

RADIO . . . and SOUND APPARATUS

for

**Broadcasting
Sound Recording
Scientific Research
Amateur Transmitting
Shortwave Receiving
and . . .
Radio Servicing**

RADIO · TELEVISION SUPPLY COMPANY

CATALOG

This catalogue represents the results of the cooperating efforts of many people, all of whom have enthusiastically striven to present the many items used in the radio art in the most convenient manner.

The arrangement of the subject matters differs from the conventional arrangement of alphabetical sequence. Logical groups have been established in

the catalogue within which related articles and materials are closely associated for easy comparison. This arrangement puts greater responsibility upon the index as a means of finding the item of interest.

The index is your ever-ready guide to every class of equipment listed in this catalogue. It is placed in front which permits easy access when used for reference.

OUR POLICY

Radio Television Supply Company has been engaged for more than twelve years in the supplying of radio parts and equipment.

The fact that during this period our organization has steadily grown in its ability to serve its patrons, and in resources, testifies to its success in keeping abreast of requirements in radio.

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and supplies. They are familiar with the progress of radio and sound through numerous technical journals, through memberships in technical organizations and their own individual experimentations. It is the purpose of Radio Television Supply Company to continue along the lines that have in the past made it outstanding in the local radio industry, and to strive continuously to improve its products and its method of handling business transactions with its many friends.

Finally, we say with all the emphasis at our command that we guarantee each item in this catalogue to be as described, subject only to such improvements as may be made while the catalogue is current. We recognize as our greatest asset, the complete satisfaction of our customers. Unless we have achieved that, we have not measured up to our standards. To do so is our sincere desire and purpose.

RADIO TELEVISION SUPPLY CO.



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9	.17	.25	.38	.54	.68	.86	1.03
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11	.19	.29	.45	.64	.82	1.04	1.28
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13	.22	.33	.52	.75	.96	1.22	1.47
14	.23	.35	.56	.80	1.03	1.31	1.58
15	.24	.37	.59	.88	1.10	1.40	1.89
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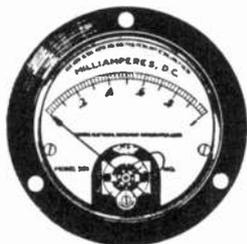
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††Supplied with external resistor.

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††Double range Milliammeters are three binding post type, self-contained.

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	Price		Price	
1	
1.5		19.25	
3		19.25	
5	\$17.00		19.25	
15	17.00		19.25	
50	17.00		19.75	
100	17.50		21.50	
150	19.00		23.00	
300	20.00		

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Range	Price	Range	Price
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1	15.00	5	14.00

MODEL 301 RECTIFIER TYPE MICROAMMETERS

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2	9.00	20	9.00
3	9.00	30	9.00
5	9.00	50	9.00

MODEL 476 A-C VOLTMETERS

Range	Price	Range	Price
1.5	\$9.00	50	\$9.00
2	9.00	100	10.00
3	9.00	150	11.25
5	9.00	250	14.50
8	9.00	300	16.50
10	9.00	500	19.50
15	9.00	750	23.50†
20	9.00	1000	28.50†
30	9.00		

†Supplied with external resistance box.

MODEL 425 THERMOCOUPLE TYPE AMMETERS

Range	Price	Range	Price
1	\$16.00	5	\$16.00
1.5	16.00	10	16.00
2	16.00	15	16.00
3	16.00	20	16.00

2 1/2" Panel Instruments

MODEL 506 D-C VOLTMETERS

Approximately resistance of voltmeters: 3 to 150 volts, 125 ohms per volt; 200 volts, 200 ohms per volt.

Volts	Scale Div.	Price	Volts	Scale Div.	Price
3	30	\$7.50	30	30	\$7.50
5	25	7.50	50	25	7.50
8	40	7.50	100	20	8.50
10	20	7.50	150	30	9.75
15	30	7.50	200	40	11.50
20	40	7.50			

Approx. Res. in ohms per volt: 3 to 150 V., 125; 200 V., 200.

MODEL 506 D-C AMMETERS

Amps.	Scale Div.	Price	Amps.	Scale Div.	Price
1	20	\$7.50	30	30	\$7.50
1.5	30	7.50	50	25	7.50
5	25	7.50	5-0-5	20	7.50
10	20	7.50	10-0-10	40	7.50
15	30	7.50	20-0-20	40	7.50

Ammeters, Self contained up to 50 amps, incl.—drop 50 MV. plus or minus 5%.

MODEL 507 THERMO AMMETERS

For use on a-c of any frequency including radio frequency.

Amps.	Scale Div.	Price	Amps.	Scale Div.	Price
1	20	\$14.50	5	25	\$14.50
1.5	30	14.50	10	20	14.50
2	40	14.50	15	30	14.50
3	30	14.50	20	40	14.50

MODEL 506 D-C MILLIAMMETERS

Milli-amps.	Approx. Resis.	Scale Div.	Price	Milli-amps.	Approx. Resis.	Scale Div.	Price
1	27	20	\$8.50	50	1	25	\$7.50
1.5	18	30	8.50	100	.5	20	7.50
2	18	40	8.50	150	.33	30	7.50
5	8.5	25	7.50	300	.16	30	7.50
10	3.2	20	7.50	500	.1	25	7.50
15	1.5	30	7.50	150/15†		30	12.50
30	1.7	30	7.50	150/30†		30	12.50

Milliammeters above 30 MA are shunted—drop approx. 50 MV.

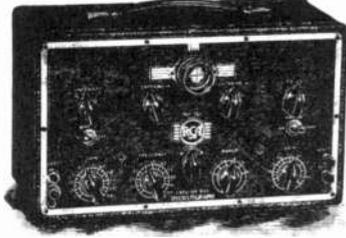
†Double range milliammeters are 3 binding post type, self-contained.

MODEL 517 A-C AMMETERS

Amps.	Approx. Res. In Ohms	Price	Volts	Approx. Ohms per Volt	Price
1	.2030	\$7.50	3	4	7.50
1.5	.08	7.50	5	10	7.50
2	.052	7.50	8	10	7.50
3	.024	7.50	10	14	7.50
5	.010	7.50	15	14	7.50
10	.0058	7.50	20	26	7.50
15	.0022	7.50	30	28	7.50
20	.00162	7.50	50	52	7.50
30	.00070	7.50	100	110	8.50
50	.00057	7.50	150	110	9.75
			250	164	13.00
			300	166	15.00

MODEL 517 A-C VOLTMETERS

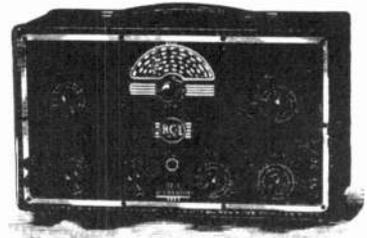
R. C. A. TEST EQUIPMENT



MODERNIZE YOUR EQUIPMENT WITH RCA TEST EQUIPMENT

RCA Service Engineers are constantly developing Testing Apparatus to make the Serviceman's job easier and more lucrative.

On this page are the latest developments in testing equipment. Bring old style servicing units "right up to the minute" with RCA Testing Equipment.



RCA CATHODE RAY OSCILLOGRAPH

Align receivers visually, check distortion and hum—see what you're doing—with the modern X-ray or radio, the RCA Cathode Ray Oscillograph. The new RCA Model 151 is an instrument of traditional RCA quality, built to give satisfaction in every service application. It has what it takes to do a better job, to help you make more money.

SPECIFICATIONS

Radiotrons Used—1 RCA 914 (1-inch), 1 RCA-885, 2 RCA-606, 1 RCA-80, Total 5.
Sensitivity—1.75 volts (RMS) for full-scale deflection.
Amplifier Range and Gain—Flat 20—10,000 cycles, gain 50.
Timing Axis (Horizontal Sweep)—30—10,000 cycles.
Operation—All controls on front panel complete with calibration screen and light shield.
Input Power Consumption—50 watts total, 30 watts hot.
Dimensions—Length 13 1/2", height 9 3/4", depth 7 1/2", weight 14 1/2" lbs.
Finish—Gray wrinkle lacquer with nickel trimming. Reversed etched, nickel-silver panel—large, soft rubber feet.
No. 151 Complete with Tubes **\$39.95 Net**

RCA ELECTRONIC SWEEP TEST OSCILLATOR

This new electronic sweep test oscillator is ideal for every application in which a wide frequency range test oscillator is needed.

SPECIFICATIONS

Radiotrons Used—1 RCA-6A7, 1 RCA-6F7, 2 RCA-606, 1 RCA-80, Total 5.
Frequency Range—90 kcs—32,000 kcs; fundamental frequency, 6 ranges—no harmonics.
Modulation—Amplitude, 400 cycles 30% Frequency, 120 times per second, adjustable from 1 to 40 kcs. at any output frequency—calibrated control.
Dial—Direct reading, indirect illumination, no parallax, center ratio 2:1 and 5:1, 4" diameter, calibration accuracy 1%.
Output Voltage—0.25 maximum at all frequencies. Negligible leakage.
Output Control—Three-step attenuator plus continuously variable control.
Dimensions—Length 13 1/2", height 9 3/4", depth 7 1/2", weight 17 lbs. Special snap handle—sturdy case.
Finish—Gray wrinkle lacquer with nickel trimming. Reversed etched, nickel-silver panel—large, soft rubber feet.
No. 150 Complete with Tubes **\$64.50 Net**

RCA TEST OSCILLATOR

(Signal Generator)



A high quality battery powered Oscillator manufactured by RCA. Covers a frequency range from 30 kc. to 25,000 kc. by means of eight overlapping bands. The entire range is covered by fundamental frequencies; no harmonics being used. A separate modulating tube is provided and is controlled by means of a switch so that it can be used with or without modulator. Panel back permit applying modulated frequency voltage. Calibration guaranteed within plus or minus 3%. Two ranges of output ranges. Battery operated but battery not included, entire unit shielded with copper. May be used with oscillographs in conjunction with external frequency modulator.
Net Price **\$34.50**

RCA OSCILLOGRAPH THE X-RAY OF RADIO SERVICE



Servicing problems easily solved with this cathode ray Oscillograph and modulator listed to right below. Enables amateur to monitor percentage modulation, examine phase shift. The RCA cathode ray Oscillograph is ready for immediate use. It includes two power supplies, one for the cathode ray tube and one for the amplifier. Through the use of two wide frequency high gain amplifiers the sensitivity is assured at two volts A.C. per inch for both vertical and horizontal deflection. Amplifier gain is approximately 40. The range extends from 10 to 18,000 cycles and permits the examination of a single cycle up to 18,000 cycles; the examination of 6 cycles up to the limit of the amplifier, 30,000 cycles. 110-120 volt A.C. Complete with 6 Radiotrons.
Net Price **\$63.95**

RCA BEAT FREQUENCY OSCILLATOR

with the famous "ACORN" TUBES



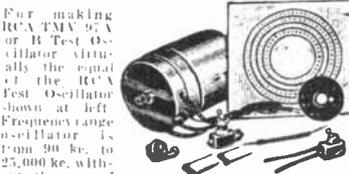
A variable frequency A.C. source is a necessity for many radio service and laboratory uses. This instrument is ideal for any application requiring an A.C. source of frequencies ranging from 30 to 15,000 cycles per second. Highly accurate this unit incorporates design features found in only the highest priced laboratory oscillators. Has a maximum output of 60 milliwatts and overall distortion (with 20 milliwatt external load) of less than 3% (with 60 milliwatt external load) less than 10%. Output impedances 250,500 and 5,000 Ohms, center tapped to ground. Uses 4 acorn type tubes. For 110-120 volts, 50-60 cycles.
Net Price **\$64.50**

RCA UNIVERSAL A.C. BRIDGE



For the simplification and quick analysis of circuits in laboratory problems. Gives an accurate check of inductive, capacity and resistances over extremely wide ranges, including the low values that ordinary resistance and capacity meters do not check. Measures inductance 100 microhenries to 10 henries. Capacity 10 microfarads to 10 millifarads. Resistance 1 ohm to 1 megohm. Variable—Ratio—A.C. circuit. Wheat-tone type bridge. 3 tubes, 40 watt power consumption. Accuracy 7% overall. Frequency of Audio Oscillator 1000 cycles plus or minus 10%. For 110-120 volts, 25-60 cycles A.C.
Net Price **\$49.65**

MODERNIZATION KIT (For RCA Oscillators)



For making RCA TMV 914 or B Test Oscillator virtually the equal of the RCA Test Oscillator shown at left. Frequency range oscillator is from 30 kc. to 25,000 kc. without the use of harmonics. Eight position range switch and tuning dial marked in kilocycles. Guaranteed accuracy of dial calibration is plus or minus 3%. Separate tube included for providing 400-cycle modulation frequency. Two position toggle switch permits operation with or without modulation. Sweep circuit jack provides connections for external modulator.
Net Price **\$7.50**

RCA FREQUENCY MODULATOR

For use with the Test Oscillators for altering circuits visually on RCA Oscillographs. Functions both as a sweep capacitor and as an A.C. impulse synchronizing generator. Output of generator has very peaked wave form instead of usual sine wave. Quick, accurate alignment, just like factory production. For 110-115 volts A.C. Complete with black crackle finish metal carrying case and 14-in. connecting cable with plugs.
Net Price **\$27.50**

RCA VIBRATION PICK-UP



Converts any mechanical vibration or motion into electrical currents of identical characteristics. If this motion is recurrent in character, the resulting electrical current may be presented visually on a Cathode Ray Oscillograph. The RCA Vibration Pickup, which functions through the piezo-electric properties of a Rochelle salt crystal, is an instrument of great value to all electrical, mechanical and sound laboratories. If your problem is a mechanical one, this instrument will help in solving it. Output voltage—0.25 volt per .001 inch movement at 250 cycles. Frequency range—10-3000 cycles. Vibration axis—right angles to face of pickup.
Net Price **\$20.00**

PIEZO-ELECTRIC CALIBRATOR



Calibrates receivers, test cellulators and laboratory apparatus. Special crystal has two frequency modes; provides calibration points in 100-ke. steps from 100 kcs. to 20,000 kcs. From 1000 kcs. to 50,000 kcs. Individual calibration and temperature at which made furnished with each instrument. Accurate to plus or minus 0.5%. Has self contained power supply and one RCA-955 Acorn-type tube. For 110-120 volt, 50-60 cycle A.C.
Net Price **\$29.95**

RCA OUTPUT INDICATOR

Small VISUAL output indicator designed for use with an oscillator when aligning receivers. Consists of tapped step-up transformer, potentiometer, glow tube and three binding post for connecting the output of receiver to transformer. Three output lamp dials are available—0.5 ohm, 1.5 ohms and 4 ohms, which cover practically all receivers. Bakelite case. Lamp rating 50-60 volts. Breakdown transformer rating 80:1 (max.). Potentiometer resistance 100,000 ohms.
Net Price **\$4.00**

CLOUGH-BREngle TESTING EQUIPMENT

MODEL 126 Cathode-Ray Oscillograph



This instrument offers complete facilities for countless problems of receiver circuit study and adjustment. R.F. and I.F. alignment, resistor, condenser, and vibrator tests are made while the receiver is under actual operation.

Flexible Operation: The switching system makes possible instant changeover for any desired test, greatly adding to the ease and simplicity of operation.

Higher Input Sensitivity: Two improved input amplifiers, one for each set of plates offer the highest sensitivity available on a cathode-ray oscillograph, .38 r.m.s. volts per inch of deflection. This extreme sensitivity is an added advantage in servicing receivers of the latest designs.

Wide-Range Sweep: The MODEL 126 has an improved sweep circuit with positive synchronizing control, generating fundamental sweep frequencies up to 20,000 cycles per second, allowing convenient study of wave forms at 150,000 cycles per second or higher.

These and many other features make the MODEL 126 the outstanding Cathode-Ray Oscillograph value, regardless of price. It has back of it the un-qualified experience of the pioneer builder of cathode-ray equipment for high-frequency applications.

MODEL 126—Cathode-Ray Oscillograph, complete in metal carrying case with all tubes including the type 906 cathode-ray tube.

Net Cash—\$ 6 4.50

Model CRA-R, Rack Style, Net Cash \$ 64.50

Panel: Height 10 1/2 in., width 19 in.

MODEL 110 SIGNAL GENERATOR



**DIRECT READING DIAL
1/2 OF 1% ACCURACY
AIR TRIMMER ON EACH BAND
ADJUSTABLE R-F IRON CORES
100,000 MICROVOLTS AVAILABLE
ON ALL BANDS
FIVE-BAND ROTO-INDUCTOR
PUSH-PULL MODULATION
ATTENUATED AUDIO OUTPUT**

Frequency Range—Fundamentals 100 kc to 31 mc.

Frequency Calibration—Direct reading etched silver dial on two scales may be estimated to 1/4 of 1%.

Modulation—400-Cycle internal at 30% level.

Output Control—Uni-selector switch provides 400-cycle internally modulated r.f., unmodulated r.f., 400-cycle audio output, or externally modulated r-f output.

Audio Output—Push-pull 400-cycle sinusoidal audio voltage for amplifier tests, adjustable 0-1.2 volts.

Roto-Inductor Switching—All coil contacts made directly to oscillating circuit; no band switch losses.

Coils—Type 2020 coil forms, r-f iron cores (see page 8) used throughout, give permanence of calibration.

R-F Output—Continuously variable by vernier and 4-step ladder attenuator from minimum to 100,000 microvolts on ALL bands. No uncontrollable high tap.

Shielding—Strays are completely controlled by uni-welded interlocking outer case with entire r-f circuit enclosed in separate copper shielded box as is the practice in highest grade microvolters. Power supply and modulator circuits shielded independently. Power chassis, line cord, and r-f units are completely isolated by shielded, multi-section filters.

Tubes—One 76 oscillator, one 6x5 rectifier, one 6N7 modulator tubes supplied.

Accessories—3-Ft. shielded coaxial output cable.

Case—Completely enclosed in uni-welded metal carrying case, finished in rich dark green baked crystalac with etched silver designation plates, C-B green inlay.

MODEL 110 SIGNAL GENERATOR, complete with all tubes—Net Cash \$49.50

Model 79-B Beat-Note Audio Oscillator

A newly improved instrument offering a standard of performance not available in combination r.f. and a.f. oscillators. For radio receiver servicing, it has the advantage that it may be used to audio modulate an r.f. signal generator over the entire audible frequency range, for the extremely important frequency characteristic test of the radio receiver. This can not be done with the a.f. oscillators built into the r.f. signal generators.

Continuously variable from 0 to 15,000 cycles, with accurate calibration throughout. Output is 27 volts at 5000 ohms or 150 milliwatts, several times the power obtainable from oscillators using low power tubes.

Has built-in amplifier, type 6E5 electron-eye zero-beat indicator and new air dielectric trimmer condensers. Distortion content less than 5%. Output essentially flat over entire frequency range. Operated directly from 110-volt 50-60 cycle line.

MODEL 79-B Beat-Note Audio Oscillator Net Cash \$59.50
Complete in Metal Carrying Case with all Tubes.

MODEL 79-BR, Rack Style Net Cash \$59.50

N



WESTON TESTING EQUIPMENTS

WESTON MODEL 773

Counter Tube Seller (Type 2)

Note how this counter Model 773 (Type 2) combines compelling eye appeal with scientific appearance. It has a handsome, polished, solid-wood case. The big, sensitive WESTON Meter is "stepped up" from the rich, 3-color panel which is finished in chromium, red and black. Striking, but dignified . . . conveying to customers an instant impression of its dependable accuracy. But appearance is but a small part of the story. Model 773 also sets a new standard in advanced engineering . . . in dependable and sustained accuracy . . . in operating simplicity . . . and in other exclusive WESTON features which forestall obsolescence and assure long and profitable life. In addition, it gives you the added convenience of WESTON'S new, rapid-reference "rotator-type" tube chart... a real time saver. Model 773, Type 2—Size 7 1/4" x 10 3/4" x 14 3/4". Net wt. 10 1/4 lbs. U.S. A. Dealer's Net Price \$58.13



Type 2



Type 1

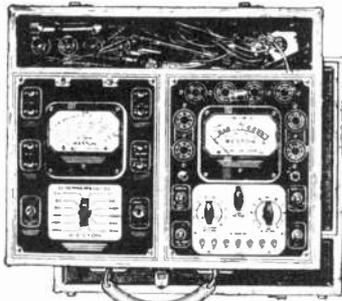
Portable Tube Checker (Type 1)

The portable Model 773 (Type 1) likewise is furnished in a carrying case worthy of this fine instrument. It is furnished in a sturdy, polished, solid-wood case of finest construction . . . one that assures full protection during the long life of the checker. Sufficiently light in weight, however, to allow for a generous sized tool or tube compartment. The case has a padded leather handle. An instrument you'll be proud to own . . . and one that will prove profitable. Supplied with WESTON'S new, rapid-reference tube chart. Model 773, Type 1—Size 5 1/4" x 9 3/4" x 15 1/2". Net wt. 10 3/4 lbs. Net Price \$53.81

U.S. A. Dealer's Net Price \$58.13

Model 775 SERVISSET

Models 773 and 772 in a Combination Carrying Case



The Model 773 Tube Checker also is offered in this combination case, along with the famed Model 772 Analyzer. Servicemen who already own the 772, however, can purchase the case equipped with Model 773 . . . and simply insert their 772 in the left-hand compartment. This combination case is made of solid-wood, sturdily constructed, and is furnished with a leather "luggage" handle. Be "set" for better business with this complete servicing kit . . . able to service sound movies, P. A. systems, television . . . as well as all radio receivers. Get the profit from all these sources with the 775 SERVISSET.

Model 775 Serviset—Size 5 1/4" x 14 1/4" x 17 1/4". Net wt. 19 1/2 lbs. Net Price (less Model 666 socket selectors) \$104.25

IDEAL FOR PANEL MOUNTING

Remember . . . Models 772 and 773 are identical in size, styling and color. They make ideal instruments for panel mounting in the shop.

The Super-Sensitive Analyzer

Model 772

The first REAL super-sensitive analyzer. See the following unique features:

1. All d-c voltage ranges at 20,000 ohms per volt.
2. A 4 1/4" instrument with large movement reading 50 microamperes for full scale.
3. Has a wide, open scale, 100 divisions, knife-edge pointer.
4. Reads in all circuits where minute currents are present.
5. Model 772 will service television receivers, as well as present-day transmitters and receivers.
6. 5 d-c voltage ranges available at rotary switch 0-2.5-10-50-250-1,000 volts.
7. 5 a-c voltage ranges, 1,000 ohms per volt, available at rotary switch, 0-2.5-10-50-250-1,000 volts.
8. 6 current ranges: rotary switch positions for 3 highest ranges—0-10-50-250 milliamps. Pin jack positions for 0-50-100 microamps 0-1 milliamps.
9. 4 resistance ranges at rotary switch—0-3,000 - 30,000 - 300,000 - 3,000,000 ohms. High range ohmmeter gives ideal test of condenser leakage.
10. 5 output meter ranges through special pin jacks—0-2.5-10-50-250-1,000 volts.

The most practical, versatile, sensitive analyzer on the market.



Model 772

Super-Sensitive Analyzer

Size 15 1/8" x 5 1/2" x 8 3/4".

Net wt. 9 lbs.

Net Price

(less Model 666 Socket Selectors) \$52.13

Model 564 Volt-Ohmmeter Type 3-C



4 Voltage Ranges! 0-3; 0-30; 0-300; 0-600 all at 1000 ohms per volt.

4 Resistance Ranges! 0-1000; 0-10,000; 0-100,000 0-1,000,000 ohms, full scale.

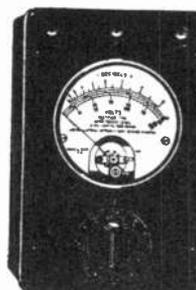
A fine Weston-quality instrument with self-contained 4 1/2 volt battery supplies the necessary potential. Changes in battery potential are compensated for by short-circuiting the resistance pin jacks of any range and adjusting pointer to zero ohms by turning the battery adjustment knob.

Voltage ranges are brought out to pin jacks. Toggle switch connects meter in circuit as a voltmeter, or ohmmeter. A pair of test leads is furnished.

Size 5 1/8" x 3 3/4" x 2 1/8". Net wt. 1 1/2 lbs.

Net Price \$28.80

Model 695 Power-Output Voltmeter



It has a resistance of 2,667 ohms per volt, or 4,000 ohms total on its lowest range and 400,000 ohms total in its highest range. It provides five voltage and eleven dB ranges, selected through a dial switch. —8, —4, 0, 8, 12, 16, 20, 24, 28, 32 dB. 1 1/2, 6, 15, 60, 150 volts. A chart gives corrections for decibel readings on any load from 5 to 50,000 ohms, at 6 milliwatts zero level.

Size 5 1/2" x 3 1/4" x 3 1/4". Net wt. 1 1/2 lbs.

