3C-PM10C-PM12C	\$1.32
g7048	TUBE ZX1004	PM3C-PM10C-PM12C	1.32
g7049	LINE ZY2003	PM12B-A12PM-PM15B	1.62
g7050	TUBE ZX1005	PM12B-A12PM-PM15B	1.62

CRYSTAL, DYNAMIC AND VELOCITY MICROPHONES

New American Dynamic Microphone



A moving coil dynamic microphone featuring high output, hi fidelity and efficient design. Excellent for public address installations, and amateur use. Semi-directional, minimum feedback. Flat response throughout range. Chrome finish. High impedance connects direct to grid. Supplied with 12 ft. cable and connector plug. $\frac{1}{2}$ "-27 thread to fit stand.

AMPERITE VELOCITY MICROPHONE



A streamline modern microphone. Will give broadcast quality. All-steel case, achieving maximum ruggedness. Acoustically designed to eliminate any possibility of cavity resonance. Triple shielded.

RAH (High Impedance) 2000 ohms. Connects direct to grid. Excellent for speech and music. Output -60 db. Frequency response 40-11,000 C.P.S. Complete with shock absorber, switch, 25 ft. cable, Chrome finish.

AMPERITE VELOCITY MICROPHONE

A specially designed microphone which can be used for speech and music. No peaks. Flat response over audible range. Output -60 db. Triple shielded. Shock absorber. Swivel bracket.



RAH (High Impedance) 2000 ohms with 12 ft. of shielded rubber jacketed cable. Chrome finish.

UNIVERSAL HAND SET



For use with transmitters and other portable radio telephone apparatus. Receiver has 2000 ohm impedance; the microphone a 200 ohm impedance. Supplied with 6 ft. four conductor cable. Colored coded phone tips.

No. 67023 Type FIMEX. Net Price\$5.88

ELECTRO VOICE CARBON MICROPHONE



An efficient double button carbon microphone. Pure 24 KT gold contacts. Low loss level. Frequency response 40-4500 cycles. Buttons 200 ohms each. Chrome plated finish.

Cat. No. 67019 Type 50. Net Price\$2.94



NEW NO FEEDBACK CRYSTAL MICROPHONE

Especially designed for high class public address systems. Cannot be acoustically overloaded. Free from acoustic feedback, permitting its use in many installations where feedback is so annoying. Self-latching tilting head. Will not pick up mechanical vibrations. Uses two dual diaphragm crystal units. Two-tone finish, black and chrome. Threaded to fit stands with $\frac{1}{2}$ " x 27 thread. Complete with 25 feet of shielded crystal mike cable.

Cat. No. 67000 "MU2, output level -60 db. for all general installations. Net Price \$17.35

Cat. No. 67001 "MU4, output level -55 db., recommended where microphone is to be used long distance from the amplifier. Net Price \$23.42

Astatic Torpedo Crystal Microphone

A general purpose crystal microphone with a self-latching tilting head, either non-directional or directional. Output level is -57 db. Chrome finish. Complete with 25 feet of cable.

No. 67002 Type T1 Net \$14.70

LAPEL CRYSTAL MICROPHONE

An Astatic non-directional crystal microphone. Dual diaphragm. Clamps neatly to the lapel. Frequency response from 30 to 4,000 cycles. -60 db. Complete with 25 feet of shielded crystal microphone cable.

No. 67005 L1 Net Price\$14.70

WESTERN ELECTRIC 663A DYNAMIC MIKE



"This professional dynamic microphone has a response from 40 to 30,000 cycles. It normally is non-directional (without baffle). It is directional with baffle, as illustrated. Impedance 20 ohms. Finished in a mottled gray.

Cat. No. 67008 Model 633A, lens swirl, baffle, cable and stand. Net Price\$42.50

Cat. No. 67009 8A Baffle. Net Price\$1.70

Cat. No. 67010 9A Swivel Joint. Net Price\$3.15



Astatic D104 Crystal Microphone

This crystal microphone has been accepted by the amateur as one of the most communication available. Frequency response from 30 to 4,000 cycles. Output level -54 db. Heavily chrome plated. Supplied with 4 feet of shielded crystal mike cable.

No. 67003 "D104, lens handle. Pts $\frac{1}{2}$ " x 27 thread. Net Price \$13.23

No. 67004 "D104RS, as illustrated with switch in handle. Net Price \$16.17

BRUSH SPHERICAL CRYSTAL MICROPHONE

A high quality crystal microphone. Ideal for public address, commercial installations, noise and speaker work. Output level -60 db. Sound cell construction. Wide range response. Non-directional.

No. 67007 Model B102K Net Price \$17.35

UNIVERSAL CARBON HANDI-MIKES

For all general use where close talking and clean cut speech reproduction is required. Finished in highly polished chrome. Overall length 6". Furnished with a 6 ft. cord and on and off snap switch.

Single Button As described above. Impedance 200 ohms. Output level -40 db. Two conductor cord. Cat. No. 67011 Type 200 Net Price\$5.88

Double Button

As described above. Impedance 200 ohms per button. Output level -35 db. Three conductor cord. Cat. No. 67017 Type 201 Net Price\$8.89

BRUNO VELOTRON Microphone

(No Voltage) The "No Voltage" Velotron is a distinct and new development rather than an improvement over an earlier type of microphone. Requires no polarizing voltage of any kind. Retains all the characteristics of a velocity microphone. It is unaffected by humidity. -55 db. output. Can be operated with over 1,000 feet of cable. Supplied with connector but no cable.

BRUNO VELOCITY MICROPHONE

This model has all the qualities of the more expensive Velocity microphones. Specifications—Output 60 db., High Impedance—to grid. Frequency response—Hi Fidelity 50 to 10,000 C.P.S., Finish—Gunmetal.

No. 67016 Model VD-HF, with connector, lens cable. Net Price \$12.94

Add 4c per foot for any length of shielded rubber jacketed mike cable. Specify length.

Special Velotron Mike

Used as a mutual instrument or detector pickup. Constant or lapel microphone, and has all the qualities of the standard Velotron. With 2 ft. of cable and connector. Output -55 db., high impedance—to grid, frequency response adjustable (20 to 12,000), C.P.S. Size, 2 1/2 x 2 1/2 x 1/2". Gunmetal finish.

No. 67017 Model SP. Net Price\$7.94

Electro Voice Double Button Mike

A modernistic design and double button microphone that has all the qualities of the more expensive types. Frequency response 40-8000 cycles. 200 ohms per button. 6 ft. cable. Gunmetal finish. $\frac{1}{2}$ "-27 thread for stand mounting.

Cat. No. 67018 Type 75. Net Price\$4.41

Astatic Scratch Filter

Tuned to resonate at the point of greatest scratch intensity, clarifies tone quality to a remarkable degree. Cat. No. 67006 Type 5-M. Net Price 88c

PICKUPS -- PLAYERS -- MOTORS AND RECORDS

ASTATIC CRYSTAL PICKUP

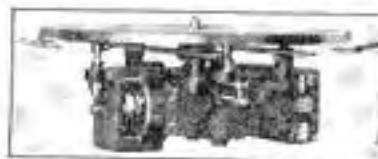


The A-T crystal pickup embodies the offset-head principle. A fine outstanding character is one of the crystal pickup's: tracking error on 12" record is reduced to 2%; extended frequency response; free without tonearm, low record wear; highly damped; 10" output; plays records up to 12". High impedance output direct to grid.