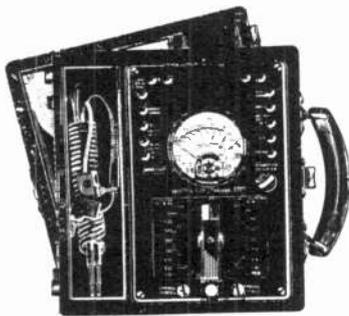
Net Prices:

Model 695—Type 3A \$27.00

Model 695—Type 3B (High Speed) 32.63

WESTON TESTING EQUIPMENTS

Model 665 Selective Analyzer



This Analyzer employs a rotary switch for the selection of ranges permitting rapid operation of the device. The Model 666 Type 1-B Socket Selector, which serves to bring the tube socket connections to the analyzer circuit, or

the Model 666 Type 2 Capacity Unit, may be mounted on this analyzer. When the latter unit is used, capacity measurements from 0 to 10 microfarads may be read directly from the scale. Model 665 has the

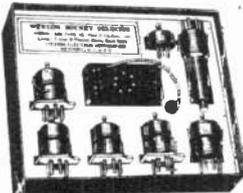
following broad list of a-c and d-c voltage ranges: 1,000-500-250-100-50-25-10-5-2.5-1, all with a sensitivity of 1,000 ohms per volt. The d-c current ranges are 500-250-100-50-25-10-5-2.5-1 milliamperes. Resistance readings may be made from 1 ohm to 1 megohm readable in four ranges. The customary analyzer grid test, including both high and low grid tubes, made with self contained batteries. The a-c ranges, for ordinary a-c measurements as well as for out-put readings, are obtained through the use of a copper oxide full-wave bridge-type rectifier.

The indicating instrument, a Model 301 type, is mounted in a Standardized Service Unit bakelite panel. The assembly is supplied in a sturdy pressed steel case attractively finished in black. A leatherette carrying case can be provided to accommodate the Model 665 and a Model 666 1-B Socket Selector. Size 5 1/2"x8 1/4"x3 3/8". Net weight 5 lbs.

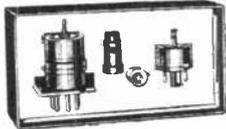
Model 665—Type 1 (less carrying case and Model 666 Socket Selector)
Carrying Case

Net Price \$58.50
Net Price 4.13

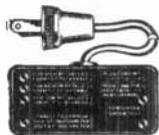
Model 666 Socket Selectors



TYPE 1-B



TYPE 3-A



TYPE 2

Type 1-B Socket Selector for testing 4, 5, 6, 7, and 8-prong base tubes. The selector block mounts mechanically on the analyzer by means of two pin-terminals. With the tester plug inserted in the radio set socket, and the tube in the selector block socket, tube circuit conditions (voltage, current, resistance) can be checked by plugging in the pin-tipped jumper cables from the jack in the selector block to the analyzer jacks or binding posts. Type 2 provides voltage taps for the accurate measurements of capacities from .001 to 10 mfd. (For use with Model 665 Selective Analyzer only.)

Model 666—Type 1-B (for 4, 5, 6, 7, and 8-octal base tubes) \$15.83
Model 666—Type 3-A (octal accessories for those who now use a Model 666 Type 1-A) 3.60
Model 666—Type 2 Capacity Unit 8.40
Jumper Cables, No. D-71785-6, Per Pair60
Ground Lead, No. D-71787, Each45
Output Meter Lead, No. D-73063, Each45
Test Leads, Elbow Terminals D-70033-4, Per Pair 1.00



Model 697

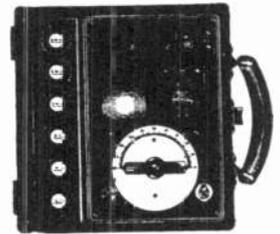
VOLT-OHM-MILLIAMMETER

This Weston Volt-Ohm-Milliammeter is equipped with a Model 301 instrument having a clearly calibrated scale. Its ranges are 750-150-15-7.5 volts a-c and d-c; 500,000-5,000 ohms center scale and 7.5-7.5 milliamperes, d-c only. Complete with self-contained battery and test leads.

Size 5 1/8"x3 3/4"x2 1/8". Net Wt. 1 1/4 lbs.
Net Price\$28.80

Model 692 Test Oscillator

Portable, triple-shielded all-wave test oscillator with plug-in coils to prevent interaction. Very low leakage. A 200-ohm constant impedance special attenuator gives a signal strength from 0.2 volt to 1 microvolt. 50% modulation at all frequencies. Ranges: L.L. 100 to 250 KC.; H.L.: 250 to 500 KC.; BC 435 to 1600 KC.; S.W.-1; 1.5 to 4 MC.; S.W.-2; 4 to 10 MC.; S.W.-3; 10 to 22 MC. Pin jacks for external modulation. Two type 80 tubes are used. Complete with tubes, calibrated curve and batteries. Size 8 1/4"x5 1/2"x5 3/4". Net wt. 8 1/2 lbs.



Net Price\$51.56

Model 664 Capacity Meter

A direct-reading capacity meter, ranging from .0001 to 200 mfd. and providing A.C. voltage measurements up to 1,000 volts. Ranges are 10-200, 1-20, .1-2, 0.1-0.2, 0.0001-0.02 mfd. and 4, 8, 40, 200, 800 A.C. volts, 1000 ohms per volt. Accurate measurement for all electrolytic condensers regardless of voltage rating. Shorts and opens indicated. Operates direct from A.C. line. Size 8 1/4"x5 1/2"x3 1/8". Net wt. 4 1/2 lbs.



Net Price\$41.63

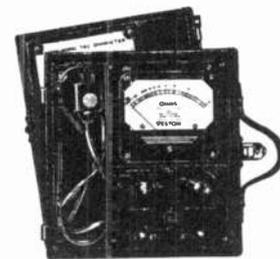
Model 763 Ohmmeter

Ranges: 0/3,000*/30,000/300,000/3,000,000 / 30,000,000 / 300,000,000 ohms full scale; 0/25/250/2,500/25,000/250,000/2,500,000 ohms center scale. Readings can be made from 1 ohm to 300 megohms, ranges being selected through one switch. Has a 4 1/4" instrument with easy reading scale.

Uses a standard 31 tube. Model 763 operates directly from any 115-volt, 60-cycle A.C. line. No batteries are required.

Size 8 1/4"x5 1/2"x3 3/8". Net wt. 4 1/2 lbs.

Net Price\$55.85



TRIPLETT TESTING EQUIPMENT

Volt-Ohm-Milliammeter



Model 1200-A Unit

Has two instruments A.C. and D.C. in the exclusive Triplett tilting type twin case. New features include Backup Ohmmeter for checking low ohms and new arrangement of shunts, limiting switch contact error to less than 1/4%. Ohms scale markings in straight lines. Scale readings—D.C. 10-50-250-500-1000 volts at 2000 ohms per volt; 1-10-50-250 M. A.; Low ohms .5 to 500; 1500, 1.5 and 3 megohms. A.C. 10-50-250-500-1000 volts. Resistance measurements have individual zero adjustments. Selector switch for all instrument readings. Contains 22 1/2 and 1 1/2 volt batteries. Shpg. Wt. 10 lbs.

1200-A Unit Code—TRITE
List—\$35.75 Net—\$23.83

Model 1200-B, same as 1200-A except A.C. meter is replaced with D.C. movement and copper oxide rectifier for A.C. with readings 2-10-50-250-500-1000 volts at 1000 ohms per volt. Shpg. wt., 10 lbs.

1200-B Unit Code—TRRRF
List—\$44.00 Net—\$29.33

1200-C Unit, same as 1200-A but has 5000 ohms per volt D.C.; 250 microamperes; 7.5 megohms.

1200-C Unit Code—TRFFA
List—\$40.25 Net—\$26.83

Audio Frequency Oscillator



Model 1260 Unit

A compact, portable Audio Frequency Oscillator that generates a pure sine wave without distortion or harmonics. Has circuit of feedback type, giving precision performance of a degree usually found only in the finest of laboratory equipment. Wide frequency range: 100-250-500-1,000-2,000-3,000-4,000-5,000-7,500-10,000 cycles. Furnishes audible frequency to test audio amplifiers, speakers, P. A. systems and is useful for a wide range of laboratory purposes. Strong signal. Attenuation is extremely accurate. Impedance matching is variable. Operating power furnished by A.C. line voltage. Necessary tubes and test leads included. Shpg. wt. 14 lbs.

1260 Unit. Code—TRMMA
List—\$42.50 Net—\$28.33

Tube Tester

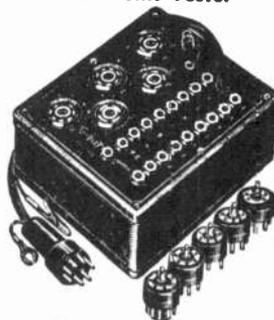


Model 1210-A Unit

Tests all types tubes -- metal, glass-metal and glass. Direct reading. Colored GOOD and BAD scale. Includes rectifier tube. Large meter. Line voltage regulation. All short tests. Cathode leakage test. Individual tests on diodes and full wave rectifiers. Simple to operate. Has four sockets with one 5-6 in combination to minimize panel space. Has a new RMA approved circuit with every essential for a dependable emission test of tube values. No confusion, complications or calculations. 60 cycle, 100-130 volts. Shpg. wt. 11 lbs.

1210-A Unit. Code—TRIER
List—\$33.00 Net—\$22.00

Free Point Tester

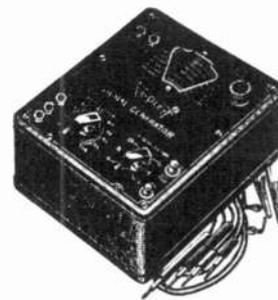


Model 1220-A Unit

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 to all parts of the circuit. Automatic in operation. Used in conjunction with 1200 Series Volt-Ohm-Milliammeters. Extra connections may be added, when necessary, at a very slight cost. Shpg. wt. 8 lbs.

1220-A Unit. Code—TRICH
List—\$16.50 Net—\$11.00

Signal Generators



Model 1231 Unit

Model 1231 All-Wave Direct Reading D.C. Signal Generator now has built-in trimmer calibrated coils for accuracy of 1% on broadcast, intermediate and short wave bands. Six bands cover 120-30,000 Kc.—all fundamentals. Fully stabilized. Extra-long 12 in. vernier type direct reading scale. Improved band selector switch. 400 cycle audio signal available. Includes batteries and two type '30 tubes. Shpg. wt. 13 lbs.

1231 Unit. Code—TRUTH
List—\$38.50 Net—\$25.67

Same as 1231, but for 110 volts—60 cycle A.C. operation. Shpg. wt. 16 lbs.

1232 Unit. Code—TULSA
List—\$41.25 Net—\$27.50

Model 1230 Unit is an All-Wave Signal Generator supplying a continuously variable signal. Frequencies controlled on six fixed positions, from 100-18,000 Kc. Batteries, tubes and six individually calibrated graphs supplied. Shpg. wt. 14 lbs.

1230 Unit. Code—TRIBE
List—\$25.25 Net—\$16.83

MASTER UNITS

Case is metal with baked electro black wrinkle finish. Size: 7 7/8 x 6 5/8 x 4 3/4 in. deep. Panels are attractively etched; silver and red on black; with metal re-inforcements. Sockets are flush. All materials are of the best quality. Master carrying cases listed on page F-4.

Vacuum Tube Voltmeter



Model 1250 Unit

With its accuracy independent of changing tube values, Model 1250 is the first self-calibrating Vacuum Tube Voltmeter. Tube characteristics are stabilized with the circuit, irrespective of what tube emission values may be. Replacing a tube does not alter accuracy. Measures low A.C. and D.C. voltages without current drain. Has two separate D.C. movements in a tilting type case. One indicates when tube characteristics are stabilized with circuit, other is a three-range voltmeter with approximately linear scales reading in peak A.C. and D.C. volts. Ranges are 2.5, 10, and 50 volts. All accessories included. Shpg. wt. 13 lbs.

1250 Unit. Code—TRPPD
List—\$55.00 Net—\$36.67

Model 1251
Same as the above, but with ranges of 3-15-75-300 volts. Code—THEKA.
List—\$71.50 Net—\$47.67

Condenser Tester



Model 1241 Unit

New and improved Condenser Tester, Supercedes previous Model 1240 in the Master Unit Series. Complete tests for all condensers from .0001 to 30 microfarads. Quickly and accurately tests for shorts or opens, leakages, breakdown and capacity. Breakdown tests for electrolytic and paper condensers at rated working voltages. Defects are indicated on direct reading meter with five scales. Capacity is read directly in microfarads.

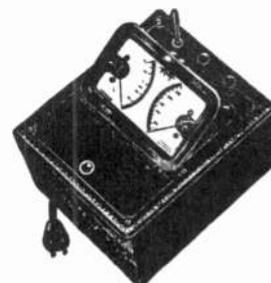
DC voltage for paper condenser breakdown up to 1,000 volts in five steps. For electrolytics, breakdown voltage to 575 in nine steps.

Scales read: A—.0001 to .01; B—.01 to .2; C—.2 to 2; D—2 to 30. Colored GOOD-BAD scale for electrolytics.

Instrument has line voltage regulator with unique shadow type indicator.

Model 1241. Code—TRTYT
List—\$41.25 Net—\$27.50

Modulation Monitor

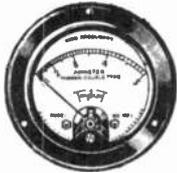


Model 1295 Unit

Actual modulation percentage of radio transmitters is shown on the direct reading dial. Eliminates uncertainty of depending on the ear, variation of antenna ammeter or the loop and light in determining carrier shift and percentage of modulation. Scale indicates modulation from 40 to 120 per cent. All readings are in peaks. Visual information provided on a second dial for carrier reference level for modulation test and also to check carrier shift during modulation. Model 1295 has a twin instrument, tilting type, with two separate movements. It is factory calibrated and no further calibrations are needed. Shpg. wt. 11 lbs.

1295 Unit. Code—TRKKY
List—\$37.25 Net—\$24.83

TRIPLETT TESTING EQUIPMENT



THERMO AMMETERS † High Frequency. Accuracy 2%

Triplet Thermo Ammeters are supplied in Models 241, 341. These models correspond in size, etc., to corresponding D.C. models. All have molded cases. Have external couples which withstand 50% overload connected to meter with 2 ft. leads. Couples are easily replaced when necessary. Internal couples to order.

Range	Approx. Res.
0-1 Amps.	.35
0-1.5 Amps.	.21
0-2.5 Amps.	.13
0-5 Amps.	.06

External Couples only, for any Model. List Price ...

Code	List
TORUN	8.75
TITIE	8.75
TODDY	8.75
TOLYL	8.75

Code	List
TONZA	\$10.00
PIZZA	10.00
TESTA	10.00
TOUGH	10.00

UNIVERSAL A.C.-D.C. METER (COPPER-OXIDE TYPE)

D. C. 2% Accuracy. A. C. 5% Accuracy. The A. C. scale has 75 divisions marked 0-15 in red. The D. C. scale is similar but printed in black. The ohm scale reads 0-1500 in black and 0-1.5 megohms in red. With multipliers, scale readings are 15-150-750 volts. A. C. or D. C. at 1000 ohms per volt resistance. D. C. Milliampere readings are 15-150. The copper-oxide unit is employed in what is regarded as the most advanced circuit, minimizing losses in rectification. This unit with a D. P. D. T. toggle switch for A. C. or D. C. is housed with shunts for the 0-4 milliammeter in a separate case suitable for panel mounting and having four connections, 2 each for A. C. and D. C. A 12" lead connects to meter.



Universal Model 321 Meter (0-4 M. A.) with copper-oxide unit and switch complete. Code—TRIOS. List Price \$15.00

VOLT-OHM-MILLIAMMETER

Model 321—(Scale reads 30-300-600 volts; 30-300 milliamperes; 100,000 ohms.) Code—TRIES. *3. List Price \$7.50

Model 321—(Scale reads 10-50-250-500-1000 volts; 10-50-250 milliamperes; low ohms .2 to 500; high ohms 100 to 100,000.) Code—TABOR. *3. List Price \$7.50

33 1/3

TUBE TESTER



Model 1310 is a 1937 improved emission-type tester—conforming to all standards of good engineering practice. Accepts and rejects all glass, glass-metal or metal tubes according to their GOOD or BAD values. Simple to operate. The four controls are: Load, Tube Selection and Shorts, Line and Filament Voltages. Supplies separate diode test.

Furnished in a beautiful modernistic, two-tone walnut case with sloping panel, and metal tube reading charts. Case measures 11x8 1/2 x 8 ins. with removable cover for either portable or counter use.

Shipping Wt. 18 lbs.

Model 1310. Code—TROGS. List Price—\$40.75 Net Price—\$27.17

MASTER UNIT TEST SETS



A complete portable radio servicing laboratory. Includes Models 1200-A Volt-Ohm-Milliammeter, 1210-A Tube Tester; 1220-A Free Point Tester and 1231 Direct Reading All-Wave Signal Generator in the 1204 case.

1206 Complete. Code—TROMB. Shipping Wt. 37 lbs. List Price—\$132.75 Net Price—\$88.50

1207, as above, but with Model 1232. Code—TWINE. Shipping Wt. 37 lbs. List Price—\$135.50 Net Price—\$90.33

1205-A, same as 1206, but has Model 1230. Code—TRIED. Shipping Wt. 36 lbs. List Price—\$119.50 Net Price—\$79.67

MASTER UNIT CASES

1201 Case only, for single Master Unit. Code—TRENT. Shipping Wt. 5 lbs. List Price—\$6.00 Net Price—\$4.00

1202 Case only, for two Master Units. Code—TREEN. Shipping Wt. 8 lbs. List Price—\$7.00 Net Price—\$4.67

1203 Case only, for three Master Units. Code—TREAD. Shipping Wt. 11 lbs. List Price—\$8.00 Net Price—\$5.33

1204 Case only, for Master Test Set. Code—TRAWL. Shipping Wt. 13 lbs. List Price—\$9.00 Net Price—\$6.00

MULTI-PURPOSE TESTER



Applies proper D. C. voltages to tube elements. Includes test for rectifier tubes and separate diode test. Supplies pulsating signal to C.G. and indicates tube values on the GOOD-BAD scale. Neon inter element short test (made while tube is hot) detects even the slightest leakage. Has shadow-graph line voltage indicator. When new tubes are released up-to-date tube charts are provided. Furnished in a highly attractive quartered oak case. Panel is attractively etched, natural silver background with sunken black lettering. For portable or counter use. Case measures 15 1/2 x 11 1/2 x 7 1/2 ins. Shipping Wt. 26 lbs.

Model 1502. Code—TUNIC. List Price—\$60.50 Net Price—\$40.33

POWER OUTPUT TUBE TESTER



Combines in one instrument the equivalent of nine separate units. Has the improved Model 1502 Power Output circuit.

Checks any type glass, metal-glass or metal tube for worth—Neon short test Separate diode test—Metered paper condenser test (for shorts and open)—Electrolytic condenser leakage test—D. C. voltmeter and milliammeter—Ohmmeter—A. C. voltmeter—decibel meter.

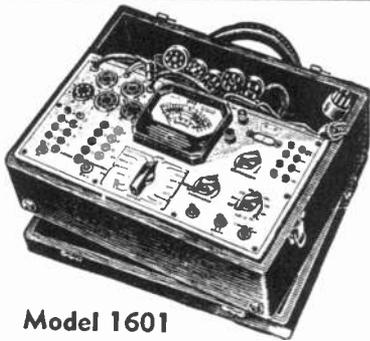
D. C. scale: 10-50-250-500-1000 volts, 1000 ohms per volt; 10-50-250 M. A.; ohms, .2 ohms to 10 megohms; 10-50-250-500-1000 A. C. volts at 400 ohms per volt; down 10 and up 15 decibels. Shadowgraph line voltage indicator. Case same as Model 1502. Shipping Wt. 26 lbs.

Model 1503. Code—TROTH. List Price—\$77.00 Net Price—\$51.33

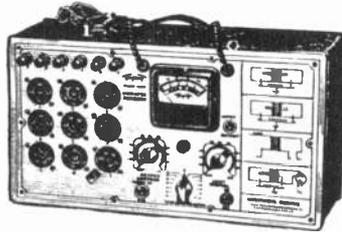
Model 1504, same as 1503 but with complete Free Point Set Tester in side panels. Shipping Wt. 28 lbs.

Code—TRIMM. List Price—\$93.50 Net Price—\$62.33

TRIPLETT TESTING EQUIPMENT



Model 1601



Model 1670

MODEL 1601 DELUXE SET TESTER

MEASURES: D.C. volts 10-50-250-500-1000-2000 at 25,000 ohms resistance per volt; A.C. volts 10-50-250-500-1000-2000 at 1000 ohms resistance per volt; 250 D.C. microamperes; 1-10-50-250-500 D.C. MA.; 1, 2 and 20 D.C. amperes.

RESISTANCE: 0 to 500 low ohms, backup circuit; 0-20,000 and 0 to 200,000 ohms, 2 and 20 megohms.

CONDENSER TESTER: Ranges .001 to 30 microfarads. Also electrolytic leakage test.

DECIBEL METER: Down 10 and up 15.

FREE POINT TESTER: Makes all series and parallel meter connections through five sockets, with standard R.M.A. markings.

MODEL 1601 CASE: Attractively colored leatherette case with removable cover. Has carrying compartment for all accessories. Dimensions when closed: 15 1/2 x 12 x 6 3/4 in.

Model 1601—Batteries, all accessories and complete instructions are included.

List Price \$74.00 (complete in leatherette case) Code—TYTER
 Also supplied in Deluxe Line metal case with black wrinkle finish and chromium panel borders. Attached carrying handle. Dimensions: 14 1/2 x 7 3/4 x 4 1/2 in. Code—THIAB
 List Price \$68.00 (in metal case) Net Price \$45.33

VIBRATOR TESTER — MODEL 1670

Model 1670 tests automotive and home battery radio receiver vibrators under actual performance conditions. Load of 5,000 ohms, recommended by vibrator engineers, is applied. Has been designed in cooperation with laboratories of leading manufacturers of vibrator testers.

Three scale instrument: 0-10 volts scale shows input voltage to the vibrator; GOOD-BAD scale for output; scale marked 0-100 per cent shows per cent of output voltage as reflected by the change in input voltage.

Low damped meter permits needle to follow voltage fluctuations caused by faulty vibrator contacts.

Supplied in metal case with attractive black wrinkle finish. Size: 14 1/2 x 7 3/4 x 4 1/2 in. Model 1670—(Complete in metal case) Code—TIARB
 List Price \$36.00 Net Price \$24.00

Model 1670 Vibrator tester also may be obtained in the DeLuxe leatherette covered case. Cover is removable. Dimensions when closed, 15 1/2 x 12 x 6 3/4 in.

Model 1670—(Complete in leatherette case) Code—TALER
 List Price \$42.00 Net Price \$28.00

25,000 OHMS PER VOLT MASTER TESTER



Model 1200E

A new Master Volt-Ohm-Milliammeter with D.C. instrument for 25,000 ohms per volt testing. For all D.C. measurements requiring a minimum of current draw.

Has two precision instruments (A.C. and D.C.) in the exclusive Triplett tilting type twin case. D.C. 25,000 ohms per volt—50 microamperes—Resistance readings to 40 megohms—Backup circuit for low ohms.

Scales read: D.C. 10-50-250-500-1000 volts at 25,000 ohms per volt; 50 microamperes; 1-10-50-250 milliamperes; low ohms, 1/2 to 1000; high ohms, 40,000 ohms; 4 and 40 megohms; A.C. 10-50-250-500-1000 volts.

New arrangement of shunts provides maximum switch contact accuracy. Separate instruments in the twin case provide for greater accuracy; less chance of damage to movements. Accuracy within 2 per cent A.C. and D.C. Markings for ohms scales in straight lines, avoiding errors. Separate adjustments for each ohms scale. Selector switch for all readings. Exclusive tilting feature permits instant adjustment of scales to any angle in direct alignment with the reader's line of vision.

Furnished in regular Master Unit metal case, 7 1/2 in. x 6 1/2 in. x 4 1/2 in. Black wrinkle finish. Panel is etched-silver and red on black.

Model 1200-E Code—TWARB List Price \$46.75
 Net Price 31.17

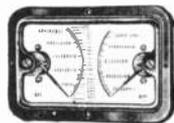
POCKET VOLT-OHM-MILLIAMMETER

Model 666

An actual pocket-size Volt-Ohm-Milliammeter in black molded case with A.C. and D.C. voltage ranges, D.C. milliamperes range and a selector switch for all instrument readings. Has low and high ohms scales for testing resistances. . . . Small enough to be carried conveniently in the coat pocket yet has all the advantages of larger multimeters. Provides measurements for every requirement of the serviceman—in the home or shop. Also an indispensable extra-utility instrument for laboratory experimenters, radio amateurs and manufacturers. . . . Scale length corresponds in size to that of Triplett three inch instrument. Ranges: D.C. 10-50-250-500-1000 volts at 1000 ohms per volt; 1-10-50-250 M.A.; A.C. 10-50-250-500-1000 volts at 1000 ohms per volt; Low ohms 1/2 to 300; High ohms to 250,000. Provisions for external batteries for higher resistance measurements. Sturdy black molded case, 3 1/8 x 5 3/4 x 2 1/4 in. high. Panel is modernistic silver and black. Battery and test leads with alligator clips included. Shipping wt., 4 lbs. Code—TRYMA



Model 666 List Price \$22.50
 Attractive Leather Carrying Case, Model 669, Available.
 List Price \$5.50



TWIN INSTRUMENTS

THE TWIN is furnished in any combination of A.C. or D.C. instruments. Both are included in the special rectangular molded case that requires a minimum of space. Permits simultaneous readings on both instruments when connected in the same or separate circuits. Instrument scales are side by side making possible two distinct readings at a glance. Used to balance loads in three-wire circuits;

detect line fluctuations when load readings are taken; measure antenna and modulation current; determine filament and plate voltages and similar applications.

To determine List Price of Twin Instruments take the sum total list price of both instruments as supplied in Models 321 or 331.

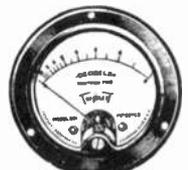
MODEL 1200-A KIT

Enables the engineer to build his own Volt-Ohm-Milliammeter. Has No. 120 Triplett Twin instrument with scale reading: D.C. 10-50-250-500-1000 volts at 2000 ohms per volt; 1-10-50-250 milliamperes; 1/2 to 500 low ohms by back up circuit; 1500 ohms; 1.5 and 3 megohms, A.C. 10-50-250-500-1000 volts. Also included in the kit are mounted resistors and shunts for the above readings; No. 121 Special Triplett Selector Switch; No. 124 .5 MFD Condenser for output measurements; No. 125 Rheostat Assembly; Complete set of diagrams and instructions; Hook-up wire; Complete set of hardware; Marked panel plate; Test leads.

Model 1200-A Kit—Complete. Code: TRIPS. List Price \$27.50
 No. 120 Twin Instrument only List Price \$15.50
 (for above kit.)

POWER LEVEL INDICATORS

Used to measure sound or noise levels in amplifiers for Public Address, Theaters, Broadcasting Studios, Broadcasting Station Equipment, etc. The Decibel Meter permits the operator to make instant adjustments to prevent sound hissing or distortion. Furnished in two ways—either standard or highly damped. Standard range furnished reads up 6 and down 10 decibels, zero decibel at 173 volts, 500 ohm lines, 6 milliwatts. Standard damping furnished, unless highly damped is specified. Other ranges to order only.



Model 321—Up 6 down 10 Decibel Meter. Code—TAINT. List Price \$18.00

READRITE TESTERS

SINGLE TESTERS AND COMBINATIONS



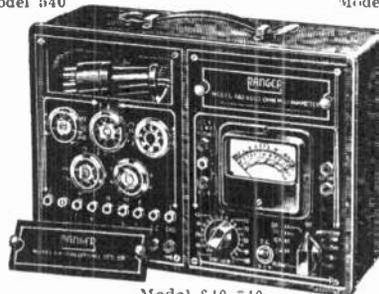
Model 440

MODEL 440 TUBE TESTER

Checks all tubes speedily and accurately. Has direct reading GOOD-BAD scale Model 221 Triplet instrument. Proper load values are applied to tube; under test. The circuit is designed to indicate all inter-element shorts and leakages. Four flush mounted sockets provide for the various tubes, one 5-6 in combination to minimize panel space. Unique illuminated dial A.C. meter for line volts adjustment which also serves as visual indication when tester is connected to power supply. Attachment cord is held in place when transported by wrapping around the handle. Approx. shpg. wght., 12 lbs.
Model 440. Code RAHAB List Price \$31.50
Dealer's Net Price—\$18.90



Model 540



Model 640-740

MODEL 440-540—Code—RACER
 Approximate shipping weight, 21 pounds.
Dealer's Net Price.....\$36.90
List Price.....\$61.50
MODEL 640-740—Code—RENAN
 Approximate shipping weight, 16 pounds.
Dealer's Net Price.....\$28.35
List Price.....\$47.25
MODEL 440-740—Code—RAPID
 Approximate shipping weight, 20 pounds.
Dealer's Net Price.....\$36.90
List Price.....\$61.50
MODEL 540-740—Code—RECTO
 Approximate shipping weight, 19 pounds.
Dealer's Net Price.....\$37.50
List Price.....\$62.50

MODEL 540 SIGNAL GENERATOR

This All-Wave Direct Reading D.C. oscillator has new plug-in coils, peaked with trimmer condensers and individually calibrated to exceptionally low tolerances. Five frequency bands from 110 to 20,000 Kc.—all fundamentals. Greater accuracy is assured also by the absence of switch contacts, and short grid wire connections. Guaranteed accuracy is 1% from 110 to 3000 Kc.; 2% for higher frequencies. Completely shielded for static and magnetic fields. Attenuation and stability are outstanding features. Strong signals, both modulated and unmodulated, are provided. Three 1½ volt unicells, 45 volts of B batteries and two type 30 tubes are included with necessary accessories. Handy compartment, with snap-on cover, for accessories. Approx. shpg. wt., 11 lbs.
Model 540. Code RAMUS. List Price \$32.50
Dealer's Net Price—\$19.50

Mod. 740 VOLT-OHM-MILLIAMMETER

Has 3 in. square Triplet precision instrument with scale readings: 10-50-250-500-1000 A.C. and D.C. volts at 1000 ohms per volt; (D.C. Accuracy 2%; A.C. 5%); 1-10-50-250 D.C. milliamperes; low ohms, 0-300; high ohms to 250,000 at 1.5 volts. Provisions for resistance readings up to 2.5 megohms; by adding external batteries. Measures low ohms with 25 ohms in center of scale, giving good meter deflection down to ½ Ohm. Low loss switch contacts. Long battery life is assured by low current draw not exceeding 1 milliampere. Handy compartment, with snap-on cover, for accessories. Approx. shpg. wght., 9 pounds.
Model 740. Code REDAN List Price \$32.50
Dealer's Net Price—\$19.50



Model 640

MODEL 640 FREE POINT TESTER

Generally used with Model 740 Volt-Ohm-Milliammeter. Has five sockets with standard R. M. A. markings for servicing sets using any type tubes. Panel includes eight automatic switch type and ten single action jacks. Extra connections can be made, when necessary, at very slight cost. All series and parallel instrument connections are made through the set sockets to any part of the circuit. Handy compartment, with snap-on cover for accessories. Approx. shpg. wght., 8 pounds.

Model 640 Code RATAN List Price \$17.25
Dealer's Net Price—\$10.35

DIRECT READING TUBE TESTER



Model 430

An up-to-the-minute tube tester, designed to check all tubes speedily and accurately on Direct Reading GOOD-BAD meter scales. This latest model applies the proper load to tubes under test. Five flush mounted sockets provide for various tubes without use of adapters. Lamp used to illuminate special shadow type A.C. line voltage adjuster meter also indicates when tester remains connected to power supply. Tester circuit designed to indicate all inter element shorts and leakages. Attractive oak case and sloping silver and black etched metal panel. Removable cover makes tester equally satisfactory for counter or portable use. Up-to-date tube charts furnished to all registered users. Shipping weight 10 lbs.

Model 430—
Code: REPLY List Price \$33.00
Dealer's Net Price \$19.30
 Same as model 430, but with Readrite meter having GOOD-BAD Direct Reading Scale. Shipping weight, 10 lbs.
Model 431—
Code: RENEW List Price \$26.50
Dealer's Net Price \$15.90

D.C. POCKET VOLT-OHM-MILLIAMMETER



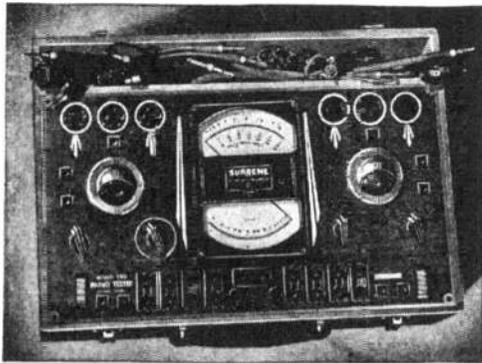
Model 735

Model 735 is a pocket size D.C. Volt-Ohm-Milliammeter with selector switch, black molded case with all corners nicely rounded and ranges comparable to those of larger multimeters. Can be carried easily in the coat pocket. Provides measurements for all essential requirements of the serviceman on home calls and is suitable for extra utility use in the shop and laboratory. Ranges are 15-150-750 volts at 1000 ohms per volt; 1.5-15-150 M.A.; ½-1000 low ohms; 0-100,000 high ohms at 1.5 volts. External batteries may be used for higher resistance measurements. Has Triplet D'Arsonval type precision instrument with readings accurate within two per cent. Selector switch for all ranges and individual zero adjustment for resistance measurements. Sturdy black molded case 3 1/16" x 5 7/8" x 2 1/4" high. Attractive silver and black etched panel. Battery and test leads with alligator clips are included. Approximate shipping weight, 8 pounds, 4 ounces.

Code:REGAL
Model 735..... List Price \$18.00
Dealer's Net Price 10.80

SUPREME TESTING EQUIPMENT

MODEL 550 ANALYZER



Model 550

The Model 550 is the most complete analyzer available. Has new Supreme quadrimeter with double, illuminated windows and Bi-indicating needle.

By the use of two multi-contact switches it may be connected so as to obtain the following 41 ranges and functions: 0/7/35/140/350/700/1400 A.C. volts, 0/7/35/140/350/700/1400 D.C. volts, 0/7/35/140/350/700/1400 mils., D.C. 0/14 ampere D.C. (external only), capacity measuring ranges of 0/0.07/0.35/1.4/3.5/7.0/14.0 mfd., 0/2000/20,000/200,000/2,000,000/20,000,000 ohms, —10 to +6 D. B., 0 to +16 D. B., +10 to +26 D. B., +20 to +36 D. B. and +30 to +46 D. B. and six output ranges 0/7/35/140/350/700/1400 A.C. volts. Electrostatic capacitor leakage check, self-contained power supply, electrolytic filter capacitors tested at rated voltage and leakage read on meter, ohms scale with "zero ohms adjuster", provisions made for blocking D.C. potential from metering circuits for output measurements. Complete Supreme Free Reference Point System of analysis through one cable. Antique bronze metal panel $\frac{1}{8}$ " thick. Handsome Golden Oak case with removable lid. Complete with all accessories, instruction manual and necessary adapters.

Dealer's Net

\$55.95

Code—DERAD

MODEL 500 AUTOMATIC

For the service engineer who requires not only a modern tube testing instrument, but also additional multi-meter functions. The SUPREME Model 500 Automatic is designed around SUPREME'S ultra-modern Quadrimeter with its Bi-Indicating Needle and Dual viewing windows which are indirectly illuminated. Tests all tubes for quality on English reading scale, and under correctly rated loads. Only six sockets for all tests including octal tubes with filaments terminating at any two positions, by means of exclusive "Floating" filament return selector switch circuits. Simple, accurate line voltage adjustment. Separate tests of all elements of multi-element and multi-purpose tubes, diodes, detectors and full wave rectifiers. Full size neon lamp used for hot leakage tests between any two elements. Detects open elements. Tests all latest tubes including cathode ray indicator types. Four A.C. voltage ranges 0/7/140/700/1400 volts; four D.C. voltage ranges 0/7/140/700/1400 volts; four D.C. milliamperage ranges of 0/7/140/700/1400 milliamperes; five ohmmeter ranges 0/2,000/20,000/200,000/2,000,000/20,000,000 ohms; three D. B. ranges —10 to +6, 0 to +16, and +10 to +26 D. B.; four output ranges 0/7/140/700/1400 A.C. volts. Electrolytic capacity leakage on colored "Bad-Good" English reading scale. Electrostatic capacity leakages with full size neon bulb.

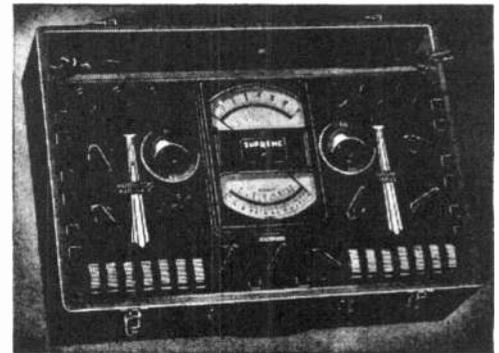
Panel of rich Antique Bronzed metal— $\frac{1}{8}$ " thick.

Mounted in beautifully finished Golden Oak carrying case with slip-hinged cover, all necessary accessories, instruction sheets and tube chart.

Dealer's Net

\$66.95

Code—AUTOM



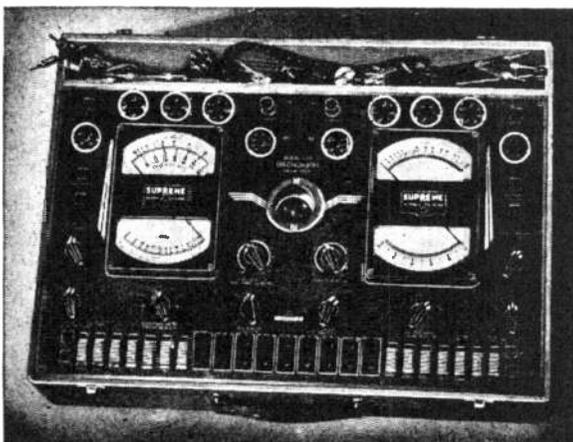
Model 500

MODEL 585 DIAGNOMETER

Combines the most advanced analyzing, set testing and tube testing circuits in one complete instrument. Uses two Supreme Quadrimeters with illuminated scales. By using two multi-point switches, the following 42 ranges may be obtained: D.C. volts of 0/7/35/140 350/700/1400, A.C. volts of 0/7/35/140/350/700/1400, D.C. mils. of 0/7/35/140/350/700/1400 and 0/14 ampere (external only) D.C., capacity measuring ranges of 0/0.07/0.35/1.4/3.5/7.0/14.0 mfd., resistance measuring ranges of 0/2,000/20,000/200,000/2,000,000/20,000,000 ohms, D. B. ranges of —10 to +6, 0 to +16, +10 to +26, +20 to +36, +30 to +46 D. B. and six output ranges of 0/7/35/140/350/700/1400. English reading tube testing scale in colors. English reading electrolytic capacity leakage scale, and 0 to 200 ohms low range ohmmeter powered from self-contained battery. Forty-two multi-meter functions and ranges in all! The tube testing circuits are the same as the Model 500 Automatic which results in a 5 way test of (1) leakages, (2) shorts, (3) opens, (4) quality and (5) sectional quality tests. Uses SUPREME Free Reference Point System of analysis in analyzer circuits the same as the Model 550 and 551. Antique bronze panel. Golden Oak carrying case. All instructions and necessary accessories.

Dealer's Net

\$96.95



SUPREME TESTING EQUIPMENT

MODEL 551 ANALYZER

Cut the time necessary to find radio troubles—use the new Model 551 Analyzer which incorporates Supreme's exclusive "Free Reference Point System of Analysis." By this method, all resistance, voltage and current measurements may be taken between any two tube elements or between any tube element and ground or chassis without the necessity of turning over the receiver. Why "Get out and get under" a radio chassis? If you'd like, you can still use the Model 551 as a multimeter, for you have all the point-to-point functions and ranges of the Model 544 Set Tester—20 in all—including 0.2 to 1400 A.C. volts in four ranges; 0.2 to 1400 D.C. volts in four ranges; 0.2 to 140 D.C. ohms in three ranges; 0.2 to 1400 A.C. volts in four output ranges (without the necessity for an external series capacitor); and 0.1 ohm to 20 megohms in five ranges (all self-contained).

This combination of ranges and functions, together with SUPREME'S "Free Reference Point" System allows you to literally spread out the radio receiver's circuit on the analyzer panel, eliminating costly delays in physically breaking each individual circuit for correct measurements, or fishing around underneath the chassis for point-to-point test.

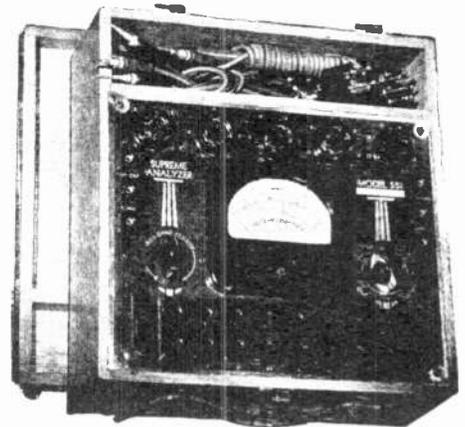
The Model 551 comes completely equipped with all accessories and operating data. It is mounted on a rich Antique Bronze panel and housed in a Golden Oak carrying case. For 100 to 125 volt—60 cycle supply unless otherwise ordered at slight additional cost.

(Can be obtained with 25,000 ohms per volt super-sensitive meter as \$5.00 additional.)

Dealer's Net

\$38.95

Code—ANAL



Model 551

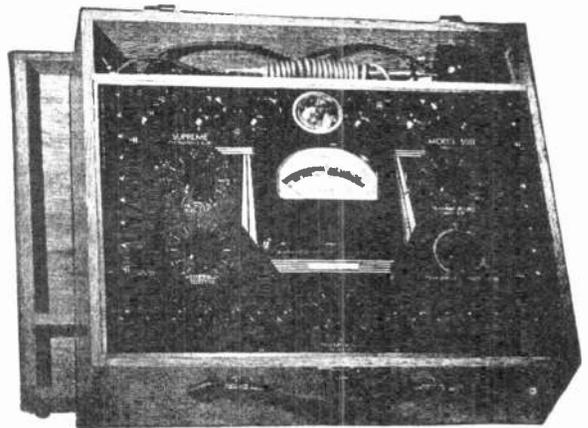
MODEL 502 — TUBE TESTER

When we say that the Supreme Model 502 is the answer to a serviceman's dream come true, we mean just that. Here is an instrument which is not only a complete tube tester, but a set tester as well! The basic tube testing circuit is the same as the Model 501. This means that the Model 502 uses the new SUPREME Electro-Conductance tube test for all quality tests of separate diode and rectifier plates as well as individual tube sectional and complete tube element quality tests. It also means that the Model 502 includes inter-element leakage checks between any two elements, an open element test in each tube element and a short test between any two tube elements. The Model 502 also uses the obsolescence proof "Floating Filament" Selector and associated circuit.

Besides all this, the Model 502 offers 19 additional ranges and functions including four A.C. voltage ranges of 0.7/140/350/1400 volts, measuring as low as 0.2 volts; four D.C. voltage ranges of 0.7/140/350/1400 volts, measuring as low as 0.2 volts; three ohmmeter ranges of 0.2/200/2,000/20,000 ohms, measuring as low as 0.1 ohms with 3.5 ohms at center scale; two megohm ranges of 0.2 meg/20 meg., all with self-contained power supplies; an Electrostatic capacitor leakage test on a neon bulb; and an Electrolytic Filter capacitor leakage test directly on a "Good-Bad" English Reading meter scale.

Just imagine this superb instrument housed in a Golden Oak carrying case and mounted on an Antique Bronze panel. Remember, the complete instrument weighs only 16 pounds and measures overall but 10½ in x 14½ in. x 5 in. Comes complete with all instructions and tube list for 100 to 133 volts, 60 cycle unless otherwise ordered at slight additional cost. (Can be obtained with 25,000 ohms per volt super-sensitive meter . . . \$5.00 additional.)

Code—TUMJL



Model 502

Dealer's Net

\$49.95

MODEL 501 — TUBE TESTER

Every serviceman wants a tube tester which quickly, accurately and authoritatively tests tubes. Why? Because it actually results in more tube sales. That's the idea behind the NEW SUPREME Electro-conductance tube tester. No one tube test will prove satisfactory! So, the Model 501 incorporates five possible tests: (1) inter-element leakage between any two tube elements, (2) open element test in each tube element, (3) short check between any two elements, (4) quality test of complete tube elements—and (5) in multi-section, or full wave rectifier tubes, separate sectional or plate quality tests. Five possible tests on every tube! You can't go wrong!

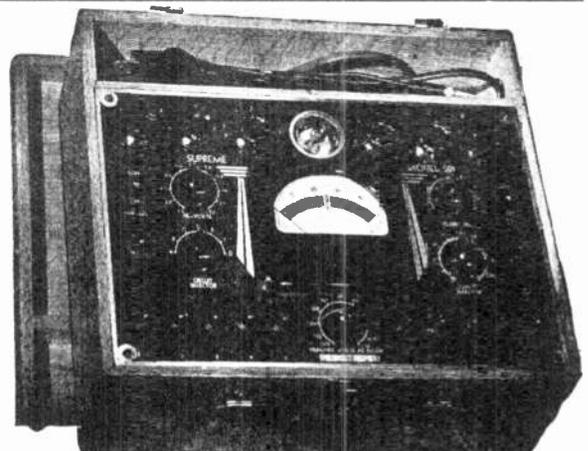
Remember, trick tube connections such as the 6P7 with filaments terminating on No. 2 and No. 3 pins, the 6A5 with its cathode connected internally to its heater center and also brought out to No. 8 pin, or the 5X4 and 5Y4 with filaments terminating on No. 7 and No. 8 pins do not require complicated treatment on the 501. All present types of receiving tubes can be tested—"M" types—"MG" types—"G" types—octal—non-octal—spray shield or plain glass. And—best of all—Supreme owners are protected from early obsolescence by our "Floating Filament" Selector which can apply filament voltage to any two pin terminations including "top cap." No multiplicity of sockets—just six in all—no adapters—no confusion.

The Antique Bronze panel and Golden Oak carrying case result in an instrument with "Sales Appeal—Plus." Complete operating data, tube lists and accessories. For 100 to 133 volt, 50/60 cycle unless otherwise ordered at slight additional cost.

Dealer's Net

\$36.95

Code—TUBET



Model 501

HICKOK TESTING EQUIPMENT

MODEL AC 51X DYNAMIC MUTUAL CONDUCTANCE TUBE TESTER

With Volts, Ohms, Milliamperes, Capacity, Condenser Leakage, Output, Inductance and Decibel Readings

D.M.C. IN MICROMHOS—ALSO "GOOD," "REPLACE," "DOUBTFUL." INDICATES ALL OTHER VALUES NECESSARY FOR PORTABLE RADIO SERVICING

COMPARE THESE FEATURES:

1. True Dynamic Mutual Conductance.
2. Sufficient plate current to accurately check both emission and mutual conductance.
3. Each tube element receives proper voltage, D.C. applied to plate and grid.
4. Checks gas content on meter.
5. Detects both short and open elements.
6. Elements tested separately in multi-element tubes.
7. Short tests made hot or cold.
8. Selector switches take care of all tubes.
9. Meter not affected by amount of plate current; only by Gm.
10. SELLS MOST TUBES—CULLS THEM CLOSER. Obsolescence eliminated.
11. Ninety-four unused switch position for future tubes, only 50 used. All positions wired.
12. Tests Diode plates separately.



Size, AC51X: 14"x 13 3/4"x6" deep. Sliding panel. Hardwood case, beautiful rubbed walnut finish. Shipping wt. 23 1/2 lbs.

- FOR THE SET TEST SECTION
13. A.C.-D.C. Volts: 0-20, 200, 500, 1000 in five overlapping ranges. Same scale for A.C. and D.C. UNIFORM SCALE.
 14. D.C. Milliamperes: 0-20-200 direct.
 15. Ohms: 1 to 5 megohms in 3 overlapping ranges. NO BATTERIES USED.
 16. Capacity: .00025 to 24 mfd. Checks leakage in electrolytic condenser with POLARIZING VOLTAGE.
 17. A.C. Voltmeter can be used to read OUTPUT.
 18. A.C. Voltmeter accurate on AUDIO FREQUENCIES.
 19. Instructions supplied for reading DECIBELS.
 20. Checks inductance of chokes with or without D.C. COMPONENT OF CURRENT.
 21. No copper oxide rectifiers insure permanency of calibration.
 22. Measures hum in filter systems—EXCLUSIVE FEATURE. Note extra large new square HICKOK meter. Scale length over 3 3/4".

Dealer's Net Price complete, \$59.40

110 volts, 50 or 60 cycles (specify frequency)

(220 volts. or 25 cycle types) \$3.00 net extra

MODEL 4900S D.C. POTENTIOMETER TYPE ZERO CURRENT VOLTMETER—INFINITE OHMS PER VOLT

As every service man knows, modern receivers with high fidelity audio circuits, effective automatic volume control, automatic frequency control and silencing circuits, make use of numerous networks of high resistance in which, at times, currents of only a few microamperes flow. If an attempt is made to determine voltage in portions of these networks with a conventional voltmeter, not only is the voltage observed incorrect but in too many cases the act of connecting the voltmeter so disturbs conditions within the circuit as to make all observations of voltage or current valueless.