Cat. No. **5110** Model O-2.

Net Price **\$3.82**

GREEN FLIER PHONO-MOTOR GOVERNOR CONTROLLED



(Dual Speed)

A heavy duty dual speed motor. For 33 1/3 and 78 RPM records. Lever shift for either speed. Induction type motor, silent operation. No radio interference. Absolute uniformity of speed under severe variation of voltage and record drag. Overall size 8 1/2 x 5 1/2. For 105 120 volts—60 cycles. 4-ampere with 12" turn-table.

Cat. No. **5113**

Net Price **\$10.50**

SINGLE SPEED MOTORS

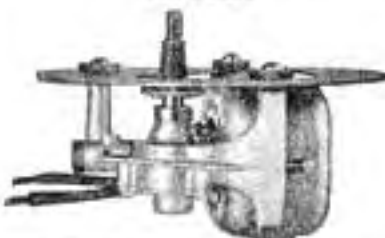


Universal standard induction motor. 8" long. 4 1/2" wide. 3 1/2" deep. Ideal for radio phonograph installation. For 105-120 Volt—60 cycle AC. For standard records. 78 RPM.

Cat. No. **5114** Model V with 12" turn-table.

Net Price **\$7.35**

CONSTANT SPEED PHONO-MOTORS



An excellent motor for portable and remote installations. Self-starting, compact, light in weight, years enclosed, very quiet. Supplied with 8" or 12" turn-tables.

Cat. No. **5115** 8" turn-table.

Net Price **\$5.00**

Cat. No. **5116** 10" turn-table.

Net Price **\$5.15**

Cat. No. **5117** 12" turn-table.

Net Price **\$5.44**

UNIVERSAL PHONO-MOTORS

110 Volt AC-DC 33 1/3-78 RPM

All gears completely enclosed and run in oil. Silent spiral cut gears made from laminated bakelite.

Cat. No. **5118** Type N with 12" turn-table.

Net Price **\$13.50**

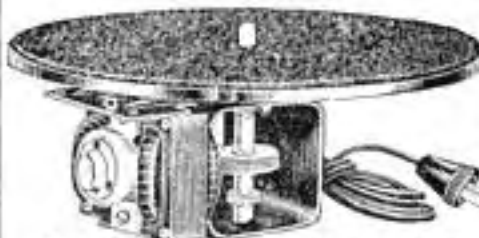
SINGLE SPEED AC-DC MOTORS

Motor as above except one speed. 78 RPM

Cat. No. **5119** Type G with 12" turn-table.

Net Price **\$11.85**

ALLIANCE PHONO-MOTORS (Even Speed)



This new "Even Speed" motor is an achievement, eliminating the need of a governor, yet maintaining uniform speed through all variations of record drag. Large bearings with ample oil reserves and laminated bakelite helical cut gears assure smooth, silent operation and long life. 9" turn-table and motor. 78 RPM. 110 volt—60 cycles. Finished complete with 3" cord and rubber spools for mounting.

Cat. No. **5109**

Net Price **\$5.29**

ASTATIC TRU-TAN CRYSTAL PICKUP



Astatic Offset Head Design achieves life-like reproduction. Reduced surface noise and freedom from wave-form distortion. Smooth wide-range response. High impedance outputs direct to grid. Ideal needle contact conditions over the entire playing surface, reducing record wear.

No. **5111** Model B-10 for 10" and 12" records.

Net Price **\$10.29**

ASTATIC "S" CRYSTAL PICKUP



Combinations of biphase crystal elements. Mounted on a pivoted arm. Ball-bearing swivel base. Superior, brilliant, and true response. Has a substantially flat curve over entire scale. High impedance contacts direct to grid. Black vinylite finish.

Cat. No. **5112** Model S4 for 10" and 12" records.

Net Price **\$5.8**

CUTTING NEEDLES

Highly tempered razor sharp steel needles for cutting on grooved coated disks.

No. **5130**

Net Price **\$1.25**

Specialty needle for cutting and recording on acetate coated disks.

No. **5131**

Net Price **\$3.45**

PACKARD AUTOMATIC RECORD CHANGER (DUAL SPEED)



Model K plays eight 10 inch records automatically. 12 inch records manually. Dual speed for either standard (78 RPM) or slow (33 RPM). Any record may be repeated. All steel construction, stainless brass finish. High impedance. Offset head with crystal pickup. Mounts in space 12 x 12 x 3 1/2" deep below panel.

Cat. No. **5120** Model K complete.

Net Price **\$28.50**

Cat. No. **5121** Model L plays seven 12" or eight 10" records automatically. The same pickup and motor as listed in the above changer. Dimensions 14 x 15 x 3 1/2" deep below panel.

Net Price **\$31.16**

SONORA RECORD PLAYERS



High quality phonograph player. 33 equipped with a high impedance magnetic pickup. Self-starting synchronous motor for 78 RPM records. Volume control. Will play up to 12" records. Walnut cabinet, size 8 1/2 x 14 x 10 1/2.

Cat. No. **5124**

Net Price **\$12.70**

PORTABLE RECORD PLAYER

Same construction as the player described above except that it is mounted in a durable black leatherette carrying case.

Cat. No. **5125**

Net Price **\$10.95**

Acetate Coated Record Blanks



The greatest care is used to keep these discs free of all foreign substances and tiny scratches, eliminating needle scratches. Not supplied pre-dressed type.

5126 Size 8", Net ea. **\$.45**

5127 Size 10", Net ea. **.55**

5128 Size 12", Net ea. **.72**

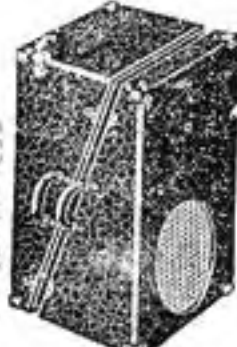
5129 Size 16", Net ea. **1.35**

DUAL SPEAKER CASE

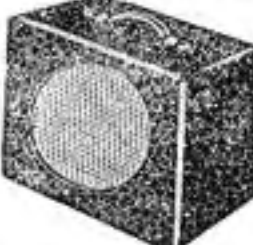
Very solid diagonal construction which permits each side to be used as an effective separate baffle. Durable black leatherette covering. For 10" and 12" speakers. Overall size 20 1/2 x 15 1/2 x 9 1/2". Two handles.

No. **5123**

Net Price **\$4.91**



SINGLE SPEAKER CARRYING CASE



Will house speakers from 8" to 14". Extremely strong, solid wood. Wire screen. Covered in durable black leatherette. Size 15 x 15 x 12". Removable back cover.