To appreciate the extent of these disturbances it is necessary to consider only two typical examples involving two opposite sources of error. In Figure 1 is shown a typical case of measurement where constant current is involved. It is assumed that in a portion, A-B, of a circuit the current is limited to substantially a constant value of 20 microamperes by high impedances elsewhere in the circuit. From Ohms Law it is seen that the voltage developed across the 100,000 ohm resistor R will be 2 volts. However, if an attempt is made to measure this voltage with a voltmeter having a range of 10 volts full scale and a sensitivity of 1000 ohms per volt the meter will constitute a shunt of 10,000 ohms in parallel with R. From the formula for the equivalent resistance of two parallel resistors:

$$R = \frac{r_1 \times r_2}{r_1 + r_2} = \frac{100,000 \times 10,000}{100,000 + 10,000} = 9,090 \text{ ohms.}$$

Thus the resistance between A and B has been reduced from 100,000 ohms to 9,090 ohms and, with a current of 20 microamperes, the voltage will be 0.182 volts which is less than ten percent of the voltage before the meter was connected.

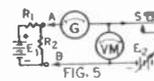
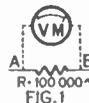
It is obvious that if the resistance of the meter is increased the error will be reduced. It is interesting to calculate the result with a meter of 20,000 ohms per volt. In this case the meter resistance will be 200,000 ohms, the equivalent resistance of the parallel circuit 68,600 ohms and the voltage with the meter connected will be 1.33 volts. The error is 33 per cent.

However, it will be noticed in the examples given that as the meter resistance is increased the effect on the circuit and the resulting errors are decreased. From this it would appear that as the meter resistance approaches infinity the cumulative errors will reduce to zero. This is exactly what happens. The problem then is to build a meter which has an infinite resistance and will draw no current from the circuit to which it is connected. The Potentiometer method of voltage measurement has long been recognized as the only accurate means of measuring voltage in the cases illustrated in the above examples. Heretofore potentiometers have been available commercially only in the form of extremely accurate laboratory instruments which required rather complicated and tedious adjustments.

The infinite resistance voltmeter of the Model 4900 is based on the principle of the potentiometer and includes many of its advantages but is very simple to operate. The fundamental circuit of the potentiometer voltmeter is shown in Figure 5. The measuring system consists of the galvanometer G, a voltmeter VM, and a source of variable voltage E2 connected as shown. It is shown connected to measure voltage in a network such as was shown



Size: 12 3/4"x10"x5". Wt.: 12 lbs.



In Figure 3 which consists of a source of unknown voltage E and resistors R1 and R2. Voltage is to be measured between A-B.

COMPLETE COVERAGE WITH THE FOLLOWING RANGES

- 0-10, 0-50 and 0-250 D.C. volts at an infinite resistance per volt.
- 0-2.5, 0-10, 0-50, 0-250, 0-500 and 0-2500 volts A.C. and D.C. at 1000 ohms per volt.
- 0-1, 0-5, 0-50, 0-500 A.C. and D.C. milliamperes.

Five overlapping ranges of resistance covering from .05 ohm to 10 megohms. Five overlapping ranges of capacity covering from .0001 mfd. to 200 mfd. Five overlapping ranges of output, 0-1000, volts, same as A.C. volt ranges. Indications accurate on any type of output circuit.

Complete instructions are included for measuring decibels in any type of audio circuit, for measuring leakage and capacity of mica, paper and electrolytic condensers, and for measuring inductance and impedance. All leads supplied will attach to Hickok Model 5200 Multi-Selector Unit—complete with instructions—book bound—containing all details. Capacity meter operates from 100-130 volt 60 cycle power source. Other voltages and frequencies supplied at small extra cost.

DEALER'S NET PRICE.....\$49.20

HICKOK TESTING EQUIPMENT

MODELS AC 51P and C DYNAMIC MUTUAL CONDUCTANCE TUBE TESTERS

The only dual reading unit made—Indicating D.M.C. in Micromhos—also how Good, Bad, Doubtful. New Roll type Chart Easy to Read and Replace.

FEATURES:

1. True Dynamic Mutual Conductance.
2. Sufficient plate current to accurately check both emission and mutual conductance.
3. Each tube element receives proper voltage.
4. Checks gas content.
5. Detects both short and open elements.
6. Elements tested separately.
7. Short tests made hot or cold.
8. Selector switches take care of all tubes.
9. Meter not affected by amount of plate current.

Ninety-six unused switch positions for future tubes. Only forty-eight used. All positions wired.

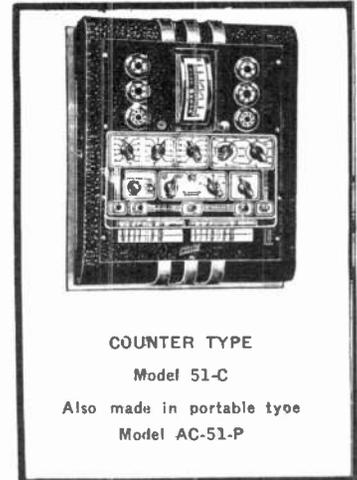
TECHNICAL DESCRIPTION OF AC51-C AND AC51-P TUBE TESTERS:

Rectified current is used to energize both plate and grid. Superimposed on the rectified voltage in the grid circuit is an alternating signal voltage. The large edgewise meter responds only to the change in plate current caused by the signal on the grid. The meter is not affected by the steady value of plate current, except in diodes and rectifiers in which plate current is indicated.

Size, AC-51-C: 14"x16"x6" deep at top. Sloping panel. Beautifully trimmed in chromium. Shpg. wt. 23 lbs.
Size, AC-51-P: 14"x13 3/4"x6" deep. Sloping panel. Hardwood case, beautiful rubbed walnut finish. Shg. wt. 23 lbs.

The AC-51 type testers are a truly Dynamic Mutual Conductance Tester. In twin and multi-element tubes, the components are tested separately, determining the dynamic mutual conductance of each component. In twin grid tubes each grid is energized separately, determining the relative function of each. Diode plates are tested separately.

DEALER'S NET PRICE, either type, 110 Volts, 50-60 cycles.....\$46.50



COUNTER TYPE

Model 51-C

Also made in portable type
Model AC-51-P

SIMPSON TESTING EQUIPMENT



215 AC-DC VOLT-OHM-MILLIAMMETER
5,000 OHMS PER VOLT

Incorporates all of the essential ranges for modern servicing, both A.C. and D.C. Large 4 1/2 in. meter with its long, easy to read scale permits close reading on all ranges. The first small, low priced instrument to incorporate this large meter, heretofore available only in Simpson set testers at higher prices.

Ranges: D.C. at 5,000 ohms per volt, A.C. at 1,000 ohms per volt.

VOLTS 0-2.5-10-50-250-1000 A.C.-D.C.
MILLIAMPERES 0-10-100-500
MICROAMPERES 0-250
DECIBELS (5 Ranges) -12 to +55

OHMS 0-4,000 (30 at center)
0-400,000 (3,000 at center)
0-4 Megs (30,000 at center)

Molded bakelite case is provided with leather handle. The rectangular meter case is also of molded bakelite. Handsome silver and black durable metal panel offers the rich contrast which is characteristic of Simpson test equipment. Supplied complete with pair of test prods.

Size: Width 5 1/2", Height 7", Depth 3"

Dealers' Net Price

\$25.75

205 DC-POCKET VOLT-OHM-MILLIAMMETER
5,000 OHMS PER VOLT

The "Baby" of them all. Smallest in size, but what a value. A modernistic ensemble incorporating the new Simpson 2 in. rectangular instrument with molded bakelite case and handsome, streamlined metal panel. The 200 microampere basic movement provides higher resistance ranges than have ever been available before in small instruments. All voltage ranges have a resistance of 5,000 ohms per volt. Slip it into your pocket and you're ready for most any emergency.

Ranges: D.C. only at 5,000 ohms per volt.

VOLTS 0-10-50-250-1000
MILLIAMPERES 0-10-500

Size: Width, 2 1/4 in. Length, 3 1/4 in. Depth, 1 1/4 in.

Furnished complete with pair of test prods.

Dealers' Net Price

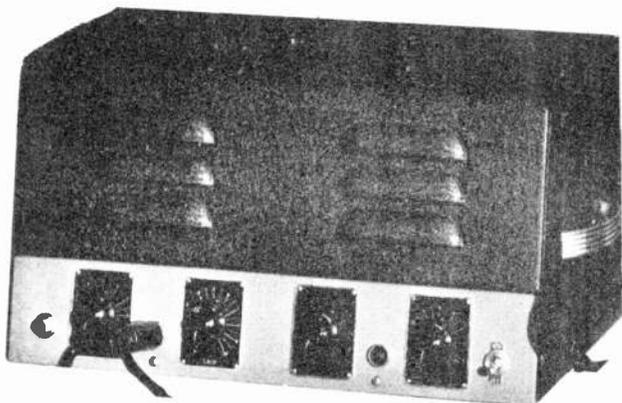
OHMS 0-2,000 (25 at center)
0-200,000 (2,500 at center)
0-2 Megs (25,000 at center)

\$13.25



R. T. AMPLIFIERS

The RT-25A 25 Watts Output
The RT-50A, 50 Watts Output



This amplifier is another of our products designed in our own laboratory. It is being used for modulating transmitters and for public address systems in schools, churches, auditoriums, night clubs, etc.

The RT-25A has high gain—sufficient for operating any type microphone. It is resistance coupled throughout, making for high fidelity and lack of hum from transformer pickup.

The amplifier has two inputs—one high gain for low level microphone, and one lower gain input for pickups, etc. Each has its own gain control, neither adjustment in any way affecting the other, so that both inputs may be used simultaneously if desired. A third master control adjusts the gain for the whole amplifier. This control is of the compensating type, tending to raise low frequency response at low volume. A tone control gives adjustment for any depth of tone desired.

The output transformer is of a universal type and various voice coil impedances can be had as well as a 500 ohm line. For use as a modulator, it may be coupled from the 500 ohm winding to RF load through a matching transformer. The amplifier has an output of 25 watts and will accordingly modulate an input of 50 watts 100%.

The tubes used are 1-6F5G, 1-6N7G, 2-6C5G's and 2-6L6G's. Output connections are brought out to a 7 prong socket with all impedances available at this point. A lead is also brought to this socket from the C.T. of the high voltage winding, so the amplifier can be "killed" while leaving the filaments on when desired.

When used for public address, a jumper is used across the plug, preventing damage to the amplifier by operation without the speaker plug being inserted. A speaker field is not required as part of the filter system, thus any type load may be used. A cushioned socket is used for the input tube, giving maximum freedom from microphonics.

The RT-25A is ideal for plate modulating the Bi-Push or any transmitter with similar power. The RT-25A will also grid bias modulate a kilowatt very satisfactorily.

The RT-25A also makes an ideal speech amplifier, and mixing panel, for the high power 'phone man. It is pleasing in appearance and symmetrical in design, and should look very well on any amateur's operating desk.

The RT-50A

Radio Television Supply Company offers the RT-50A which contains all of the same features as the RT-25A, but with a 50 watt output. It uses 4-6L6G's with transformers of corresponding rating.

Both of these amplifiers may be had in Kit form or wired and tested. All amplifiers are complete with tubes, standard output transformer, and the chassis is properly punched. We also furnish a circuit diagram with all Kits.

PRICES

RT-25A—(chassis 7x14x7 1/2" High).....KIT—\$29.50

RT-50A—(chassis 9x14x7 1/2" High).....KIT— 42.50



RT—25A wired — 44.50

RT-50A wired — 57.50



Modulations transformers for matching lines to RF loads. 500 ohm primary to 5000 - 6000 - 7000 - 8000 - 9000 - 10000 ohm secondary.

T-83M22 for the RT-25A — 4.80

T-73M52 for the RT-50A — 9.60

R. C. A. SOUND SYSTEMS

BEAM-POWER AMPLIFIER



MI 4264
Code SCUYP **\$36.50** Less tubes

Complete set of tubes \$4.45

12-WATT AMPLIFIER



12 Watts Undistorted Output—
19 watts maximum.

Two-Purpose Design — Operates from 6-volt storage battery and dynamotor or from regular 110-volt A-C. Excellent for mobile use.

All-Metal Tubes with Beam-Power Output Tubes. (Glass Rectifier.)

MI 4274 **\$78.60**
Code SCQOJ
less tubes
Complete set of tubes **\$10.60**

SPECIFICATIONS

Gain—95 db. at 1,000 cycles—250 ohms input
112 db. at 500,000 ohms input

Power Output—12 watts
Maximum Output—19 watts

Tubes—1 RCA-1612 2 RCA-6L6
 1 RCA-6X7 1 RCA-5Z3

Input Impedances—250 and 500,000 ohms

Output Impedances—2, 4, 7½, 15 and 250

Weight—Net, 17½ lbs.; Shipping, 22 lbs.

Power Required (Underwriters' Rating)—145 watts; average—118 watts; 105-125 volts—50/60 cycles

Dynamotor Required for 6-Volt Operation—350 volts—150 m.a.

Dimensions—14½" x 8½" x 8"

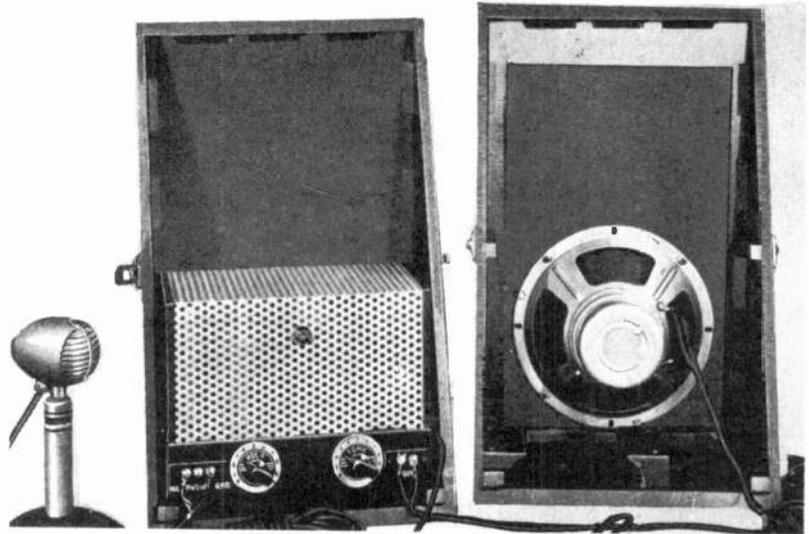
R. C. A. SOUND SYSTEMS

PORTABLE SOUND SYSTEM

PG 111

Portable Sound System

- Uses Beam-Power Output Tube
- Uses Permanent Magnet Speaker of High Sensitivity
- Tone and Volume Controls
- Complete in One Sturdy, Compact Case
- Total Weight Only 25 lbs.
- Uses RCA Aerodynamic Microphone
- Includes Phonograph Connection



\$99⁵⁰

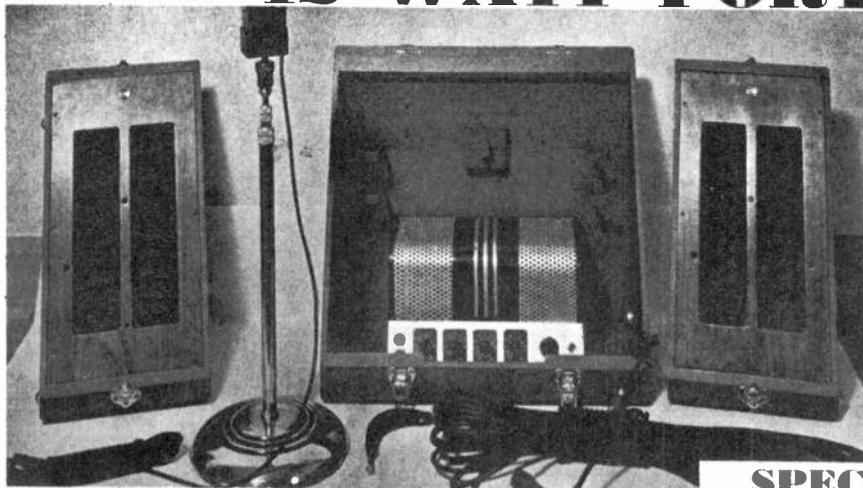
MI 4706, Complete with tubes.
Code SCWEV

SPECIFICATIONS

Amplifier Gain—110 db.—560,000-ohm input.
Frequency Response— ± 2 db. from 90-10,000 cycles.
Output—6 watts.
Tube Complement—1 RCA-79, 1 RCA-6L6, 1 RCA-80.
Input Impedance—560,000 ohms.

Output Impedance—Universal Transformer, 1 to 15 ohms.
Microphone—RCA Aerodynamic (high impedance).
Speaker—Permanent Magnet, 6 $\frac{1}{4}$ " diameter.
Net Weight—25 lbs.
Shipping Weight—32 lbs.

12-WATT PORTABLE



PG 112

Portable Sound System

- 12 watts—ample for most installations
- Mixes two microphone inputs
- Two input positions, one 250 ohms and one 500,000 ohms
- Tone Control and phonograph input jacks
- One attractive black leatherette case holds all equipment
- Uses RCA Velocity Microphone

SPECIFICATIONS

Two heavy-duty permanent magnet speakers, an attractive RCA Junior Velocity Microphone complete with chromium-plated adjustable stand for either floor or banquet use, and long inter-connecting cables, complete the PG-112 equipment and make it an outstanding RCA value.
MI 12750, complete with tubes — Code SCOWD.

\$199⁵⁰

Gain—95 db. at 1,000 cycles—250 ohms input; 112 db. at 500,000 ohms input.
Rated Output—12 watts, maximum 19 watts.
Tubes—1 RCA-1612, 1 RCA-6N7, 2 RCA-6L6, 1 RCA-5Z3.
Input Impedances—250 and 500,000 ohms.
Output Impedances—2, 4, 7 $\frac{1}{2}$, 16 and 250 ohms.

Power Required—145 watts, 105-125 volts, 50/60 cycles.

Dynamotor required for 6-volt operation. 350 volts, 150 m.a.

Cable Lengths—Microphone, 30 feet; Amplifier to first speaker, 35 feet; first speaker to second speaker, 50 feet.

Net Weight—60 lbs

Shipping Weight—66 lbs.

R. C. A. SOUND SYSTEMS

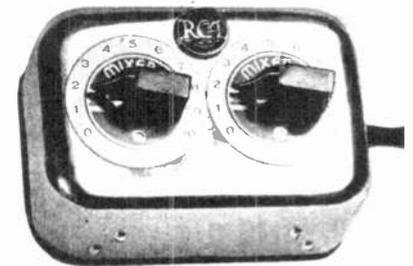
RCA 24-WATT AMPLIFIER



- Remote Electric Mixing — Another RCA First.
- Permits controls to be located any distance from microphone or amplifier.
- New, noiseless, high-level mixing circuits. Beam-Power output tubes—Inverse feedback circuit—Low distortion.
- Automatic bass compensation for phonograph.
- Two microphone pre-amplifiers—Microphone input jacks furnished.

\$133.50

(less remote mixing unit and tubes)
 MI 4284—Code SCQUP
 Complete set of tubes
\$15.60



Control Unit

This unit is plugged into the amplifier and may be used to mix the various inputs in any desired manner. It is a simple, compact unit of handsome appearance and may be placed on the orchestra leader's stand, in the back of an auditorium, or any convenient central location.

MI 4123-A Remote Mixing Unit complete with 30-foot cable. Code SCUSJ.....**\$24.25**

MI 4123 Remote Mixing Unit less cable. Code SCRUC.....**\$15.50**

MI 4685 50-foot Extension Cable with plugs. Code SCUWN.....**\$11.60**

For those who require up to 24 watts output, the RCA MI 4284 Amplifier is unexcelled. It incorporates the finest of circuit design, is ruggedly manufactured, and is extremely flexible in operation. Use of RCA long-life, conservatively operated metal tubes in all stages permits high gain without microphone and circuit noises. Matched circuits throughout insure maximum amplification without feedback. Other features include high quality, shielded input transformers for each cushion-mounted pre-amplifier, input mixing facilities for two or four positions, speech-music switch, continuously variable tone control and pilot lamp. The housing is designed along modern lines and is finished in silver gray and aluminum lacquer. Its distinctive controls and attractive appearance make it excellent for counter or window display purposes.

SPECIFICATIONS

- Gain—107 db. at 1,000 cycles.
- Frequency Response—70-10,000 cycles plus or minus 2 db.
- Power Output—24 watts.
- Tubes—2 RCA-1612, 2 RCA-6N7, 2 RCA-6L6, 1 RCA-5Z3.
- Input Impedances—2 250-ohm inputs.
2 0.5,600-ohm inputs.
- Output Impedances—4, 7½, 15, 60 and 250 ohms.
- Net Weight—25 lbs.
- Shipping Weight—30 lbs.
- Dimensions—16¼" x 8¾" x 8¼"
- Power Requirements—180 watts (155 watts normal), (Underwriters' Rating)—50/60 cycles—105-125 volts A-C.



Remote Electric Mixing

Remote electric mixing is a new RCA development which permits control of amplifiers and microphones from the most advantageous location, at any distance up to 2,000 feet from the equipment. It is accomplished by mixing and controlling electrically in the amplifier rather than in the signal circuits. Such control means that the control circuits handle simple D-C potentials that are not critical and may be of any desired length. Remote mixing is another of RCA's many contributions to the Commercial Sound field.

R. C. A. SOUND EQUIPMENT



RCA VELOCITY MICROPHONE

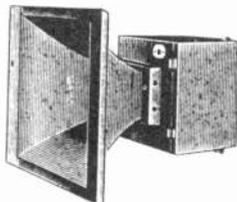
MI-4010-A This is the highest quality, low cost Velocity Microphone ever made available to sound engineers. The frequency range is so excellent that this microphone is rapidly replacing other types of microphones in use today. Highly favorable directional characteristics; high sensitivity and faithfulness of response. Frequency Range—50 to 10,000 cycles. Impedance—250 ohms and 16,000 ohms. Dimensions—2 3/4" wide, 2 3/4" deep, 6 1/2" long. Net Weight—2 pounds; shipping weight, 4 pounds. Finish—Durable Baked Wrinkled Gunmetal. Shielded Cable—30 feet with plug. Average Operating Level, —68 db.

LIST PRICE **\$43.50**

RCA DIRECTIONAL SOUND PROJECTOR

MI-1453/1425-A:

Wide angle projector, designed for high reverberation conditions. Excellent voice reproduction, with low frequency cut-off. Specially designed for public address work. Ruggedly constructed, and highly efficient. Delivers large acoustic outputs. Requires minimum amount of space—only 25". Efficiency, 25%. Distribution angle, 60°. Length 25", width 25", height 25". Net weight, 50 pounds. Shipping weight, 85 pounds. Material, wood. Finish, black.



LIST PRICE, Complete with MI-1425-A Speaker Mechanism **\$88.90**

MICROPHONE STANDS

STUDIO FLOOR STAND MI-4068 Its modernistic design makes it especially suited for Public Address or Studio work. The weight of the heavy base precludes all possibility of its being knocked over while in use. The height of the stand is adjustable from 37" to 67". An easily operated positive locking device holds the microphone at any desired height. Finished in statuary bronze; the base is of brown crackle.

LIST PRICE **\$18.75**

ADJUSTABLE BANQUET STAND MI-4065—Finished in statuary bronze. Adjustable from 11" to 16".

LIST PRICE **\$9.75**

TABLE STAND MI-4069—Gun-Metal finish, 11" in height.

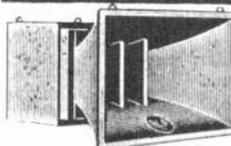
LIST PRICE **\$1.60**

MI-4056—Heavy, substantial Program Stand, bronze finish. Adjustable in height from 56" to 81". Dashpot device permits lowering the microphone smoothly and without jolting when the catch is released, and can be pocked in position.

LIST PRICE **\$55.55**

COLLAPSIBLE STAND MI-4059—Collapsible Microphone Stand for portable use. Weighs only three pounds, finished in oxidized bronze. Length; collapsed, 31"; extended, 72".

LIST PRICE **\$44.45**

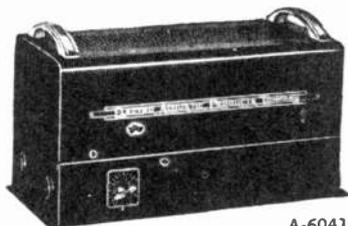


MI-4428 WOOD BAFFLE

A new RCA development. Semi-weatherproof wood baffle, with high-frequency equalizers. Will house either 8" or 12" Dynamic Speakers, and has a distribution angle of 90° horizontal and 50° vertical. Bell mouth size, 27 3/4" x 17 3/4". Depth of baffle, 27" overall. Bell, 15" deep. Speaker housing, 12" x 14 1/2" x 14 1/2". Acoustically treated. Finish, baked durable gray crinkle. Net weight, 28 pounds. Shipping weight, 53 pounds. Mounting, substantial eyelets provided.