Cat. No. **5122**

Net Price **\$3.45**

Net Price **\$3.45**

* WIRELESS REMOTE CONTROL --- ELECTRONIC TONE CORRECTION



This new wireless remote control is an exclusive development that may be used with most of the Bogen sound systems listed in this catalog. No cables or wires between the amplifier and remote control are necessary, thus eliminating the possibility of inductive noise pickup as occurs with many wired remote control units. The Bogen wireless remote control permits the operator to control both channels of a dual channel amplifier and individually control the volume of two microphones or a microphone and phono pickup. Both channels may be operated simultaneously permitting mixing. A master on and off switch on the wireless control automatically cuts the amplifier off, preventing any signal from coming through.

When in this condition, it is impossible to control the volume of the amplifier pickup. The control is completely self-contained in a streamlined metal case equipped with two coin controls, a master switch, and indicating pilot light. Overall size 12" square, by 1 1/2" high. It is only necessary to plug the remote control into any A4 or 10" outlet conveniently located and control the system. All Bogen amplifiers (1) have provision for this wireless control, or can be provided for use with it as an additional cost of \$2.20. Cat. No. **59325** Type WR Wireless Remote Control complete with cables. **\$29.11**
Net Price

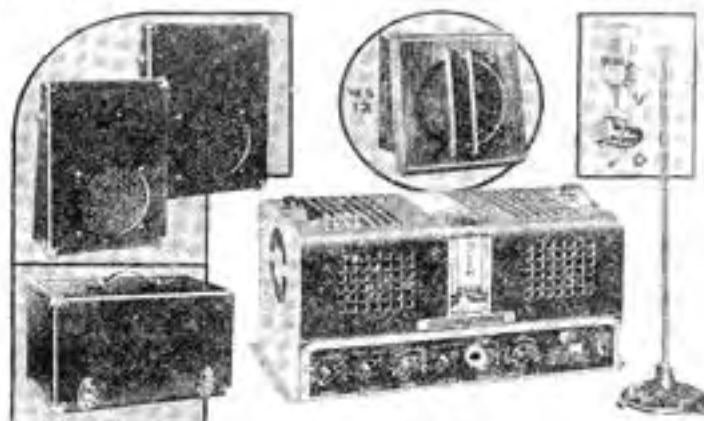
*BOGEN 18 WATT HI-FIDELITY SOUND SYSTEM

The high fidelity amplifier featured in this system contains many new refinements of construction, such as provision for remote control operation and a new improved electronic tone corrector circuit. The action of the electronic tone corrector is adjusted by two controls, one to control the bass and the other to control the treble. Both may be mixed and blended so that the user may select any particular taste for tone he desires without loss, frequency discrimination, or distortion. A socket is provided on the chassis for use with the wireless type remote control (shown above) or with the wired type (page 64). Permanent connection of four channels to the amplifier with the selection of any two for simultaneous operation. Featured is the new tone free and stable infinite feedback input circuit which assures absolutely quiet microphone operation, even at high volume levels.

Amplifier specifications: Output 18 watts (less than 5% harmonic content); tube complement, 1-6X4, 1-6L5, 1-6C90, 2-6X6, 1-6X4; gain 125 DB; frequency response 20 to 12,000 cycles ± 2 DB; output impedance 2.4 to 15 500 ohms; current drain 128 ma; 100V, 50 DB cycles.

The complete system as described above for permanent installation consists of one DN-18 amplifier; one kit of matched tubes; one Bogen VR-11P electronic microphone with 25 ft. of cable and plug; one Jensen PM 12B heavy duty 12" dynamic speaker, each with 25 ft. of cable and plug; one Model II 10 de luxe integrated floor stand.

Cat. No. **59326**—DN-18-V, complete system as described above.
Cat. No. **59327**—DN-18-D, system complete but with the American DYT dynamic microphone.
Net Price, for either system described above **\$113.60**
Cat. No. **59328**—Model DN-18 amplifier only with tubes free installation. Net Price **\$54.98**



Dual-Stage Inverse Feedback Inputs
Electronic Tone Correction

*BOGEN 30 WATT HI-FIDELITY SOUND SYSTEM

This 30 watt high fidelity system has all the features of the 18 watt system described in the left except that it is of higher power. Amplifier specifications: Output 30 watts (less than 5% harmonic content); tube complement, 1-6X4, 1-6L5, 1-6C90, 2-6X6, 1-6X4; provision for remote control built in; gain 131 DB; frequency response 20 to 12,000 cycles ± 2 DB; output impedance 2.4 to 15 500 ohms; current drain 175 ma; 110V 50-60 cycles.

The DN-30 system includes one 30 watt high fidelity amplifier; two Jensen 12B 12" heavy duty PM dynamic speakers, each with 25 ft. of cable and plug; one D-10 de luxe microphone floor stand, one kit of matched tubes, one Bogen VR-11P microphone with 25 ft. of cable and plug.

Cat. No. **59332**—Type DN-30-V, complete system as described above.
Cat. No. **59333**—Type DN-30-D, complete system as shown but with American DYT dynamic microphone.
Net Price of either system **\$124.36**
Cat. No. **59334**—Model DN-30 Amplifier only with tubes free installation.
Net Price **\$72.62**

PORTABLE CARRYING CASES

Cat. No. **59330**—Model 125 Portable Case for DN-18 or DN-30 amplifiers. Net Price **\$8.23**
Cat. No. **59331**—Model 131 Ring Speaker Case for two 12" speakers. Net Price **\$8.82**
For permanent installations without speaker baffles are recommended (as shown above).
Cat. No. **59329**—Type WS-12 for 12" speakers. Net Price, each **\$5.58**

*BOGEN 70 WATT BINAURAL HI-FIDELITY AMPLIFIER

The new Model DN-70 is the finest high power amplifier available, featuring every worthwhile development of modern sound engineering. Features include "binaural" amplification, a new dual circuit that creates what can be defined as "moving sound" or auditory perspective. The DN-70, when properly installed for binaural reproduction, permits the operator to create the illusion of the sound emanating from the performer or moving with the performer across the stage.

Electronic tone correction, another exclusive feature, enhances the excellent tone quality of this hi-fidelity amplifier.

Precision for remote control is built in. Any two input channels of the DN-70 can be operated with either the wireless remote control or the wired type remote control.

Incorporated also are two separate output channels designed to operate as if the amplifier were in reality two amplifiers in one. Each output channel is a separate and complete output stage equipped with its own pair of 6L5 tubes in push-pull, each with a separate driver tube. Each channel delivers 35 watts and is controlled independently by an individual power control.