LIST PRICE **\$22.50**

ELECTRO-ACOUSTIC SOUND EQUIPMENT



A-6041

DeLuxe Booster Amplifier 60 Watt "Beam Power" Type

Class "A" Power Amplifier: Designed for Heavy Duty Operation.

APPLICATIONS:

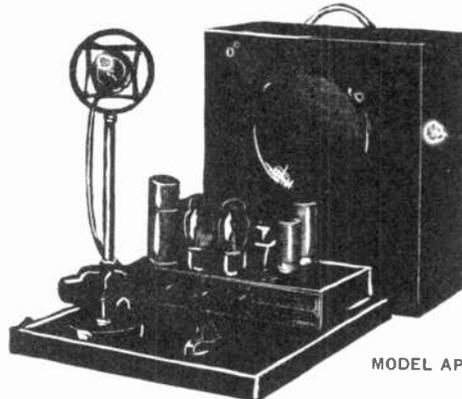
For all sound broadcasting requirements where high noise levels or an extended coverage area necessitates tremendous undistorted power output.

SPECIFICATIONS:

- Power Output**—Full 60 watts output at less than 7% harmonic content.
- Input**—Requires input signal of plus 18 db. (14 volts on 500 ohm line).
- Input Impedance**—10,000 ohms—may be fed by any amplifier having an output of 15 volts at any impedance up to 10,000 ohms.
- Output Impedance**—500-250-125 ohms (Adjustable externally).
- Controls**—Volume control only.
- Hum Level**—61.8 db. below full output.
- Power Supply**—105-120 volt 50-60 cycle AC.
- Tube Complement**—4-6L6's; 1-5U4G.
- Inputs**—1 for output of base system amplifier.
- Outputs**—3 for speakers.
- Field Supply**—None.
- Code: PORCA. Price less tubes.....**\$90.00**
- Kit of matched tubes.....**\$10.00**

Model AP-702—6 Watt Public Address System

NEW DESIGN—UNPARALLELED PERFORMANCE—LOW PRICE



MODEL AP-702—\$59.50

A portable public address system that satisfies the growing demand for an inexpensive, compact, high quality unit. Every medium size chain store and independent grocery and market is a prospect for the 6 watt Addressovox System. They can make money with it and improve their service within the store by spot announcements of special offers and values. This is an unlimited field for the dealer and serviceman.

FEATURES—Full six watts output. Designed for use with carbon microphone. Separate plug-in connections for carbon microphone and phonograph turntable. Phonograph and microphone controls are incorporated, to be used individually or as a mixer. A tone control is incorporated.

High quality double button carbon microphone with desk stand and 10 ft. cord is supplied. A Magnavox 8" electro-dynamic speaker is mounted in the case. Speaker is supplied with 25 ft. cord and plug.

MODEL AP-702—System complete with carrying case, amplifier and tubes, double-button carbon microphone and 10 ft. cable, desk stand, 8" Magnavox electro-dynamic speaker and 25 ft. 3-conductor rubber covered cable with plug attached.

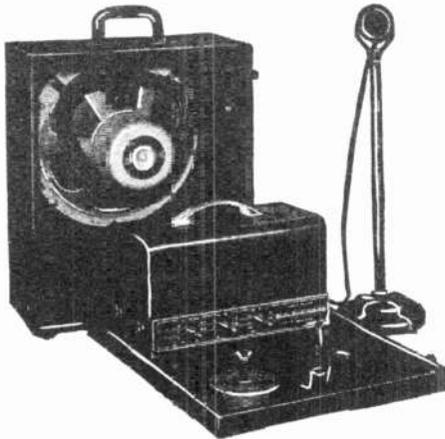
Code: MAGNA. Price less tubes **\$55.85**

MODEL A-702—6 watt amplifier only. Code: POWER. Price, less tubes **\$29.00**

Kit of matched tubes—**\$3.65.**

ELECTRO-ACOUSTIC SOUND EQUIPMENT

MODEL AP-1832—18 WATT PUBLIC ADDRESS SYSTEM



Model 1832A—\$134.50

This system presents high quality performance, complete dependability of operation and striking professional appearance—all in one powerful, but conveniently portable unit.

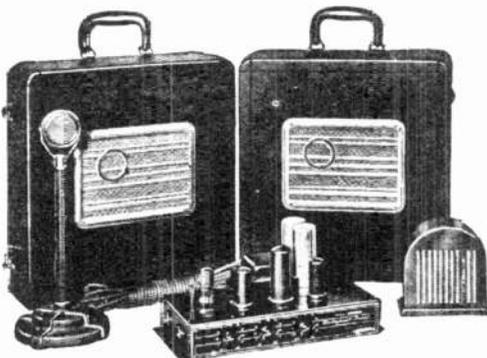
POWER OUTPUT—18 watts.
INPUTS AND OUTPUTS—3 separate non-interchangeable input receptacles for 2 microphones and one high impedance phonograph, separate output receptacles for 2 electro-dynamic speakers 7500 ohm fields each. From 2 to 12 P.M. speakers may be used interchangeably since the fields are not part of the filter circuit. An external impedance matching switch is provided on the chassis.
CONTROLS—Tapered volume controls—separate for microphone and phonograph inputs—insure quiet, smooth attenuation. Phonograph and microphones may be used independently or simultaneously for mixing voice and music.
MICROPHONE—A wide range crystal microphone, Model 100MC is furnished as standard equipment with the AP-1832 system.
SPEAKERS—A choice of the finest electro-dynamic speakers made is offered with the AP-1832 system. See price list below:
MODEL AP-1832C—18 watt system for permanent installation. Complete with 2-12" Magnavox electro-dynamic speakers, Model 100MC wide range crystal microphone with 25' cord and plug, adjustable modernistic floor stand, amplifier less tubes. Code: **MAPEY**. Price \$118.00
MODEL AP-1832A—18 watt portable system. Complete with deluxe carrying case, Model 100 MC crystal microphone and 25' cable, modernistic banquet stand, 1-12" Magnavox high fidelity electro-dynamic speaker and 50' three conductor rubber covered cable with plug attached, amplifier less tubes. Code: **MANAG**. Price \$134.50
Price with Velocidyne Microphone \$120.00
MODEL SC-13—Deluxe carrying case containing 1-12" Magnavox high fidelity electro-dynamic speaker with 50' cable and plug. This carrying case is carefully designed and wholly self-contained with compartments for cords, tubes and accessories. Code: **MAXIM**. Price \$35.00
MODEL AP-1832B—18 watt portable system. Complete with deluxe "twin speaker" carrying case, 2 Magnavox 10" electro-dynamic PA speakers with 50' cable and plug, wide range crystal microphone Model 100 MC with 25' cord and plug, adjustable studio floor stand, amplifier less tubes. Code: **MATON**. Price \$154.50
MODEL A-1832—18 watt amplifier only. Code: **POTOM**. Price \$49.50
Kit of Matched Tubes \$8.25

Size—14 1/4" x 7 1/2" x 8 3/4"
Power Output—Class "A" 18 watts at less than 2% harmonic content measured at full output.
Inputs—2 crystal Velocidyne or high impedance velocity microphones and high impedance phonograph.

AMPLIFIER SPECIFICATIONS:
Output Impedance—250—5—2.5 ohms (externally adjustable on the chassis).
Power Gain—120 db. (1 megohm input impedance).
Hum Level—60 db. below full output.
Field Supply—22 watts.

Outputs—2-7500 ohm electro-dynamic speakers with 5 ohm voice coils or 2-12" permanent magnet speakers.
Tube Complement—1-6J7; 1-6C5; 2-6L6's; 1-5U4G.
Power Supply—115 volt—50-60 cycle AC—120 watts.

MODEL AP-922C—10 WATT PORTABLE SOUND SYSTEM



Model AP-922—\$93.50

This system sets a new standard of excellence in its combination of quality reproduction with compactness and extreme portability. This same system rains the carrying case provides the answer to the tremendous field for a powerful high quality low cost system for permanent installations.

POWER OUTPUT—10 watts.
INPUTS AND OUTPUTS—Separate, clearly marked, non-interchangeable input receptacles are provided for one microphone and one high impedance phonograph turntable. Two output receptacles are provided for electro-dynamic speakers. An important output feature is the automatic impedance match when the second electro-dynamic speaker is connected.
CONTROLS—The exclusive Electro-Acoustic escutcheon plate combines distinctive appearance with widely spaced, clearly marked numerals. The tapered volume controls provide smooth, quiet attenuation, and permit the use of microphone and phonograph independently or as a mixer. A continuously variable tone control is incorporated.
MICROPHONE—The Model AP-922 is the first sound system to feature the Electro-Acoustic Velocidyne, the latest in high quality microphone equipment at low cost. This superior instrument incorporates modernistic appearance—extremely rugged construction—smooth response and better efficiency than many high priced velocity types. The Velocidyne has the directional characteristic of the ribbon types, and its high output level makes it possible to operate on cable lengths up to 200 feet without appreciable loss.
SPEAKER—Standard speaker equipment for the single carrying case type system is a Magnavox Model 8C81—8" public address electro-dynamic unit complete with 25' rubber covered extension cable and plug. The extension speaker—available for both permanent installation equipments and portable carrying case systems is a Magnavox 8" electro-dynamic unit.

MODEL AP-922A—10 watt system for permanent installation. Complete with 1-8" Magnavox electro-dynamic speaker, Velocidyne microphone with 25' rubber covered extension cable and plug, amplifier less tubes. Code: **MARGO**. Price \$53.00
MODEL AP-922B—10 watt system for permanent installation. Complete with 2-8" Magnavox electro-dynamic speakers, Velocidyne microphone with 25' cable and plug, amplifier less tubes. Code: **MARAG**. Price \$61.00
MODEL AP-922C—10 watt portable system. Complete with latest type waterproof twin speaker case containing amplifier less tubes, 2-8" Magnavox electro-dynamic speakers, each with 25' rubber covered extension cable and plug attached, one Velocidyne microphone with 25' cable and plug. Code: **MARLE**. Price \$93.50
MODEL AP-922D—10 watt portable system. Identical with the Model AP-922C twin speaker portable system except that the Velocidyne microphone is omitted and 1-Model 100MC swivel mounted diaphragm crystal microphone with banquet stand and 25' cable and plug is supplied. Code: **MARNE**. Price \$113.00
MODEL A-922—Amplifier only less tubes. Code: **MARPA**. Price \$34.50
Kit of Matched Tubes \$7.50

Size—13" x 6 3/4" x 6 3/4"
Power Output—Class "A" 10 watts 3 stages resistance—transformer coupled amplifier.
Inputs—1 crystal velocity or Velocidyne microphone, 1 high impedance phonograph.
Controls—Microphone, phonograph (mixer), continuously variable tone.

AMPLIFIER SPECIFICATIONS:
Outputs—2 electro-dynamic speakers with 5 ohm voice coils (impedance automatically matched when second speaker is connected).
Power Gain—117 db. (one megohm input impedance).
Hum Level—60 db. below output.

Field Supply—For 2 electro-dynamic speakers.
Tube Complement—1-6J7; 1-6N7; 1-6L6; 1-5U4G.
Power Supply—115 volts—50-60 cycle AC—70 watts.

ELECTRO-ACOUSTIC SOUND EQUIPMENT

MODEL AP-3023B—30 WATT PUBLIC ADDRESS SYSTEM



MODEL AP-3023B—\$176.00

MODEL AP-3023-B—30 Watt Portable System. Complete with carrying case, amplifier (less tubes) crystal microphone, floor stand and connecting cables. Code: MAGAN.

Price \$176.00

MODEL 1322-C—DeLuxe Carrying Case containing 1—12" Magnavox High fidelity speaker with 50' connecting cable. Finest combination carrying case and speaker baffle on the market. Carries extra microphone and floor stand as well as extension cables, etc. Acoustically perfect. Carries our un-

● THE PUBLIC ADDRESS SYSTEM THAT HAS EVERYTHING! CARRIES OUR UNQUALIFIED RECOMMENDATION FOR EVERY PUBLIC ADDRESS APPLICATION WHERE TRUE HIGH FIDELITY PERFORMANCE IS DESIRED

POWER OUTPUT—30 Watts.

INPUTS AND OUTPUTS—Input receptacles for three microphones—either velocity or crystal. High gain characteristic of the amplifier permits operation of any high impedance microphone. Separate input receptacle for phonograph turntable. Output receptacles for two electro-dynamic speakers and one or more permanent magnet speakers. An impedance matching switch is incorporated for use when additional or extension speakers are required. Although field is supplied for two 13,000 ohm electro-dynamics or one 5,000 ohm heavy duty dynamic, the amplifier does not require fields for operation. This makes possible the use of as many as 32 permanent magnet speakers.

CONTROLS—All controls are logarithmically tapered for smooth, silent operation. Two microphone controls are provided so that as many as three microphones—two on one channel—may be mixed. Separate phonograph volume control permits individual operation of a phonograph turntable or mixing voices and recorded music. Continuously variable tone control and master gain control are valuable features.

MICROPHONE—A Model 100-MC wide range crystal microphone complete with adjustable floor stand, 25 ft. cable and plug is furnished as standard equipment.

SPEAKER—The finest speaker we make—weight and size considered—is supplied as standard equipment with this system. This is a 12" Magnavox electro-dynamic unit, Model 13216. Power handling capacity 15 watts. The frequency response is remarkably smooth to well above 7000 cycles.

MODEL AP-3023-A—30 Watt System for permanent installation. Complete with amplifier, 2—12" Magnavox high fidelity PA Speakers, Crystal Microphone and Floor Stand—less tubes. Code: MAGAL. Price \$159.50

qualified recommendation for use with AP-3022-B System

when two speakers are desired. Code: MARTY. Price, \$42.50

MODEL AP-3023-C—30 Watt Dual Case Portable System.

Same components as Model AP-3023-B—System except fur-

nished with Twin Speaker Case mounting. 2—12" Magnavox

Model 13216 Speakers with 50' connecting cables. Code:

MAGRE. Price \$220.00

MODEL A-3023—30 Watt Amplifier only. Code: POMOT.

Price less tubes \$87.50. Complete kit of matched tubes \$11.25

AMPLIFIER SPECIFICATIONS

Size—16½" x 8¾" x 9-7/16".
Power Output—Class A—30 watts at less than 7½% harmonic content, 3% at 23 watts output.
Input—Three crystal or velocity high impedance microphone, one high impedance phonograph.

Controls—Microphone 1 and 2—Microphone 3—Phonograph—Master gain—Tone (3 channel mixer, master gain, none).
Output—500 ohms, taps at 250 and 125 ohms with impedance changing switch.

Voltage Gain—112 db. (Input to output plate load) power gain 133 db. with one megohm input impedance.
Hum Level—61.8 db. below full output.
Field Supply—24 watts—400 volts—.009 amp for two 13,000 ohm fields.
Tube Complement—3-6J7's; 1-6C5;

2-6L6's; 1-5Z3.
Power Supply—105-120 volts, 50-60 cycle AC, 136 watts.
Note: When power output requirements will exceed 30 watts audio energy, add one or more A-3041 power stages as required. See accessory page for prices and specification.

MODEL AP-2023B—22 WATT PUBLIC ADDRESS SYSTEM



SINGLE CASE Model AD-2023B \$162.00

DUAL CASE Model AD-2023C \$200.00

dynamic speaker with 50' rubber covered cable, 1 Model 100MC crystal microphone and adjustable floor stand with 25' rubber covered cable, amplifier, less tubes. Code: MACOT. Price \$162.00

MODEL SC-14—DeLuxe single speaker case containing 1—12" high fidelity Magnavox Model 132 electro-dynamic speaker

with 50' rubber covered cable. Has convenient space for carrying additional microphone and stand. This speaker unit when

used with the AP-2023 systems delivers unmatched performance, when it is desired to use two speakers with the system.

The production is definitely superior to split speaker case units. Code: MARTY. Price \$42.50

MODEL AP-2023C—Dual Case Portable System as illustrated. Same components as AP-2023B System except with Twin

speaker case mounting 2—12" Magnavox Model 132 high fidelity electro-dynamic speakers with 50' rubber covered cable

each. Code: MACOR. Price \$200.00

MODEL A-2023—22 Watt Amplifier Only. Code: POMOW. Price less tubes, \$73.50. Kit of matched tubes \$9.75

POWER OUTPUT—Full 22 watts.

INPUTS AND OUTPUTS—Input receptacles for two high impedance microphones—either crystal or velocity. Separate input receptacle for high impedance phonograph turntable. Output receptacles for two electro-dynamic and one permanent magnet speakers. Permanent magnet speakers or electro-dynamic speakers will operate with the amplifier since it does not require fields to operate. External impedance matching switch is provided on the output of the amplifier, making it possible to operate as many as 24 PM speakers.

CONTROLS—Separate logarithmically tapered mixer controls are provided for each individual microphone channel. Separate phonograph and tone controls.

MICROPHONE—Model 100MC wide range crystal microphone complete with adjustable floor stand and 25' cable is supplied as standard. Velocity microphone will be furnished if desired.

SPEAKER—2 Magnavox Model 132—12" high fidelity electro-dynamic speakers—best reproducing units yet developed mounted in extremely high quality DeLuxe Twin speaker case as illustrated. Speakers are provided with 50' connecting cables.

MODEL AP-2023-A—22 Watt system for permanent installations.

Complete with amplifier, less tubes, 2—12" Magnavox speakers

high fidelity Model 132, 1 Model 100MC wide range crystal microphone, adjustable studio floor stand and 25' rubber covered

microphone cable. Code: MACOM. Price \$139.50

MODEL AP-2023-B—22 Watts Portable System. Complete with

DeLuxe carrying case containing 1 Magnavox 12" electro-

dynamic speaker with 50' rubber covered cable, 1 Model 100MC crystal microphone and adjustable floor stand with 25'

rubber covered cable, amplifier, less tubes. Code: MACOT. Price \$162.00

MODEL SC-14—DeLuxe single speaker case containing 1—12" high fidelity Magnavox Model 132 electro-dynamic speaker

with 50' rubber covered cable. Has convenient space for carrying additional microphone and stand. This speaker unit when

used with the AP-2023 systems delivers unmatched performance, when it is desired to use two speakers with the system.

The production is definitely superior to split speaker case units. Code: MARTY. Price \$42.50

MODEL AP-2023C—Dual Case Portable System as illustrated. Same components as AP-2023B System except with Twin

speaker case mounting 2—12" Magnavox Model 132 high fidelity electro-dynamic speakers with 50' rubber covered cable

each. Code: MACOR. Price \$200.00

MODEL A-2023—22 Watt Amplifier Only. Code: POMOW. Price less tubes, \$73.50. Kit of matched tubes \$9.75

AMPLIFIER SPECIFICATIONS:

Size—16½" x 8¾" x 9-7/16".
Power Output—Class "A" 22 watts at less than 3% measured at full output.
Inputs—2 crystal or velocity high impedance microphones, one high impedance phonograph.
Hum Level—60 db. below full output

Controls—Microphone, 1 and 2—phonograph—tone.
Output—500 ohms, taps at 250 and 125 ohms, with external impedance matching switch.
Power Gain—133 db. (with 1 megohm input impedance).
Field Supply—22 watts.

Tube Complement—2-6J7's; 1-6C5; 2-6L6's; 1-5Y4G.
Power Supply—115 volts, 50-60 cycle AC—125 watts.
Outputs—2-7500 ohm electro-dynamic or 1-24 permanent magnet speakers.
Note: This may be used as bass amplifier when adding A-3041 or A-6011 power stages.

ELECTRO-ACOUSTIC SOUND EQUIPMENT

MODEL EAP-2232

30 Watt Combination 110-Volt AC—6-Volt DC
Mobile Sound System

This is a sensational new sound system having finer appearance—performance—power—operating features than have ever before been offered in a portable Mobile sound system. It eliminates all the limitations and objectionable features of previous Mobile systems. There are no tricks—no gadgets. Changeover from 6 volt DC to 110 volt AC is automatic in operation. It merely requires the inserting of the desired supply cord. Two 4' supply cords—one for AC the other for battery storage use—are furnished complete with non-interchangeable plugs and clips. No power pack is required to operate this system. Its absolute fool-proof operation is featured throughout the entire layout and design.

In addition to the automatic power changeover feature, the EAP-2232 Mobile system incorporates another marvelous, exclusive Electro-Acoustic development—the "jar proof" pickup to follow the record grooves no matter how rough the road or pavement. Hundreds of Electro-Acoustic Mobile systems are now in constant and successful use by the largest motor car manufacturers for their sales promotion activities, with hundreds more in daily use by great metropolitan motor coach systems to inform passengers of stops and routes.

FOURTEEN STAR FEATURES

- ★ Automatic power changeover from 6 V. DC to 50-60 cycle AC.
- ★ "Jar-proof pickup"—perfect record tracking under any pavement conditions.
- ★ Beautifully symmetric metal case design. Built for complete utility in every type of installation.
- ★ New, sloping control panel with all controls arranged for real operating convenience.
- ★ The controls are easy to reach and the large, widely spaced dial numerals may be easily read from any angle. Chrome carrying handles.
- ★ Easily removable bottom plate exposes all

- wiring and makes servicing quick and easy.
- ★ Latest type swivel mounted wide range crystal microphone with 25' rubber covered low loss cable and plug attached. "Push to talk" switch in carrying handle.
- ★ High fidelity crystal pickup with the smoothest response ever achieved in an electric pickup device.
- ★ Two 12" Magnavox heavy duty permanent magnet speakers—the finest made. Dust proofed throughout. Exceptionally sensitive and efficient. Ten ft. rubber covered cord and plug furnished on each speaker.

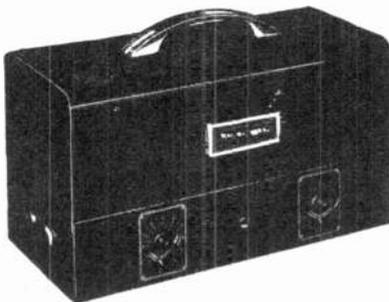
Operates with one crystal microphone and one high impedance phonograph turntable. **Actual Power Output**—30 Watts Class "A". **Power Gain**—120 db. (one megohm input impedance). **Hum Level**—60 db. below full output. **Controls**—Microphone, phono. (mixer) variable tone. **Inputs**—One microphone, one high impedance phono. **Outputs**—Two for permanent magnet dynamic speakers.

AMPLIFIER SPECIFICATIONS:
Output Impedances—250-5-2.5 ohms (external impedance matching switch).
Tube Complement—1-6J7; 1-6C5; 2-6L6G's; 1-5Z3.
All input and output connections made through non-interchangeable receptacles.
Field Supply—None.
Power Supply—6 V. DC—50-60 cycle—115 V. AC.
Dimensions—13 1/2" x 16 3/4" x 9 1/2".
EAP-2232 Mobile Sound System for combin-



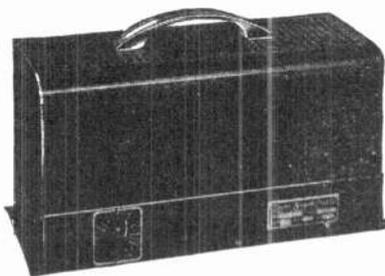
- ★ High Power Output. The amplifier delivers full 20 watts. Reproduction of both speech and music is clear, life-like and remarkably free from distortion.
- ★ Separate microphone and phonograph controls may be used for individual operation or as a mixer.
- ★ Dependable, constant speed 78 RPM motor.
- ★ Low drain ball bearing generator.
- ★ Separate filament switch and generator switch. Signal light.
- ★ Unique and efficient pickup lock holds the pickup securely in place when not in use.

ation 6 V. DC or 50-60 cycle 115 V. AC use. Complete with handsome metal carrying case; 30 watt amplifier and tubes; turntable; 1 Meinel 100 MC microphone with carrying handle, "push to talk" switch, and 25' rubber covered cable and plug; 2 Magnavox type 335-12" heavy duty permanent magnet dynamic speakers each with 10' rubber covered cord and plug; 1-4' rubber covered AC supply cord with plugs; 1-4' rubber covered battery supply cord with plug and clip. Code: MAROL. Price **\$274.50**



Model A-123

DUAL INPUT MIXER PRE-AMPLIFIER
Essential for remote pickups and for installations requiring long microphone leads. **Gain**—52 db. (from 2 megohm input to 20,000 plate load). **Output**—200 ohms and 50 ohms, 200 ohm output may be used balanced to ground. **Controls**—Microphone—Microphone. On-Off switch. **Maximum Output**—Plus 3 db. **Noise Level**—Minus 80 db. **Tubes**—3-6J7s; 1-6X5. **Size**—12" x 6 1/4" x 6 3/4". All connections made through non-interchangeable input and output receptacles. Code: POGON. Complete with tubes. \$60.00



Model A-3041

30 WATT "BEAM POWER" STAGE
Strictly Class "A" Power Amplifier. Designed for Heavy Duty, Trouble-free Operation. **Power Output**—Full 30 watts output. **Input Impedance**—10,000 ohms—may be fed by any amplifier having an output of 14 volts at any impedance up to 10,000 ohms. **Output Impedance**—500 - 250 - 125 ohms. (Adjustable externally.) **Controls**—Volume control only. **Hum Level**—61.8 db. below full output. **Power Supply**—105-120 v. 50-60 cycle AC. **Tube Complement**—2-6L6s; 1-5Z3. **Field Supply**—24 Watts - 400 volt - .060 amp (for one or two—13,000 ohm fields.) Code: PORTE. Price less tubes \$60.00
Kit of matched tubes 5.50



Model RT-4

Electric Phono. Turntable

Here is a phonograph turntable that actually reproduces electrical recordings with fidelity to the original conditions. Compact and portable. Constant speed, self-starting motor. Plays 10" and 12" 78 R.P.M. records. Latest type crystal pickup and separate volume and tone controls. Complete with AC connecting cord and 6 ft. cable and plug for connection to amplifier. Operates only on 110 volt, 60 cycle AC. Code: ASTER. Price \$45.00

AMERICAN MICROPHONES

All American Crystal Microphones are Licensed under Patents of the Brush Development Co.