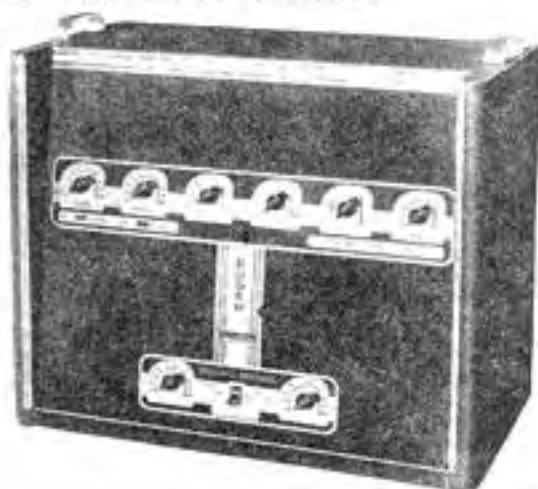
Both channels can be operated simultaneously or combined to deliver the full output of 70 watts. This offers many advantages and infinite applications. For example, when an installation covers both outdoor and indoor areas, the indoor speakers can be used on the other channel at a high volume level. As an emergency feature one channel does not affect the operation of the other channel.

Amplifier specifications: Four high gain universal inputs for use with any high impedance microphones, and two inputs for phono pickup devices. Each output channel has separate impedance of 2.4 to 15 500 ohms. Tube complement, 4-6X4, 1-6L5, 1-6C90, 2-6X6, 2-6X4, 4-6L5, 2-6X4. Output 70 watts (less than 1% harmonic content). Overall gain 124.5 DB. Frequency response 20 to 12,000 cycles plus or minus 2 dB. Current drain 70 watts, 110 V, AC 50-60 cycles. Dimensions, 18 1/2" high, 20 1/2" wide, and 11" deep.

Cat. No. **59335**—Amplifier and tubes, free installation.
Net Price **\$112.43**
Price

Speakers recommended for this system are Jensen AT2PM or PM12B.

- *FOUR-CHANNEL INPUT
- *PROVISION FOR REMOTE CONTROL
- *ELECTRONIC TONE CORRECTION



See Page 38 for Our Easy Time Payment Plan

BOGEN SUPREME FIDELITY SOUND SYSTEMS

"6" WATT PORTABLE SOUND SYSTEM

This new low priced system designed for small public address installations, provides excellent coverage for halls with a capacity up to 500 persons. It is compact, powerful and capable of true fidelity reproduction. For portability the amplifier is mounted in the attractive leatherette covered case which also serves as baffle for a heavy duty 8" Jensen Dynamic speaker. The entire unit assembled for portable use measures only 12 1/2" x 5 1/2" x 14" and weighs only 15 1/2 lbs. The amplifier is equipped with universal input for any high impedance microphone and phono input is also provided. Both inputs are individually controlled, permitting electron mixing between phono and microphone. A tone control is also incorporated. All controls are equipped with calibrated metal etched plates. The new no voltage Velotron combination microphone is featured. The mike comes equipped with a chromium plated handle to permit use as a compact light weight hand mike. The handle however fits into a weighted base thereby permitting the mike to be quickly converted for desk stand operation. The complete DP6VT system consists of one D6 6-watt amplifier, one complete kit of matched tubes, one Jensen 8" Electro Dynamic speaker, one combination no-voltage Velotron mike and stand, 25 feet of microphone cable and plug, and entire system mounted in leatherette covered portable case.

Amplifier specifications: Output 6 watts (less than 5% harmonic content); tube complement, 2-6X4G, 1-6L6G, 1-5X4G; controls, one microphone, one phono, one tone; gain 125 DB; frequency response 70 to 8000 cycles plus or minus 2 DB; current drain 75 watts—110 volt 50-60 cycles. Cat. No. **9300** Model DP6VT system complete as described above. Net Price **\$38.37**

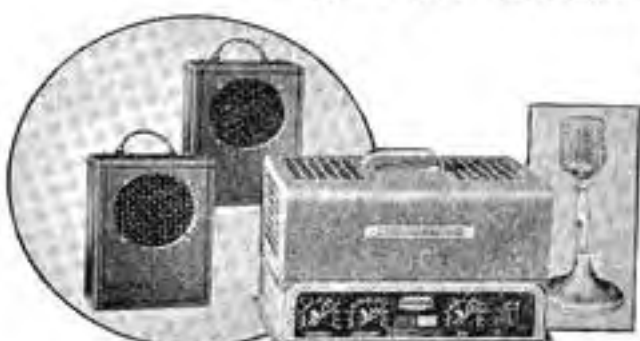


Amplifier only with tubes, less all accessories.

Cat. No. **9301** Type D6.

Net Price **\$18.23**

* "10" WATT DELUXE ECONOMY PORTABLE SYSTEM



DP-10VT system complete as described at the right except without carrying case (for permanent use).

Cat. No. **9303**.

Net Price **\$49.10**

Model DP-10 amplifier only with tubes less accessories.

Cat. No. **9304**.

Net Price **\$27.93**

This system meets the demand for a medium priced, two speaker sound system at an economical price, yet featuring the deluxe trimmings of the larger and more costly systems. Although the price is extremely low, it is built with the same high quality materials and accessories as is used in all Bogen equipment. Incorporated are the latest design features including two inputs for mike or phono. Universal mike input for any high impedance mike. Individual full range gain controls for each input, dual stage electron mixing between microphone and phono inputs. Beam power output tubes. Completely shielded microphone input connection and speaker plug-in sockets. The component accessories assure excellent fidelity of reproduction and dependability for continuous operation. Complete system is housed in a two section handsome leatherette covered carrying case, each section of which is also a speaker baffle, for each of the two 10" P.M. dynamic speakers. The microphone is the new no-voltage velotron, mounted on a combination desk stand which can be instantly converted to a handle for hand use.

Complete system consists of one 10-watt amplifier, one portable carrying case, one complete kit of matched tubes, two 10" P.M. dynamic speakers each with 25 ft. of rubber covered cable and plug, one velotron no-voltage microphone with 25 ft. of shielded rubber covered mike cable and plug, one combination hand and desk stand. Amplifier contained in a beautiful modern streamlined metal case finished in chrome and smartly trimmed in chrome.

Amplifier specifications: Output 10 watts (less than 5% harmonic content); tube complement, 2-6X4G, 2-6V6G, 1-5Y4G; one mike, one phono and one tone control; gain 125 DB; frequency response 65 to 9000 cycles, plus or minus 2 DB; current drain 85 watts—110 V. 50-60 cycles. Cat. No. **9302** DP-10VT portable system as described above. Net Price **\$56.45**

The DP-10VT system described above can be obtained with provision for use with the Bogen wireless or wired remote control at an additional cost of \$7.35. Specify if remote control provision is wanted and what type is desired.

* BOGEN HIGH GAIN 12 WATT SOUND SYSTEM

These systems are designed for either permanent or portable installations. Duo stage electron mixing is provided for mike and phono inputs, and each input is individually controlled. A full range tone control. Microphone input is designed to match any high impedance microphone. Entire system is housed in a two-section leatherette covered carrying case of which each section is a speaker baffle for the 10" Jensen electro dynamic speakers each with 25 ft. of cable and plug. The new no-voltage velotron microphone with 25 ft. of shielded cable and plug is mounted on a type B19 floor microphone stand.

Amplifier specifications: Output, 12 watts (less than 5% harmonic content); tube complement, 1-6X4G, 2-6V6G, 1-5Y4G; gain 125 DB; frequency response 55 to 9000 cycles plus or minus 2 DB; output impedance 2-4-9-15-500 ohms; current drain 112 watts—110 V. 50-60 cycles.

Complete system consists of one amplifier, one kit of matched tubes, two Jensen 10" electro dynamic speakers each with 25 ft. of cable and plug, one no-voltage velotron microphone (VT) with 25 ft. of shielded cable and plug. Complete with microphone and carrying case.

Cat. No. **9305** Type DP12VT, complete system as described above.

Cat. No. **9306** Type DP12V (V), complete system as described above, but with Bogen VD-RP velocity microphone.

Cat. No. **9307** Type DP12D, as described above, but with American DTT (D) dynamic microphone.

Net Price, any system **\$75.40**

The above systems can be supplied with provision for use with the Bogen wired or wireless remote control at an additional cost of \$7.35. Specify if remote control provision is wanted and the type desired.



Model D12 amplifier only, as described at left, with tubes less accessories. Field supply for 2-1500 ohm electro dynamic speakers. Fields are not necessary in the circuit if it is desired to operate amplifier with P.M. dynamic speakers.

Cat. No. **9308** Type D12.

Net Price **\$33.81**

BOGEN MODEL SR WIRED TYPE REMOTE CONTROL

Equipped with two gain controls, permitting the operator to control volume and mix any two channels of a Bogen amplifier such as two mike channels, and one mike and one phono channel. Can be used with up to 2,000 ft. of cable.

Any Bogen amplifier with provision for remote control operation can be controlled by the SR remote control. Cat. No. **9309** SR remote control, less cable.

Net Price **\$3.97**

Cat. No. **9310** Model RC30, 30

ft. of cable and plug for 80 ft. remote control.

Net Price **\$1.47**

Cat. No. **9311** Type R103, three-conductor remote control cable, per 100 ft., less plugs.

Net Price **\$2.00**

HIGH QUALITY! LOW COST!

*HEAVY DUTY 15 WATT SYSTEM

NEW DUO STAGE INVERSE FEEDBACK INPUTS

A heavy duty 15 watt sound system for permanent or portable installations, capable of ample power for the average indoor or outdoor gathering of 5,000 to 8,000 people. Ideal for orchestras, dance halls, theaters, etc. Flexibility of operation and fidelity of tone are keynotes and your assurance that all component accessories of this system have been carefully selected. Equipped with four input channels; two are Universal microphone inputs for any high impedance microphones, the other two are for phone pickup devices. The four inputs may be connected permanently with the choice of selecting any two inputs very readily with the duo stage electron mixer. A master tone control allows full range control. In addition to the speaker plug-in connections, output impedances of 2-4-8-15 and 500 ohms are available on a terminal strip. The amplifier is smartly trimmed with chrome bands and chrome handles and finished in a beautiful gray crackle. A selection of three microphones is left to the purchaser's option. Amplifier specifications: Output 15 watts (less than 5% harmonic content); tube complement, 2-6X5, 1-6P8G, 1-6C8G, 2-6N6G, 1-5X7G; gain 123 DB; frequency response 50 to 10,000 cycles $\pm$ or $\pm$ 2 DB; current drain 125 watts—110V, 50-60 cycles.

Complete system for permanent installation consists of one 15-watt amplifier, one kit of matched tubes, two 12" heavy duty PM dynamic speakers each with 25 ft. of rubber-covered cable and plugs, one Model H10 Deluxe microphone stand, and a selection of the M11-HP no voltage velotron microphone (VT), or Model VD-HP velocity microphone (V), or the American DIT dynamic microphone (D), each with 25 ft. of rubber-covered shielded microphone cable and plug.

Cat. No. **9312**—Type DPE15-VT system as described above, with the M11-HP no voltage velotron microphone (VT).

Cat. No. **9313**—Type DPE15-V, complete as described above, with the VD-HP velocity microphone (V).

Cat. No. **9314**—Type DPE15-D, as described above, with the American DIT dynamic microphone (D).

NET PRICE, ANY 15-WATT SYSTEM AS DESCRIBED ABOVE.....**\$72.23**

Either of the 15-watt or 30-watt systems described above can be supplied with remote control provisions built in for use with the Bogen wired

*HEAVY DUTY 30 WATT SYSTEM

DUO STAGE INVERSE FEEDBACK INPUTS

A 30 watt system to meet the demand for a heavy duty public address sound system at a moderate price. The amplifier used incorporates all of the latest features. For use in either permanent or portable installations and will handle outdoor crowds from 12,000 to 15,000 people with the finest of fidelity. Observe the low harmonic content because of the new duo-stage inverse feedback inputs. Any combination of four input devices such as four microphones or four phone pickups, or two microphones and two phone pickups may be connected permanently to the four channel input circuit, and the choice of any two may be readily selected from the front panel. Note the unique panel arrangement, striking appearance and accessibility.

The amplifier is contained in a metal base and beautifully streamlined modern cover, finished in a gray crackle and smartly trimmed with chrome bands and chrome handles. The selection of microphones is left to the purchaser's option. The rubber-covered speaker cables and shielded microphone cable are of heavy duty type rubber and will stand very rough usage. The 12" heavy duty PM dynamic speakers have plug-in connections. Available also are 2-4-8-15-500 ohm output impedances.

Amplifier specifications: Output 30 watts (less than 5% harmonic content); tube complement, 2-6P5, 1-6N7G, 1-6P6G, 2-6L6G, 2-5X6G; gain 122.5 DB; frequency response 50 to 10,000 cycles $\pm$ 2 DB; current drain 175 watts—110V, 50-60 cycles.

The complete 30-watt system for permanent use as described above consists of one amplifier, one matched kit of tubes, two heavy duty 12" PM dynamic speakers each with 25 ft. of cable and plug, one Model H10 microphone floor stand, and a selection of three microphones shown above, each with 25 ft. of microphone cable and plug.

Cat. No. **9315**—Type DP30-VT, system complete as described above with the M11-HP no voltage velotron microphone (VT).

Cat. No. **9316**—Type DP30-V, system as described above with the Bogen VD-HP velocity microphone (V).

Cat. No. **9317**—Type DP30-D, system as described above with the American DIT dynamic microphone (D).

NET PRICE, ANY 30-WATT SYSTEM SHOWN ABOVE.....**\$93.79**

or wireless type remote control at an additional cost of \$2.20. Specify if remote control provision is wanted and the type desired.

PERMANENT INSTALLATION SPEAKER BAFFLES

For permanent installations walnut speaker baffles are recommended for wall mounting; Type W812 as shown above.

Cat. No. **9318**—For 12" speakers.
Net Price.....**\$5.58**

PORTABLE CARRYING CASES

Portable carrying cases recommended and made to fit the above systems. Cat. No. **9319**—Model 133 amplifier case.