The New "Clipper" Dynamic

Another American Moving-Coil Microphone, Featuring

APPLICATIONS: Excellent for communication purposes, airplane use, Marine Safety-at-Sea Installations, Police Broadcasting, Amateur Communication, Public Address, Indoor and Outdoor Installations.



Code: D1SET
List Price \$22.50

HIGH OUTPUT—SMALL SIZE
RUGGEDNESS—FIDELITY
TRIM—EFFICIENT DESIGN
LONG LIFE—STABILITY

D7T—High Impedance
10,000 or 500 or 200 Ohms

MODEL "EL-4" DOUBLE-BUTTON MICROPHONE



has cast grille which is attractive and serves as a protection to the diaphragm. The "No-pack" carbon cup greatly increases the stability of the instrument, making frequent volume settings, while the microphone is in operation, unnecessary. The diaphragm is stretched duramin .002 in. in thickness and the tension has been carefully controlled so resonance does not occur within the working range. The cellulose retainer gasket, further reduces packing and undesirable damping and increases carbon life.

Normal operating current 10 ma per button. Internal resistance 200 ohms per button. Finished in polished chrome. Carefully packed with a comprehensive set of instructions and performance data. Packed wt. 1 1/4 lbs. Diameter 2 3/4 in., depth 1 1/4 in. Complete with yoke with 3/8"-27 thread for floor stand mounting.

Applications: Experimental recordings, amateur stations, public address installations etc.

List Price \$7.50



MODEL "SJ"

It is a single-button microphone with an internal resistance of 200 ohms. The "SJ" may be used with any standard two-button microphone transformer, by using one-half of

the primary in the microphone circuit. A regular single-button microphone transformer, however, is preferable.

Applications. — Inter-office communicating systems, burglar alarms, amateur transmitters, concealed detective auditors, and as an aid to the hard-of-hearing.

List Price \$5.00

MODEL "DB" 2

This double button mike is built to withstand rough usage. No rubbing noises are transmitted from the case to the microphone. A switch in the handle, makes and breaks the circuit.

The output of this two-button microphone is constant between the upper and lower limits of the speaking voice. Chrome finish. Furnished with 12 feet of three-conductor microphone cord. 200 ohms resistance per button.

List Price \$10.00



MODEL "SB"

The "SB" Hand Microphone is a single-button composite diaphragm unit. Equipped with an on-and-off switch. Handles the voice frequencies adequately, and is very sensitive.

List Price \$5.00

CARBON GRANULES

American Granules are processed to eliminate carbon noise. They are high in sensitivity and packed in hermetically sealed vials in exact amounts. Each vial packs 2 two-button standard microphones.

List Price \$0.75



MODEL "BH" LAPEL MIKE

The quality obtainable with this little unit is above expectation. It is fully adequate for high and low range speaking voices. Single button. 200 ohms resistance. Finish: black art metal; size, 1 1/2 x 1 1/2 ins.

Applications. — Speaker's platform, lecture rooms, theater premiers, sports announcements, surgeon's operating lecture rooms, remote control, class rooms.

List Price \$6.00

FH-3 AND FL-3 FLOOR STANDS



The new AMERICAN FH-3 and FL-3 Floor Stands have a positive action, friction lock which assures reliable, noiseless adjustments; insulated, heavy steel tubing; and three-contact, rubber-cushioned, "Floor Grip" Base. Finish baked Satin Black, with chrome trim. Adjustable to full six feet. FH-3, Net Wt. 15 lbs.; FL-3, Net Wt. 8 lbs.

FH-3, Studio Model, Code: FUHET.

List Price \$15.50

FL-3, Lighter Model, Code: FLEXR.

List Price \$10.50

BS BANQUET STAND



The round-base banquet stand is finished in baked Satin Black with chrome trim. The base has an imbedded, vibration-absorbing, rubber ring. Tubular upright serves as passageway for cable. Positive action, friction lock assures reliable, noiseless adjustments. Net Wt. 6 lbs. Adjustable to two feet. Code: FUDAS.

List Price \$8.00

SUSPENSION RINGS WITH

3/8" x 27 FEMALE THREAD FOR STAND MOUNTING

Chrome Plated with 4 Double Mounting Hooks

6" Ring—List Price \$2.50

5" Ring—List Price \$2.25

Complete with 8 Springs



Covers for A1 Stands—List Price

Covers for EL Stands—List Price

Models "EL" and "A1" Desk Stand's base rests on an insulating imbedded rubber ring. The four double hooks facilitates the installation and removal of unit. Space provided for passing cord thru ring. Stands finished in nickel.

"A1" Desk Stand. 6-inch ring, no covers —springs included. Weight 4 lbs., 9 1/2 in. high.

List Price \$4.00

"EL" Desk Stand. 5-inch ring, no covers —springs included. Weight 2 lbs., 7 1/2 ins. high.

List Price \$2.75

AMERICAN MICROPHONES

All American Crystal Microphones are Licensed under Patents of the Brush Development Co.

"GLOBE" CRYSTAL MICROPHONE C-5

DUAL-DIAPHRAGM
DUAL-CRYSTAL



The C-5, a non-directional microphone, recommended for good quality audio pick-up, which includes general public address applications, disc and film recordings, and good amateur phone transmission. The high internal capacity of the dual-crystal elements lowers the impedance proportionately, thus the cable effect is minimized. The frequency response of the C-5 is uniform for all angles of approach. Standard reference level. —68 db. Push-pull or, single grid input may be used.

Each microphone is equipped with side cable outlet stand mounting (3/8" x 27 thread) and eight feet low-capacity cable.

List Price

C-5 Crystal Microphone	\$25.00
Desk Stand "AG"	2.50

MODEL CL-2 LAPEL MICROPHONE



A crystal microphone designed specifically for lapel microphone work. Output is equal to that of the larger diaphragm type. Diameter 2 1/4", depth 3/8". Equipped with spring clip and 25 feet cloth-covered cable.

CL-2 Lapel Microphone

List Price
\$25.00

AMERICAN DELUXE D-3 DYNAMIC MICROPHONE



The reputation of the American Microphone Company stands back of this instrument, whose quality is not excelled by any other dynamic microphone produced today.

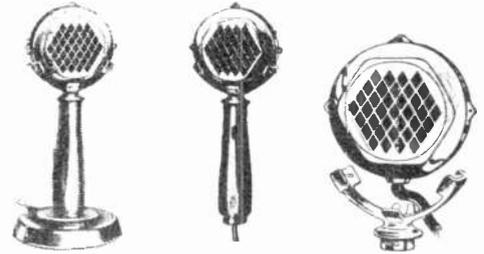
FIDELITY: Faithful response over the entire audio range. Absence of peaks means elimination of acoustic feedback troubles in PA systems.

OUTPUT: Minus 80 db. with zero level at 6 Milliwatts permitting low level mixing. 50 ohm. impedance. Inductive pick-up troubles at a minimum.

The American Model D-3 Dynamic is rugged, unaffected by temperature, pressure and humidity. Semi-directional pick-up. Cobalt steel field, no polarizing voltage required. Case bronze finished 2 3/4" in diameter by 2 1/2" long. Equipped with 3 contact plug at microphone with 25 feet of high quality shielded and rubber covered cable. Mounting consists of an inconspicuous yoke slipping over unit and designed to mount on standard 5/8" x 27 male thread. Suitable for broadcasting, high fidelity recording and finest public address purposes.

List Price	\$90.00
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A. G. CRYSTAL MICROPHONE



A. G. Stand

Model AH

Model AG

An all-purpose microphone with a wide range of efficiency. Self-energizing; no polarizing voltage is required. Its high impedance permits the output to be fed direct to the grid of the input tube. It is not subject to overloads and is practically free from the disturbance of mechanical shock. Protected against moisture and temperature changes.

Completely wired, with low-loss microphone cable. A yoke fitting is furnished for mounting on desk or floor stand. Can be mounted in the standard carbon microphone rings. Size of the head 3 1/4" x 1 3/4"

(Complete Instructions) Model "AG"—List Price \$22.50

MODEL "AH" HAND MICROPHONE

Equipped with switch and filter to absorb surge of make-and-break contact. Can be inserted in regular desk base.

List Price \$25.00
Base only 1.00

MODEL "AG" DESK STAND

(Illustrated.) Chromium-plated. Base removable without removing plug from assembled cable.

List Price \$2.50

NEW LOW PRICED DYNAMIC

The Dynamic is unsurpassed as an all-purpose microphone. It is most rugged and its life of trouble-free operation is indefinite. Being a pressure-type instrument, the response is unaffected by either a close or distant sound source. Insures a brilliant recording. Excellent for public address, indoor or outdoor installations, studio or remote pick-up.



The D-5 series dynamics are moving-coil, permanent-magnet dynamics. Semi-directional. Immune to temperature changes. Exceptionally rugged. Consistent in response. Pick-up with equal success from varying distances. Have excellent frequency response for talking or singing voice, orchestras, etc. Freedom from wind noises. High output. High or low impedance. Minimum feedback. (Flat response.) Finish baked Satin Black with chrome trim. Net weight 1 1/2 lbs. Small structure ideal for public address use. Low impedance, if desired, for Amateur Transmitting Stations. Most dependable for Police Broadcasting.

D-5-T DYNAMIC

D-5-T impedance 10,000 ohms. Designed for high-impedance input. A high-permeability, nickel alloy transformer is enclosed in the microphone case. Up to fifty feet of cable may be used on this instrument without frequency discrimination. Comes complete with twenty-five feet shielded, rubber-jacketed cable, and Amphenol plug.

Code: DYHIM.
List Price \$32.50

D-5 DYNAMIC

D-5 impedance 50 ohms. Designed for low-level mixing and for use on long lines. The standard output (50 ohms) will work into any conventional dynamic microphone circuit or input transformer 30-50 ohms to grid. Comes complete with twenty-five feet shielded, rubber-jacketed cable, and Amphenol plug.

Code: DYLOM.
List Price \$27.50

DD Desk Stand for above. Round base, 4" upright. Net weight 1 1/2 lbs. Satin black finish.

Code: DYNES.
List Price \$2.50

BRUSH CRYSTAL MICROPHONES

BRUSH Spherical MICROPHONE

Model BR2S—A high quality microphone for remote pickup, public address, commercial interstation, police and amateur work. Very popular. Size only 2 1/4" in diameter. Finished beautifully in dull chromium plate. Shipped complete with three conductor locking type plug and socket connector. Output level minus 66 db.* Net weight 5 oz. Shipping weight 2 lbs.

Code: MAPLE. **\$29.50**
List Price.....

BRUSH DESK MICROPHONE

Model BP2—For use in pulpits, lecterns, lecture halls, etc. Size 3 1/4" x 3 3/4" x 1 1/4" high. Finished attractively in black crackle. Output level minus 66 db.* Net weight complete with cable locking compression bushing 12 oz. Shipping weight 2 1/2 lbs.

Code: MIROD. **\$47.50**
List Price.....

BRUSH BROADCAST TYPE MICROPHONES

Models: AR-43, R-34, AR-26

All above types sound cell microphones are built into a 3" spherical case finished in chrome or bronze.

AR-43—High output level—60 db.*

R-34—Wider frequency response than normally required. Output level—67 db.*

AR-26—High internal capacity, ideal for extremely long leads. May also be used with a Brush transformer for 50 and 200 ohm impedances. High impedance output level—66 db.*

All above microphones are shipped complete with 3 conductor locking type plug and socket connector. Net weight, 8 oz., shipping weight, 2 1/2 lbs. Transformer net weight, 1 lb. 3 oz., shipping weight, 3 lbs.

Code word	Code word
AR-43 MIDAR	AR-26 MITAR
R-34 MIRER	Transformer MOTOR

List Price of Each Microphone..... **\$75.00**

List Price of Transformer..... **\$15.00**

(* ZERO db. EQUALS 1 VOLT PER DYNE PER SQUARE CENTIMETER)

BRUSH "PA" MICROPHONE

Model B-1—Recent addition to the Brush line. Brings the many advantages of Brush sound cell operation within reach of PA, police, commercial, amateur and other work. Furnished complete with three conductor locking type plug and socket connector. Size 3 1/4" x 1 3/4" x 3/4". Finished in dull chromium. Output level minus 66 db.* Net weight 11 oz. Shipping weight 2 lbs.

Code: MACAN. **\$26.50**
List Price.....

THEATER MICROPHONES

Model BT4—This type of microphone is ideal for theater stage applications for the purpose of sound reinforcement. The type illustrated here is supplied in groups of four permanently connected together with 1/2 feet of cable between each microphone and 15 feet from one end of the set. The output level of this arrangement is—66 db.* The individual microphone measures 3-13/16" x 2 3/4" x 1 1/4". The case is of cast metal with a protective screen on the inside. Net weight of one set is 3 lbs. Shipping wt. 5 lbs.

Code word: MACOL. **\$90.00**
Price, per set.....

BRUSH LAPEL MICROPHONE

Model BL-1—The smallest light weight microphone on the market today. Permits the speaker to move about on the platform without restriction. Special internal cushioning and protecting rubber jacket insure quiet operation. No interference from breathing noises. Output level minus 72 db.* Size only 1 1/4" x 1 1/4" x 3/8". Shipped complete with 15 feet of lightweight single conductor cable and clothing fastener. Net weight 1 oz. Shipping weight 28 oz.

Code: MAIZE. **\$30.00**
List Price.....

BRUSH CRYSTAL HEADPHONES

TYPE-A TWO PHONE HEADSET



An extremely serviceable and very durable unit. Light in weight. Ideal for commercial transmission—for use with home receivers—amateur reception—the exacting monitoring work of commercial broadcasting stations—for balancing alternating current bridges and a wide variety of commercial and laboratory work. Net weight complete with five foot cords, 6 oz. Shipping weight 2 lbs.

Code: MILLO. **\$9.00**
List Price.....

MICROPHONE SOCKET

CO3—Three conductor—cable outlet socket complete with 3/8"—27 to 1/4" pipe thread stand adaptor for Standard Type microphones. Shipping weight 9 oz.

Code: SABBO. **\$2.50**
List Price.....



TYPE-A SINGLE PHONE HEADSET

For use where the preference is for single phone rather than two phone operation. Same applications as the two phone headset. Metallic headband and small rubber cushion hold the phone securely against the user's ear. Net weight complete with five foot lead, 3 oz. Shipping weight 1 1/4 lbs.

Code: MILOD. **\$5.00**
List Price.....

TYPE-A PHONE LORGNETTE HANDLE

For schools, churches, auditoriums, etc. An attractive Type-A phone with chromium plate and black enamel lorgnette handle. 5 inch extension from 12 to 17 inches. Selected by the hard of hearing themselves as being best suited for their use. Net weight 6 oz. Shipping weight 3 lbs.

Code: MILME. **\$6.50**
List Price.....



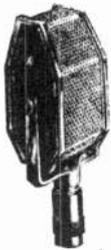
CABLE CONNECTORS

MC3—Three conductor type—with cable compression bushings in each end, rugged, tight, threaded collar type . . . complete unit, both plug and socket. Overall length 2 3/4 inches. Net weight 3 oz. Shipping weight 1 lb.

Code: SOJGE. **\$3.00**
List Price.....



AMPERITE MICROPHONES



A Very Popular, Very Excellent Velocity

Answering the demand for a high-quality velocity microphone at a competitive price, Amperite presents the 193's model RAH-RAL. Truly outstanding performance, this Velocity is excellent for both speech and music. Eliminates feedback. Has a frequency range of 60 to 7500 cps. Output, -68 db. Unaffected by temperature, pressure, or humidity. Unusually rugged. Triple shielded, and fitted with heavy shock absorber and swivel bracket. Shipping weight 5 lbs.

Model
 RAH (hi-imp.) with 12' of cable \$22.00
 RAL (200 ohms) with 8' of cable
 Chrome or Egg Shell Finish 23.00



NEW ! Model SR80n, Output -56db., Highest in Studio Microphones

On the basis of all-around tests, Model SR80n has achieved an outstanding record. Now accepted as the best for studio, P. A., and recording. Frequency range 10 to 15,000 cps. Output, -56 db. Triple shielded, fitted with switch (optional), cable connector, and 25' of cable.

Model
 SR-80H (hi-imp.) (Gunmetal Chrome)
 SR-80 (200 ohms) \$80.00 \$82.00
 Other impedances obtainable at no extra cost.



NEW ! Amperite "Hand - I - Mike"

A real Amperite Velocity with many uses. Can be used as hand, desk, or stand microphone. The 3/8-27" thread on bottom permits use on standard floor stand. Excellent for close talking. Frequency range 60 to 7500 cps. Output, -68 db. equal to larger types. Size of head, 1 1/2" x 1 1/2" x 2 1/2". 12' of cable.

Model
 HDH (Hi-imp.) List \$22.00
 HDL (200 ohms) 3.00



Contak Mike With Foot-Operated Volume Control No String Changes Necessary

Can be Attached to Most Radio Sets. Gives natural reinforcement without peaks or other undesirable effects. Can be used on all string instruments such as Guitars, Violins, or as Vibration analyzer. Easily attached without tools—no drilling. Will operate with either low or high-gain amplifiers. Frequency response 40 to 9000 cps. Output, -40 db. 25' of cable. Ship. Wt. 2 lbs.

Model
 KTH (1 1/2-imp.) \$22.00 List
 KTL (200 ohms) 30.00 List
 With foot-operated volume control

Amperite Static Velocity

An inexpensive microphone of the static type with high output (-52 db.). Frequency range 20 to 7000 cps. Operates on any voltage from 80 to 300 V. (100 V. optimum). Decreases feedback. Cable lengths up to 200 ft. can be used.

Model
 S-1 \$15.00 List
 Chrome Finish 16.00 List

THE AMPERITE VELOCITY

Distinguished in Design and Quality

now offers a new exclusive feature in **THE ACOUSTIC COMPENSATOR***



PUSH UP TO INCREASE HIGHS, PUSH DOWN TO INCREASE LOWS



Models RBHn-RBMn

Considered the finest types of microphone available for P. A. work, these models are excellent for close talking and distant pickup, speech, music, or wherever else a high-quality microphone is required. Frequency range 40 to 11,000 cps. Output, -65 db. Excellent also for studio or recording. Complete with switch, cable connector and 25' of cable.

Model RBHn (High impedance) \$42.00 List
Model RBMn (200 ohms)

Models RBBHn-RBBn

For unusual feedback conditions such as footlight installations. The 200-ohm model is especially recommended for such installations. Output is 3 db. lower than models RBHn-RBMn. Frequency range 40 to 11,000 cps. Complete with switch, cable connector and 25' of cable.

Model RBBHn (High impedance) \$42.00 List
Model RBBn (200 ohms)

***ACOUSTIC COMPENSATOR MODELS**

The Acoustic Compensator permits the increase of the high frequencies by the mere flip of the finger. Simple construction. As shown in diagram, simply push the knob up to increase high frequencies, or down to increase lows. Makes microphone adjustable for close talking or distant pickup.

Models RBHk-RBMk, with acoustic compensator. Frequency range 40 to 11,000 cps. Output, -65 db. Complete with switch, cable connector and 25' of cable. \$42.00 List

AMPERITE MICROPHONES ARE TRIPLE SHIELDED against all RF or magnetic fields, thereby eliminating hum pickup. They are acoustically designed to eliminate any possibility of cavity resonance.

FINISHES: All microphones have the new standard gunmetal finish. Also available at no extra charge in long lasting slate grey finish, recommended for outdoors, etc. Chrome—\$1.00 List Extra.

NOTE: Special custom microphones, such as microphones with increased low or high frequencies, or special impedances, obtainable at no extra charge.

Additional **CABLE LENGTHS** obtainable at 6c list per foot.



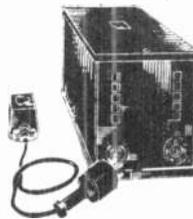
Amperite Jr. Velocity Mike (Lapel)

The most successful "lapel" mic. Size of match box. Ideal for lectures and specialty acts. Can be hidden under coat. Output constant with any position of the head. Transformer included in microphone case. Flat response 60 to 7500 cps. Output -70 db. Shipping weight 2 lbs.

Model
 7J-H (Hi-imp.) \$22.00 List
 7J (200 ohms)

AC Operated Pre-Amp.

2-stage pre-amp, with high impedance input. Can be used with low impedance microphone in conjunction with LGP Transformer. Output impedance 200, 500 and high impedance. Inductive hum reduced to minimum. Frequency response 40 to 10,000 cycles (1 db.) Gain -56 db. Metal tubes. Ship. weight, 18 lbs.



Model
 PAC6 (less tubes) \$70.00 List
 Brackets for panel mounting 2.00 List

NEW ! Ham Mike of Broadcast Quality

Now, a "Ham" Mike that brings the professional touch to amateur broadcasting. Real broadcast quality. No peaks, thereby allowing a higher percentage of modulation without splashing. RF choke circuit included in microphone. Frequency range 40 to 7500 cps. Output, -65 db. Complete with new special Ham desk stand. Individual call letters sent no charge upon receipt of return card shipped with microphone.



Model
 HAM (Hi-imp.) \$22.00 List
 HAL (200 ohms) Chrome 23.00 List

Input Transformer (Cable Type) LGP

Enables the use of low impedance microphones and cable lengths up to 2000 ft. with amplifiers having high impedance input. Hum trouble entirely eliminated. Can be used with 25, 50, or 200-ohm microphones. Output connects directly to high imp. input of amplifier. Standard grade recommended for speech; laboratory grade for music. Shipping weight 3 lbs.



Model
 LGP (Standard) 60-8000 cps. \$ 5.00
 LGP (Lab.) 40-14,000 cps. 10.00

SHURE MICROPHONES



SHURE "ULTRA" Wide-Range CRYSTAL MICROPHONES

Shure "ULTRA" offers the highest performance available today in general purpose microphones. Because of this, "ULTRA" microphones are standard equipment with nationally-known sound-equipment manufacturers and eminent sound engineers everywhere.

Model 700A. A small compact unit with swivel arrangement for use where "tilting" of microphone head is desired. Cable may be run inside or outside stand tubing. Finished in bright polished chromium plate overall. Diameter, 2 3/8". Complete with 7 ft. single-conductor shielded cable. Code: Ruret. List Price..... **\$25**

Model 700A-25 FT. Cable length, 25 ft. Code: Rurel. List Price..... **\$26.80**

Model 701A. A "Grille-Type" Microphone, styled to meet the most critical taste and designed to give outstandingly high-quality reproduction. Attractive rubber-black screens with contrasting chromium fittings. 3 1/4" high, 2 3/8" wide, 1 1/4" deep. Complete with 7 ft. single-conductor shielded cable. Code: Rurev. List Price..... **\$25**

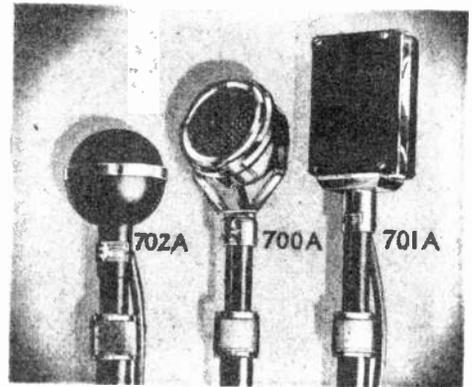
Model 701A-25 FT. Cable length, 25 ft. Code: Rured. List Price..... **\$26.80**

Model 702A. A small Spherical Microphone with Semi-nondirectional pickup... a feature which is especially valuable because it permits placement of a group around the Microphone without frequency discrimination. Beautiful rubber-black finish with circular chromium band. Diameter, 2 3/8". Complete with 7 ft. single-conductor shielded cable. Code: Rurez. List Price..... **\$25**

Model 702A-25 FT. Cable length, 25 ft. Code: Rureg. List Price..... **\$26.80**

With These 8 Exclusive Features!