Cat. No. **9320**—Model 134 dual speaker case for 12" speakers.
Net Price.....**\$8.82**

Net Price.....**\$8.23**

UNIVERSAL MOBILE SYSTEM 110 V. AC.—6 V. BATTERY OPERATION



A Universal system for 6 V. and 110 V. operation. This amplifier is self-contained requiring no external power pack. A switch on the front panel readily changes from 110 V. AC to 6 V. DC, as desired. Remote control provision is built in, and by the purchase of a Bogen SR remote control, the volume of both input channels may be individually controlled. The amplifier is covered with a smart streamlined cover, less the universal phone assembly which can be added at the option of the purchaser and merely replaces the regular cover.

Amplifier specifications: Output 15 watts (less than 5% harmonic content); tube complement, 1-6T7G, 2-6C8G, 2-6V6G, and 2-6X5G; controls, one mike, one phone, one tone, one AC-DC switch; gain, 121 DB; frequency response 55 to 8,000 cycles $\pm$ 2 DB; speaker plug-in connections in addition to 2-4-8-15-500 ohm output impedances; current drain 50 watts 110V, 50/60 cycles; 9 amp. 6 V. DC.

The complete system consists of one Universal amplifier (less the Universal Phone Assembly); two 12" PM dynamic speakers, each with 10 ft. of heavy duty rubber-covered cable and plug; one kit of matched tubes; and your choice of a M11-HP no voltage velotron hand microphone, or the American DIT dynamic hand microphone.

Cat. No. **9321**—Type DP615VT, system complete as described above with the M11-HP no voltage velotron microphone.

Cat. No. **9322**—Type DP615D, system complete as described above with the American DIT hand microphone.

Net Price, either system.....**\$82.32**

Cat. No. **9323**—Type UT15 Universal Phone Assembly and cover for 6V. DC and 110V. AC operation as illustrated at left.

Net Price.....**\$26.46**

Model SR wired remote control requires no external source of power. Installation of remote control is extremely simple, merely plug-in.

Cat. No. **9324**—Model SR Remote Control, complete with 50 ft. of cable and plug.
Net Price.....**\$5.40**

INDEX

A AC-DC Electric Plants	39
Aerials	29
Aerial Springs	31
All-Wave Aerials	29
Amplifiers, Mobile	69, 71
Amplifiers, Power	67, 68, 69, 71
Amplifiers, Sound	67, 68, 69
Amplifiers, Speech	6
Antenna, Auto	59
Antennas, Short-Wave	28, 37
Audio Transformers	43, 44, 45, 46, 47, 48

B Bakelite Rod	58
Batteries	39
Battery Cable	30
Binding Post	37
Books	8, 16, 25, 26, 27
Brackets	32
Brass Rod	28
Browning Products	9
Beano Microphones	65
Beano Microphones	65
Bureau Batteries	30
Bushings, HV	28
Buzzer, HV	62

C CABINETS, Metal	32
Cable	30
Cable, Connectors	37, 38
Cable, Microphone	30
Cable, Shielded	30
Cable, Transmission	30
Call Letter Pin	54
Carlwell Condensers	14
Cathode Ray Tubes	10
Centralab Controls	52
Centralab Resistors	51
Chassis Blank	35
Chokes, Filter	20
Chokes, RF	16, 18, 19, 33
Chokes, Transmitting RF	19
Circle Cutters	60
Claroat Controls	51
Clips	58, 57, 58, 61
Clocks	54
Church Bridge Equipment	20
Coil Dore	58
Coil Forms	18, 30
Coil Forms, Plug-In	16, 18, 19, 30
Coil Forms, Transmitting	19
Coil Kits	33
Coils	18, 33, 36
Coils, All-Wave	33
Coils, Oscillator	33
Coils, Plug-In	16, 30
Coils, Transmitting	12, 19, 36
Color Code Enamel	54
Communication Receivers	2, 5, 6
Concentric Cable	17, 19, 37
Condensers, Auto Radio	35
Condensers, By-Pass	35, 40, 41, 42
Condensers, Electrolytic	35, 40, 41, 42
Condensers, Filter	35, 40, 41, 42
Condensers, Mica	41, 42
Condensers, Neutralizing	14, 15, 18
Condensers, Padding	15, 33, 36
Condensers, Plug-In	30
Condensers, Replacement	35, 40, 41, 42
Condensers, Transmitting	35, 37, 40, 42
Condensers, Transmitting Mics	41, 42
Condensers, Tubular	35, 40, 41, 42
Connectors, Variable	14, 15, 17, 19, 33, 36
Connectors, Cable	37, 38
Connectors, Microphone	30
Converters, Rotary	30
Cornell Dubilier Condensers	41
Coto Code	12
Coto Wires	54
Couplings, Shaft	19, 16, 58
Crystal Detectors	65
Crystal Hobbles	13
Crystalline Lacquer	58
Crystal Phones	13
Crystal Sets	55
Crystals, Transmitting	13

D Dial Plates	55
Dials	19, 55
Drills	61
Dual Diversity Receivers	7
Dynamic Speakers	63

E Earphone Cushions	13
Finne Trans. Tubes	12
FOI Cable	30
Exeter Tank	17, 18

F Field Supply	36
Filter, Line	29
Five-Meter Equipment	18
Fuse Holder	35
Fuse Mountings	57
Fuses	57

G Generators	39
Generators, Condenser	35
Grid Clips	18, 36, 57
Grid Cloth	58
Grommets	61
Ground Clamps	31
Guardian Relays	25

H Hallcraft Products	1, 2, 4, 5, 72
Hammamund Products	6, 15, 16, 17
Hammamund Receivers	5
Hand Set	65
Hardware	57, 58
Head Sets	13
Hole Cutters	60

I IF Transformers	16, 18, 33
Inductance Switch	34
Insulating Cambric	58
Insulators	18, 28, 29, 31
Interrupter Coil	33
IRC Controls	52
IRC Resistors	52, 53

J Jacks	28, 56, 57
Jensen Speakers	63
Jerrels	54

K Keys, Code	36, 62
Knobs	54

L Lead-In Strip	31
Lead-In Wire	30
Lightning Arrestors	31
Line Cards	51
Line Filters	30
Line Strips	56
Lugs, Tinned	61

M Magnet Wire	30
Maps	27
Metal Tubes	8, 9
Meters	22, 23, 24
Microphone, Cable	30
Microphones	30, 64, 65
Microphone Stands	64
Motors, Phono	38, 66
Mu-Switch	39

N Name Plates	34, 55
National Products	18, 19
Neon Bulbs	54
Neutralizing Condensers	14, 15, 18
Nuts	61

O Ohmite Chokes	51
Ohmite Resistors	50
Oscillator Code	62

P Padding Condensers	15, 33, 36
Panels	32
Phone Cards	55
Phonographs, Electric	60
Phono Player	37
Photo-Electric "Eye"	25
Photo Tubes	10
Pick-Ups, Phono	66
Pilot Jewels	54
Pilot Lights	54
Pioneer Products	39
Plates	60
Plug-In Coil Forms	16, 18, 19, 36
Plug-In Coils	16, 34
Plug-In Coil Shields	18
Plug-In Transmitting Coils	12, 19
Plugs	28, 57
Plugs, Banana	28, 57
Plugs, Connectors	58, 58
Plugs, Microphone	60, 58
Plugs, Photo	57
Plugs, Speaker	58
PM Dynamic Speakers	63
Power Amplifier Kits	49
Power Amplifiers	67, 68, 69, 71
Pre-Amplifier, Mixer	71
Pre-Selector RME	6
Public Address Systems	67, 68, 69, 71
Push Bank Wire	30