- (1) "Ultra" Wide-Range reproduction from 30 to 10,000 cycles.
- (2) Dual-Drive, High-Capacity Grafoil Crystal.
- (3) Complete Barometric Compensation.
- (4) Internal Screen-Protected Cartridge.
- (5) Crystal Triple "Moisture-Sealed" by new exclusive special process.
- (6) High output level 52 db below 1 volt per bar.
- (7) New acoustically-correct single high-efficiency Curvilinear Diaphragm.
- (8) Beautifully styled new semi-nondirectional and semi-directional models in Spherical, Swivel and "Grille-Type" case designs.



"TRI-POLAR" Controlled-Direction Crystal Microphone!



1. UNI-DIRECTIONAL
 2. BI-DIRECTIONAL
 3. NON-DIRECTIONAL
- All in ONE Microphone

After years of research in the laboratories of "Microphone Headquarters", the discovery of a practical method of obtaining "velocity" or pressure-gradient operation in a crystal microphone now makes possible "Controlled-Direction" response—a feature never before available in any microphone!

By electrically combining the output of the "velocity" element with a "pressure" element, and by using the elements separately, the following directional characteristics are instantly available through a 3-point selector switch.

1. Uni-Directional. ("velocity" plus "pressure") Wide-angle front-side pickup—dead at rear. Cuts out audience noise, reduces reverberation energy pickup 66%, eliminates feedback. The first economical microphone of any type to give you this feature! Output level 63 db below 1 volt per bar.
2. Bi-Directional. ("velocity" alone) Typical velocity characteristic with pickup from front and back—dead at both sides. Allows artist placement front and back, reduces reverberation energy pickup 66%, prevents feedback. The first practical crystal microphone to give you this feature! Output level 68 db below 1 volt per bar.
3. Non-Directional. ("pressure" element alone) Full 360-degree all-around pickup for group presentations and general applications. Output level 53 db below 1 volt per bar.

Smooth high-quality wide-range response from 40 to 10,000 cycles under all operating conditions. Triple moisture-sealed Grafoil Bimorph crystals. Swivel-type mount with standard 5/8"-27 thread. Case 5 1/2" high by 2 1/2" overall diameter. Finished in black morocco-grain and chrome. Ship. Wt. 2 3/4 lbs.

Model 720A. Tri-Polar Crystal Microphone. Complete with 25 ft single-conductor shielded cable. Code: Rulak. List Price..... **\$39.50**

Model 85A High-Fidelity Sound-Cell Crystal Microphone



A true high-fidelity non-directional microphone with a response characteristic within a total range of only 5 db from 30 to 10,000 cycles. Meets the most critical requirements in applications calling for the very highest quality sound reproduction. Output level 68 db below one volt per bar (approximately 18 db below typical diaphragm types). Attractive "Grille-Type" case, finished in rich rubber-black with chromium plated fittings. Shipping weight, 1 lb. Complete with 7 ft. single-conductor cable. Code: Ruleb. List Price..... **\$45**

Model 70H

The Shure 70H sets the "standard of performance" for diaphragm-type crystal microphones. Adopted by leading Sound-Equipment Manufacturers. "Curvilinear" diaphragm and "Bimorph" crystal. "Cantilever" actuated. Output level 48 db below 1 volt per bar. Beautiful cast case, chromium plated overall. Mounts direct on any Shure Stand 3/8"-27 thread. Cable may be brought through stand tubing or outside as desired. Convertible to a Hand Microphone with A-40A Handle. Complete with shielded single-conductor rubber jacketed cable.



Model	Cable Length	Code	Shpg. Wt.	List
70H	7 feet	Rurab	1 1/4 lbs.	\$22.50
70H-25FT	25 feet	Rurov	2 lbs.	\$24.30

Model 76A Lapel Type



A new, lighter, more efficient Crystal Lapel Microphone which faithfully reproduces the speaker's voice. Small, light, and inconspicuous—barely over 1 ounce in weight and less than 2 inches in diameter. New improved clip holds microphone securely to lapel. Rubber black finished aluminum case. Complete with 25 ft. shielded single-conductor cable. Ship. Wt. 3/4 lb.

Model 76A. Code: Rulop. List Price..... **\$25**

Model 76E. Miniature Crystal Microphone. For concealed placement and general applications. Same as Model 76A but without clip. Complete with 7 ft. cable. Code: Ruled. List Price..... **\$22.50**

SHURE MICROPHONES

"COMMUNICATIONS - TYPE" MICROPHONES



**Model 70SW
Crystal Microphone**

A new, better "70S" with 5 db higher output. Produces double power on important intelligibility speech frequencies with only 56% of the amplification previously needed. Output level 42 db below 1 volt per bar. Gives clear, crisp, powerful signals that over-ride noise and static. Recommended for high-efficiency voice communications in Commercial and Amateur radiophone transmitters. Finished in chromium and morocco-grain black. Complete with integral Desk Mount and 7 feet of shielded single-conductor rubber-jacketed cable. Shipping weight, 2 1/4 lbs.

Model 70SW. Code: Ruraj. **\$25**
List Price.....

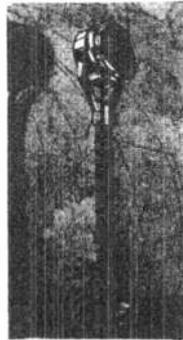
Model 70SWB. Same as 70SW but without desk mount. Code: Ruran.
List Price..... **\$22.50**

**New Model 703S
Crystal Microphone**

A smaller... lighter... "Communications-Type" Microphone with new convenient Swivel head for greater operating convenience. Has the same "high efficiency" Double Power response characteristic that made the original Shure "70S" world famous. Specially designed for Commercial and Amateur radiophone transmitters. Output level 47 db below 1 volt per bar. Chromium plated head with rich morocco-grain black desk mount. Complete with desk mount and 7 feet of shielded single-conductor cable. Shp. wt. 2 1/4 lbs.

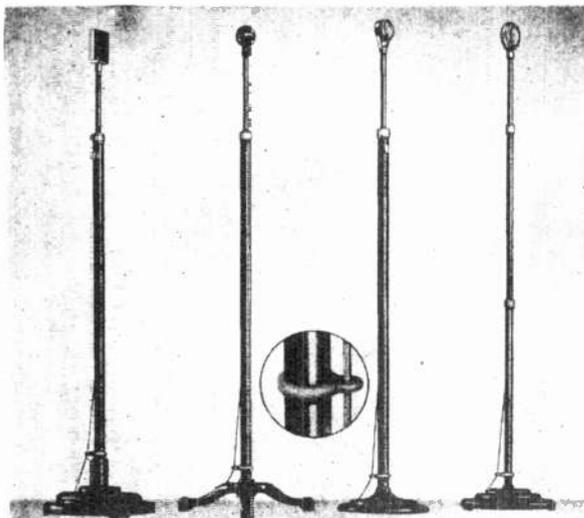
Model 703S. Code: Rurem. **\$27.50**
List Price.....

Model 703SH. Same as 703S but without desk mount. Code: Rurar.
List Price..... **\$25**



Model 79P. Plug. Two-Conductor Telephone type. Fully shielded. Chromium plated. Shipping weight, 1/4 lb. Code: Rurik.
List Price..... **\$2.25**

SUPERIOR QUALITY characterizes all Shure Microphone Stands—Quality that is reflected in beautiful modern design, careful attention to all details that enhance utility and convenience, and skilled workmanship inherent in truly fine products. At current prices they are unsurpassed values.



S58A

S57B

S56A

S54B

NEW "MILITARY-TYPE" HAND MICROPHONES



The new Shure "Military-Type" Hand Microphones are designed to fit naturally in the palm of hand! Small, light and compact — no bothersome long handle... requires minimum space in portable equipment. Easily slipped into pocket when not in use. New Shure spring cable protector prevents cable strain at outlet. Optional new positive-action switch which operates either "Press-to-Talk" or On-Off.

New "Anti-Noise" Close-Talking Models. Through a new design principle, true high-intelligibility close-talking performance with practical elimination of background noise is now available in both crystal and carbon types.

Finish is beautiful black morocco-grain with chromium plated screen. Size, 3 3/4" high, 1 1/4" thick. Net weight, 9 oz. Shp. Wt. 1 lb. Furnished complete with removable Suspension Hook and 7 ft. shielded rubber-jacketed cable. Shure "Military Type" Hand Microphones are available in General Purpose and "Anti-Noise" Close-Talking Crystal and Carbon Models.

Model 750A. Crystal Hand Microphone. General Purpose type. Code: Rusal. **\$25**
List Price.....

Model 750B. Crystal Hand Microphone. Same as 750A but with switch. Code: Rusel. List Price..... **\$26.50**

Model 760A. Crystal Hand Microphone. "Anti-Noise" Close-Talking Type. Code: Rusil. **\$30**
List Price.....

Model 760B. Crystal Hand Microphone. "Anti-Noise" Close-Talking Type. Same as 760A but with switch. Code: Rusol. **\$31.50**
List Price.....

Model 15A. Carbon Hand Microphone. General Purpose Type. Code: Ruceb. **\$15**
List Price.....

Model 15B. Carbon Hand Microphone. Same as 15A but with switch. Code: Ruced. List Price..... **\$16.50**

Model 16A. Carbon Hand Microphone. "Anti-Noise" Close-Talking Type. Code: Rucal. **\$20**
List Price.....

Model 16B. Carbon Hand Microphone. Same as 16A but with switch. Code: Rucap. List Price..... **\$21.50**

Model A40A. Removable Handle. Permits stand microphones to be converted to hand microphones (see ill 10B below). Fits microphones threaded 3/8"-27. Shpg. wt. 1/4 lb. Code: Rurj. List Price..... **\$1.50**

FLOOR STANDS

All Shure Floor Stands have the exclusive "Automatic Friction Lock" You simply raise, lower or turn the microphone... no thumb screws or wing nuts... no rattling or sudden dropping! The proper degree of friction is adjusted by rotating the chromium collar at top of barrel. The mechanism is guaranteed to last indefinitely. Cables may be run through tubings or outside. A new exclusive cable guide—furnished with each stand at no extra cost—holds the cable neatly beside the stand.

Effective stand height adjustment 43" to 68". Finish is beautiful black morocco-grain with chromium plated trim. Standard 3/8"-27 thread. (Microphones are not included and must be ordered separately.)

Model S54B. Floor Stand. A light weight Utility stand with three extendible sections. Modernistic base, 10 3/8" in diameter. Height adjustment, 25 1/2" to 62 1/2". Net weight, 7 1/2 lbs. Shipping weight, 8 3/4 lbs. Code Rucov. **\$10**
List Price.....

Model S56A. Floor Stand. "Round" Base. Base diameter, 10 1/4". Net weight, 11 lbs. Shipping weight, 12 1/2 lbs. Code: Ruvos. **\$13.50**
List Price.....

Model S57B. Floor Stand. 3-leg "Tri-Ped" Base. Leg spread, 15 1/2". Net weight, 13 1/2 lbs. Shipping weight, 15 3/4 lbs. Code: Rugart. **\$15.50**
List Price.....

Model S58A. Floor Stand. Large, heavy "Modernistic" round base. Base diameter, 12 1/2". Net weight, 14 1/4 lbs. Shipping weight, 16 lbs. Code Ruvim. **\$17.50**
List Price.....

Model A20A. Adapter. For mounting microphones with 1/2" Pipe Thread on any Shure Stand (3/8"-27 thread). White nickel plated. Shipping weight, 1/4 lb. Code: Rudap. **\$1.00**
List Price.....

Model P54A. Cable Guide. Mounts close to base and holds cable neatly beside stand. Fits all Shure Floor Stands and others with tubing diameter from 3/4" to 1 1/4" inches. Black molded rubber. Code: Ruvah. List Price **78c**

SHURE MICROPHONES

DESK and BANQUET STANDS

Convertible Desk Mount



New Shure convertible Desk Mount that permits any stand microphone to be converted to desk or hand type—quickly... efficiently—without tools or bother. Standard $\frac{5}{8}$ "-27 thread. Model S35A. Code: Ruvaf. List Price. **\$3.75**



Model S32C. Modernistic Desk Stand. A new adjustable desk stand with the exclusive Shure "Automatic Friction Lock". Beautiful modern design, with three chromium circles on base contrasting with the black morocco-grain finish. Base diameter, 6". Height, adjustable from 7" to 11". Net weight, 3 $\frac{1}{4}$ lbs. Shipping weight, 3 $\frac{3}{4}$ lbs. Code: Rudes. List Price **\$6.50**

Model S42C. Modernistic Banquet Stand. A companion unit to Model S32C listed above, useful where greater height is needed. Height range, 15" to 22". Net weight, 3 $\frac{1}{4}$ lbs. Shipping weight, 4 $\frac{1}{4}$ lbs. Code: Rukof. List Price **\$7.50**



Model S30B. "Special" Desk Stand. A small desk unit for Carbon Microphones complete with 5" ring. Modern bevel-edged design, beautifully finished in chromium plate with black morocco-grain base. Cord entrance in base. Complete with 8 rust-proof springs. Base diameter, 4 $\frac{1}{4}$ ". Height overall, 7". Net weight, 1 lb. Shpg. wt. 1 $\frac{1}{4}$ lbs. Code: Runep. List Price **\$3.50**



Rings and Springs

Model R20B. Standard Ring. A sturdy full-size, 6" ring for carbon microphones. Attractive bevel edge design. "Quickway" Hooks for quick mounting. Chromium plated. Complete with 8 rustproof springs. Shipping weight, 1 lb. Code: Ruket. List Price **\$2.50**

Model R10A. Ring. A light 5" ring for small carbon microphones. Chromium plated. Shipping weight, $\frac{1}{4}$ lb. Complete with 8 rust-proof springs. Code: Rujes. List Price **\$2.25**

The above Rings are protected by U. S. Patent Des. 100,928

Model A80A Stand Switch

New handy stand-mounting on-off switch which can be used with any type microphone. Small attractive cast case, with morocco-grain finish. Standard $\frac{5}{8}$ "-27 thread fits all Shure Stands. Overall height, 2 $\frac{1}{4}$ ". Shipping weight, $\frac{1}{4}$ lb.

Model A80A. Stand Switch. Code: Rudam. List Price **\$2.50**



Model S31A. Desk Mount. A short, non-adjustable, desk-type mount of proper height for operating table. Cord entrance in base. Black morocco-grain finish overall. Base diameter, 4 $\frac{1}{4}$ ". Height, 6 $\frac{3}{4}$ ". Shipping weight, 1 $\frac{1}{4}$ lbs. Code: Rujab. List Price **\$3**

Volume Controls for Crystal Microphones

Speakers, soloists, and announcers can now control the volume of a crystal microphone at the microphone... smoothly... with complete freedom from unwanted "tone-control" effects! Small compact unit (4" by 2" by 2"). Mounts on any Shure stand. Convenient ON-OFF switch. "Coupling" type, threaded $\frac{5}{8}$ "-27 for Models 70H, 700A, 701A and 702A. (Microphone is not included and must be ordered separately). For best results use cable length supplied with unit. Beautiful black morocco-grain finish with chromium fittings.

Model V11A. Volume Control only, with 25 ft. cable. Code: Ruzap. List Price **\$12.50**

Volume controls also available with 50 feet of cable.



UNIVERSAL MICROPHONES

"Mike" & "Phone" HAND SETS



Specially designed for five meter transmitters and the new five meter transceivers. Light in weight and compact. Highly polished molded bakelite units of the French phone type, using special high output microphone. A six ft. 4-conductor very light but durable cord furnished with individual connections to each instrument permits any form of circuit. Weight but 15 ozs. Single-Button (output — 38 DB.) with either 2000-ohm or 75-ohm high quality sensitive receiver; state which in ordering.

List Price **\$10.00**
Double-Button (output — 55 DB.) with either 2,000-ohm or 75-ohm high quality sensitive receiver. List Price **\$15.00**

Model "W" SINGLE BUTTON MICROPHONE



Small protected diaphragm, very sensitive and compact for Detectofone, Inter-office communicating systems with full quality performance. Standard impedance. Output level — 38 D.B. Size 1 $\frac{1}{4}$ " dia. x $\frac{1}{4}$ " thick. Wt. 1 $\frac{1}{2}$ oz. Code: "Wat." List Price **\$3.00**



"CAL-FON" Intercommunicating PHONE CALL SYSTEM

A high quality telephone receiver in genuine bakelite case and a high quality microphone for clear voice. Any number of stations may be connected or added to this system at any time without changes. Any two stations may communicate with each other without necessity of working through master switchboard; stations identified by separate signal rings; when called, merely lift handset and talk; to ring, remove handset and press button.

For industrial plants, business and professional offices and private home installation. Permits instant contact with desired person. Installation easily made. Simplified instructions accompany each unit. Desk Stand Base contains necessary switching apparatus, press button, line transformer and signal buzzer; only four dry cells or one 6-volt battery required, purchasable everywhere; line wire obtainable in exact length desired at extremely low cost. Cord furnished from handset to base and 3 ft. cord to be used from base to line. Size of set 8 $\frac{1}{4}$ " long x 4 $\frac{1}{2}$ " high. 4-wire line between boxes. Modernistic in design. Mahogany standard color. Shpg. wt. 4 lbs. List Price, each station **\$15.00**

RECORDING LEAD SCREWS



For recording up to 12-inch records at 98 lines per inch. Cuts from "outside to inside." Instantly connected or removed. Smooth operation, silent and accurate. Wt. 1 lb. Complete with guide, arm and adjustable output bearing, as shown. List Price **\$10.00**
For recording up to 16-inch records, 100 lines per inch. Furnished to cut either "inside to outside" or "outside to inside." Specify which is desired when ordering. Otherwise same as above. List Price **\$15.00**

MICROPHONE SPRINGS



Highest grade spring steel allowing maximum flexibility without stretch. Eight are generally used per set. Rust-proofed and polished chrome plated. Code: "Sis." List Price **each 5c**

CARBON GRANULES No. 100 Size



Very best grade transmitter carbon granules. Each vial contains sufficient granules to recarbon two two-button microphones. Hermetically sealed. Code: "GRAN." List Price **\$1.00**

R. C. A. MICROPHONES

RCA DOUBLE BUTTON CARBON MICROPHONE



SPECIFICATIONS

Type—Two-button carbon-grain. Frequency Range—50 to 6,500 cycles. Output Level—-63 db. (10-bar signal—open circuit). D-C Resistance—200 ohms per button. Impedance—250 ohms. Excitation Voltage—4 to 6 volts. Dimensions—6" high, 3½" wide, 2" thick. Net Weight—2 lbs.; Shipping Weight—4 lbs.

RCA Double Button Carbon Microphone is ideal. Attractive appearance, smooth frequency response, low carbon hiss—these are qualities that make this microphone outstanding. It is mounted in handy, rugged, all-metal case, suitable for either desk or hand use.

MI 6225-A—Code TUGEJ.

\$11⁵⁰

RCA AERODYNAMIC MICROPHONE



The RCA Aerodynamic Microphone is an outstanding RCA contribution to the popular-priced field. Small, attractive chromium finish, with modern styling, rugged construction and excellent performance, are features that appeal to every microphone user. Check the following specifications and let this microphone solve your difficult pick-up problems.

SPECIFICATIONS

Output Impedance—250 or 40,000 ohms. Operating Level—-68 db. (10-bar signal—open circuit). Frequency Range—100-8,000 cycles. Fitting Size—¼" pipe thread.

\$26⁵⁰

(less stand)

MI 6226—250 ohms, 6-ft. shielded cable—Code SCEXD.

\$29⁹⁵

(less stand)

MI 6228—40,000 ohms, 30-ft. shielded cable—Code SCONK.

RCA JUNIOR VELOCITY MICROPHONE



An exceptionally high signal to noise ratio is obtained through the use of Alnico Magnets, while three output impedances adapt it to most input circuits. If you want the best, at an attractive price, use the RCA Junior Velocity—an RCA Masterpiece. Equipped with ball and socket swivel mounting.

SPECIFICATIONS

Frequency Range—70-9,000 cycles. Output Impedances—50, 250 and 15,000 ohms. Output Level—-63 db. (10-bar signal—open circuit). Cable—30 ft., 2 conductor shielded. Mounting—Ball and socket—extremely flexible—½" pipe fitting. Weight (less cable)—2½ lbs.

\$43⁵⁰

(less stand)

MI 4036 Code SCHUY

RCA INDUCTOR Model 50-A for Outdoor Use



The RCA Inductor Microphone is an outstanding result of RCA's continued development for a microphone having predetermined characteristics such as—freedom from shock excitation, minimum response to wind effects, high pick-up sensitivity and rugged compact construction, all of which are present in this unique instrument. Operation is achieved by means of a thin aluminum conductor rigidly coupled to a pressure-operated diaphragm. No excitation power is required. A self-contained transformer matches a 250-ohm or 50-ohm line.

\$100⁰⁰

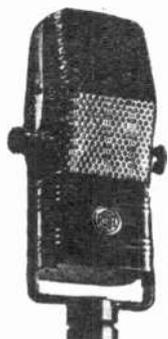
Complete with 30 foot cable
MI 4050-D Code CRAUI

SPECIFICATIONS

Frequency Range—60-10,000 cycles
Output level—67 db. (10-bar signal—open circuit)
Output Impedances—50 and 250 ohms
Fitting Size—½" pipe thread

VELOCITY MICROPHONE \$132²⁰

De Luxe Type 44-B



is used by the world's leading broadcasting studios and makes possible pick-up which would be difficult or impossible with the other types of microphones. It is completely foolproof, cannot get out of adjustment, and is able to stand more hard usage than any other type of microphone. Its bi-directional characteristics minimize room reverberation; it is free from pressure doubling, cavity resonance and high frequency directivity. Use it for your finest P.A. installations.

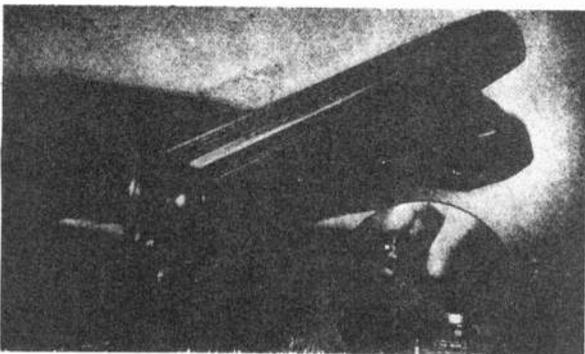
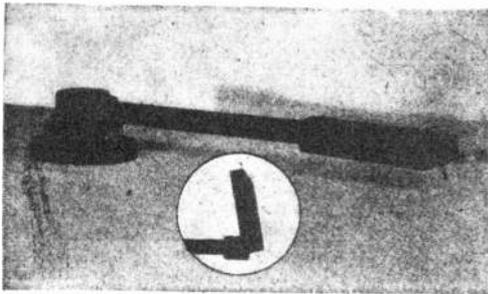
MI 4026-A Code GNAYJ

SPECIFICATIONS

Alnico Magnet—High Output
Frequency Range—30-15,000 cycles
Output level (10-bar input—open circuit)—61 db.
Output Impedances—50 and 250 ohms
Adjustable Frequency Compensating Network Incl.
Dimensions—H 12", W 7¾", D 3¾", weight 8½ lbs.
Fitting Size—½" pipe thread

SHURE CRYSTAL PICKUPS

NEW "TRANSCRIPTION-TYPE" CRYSTAL RECORD REPRODUCER



The new Shure "Transcription" Models are designed to meet the high standards required for lateral disc reproduction in the broadcast, recording and entertainment fields. Rugged, dependable cast construction and precision adjustable bearings provide a rigid assembly that will give long service even under adverse conditions. Wide-range response to approximately 7,000 cycles insures full range reproduction of high-quality records. Exclusive Shure "needle-tilt" Balanced-Tracking maintains an extremely close approximation to true tangency to record groove thus insuring minimum record wear and high quality reproduction. Head pivots horizontally at front of arm for easy needle changing, and locks in place when tilted back to eliminate accidental dropping. Adequate mass for high "inertia" with needle pressure of only 2 1/4 ounces. Arm automatically locks in fixed position when swung away from turntable, thus eliminating need for arm rest. New black morocco-grain finish. Complete with 3 1/2 ft. shielded cord, mounting screws and motor-board drilling template.

Model 912A. For all records up to and including 16-inch transcription size.
Code: **Ruzeg.**
List Price..... **\$15**

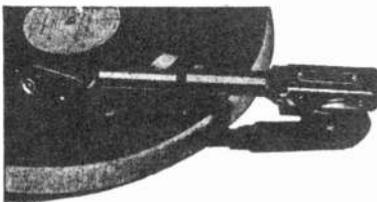
Model 910A. For 10-inch and 12-inch records only. Code: **Ruzel.**
List Price..... **\$14.50**

Model 99B. Shure ZEPHYR "Balanced-Tracking" Crystal Record Reproducer. Black Bakelite Molded. Overall Dimensions: 10 3/4" long, 2 3-16" high, base 2" wide. Radius of arm: 8". Shipping weight 1 1/2 lbs. Complete with 3 1/2 ft. shielded cord, mounting screws and motor-board drilling template. (Arm rest not included.) Code: **Ruzeb.**
List Price..... **\$10.00**

Model A70A. Zephyr Arm Rest. (See ill. above). Specially designed for the Zephyr. Holds pickup firmly in place when off the record. No thumb screws or adjustments—the pickup is simply pressed down over the arm-rest post and automatically locks in position. Arm is released when lifted. Mounts in 3-16" hole. Nickel finish. Code: **Ruzab.**
List Price..... **50c**

Model W20B. Crystal Pickup Cartridge only. Shure "Balanced-Tracking" crystal cartridge assembly (without pickup arm). Fits Zephyr arm. Code: **Ruzam.**
List Price..... **\$6**

ASTATIC CRYSTAL PICKUPS



PROFESSIONAL PICKUP
MODEL B-16

LIST PRICE . . . \$27.50

Especially designed for use on lateral transcriptions of all sizes.