R Racks, Relay	32
Raytheon Transmitting Tubes	12
Raytheon Tubes	8
RCA Antennas	29
RCA DeForest Transmitting Tubes	16
RCA Tubes	9
Receiver Kit	9
Record Changer	66
Recording Equipment	71
Record Players	66
Records, Blank	66
Relay Rack Brackets	32

Relay Rack Chassis	32
Relay Rack Panels	32
Relay Racks	32
Relays	25
Replacement Transformers	36, 45
Resistance Analyzer	55
Resistance Coils	51
Resistor Cabinets	53
Resistors, Carbon	51
Resistors, High-Range	52
Resistors, Metalized	53
Resistors, Precision	53
Resistors, Tapped	50, 53
Resistors, Wire-Wound	50, 53
Rheostats, Ohmite	51
RME Receivers	6, 37

S Sangamo Condensers	42
Saws	61
Screw-Drivers	61
Screws	61
Shaft Bushings	54, 60
Shaft Couplings	14, 16, 58
Shaft Extenders	58
Shielded Cable	30
Shielding Wire	30
Shields, Coil	16, 18, 33
Shields, Tubes	17, 33, 58
Short-Wave Receivers	2, 5, 72
Simpson Meters	16, 18, 28, 37, 56
Sockets	31
Sockets, Dialite	28, 29
Sockets, Transmitting	31
Solder	61
Soldering Irons	60
Soldering Paste	58
Sound Equipment	67, 68, 69, 71
Spaghetti Tubing	31
Speaker Rattles	64
Speaker Carrying Case	66
Speaker Cement	58
Speakers	30, 63, 64
Speaker Phono	38
Speaker Stands	64
Spacers, Aerial	28, 29
Stands, Microphone	64
Staples, Insulated	31
Suppressors, Auto Radio	35
Switches	34, 52
Switches, Band	34, 51
Switches, Knife	34
Switches, Push Button	34
Switches, Selector	34
Switches, Tap	34
Switches, Toggle	34

T Tape, Friction	58
Taylor Transmitting Tubes	11
Telegraph Instruments	62
Tentinal Strip	56
Test Equipment	20, 21, 22, 23, 24
Testers	20, 21, 22, 23, 24
Test Prods	31, 57
TIME-PAYMENT PAGE	38
Tobie Bridge Analyzer	40
Tone Condensers	40
Tone Filterettes	39
Tools	60, 61
Transformers, Audio	43, 44, 45, 46, 47, 48
Transformers, Filament	37, 43, 44
Transformers, Line	48
Transformers, Microphone	36, 44, 45, 46, 47
Transformers, Modulation	43, 44
Transformers, Power	38, 43, 44, 45
Transformers, Replacement	36, 45
Transformers, Sound	43, 44, 45, 46, 47, 48
Transformers, Transmitting	43, 44, 46, 47, 48
Transmitter Kits	7, 17, 37
Transmitters	4
Transmitting Insulators	12, 18, 28, 29, 31
Transmitting Tubes	6, 10, 11, 12
Transmitting Variable	14, 15, 17, 19
Trippett Meters	28
Tube Shields	17, 33, 58
Tubing, Bakelite	19
Tuning Indicator	54
Tuning Wand	54

U UTC Products	7, 37, 43, 44, 45, 46, 47, 48, 49
-----------------------	-----------------------------------

V Variable Condensers	14, 15, 17, 19, 33, 36
Variable Resistors	50
Vibrator, Auto Radio	59
Volume Controls	51, 52
Volume Expander	71

W Ward Leonard Relays	25
Washers	61
Wave-Trap	18, 33
Western Electric Tubes	6
Weston Meters	22
Wire	30
Wire, Aerial	31
Wire, Copperweld	61
Wrenches	60, 61
Wrinkle Varnish	58

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

RECORDING AND SOUND EQUIPMENT

BOGEN PROFESSIONAL RECORDER AND RECORDING AMPLIFIER



**R-12
RECORDER**

The Bogen R-12 Recorder incorporates exclusive design features throughout which render it completely fool-proof and simpler in operation than any other recorder, assuring consistently uniform and excellent results in the art of recording. The exclusive "dual action" control automatically eliminates record spillage and needle breakage, for it is impossible to drop the recording head on the record. "Dual action" control eliminates the weight previously required on the record head. No complicated adjustments. The groove cutting depth is consistently maintained. The turn table is powered by a 1/60 H.P., 110 V. 60 cycle motor, dynamically balanced and mounted on rubber. Recorder is adjusted to run at 78 RPM. The cutting head is of the horizontal magnetic type to reduce the weight of the movable mass and is automatically compensated for cutting on the low frequencies. Cutter impedance is 500 ohms. Other impedances are available at a slight additional cost if desired. The recording head carriage automatically stops at the end of the 12" blank record. The new Bruno-symphonic pickup is used for play-back.

Dual Action
Control

Net \$109.88

Recorder
only in
Carrying
Case

Cat. No. S9336



**RA6
RECORDING
AMPLIFIER**

The Model RA6 recording amplifier has been designed with complete recording and play back facilities, to serve as a companion for the Bogen R-12 recorder. The change-over from recording to play-back is done simply and quickly by means of a record play switch. A master volume control and master tone control are operative in either the recording or play-back position. Equipped with a high quality calibrated meter to indicate proper recording level. The amplifier is fitted with shielded lock type connections and recorder connections are plug-in. The recording amplifier and a full size electro-dynamic speaker are mounted in a compact, portable, fine leatherette carrying case.

Cat. No. S9337—RA6 Recording Amplifier with tubes in portable case.

Net Price \$53.28

Cat. No. S9338—RA6 Drive Shaft Pulley for 33-1/2 RPM records.

Net Price \$4.77

*BOGEN 28 WATT 6 VOLT "DC" OR 110 VOLT "AC" OPERATION

- 3 Channel Input
- No External Power Packs
- Switch from AC to DC
- Duo Stage
- Electron Mixing
- Special Motor
- Jensen "PM"
- Dynamic Speakers

The Bogen 28 Watt Universal Mobile system is particularly recommended for mobile or sound truck installation. No external power packs are necessary; both the 6V. and 110V. power supplies are built in. A special switch instantly converts the amplifier for either battery or AC operation. Equipped with three input channels for use with two high impedance microphones and one phono pickup. A full range tone control. Duo-stage electron mixer permits mixing and fading between any two input devices and allows simultaneous operation of any two.

Provided for use with the SR remote control on the 6V. DC and 110V. AC, or wireless remote control on 110V. AC only. To reduce battery consumption, a "standby" switch is used to cut off the accessories during intermittent use, keeping the tube filaments heated, ready for instant use. Incorporated also are a separate master power switch and a phono switch to control phono turn-table. The specially designed "Green Flyer" universal phono motor operates either on 6V. DC or 110V. AC. An Astatic crystal pickup is used with a shock-proof arm and is mounted on the phono assembly. The entire phono assembly is removable and the amplifier may be obtained with or without the turn-table assembly.



Supplied with two heavy-duty Jensen 12" PM Dynamic speakers that will handle the full power without overload or distortion. Each speaker is equipped with 10 ft. of cable and a polarized plug for instantaneous connection. A choice of either the Model VR-HP Velocity microphone or the American DST Bullet dynamic microphone.

Amplifier specifications: Output 28 watts (less than 5% harmonic content); tube complement—2 6X5, 1 6X3, 1 6X4, 1 5X4G, 2 6L6G; overall gain 118 db.; frequency response 40 to 10,000 cycles plus or minus 2 db.; output impedances 2-4 0 15-500 ohms; current drain 165 watts; 110V. 50 60 cycles, 22 1/2 amp.; 6V. 140. Dimensions 12" deep, 15" wide, 17" high.

The DP-28D system complete consists of the universal amplifier, including the phono assembly, kit of matched tubes, Bogen VR-HP velocity microphone or American DST bullet dynamic microphone (hand type) with 25 ft. of shielded rubber-covered cable and lock type connector, two Jensen PM12H dynamic speakers with cables and plugs.

Cat. No. S9339—Complete system as described above with tubes, phono assembly, speakers, and VR-HP velocity microphone (V).

Cat. No. S9340—Complete system as described above with tubes, phono assembly, speakers, and American DST dynamic microphone (D).

Net Price \$151.70

either system

Cat. No. S9341—Complete system as described above less phono assembly. Specify selection of microphone.

Net Price \$123.19

FOUR-CHANNEL MIXER AND PRE-AMPLIFIER

Built-In Power Supply

A four-channel mixer and pre-amplifier that can be attached to any amplifier input permitting electron mixing of four high impedance microphones or a radio and phono device. All inputs and outputs are equipped with lock type shielded connectors. Hum-proof. 110V. 30/50 cycle. Complete with five matched tubes.

Cat. No. S9342

Type PM4-AC

Net Price \$25.87

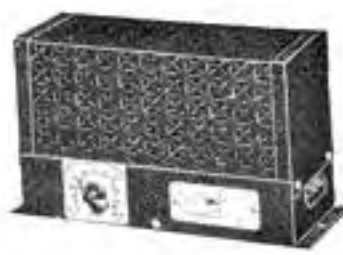


Volume Expander

A new device attachable to any amplifier or radio set. The volume expander automatically recreates the original playing of music by reproducing certain notes that are attenuated in making recordings and broadcasting. Equipped with controls to vary the degree of expansion desired. A perfect scratch filter for phono pickups eliminating background noise and needle scratching without sacrifice of tone quality or range. For AC-DC 110 V. Power supply built in. Complete with tubes.

Cat. No. S9341—Type VES

Net Price \$16.91



the hallicrafters inc.

Model S-17 SUPER SKYRIDER

THE MOST POPULAR RECEIVER IN THE ENTIRE AMATEUR FIELD

This model has everything any amateur or short-wave listener could possibly ask for in a single receiver. It tunes from 5 meters to the top of the broadcast band, with an average overall sensitivity of better than 1 microvolt for all bands. Wide Range Variable Selectivity from single-signal razor sharpness to broad High Fidelity, a 1000° Spiral Band Spread of unique design, 2 stages of pre-selection, a built-in Dickert Automatic Noise Limiter. These are but a few of the outstanding features of this value-packed receiver.

There's a built-in "S" meter, that works on weak as well as strong signals, and every control needed for communications reception.

Band coverage is as follows, Band No. 1—545 KC to 1550 KC, Band No. 2—1550 KC to 4300 KC, Band No. 3—4.2 MC to 10.2 MC, Band No. 4—9.8 MC to 20.5 MC, Band No. 5—19 MC to 35 MC, Band No. 6—35 MC to 62 MC. Designed for 110 Volts, 50-60 cycle operation. Dimensions: 21 1/4" wide, 9 3/4" high, 11" deep.

\$10,000—Model S-17 Super Skyriders including tubes but less crystal and speaker..... **\$125.50**

\$10,001—Model S-17 Super Skyriders with crystal and tubes but less speaker..... **\$137.50**

\$10,002—Model S-16 Super Skyriders, the same as Model S-17 but with only 1 stage of Pre-Selection and without Automatic Noise Limiter. Equipped with 10 Tubes but less crystal and speaker..... **\$99.00**

\$10,003—Model SX-16 Super Skyriders, same as Model S-16 but equipped with crystal..... **\$111.00**

\$10,004—12" P.M. Dynamic Speaker in matching cabinet..... **\$12.00**



* 13 Tubes

* 2 Stages Pre-Selection

* Dickert Automatic Noise Limiter

* 62 MC to 545 KC coverage on 6 Bands

* 1000° Band Spread

* Wide Range Variable Selectivity

* "S" Meter

* Better than 1 microvolt average sensitivity on all bands

* Inertia Tuning

THE SKY CHAMPION

CHAMPION IN PERFORMANCE AT A SENSATIONALLY LOW PRICE!

Here's value such as you've never seen before. Genuine Communications performance that compares favorably with that of receivers at double its price—with all the precision engineering that has made Hallicrafters receivers famous—with features you can't duplicate on any receiver of its class—all at a price that's entirely out of proportion for such tremendous value. Here's an 8-tube AC Communications Receiver with Pre-Selection and Built-In Speaker, nothing else to buy—sensitivity and selectivity on a par with much higher priced receivers—a real communications job in every respect. Provides full coverage from 44 MC to 545 KC, everything from the 10-meter band to the top of the broadcast band. Band No. 1—545 to 1800 KC, Band No. 2—1.7 to 5.65 MC, Band No. 3—5.55 to 18.5 MC, Band No. 4—17 to 44 MC. The SKY CHAMPION offers every essential control for good communications reception—R.F. Gain Control, Tone Control, Phone Jack—AVC Switch, Beat Oscillator Switch, Send-Receive Switch, A.F. Gain Control, Band Switch, BFO Switch and Pitch Control. A separate Band Spread Dial makes tuning easy. Speaker is an integral part of the set.

Dimensions: 18 1/4" wide, 9 3/4" deep, 8 1/2" high.
\$10,005—Model S-20 SKY CHAMPION including speaker and tubes..... **\$49.50**

SEE PAGE 38 FOR OUR EASY
TIME PAYMENT PLAN



* 8 Tubes

* Complete Coverage (44 MC to 545 KC)

* 4 Bands

* Separate Band Spread Dial

* Individual Coils for Each Band

* Inertia Tuning Mechanism

* Beat Frequency Oscillator

* AVC Switch

* Excellent Sensitivity and Selectivity

* A.F. Gain Control

* Band Switch

* Sensitivity Control

THE RADIO SHACK CORPORATION

46 Brattle Street

Boston, Mass.