MODEL B-16—Professional Tru-Tan Model B-16 adapts the Astatic exclusive Offset Head Design to the playing of records up to 16 inches in diameter—attaining a finer life-like reproduction and longer record service. Fool proof cueing-in. Free from arm resonance. Wide range frequency characteristics. Laboratory tested. Beautifully finished in modernistic black and chrome. Fully guaranteed.

Replacement cartridge for above. List Price, \$6.00.

MODEL B-10—Another Tru-Tan Astatic Pickup featuring the exclusive offset head design which holds the needle practically true to tangent to assure better reproduction and longer record life. Tracking error reduced to a minimum. Needle loading simplified. Free from resonance throughout audio frequency range. Ball bearing swivel base. Fully guaranteed.

Replacement cartridge for above. List Price, \$6.00.

MODEL B-10

LIST PRICE . . \$17.50



Astatic Offset-Head Reduces Tracking Error to a Minimum.

PICKUP MODEL O-7

Requires only short mounting space. Streamline design. Black or special finish. High in quality, low in price.

LIST PRICE \$10.00

Replacement cartridge for above. List Price, \$6.00

Astatic AXIAL Cushioning

Axial Cushioning is now incorporated for the first time in a crystal pickup. The pickup arm is insulated from its supporting base at the vertical pivots, on the axis of the arm, by a highly absorbent damping material. With the pickup thus protected against motor-board vibration, motor noise is definitely reduced and speaker-pickup feedback so reduced that at least 10 DB. higher speaker level is possible before feedback sets in. The full, smooth, low frequency response of the Astatic Crystal Pickup may thus be enjoyed under the most adverse feedback conditions.



S-TYPE PICKUPS

For true reproduction of recorded sounds—true bass and brilliant trebles—no pronounced peaks throughout audio range, Astatic S-Type Pickups are extremely popular. Now made with exclusive axial cushioning feature. About one-half as light on the record as conventional magnetic pickup, therefore extremely kind to life of recordings. Only 2 3/4 ounces pressure on needle point. Finished black wrinkle with chromium plated trimmings. Fully guaranteed.

S- 8 LIST PRICE \$10.00

S-12 LIST PRICE \$12.50

Replacement cartridge for above. List Price, \$6.00

SCRATCH FILTER
MODEL 5-M

Astatic Model 5-M Scratch Filter continues to grow in favor. Thoroughly sealed and tuned to resonate at the point of greatest scratch intensity, this filter clarifies tone quality to a remarkable degree.

Fully guaranteed.

LIST PRICE . . . \$1.50

R. C. A. SOUND PICKUPS

RCA CRYSTAL PICKUP AND ARM



Stock No. 14818

\$14⁹⁵ LIST

De Luxe Type



\$6⁵⁰ LIST PRICE

MAGNETIC PICKUPS

STOCK NO.	LIST PRICE	FINISH	IMPEDANCE AT 1000 CYCLES	OUTPUT VOLTAGE AT 400 CYCLES
9661	\$6.50	Walnut	8.5	.038
11721	6.50	Brown	8.5	.038
11481	7.50	Brown	22 (with hum bucking coil)	.080
9665	6.50	Walnut	30	.083
9676	6.50	Black	400	.285
9669*	6.50	Walnut	700	.46
9670	6.50	Walnut	2800	.65
9675	6.50	Black	8500	1.21
9749	6.50	Walnut	8500	1.21

*Viscoloid Damping not included.

INERTIA TYPE SUSPENSION ARMS



\$7⁵⁰ LIST PRICE

STOCK NO.	LIST PRICE	FINISH
9678	7.50	Walnut
9679	7.50	Black

All RCA Suspension Arms fit any of the pickups shown above. Suspension Arms include a plain escutcheon and a plug for connecting to the magnetic pickup. They fit all automatic record changers except the RAE-59, BAE-26 and RAE-79.



PICKUP AND ARM

Junior Type



Small in size yet great in quality of performance, this Junior Type RCA Pickup and Arm is particularly adaptable to modernization jobs on old phonographs where space is limited. Its use is especially recommended for installations with the Junior Type Motor and Turntable shown at right.

Stock No.	List Price	Impedance at 1000 Cycles	Output Voltage at 400 Cycles
12329	\$6.75	1400	.30
11950	8.50	1400	.60

LOW-COST MOTOR AND TURNTABLE (JUNIOR TYPE)

for 10" AND 12" RECORDS

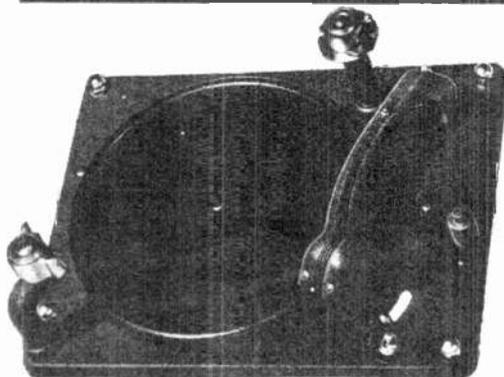


STOCK No. 11873

LIST PRICE \$10⁵⁰

Low-cost phonograph operation is offered by this Junior Type Motor for 78 r.p.m. records. The small physical size of this motor enables its application on jobs where space is limited or it is desirable to conserve space. Voltage—105-125 volts; frequency—60 cycles (can be supplied for 50 cycles). Diameter—7 inches.

Stock No. 3813 Motor Mounting Assembly contains rubber bushings, etc., to mount No. 11873 motor. List Price, package of three, \$0.56.



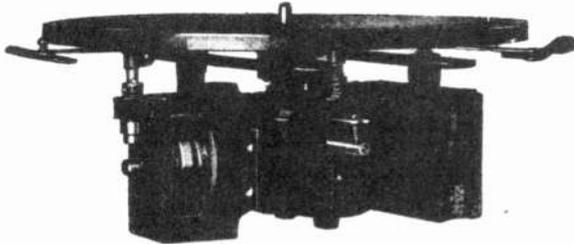
JUNIOR AUTOMATIC RECORD CHANGER

- Automatically changes seven, 10-inch records. Plays 12-inch records manually. Repeats last record of either size.
- Uses magnetic type pickup, 1400 ohms impedance. Also available as Stock No. 9801, 96 ohms impedance.

List Price\$49.95

GENERAL INDUSTRIES PHONO MOTORS

MODEL H—33-1/3 and 78 R.P.M.



GREEN FLYER
Two-speed Governor Controlled
Electric Motor

Model H with 12" Turntable, speed regulator, speed change lever and plate. Automatic Stops are optional. Specially designed for playing records recorded at 33 1/3 R.P.M. and 78 R.P.M. The shift from one speed to the other is accomplished by simply moving a lever. All gears are completely enclosed and run in oil. Silent Spiral-Cut Gears made from laminated Bakelite. Long over-size self-lubricating bearings.

Size: Length—8 7/8", Width—5 3/4", Depth—3 3/4" from mounting strap to bottom.

Model "H"

Complete with 10-inch turntable, 105 to 120 volts, 60 to 60 cycles A.C. Complete with Weighted Turntable..... \$22.50

MODEL A—78 R.P.M. and MODEL B—33-1/3 R.P.M.



GREEN FLYER
Governor Controlled Electric Motor

Furnished complete mounted on plate ready for installation. Open construction allowing perfect ventilation. Absolute uniformity of speed under severe variation of voltage and record drag. Long over-size self-lubricating bearings. Silent Spiral-Cut Gears made from Laminated Bakelite. Will not overheat in closed Cases and Cabinets. Finished in black enamel.

Size: Length—6 3/8", Width—3 3/4", Depth—3 3/8" from mounting plate to bottom.

Model "A"—110 Volts A.C., 60 cycles with 12" turntableca. \$13.75

Model "B"—110 Volts A.C., 60 cycles with 12" turntableca. 14.75

UNIVERSAL PHONOGRAPH MOTORS

Model "N" List Price, each \$23.25
33 1/3 and 78 R.P.M. Two-Speed Universal Motor, 110 Volts A.C. and D.C., 50-60 Cycles, with 12" turntable, speed regulator and speed change lever and escutcheon plate.

Model "G" List Price, each, \$20.50
78 R.P.M. Single Speed Universal Motor, 110 Volts A.C. and D.C. 50-60 Cycles, with 12" turntable and speed regulator.

Model "J" List Price, each, \$21.50
33 1/3 R.P.M. Single-Speed Universal Motor, 110 Volts A.C. and D.C. 50-60 Cycles, with 12" turntable and speed regulator.

SIX VOLT D.C. MOTORS

Model "S" List Price, each, \$19.75
78 R.P.M., with 12" turntable and speed regulator.

Model "T" List Price, each, \$20.75
33 1/3 R.P.M. With 12" turntable and speed regulator.

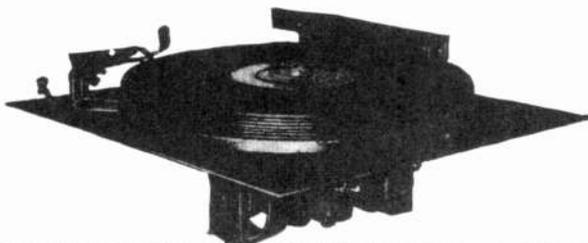
Model "R" List Price, each, \$24.50
78 and 33 1/3 R.P.M. with 12" turntable and speed regulator.

ON ALL MOTORS

Add \$1.50 for Automatic Stop.
Add \$3.00 for Weighted 12" turntable.
Deduct .50 for 10" turntable.

AUTOMATIC RECORD CHANGER MODEL "L"

Plays eight 10" records or seven 12" records Automatically



FEATURES

Plays seven 12" or eight 10" Records automatically . . . Any Record may be repeated . . . Records may be rejected . . . Repeats last record . . . Simple change for playing manually . . . Simple change for 10" or 12" Records . . . All steel Construction . . . Finish—Statuary Bronze.

This efficient record changer is compact and simple in construction. There are no intricate working parts to get out of order. The complete unit requires very small space for mounting. SIZE: Length across the front of base plate 14", Width front to back of base plate 15", Height above plate 5", Depth below the plate 3 1/2".

Record Changer mounted on 14"x15" Plate with On-and-Off Switch, Pickup and Volume Control, 110 Volt A.C., 60 Cycle 78 R.P.M. Motor.

No. 18—List Price..... \$54.00

No. 17—Same as No. 18, less Volume Control. List Price 53.25

No. 16—Same as No. 18, less On-and-Off Switch. List Price 53.50

No. 15—Same as No. 18, less Volume Control and On-and-Off Switch. List Price 53.00

For 110 Volts A.C. & D.C. Univ. Motor... Add \$8.00 to List Price

For 6 Volts D.C..... Add \$9.00 to List Price

For 110 Volts A.C. 25 Cycles..... Add \$1.50 to List Price

For 110 Volts A.C. 42 Cycles..... Add \$1.50 to List Price

For 220 Volts A.C. 60 Cycles..... Add .75 to List Price

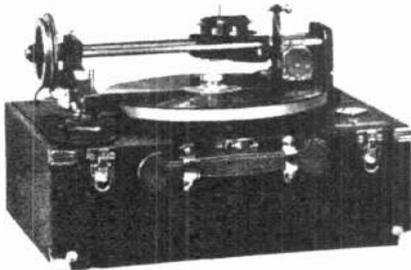
For Two Speed Motor..... Add \$3.00 to List Price

Note: We are furnishing as standard the Webster Electric Flat Type magnetic and Crystal Pickups and the Astatic Crystal Pickup. Please specify which one you prefer.

Add 7% to Net Price for Fed. Tax

RADIOTONE RECORDERS

MODEL P. R. 4



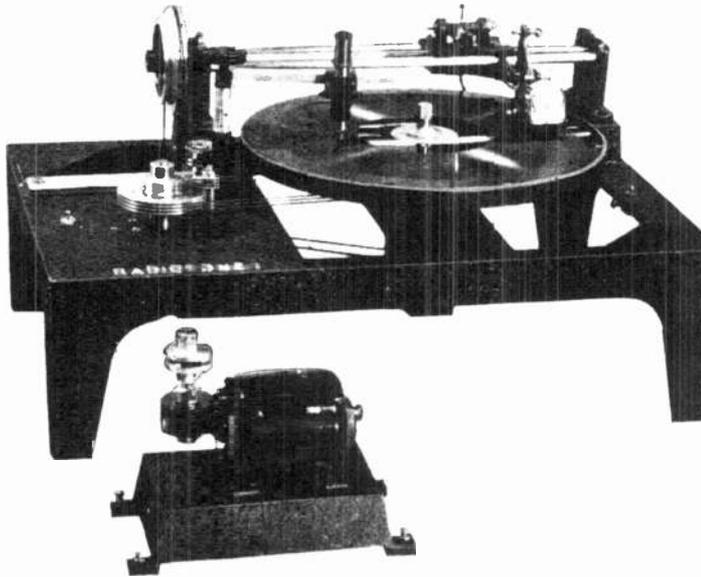
The PR-4 is a light and practical professional type disc recorder. This unit records up to a 13½" processing size disc at 78 RPM. It is equipped with a 100% con-

stant speed, synchronous motor, a 12" machine and balanced recording table, and a precision overhead lathe type screw for grooving acetate coated discs.

One of the new and exclusive features of this recording machine is the micrometer type angle adjuster and spring balance which gives a positive even depth of cut on any recordable surface. The recording head carriage has a positive windlass type adjustment for letting the recording head on the record, thus eliminating any possibility of injuring expensive stylus. The PR-4 has two different cutting pitches, 96 and 110 lines to the inch and records either from an inside start or an outside start. The PR-4 comes complete with 500 ohm recording head. It is also equipped with a crystal type playback arm and it comes completely wired and housed in a leatherette carrying case, 15 x 16 x 12 inches and weighs approximately 40 pounds.

Net Price\$176.25

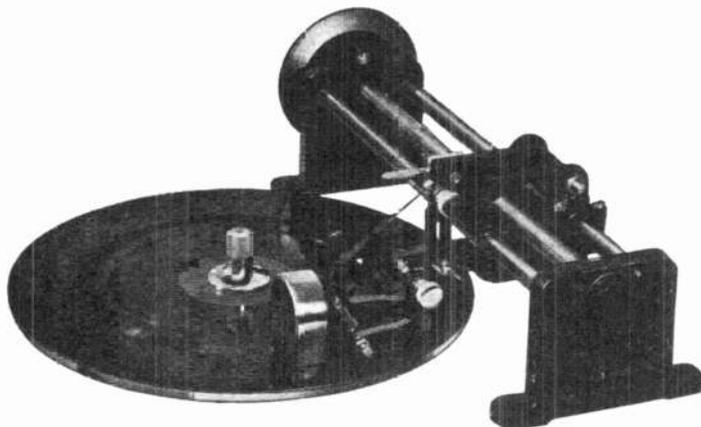
A-16 Radiotone Studio Model



Net Price \$296.25

This machine records at 33 1/3 RPM and 78 RPM. The chassis is of a bench mount type and is constructed of one solid metal casting. The recording table is made of cast iron, lathe turned and dynamically balanced. The precision overhead lathe type screw on this mechanism is designed for grooving at either 100 lines to the inch or 115 lines to the inch and records from an inside start or from an outside start. The A-16 is also equipped with Radiotone's exclusive feature, the micrometer type angle adjuster and spring balance which gives a positive even depth of cut on any recordable surface. The recording motor is a self-starting, constant speed, synchronous type and the unique pulley drive system is a dual ratio pulley allowing a quick change from 78 to 33 1/3 RPM. This machine is equipped with Radiotone's new cutting head designed to meet the new standards in instantaneous recording. The impedance of this head is 500 ohms. The A-16 comes complete with all the necessary switching devices, completely wired ready to operate, and it is equipped with a calibrated microscope with offset illumination. The dimensions of this machine are 20 x 30 x 8 inches, the 8" being the bench mount offset. This machine weighs approximately 80 pounds complete.

PROFESSIONAL RECORDING SCREW FEED ASSEMBLY

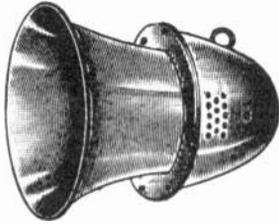


For those who wish to assemble their own recording machines, our lead screw assembly, illustrated above, will give the highest type of commercial recordings and dependable service under all conditions.

Net Price\$48.00

RAÇON SOUND UNITS

ARMORED CONE PROJECTOR



An efficient heavy-gauge steel and aluminum projector for dynamic cone speakers. Steel back enclosure with proper release holes for excellent response, and 16-gauge aluminum bell. Provided with mounting hook and mounting holes. Simple to install and assemble. Overall length 20". Bell diameter 17". For use with 12" or 10" cone speakers.

Code: RUMID..... **List Price \$19.00**

Above with steel back, acoustically damped with 1" material, and cone opening protected by durable screening and silk gauze.

Code: ROBOT..... **List Price \$15.00**

Same as above, for use with 6" or 8" speakers. Overall length 15". Bell diameter 15".

Code: RUMIX..... **List Price \$8.00**

Above with steel back, acoustically damped with 1" material, and cone opening protected by durable screening and silk gauze.

Code: RIFLE..... **List Price \$12.50**

BABY Electrodynamic Horn Unit



6-volt excitation. 1 1/4 ampere consumption at 6 volts. 15-ohm voice-coil impedance at 1000 cycles. Continuous operating capacity 5 watts Type A. 10 to 15 watts Type B. Peak load capacity 18 watts Type A. 50 watts Type B. Wt. 6 1/4 lbs.

Type A—Code: RAVEL..... **List Price \$24.75**
Type B—Code: RASSE..... **List Price 27.50**

NOTE.—Racon Units obtainable in any field change at slight additional cost.

JUNIOR Electrodynamic Horn Unit



6-8 volt field excitation. 1.1 ampere consumption at 6 volts. 15-ohms voice impedance at 1000 cycles. Continuous operating capacity, 6 watts Type A. 15 watts Type B. Peak load capacity, 20 watts Type A. 40 watts Type B. Wt. 11 lbs.

Type A—Code: RATAN..... **List Price \$33.00**

Type B—Code: REBUS..... **List Price 35.75**

ACOUSTIC TRUMPETS



Trumpets are made of Racon patented acoustic non-vibratory material. **Stormproof models** are guaranteed for life as waterproof in outdoor use in all climates and weathers, including immersion in water.

3 1/2-Foot Regular Model

Equipped with rolled-metal beaded edge, metal ferrule and suspension ring. Adapted for 1/8-18" or 1 1/4-18" threaded unit. Wt. 6 1/2 lbs. 22" diam.

Code: RELAY..... **List Price \$22.00**

De Luxe Model

Equipped with rolled-metal beaded edge, reinforced cast-aluminum tone-arm, and suspension ring. For indoor use. Wt. 10 lbs.

Code: REMIT..... **List Price \$27.50**

Stormproof Model

Equipped same as De Luxe. Waterproof. Wt. 12 lbs.

Code: RENEW..... **List Price \$44.00**

4 1/2-Foot Trumpets

Equipped with rolled-metal beaded edge and 25" cast-aluminum throat. Demountable into two sections, which can be quickly assembled or disassembled.

De Luxe Type—Wt. 16 lbs.
Code: RANCH..... **List Price \$44.00**

Stormproof Type—Wt. 18 lbs.
Code: RACEY..... **List Price \$60.50**

6-Foot Trumpets

Equipped with rolled-metal beaded edge, 34" cast-aluminum throat, and suspension eyelets. Bell 30" diam.

De Luxe Type—Wt. 18 lbs.
Code: RHYME..... **List Price \$58.50**

Stormproof Type—Wt. 23 lbs.
Code: RIDER..... **List Price \$75.00**

SUPER - GIANT Dynamic Horn Unit



6-8 volt field excitation. 1.0 ampere consumption at 6 volts. 15-ohm voice-coil impedance at 1000 cycles. Continuous operating capacity 25 watts. Peak load capacity 50 watts. Particularly adapted for theatre and auditorium use where the finest quality reproduction is required. Wt. 20 lbs.

Code: RHEUM..... **List Price \$66.00**

ALL ALUMINUM TRUMPETS



All trumpets made of 12-gauge aluminum with cast-aluminum 1/4" throat sections and cast-aluminum clamping edges, with reinforced bell and loose couplings.

6-Foot Trumpet

Bell 30" diam. Demountable into three sections

New Single-Unit Type—34" cast throat.
Code: RHINO..... **List Price \$65.00**

New Two Single-Unit Type
Code: RHOMB..... **List Price \$70.00**

4 1/2-Foot Trumpet

Demountable into 2 sections. 25" cast throat.

Single-Unit Type
Code: RIANT..... **List Price \$50.00**

Two-Unit Type
Code: RIBES..... **List Price \$57.50**

3 1/2-Foot Trumpet

Demountable into 2 sections. 16" cast throat.
Code: RAPIX..... **List Price \$25.00**

SUPER POWER Dynamic Unit



110 Volts D.C.

30-watts consumption. 15 ohm voice-coil impedance at 1000 cycles. Continuous operating capacity 35 watts. Peak load capacity 90 watts. Unexcelled for use where concentrated high

power output is required for long-range projection, as in aeroplanes, airports, traffic control, etc. Quality of reproduction is exceptionally clear. Newly-designed horns can be supplied or standard Racon Horns can be converted for use with it. Wt. 35 lbs.

Code: RUGBY..... **List Price \$90.00**

MASTER Horn Unit



6-8 volt field excitation. 1.1 ampere consumption at 6 volts. 15-ohm voice-coil impedance at 1000 cycles. Continuous operating capacity 20 watts. Peak load capacity 50 watts. Lightweight hi-powered unit especially suitable for portable systems and permanent installations where heavier units are not required. The perfect reproducer. Wt. 13 1/4 lbs.

Code: RINSE..... **List Price \$44.00**

Field Exciters

Tube-Type Rectifier

Supplies 300 Volts D.C. at 100 Milliamps

Type R46..... **List Price**
One-Unit Supply (Code: ROWAN)..... **\$25.00**
Two-Unit Supply (Code: ROWDY)..... **32.50**
Four-Unit Supply (Code: ROXEY)..... **40.00**

Diaphragm Replacements

	Net Price
Code: RUTEX Type A Diaphragms only.....	\$2.60
Code: RUVEX Type B Diaphragms only.....	3.60
Code: RUZEN Type A Head Assembly (including diaphragm).....	4.25
Code: RUZUR Type B Head Assembly (including diaphragm).....	5.25
Code: RUCHE Type C Head Assembly (including heavy-duty diaphragm).....	6.00

JENSEN SOUND EQUIPMENT

FIVE, SIX, EIGHT, TEN AND TWELVE INCH SPEAKERS
Field Coil and Permanent Magnet Designs



Illustrates appearance of 5", 6" and 8" Speakers

5, 6 AND 8 INCH

Exceptionally good small speakers for use in radio receivers, low power public address and the like. Not to be confused with the many cheaply made inefficient speakers. The PM speakers are all with heavy magnets; Model PM8-D, for instance, has twice as much high quality magnetic steel as many of the 8" speakers offered. All have 3/4" voice coils; PM speaker voice coil impedance 3 ohms; field coil speakers 5 ohms. All available with fixed or adjustable impedance transformer or less transformer.

FIVE INCH

Model F5-R with Field Coil			
Stock No.	Impedance	Field Coil	List Price
ST-104	V.C.	3000	\$ 3.40
*ST-104X	Adjustable	3000	4.40
ST-108	V.C.	2500	3.40
*ST-108X	Adjustable	2500	4.40

Model PM5-E with Permanent Magnet			
Stock No.	Impedance		List Price
ST-326	500 ohm		\$ 5.80
ST-327	V.C.		4.70
*ST-327X	Adjustable		5.45
*ST-327Y	Adjustable		5.95

SIX INCH

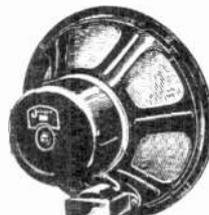
Model E6-R with Field Coil			
Stock No.	Impedance	Field Coil	List Price
ST-116	V.C.	2500	\$ 4.70
*ST-116X	Adjustable	2500	5.95
ST-124	V.C.	1000	4.70
*ST-124X	Adjustable	1000	5.95

Model PM6-E with Permanent Magnet			
Stock No.	Impedance		List Price
ST-239	500 ohm		\$ 6.90
ST-242	V.C.		5.80
*ST-242X	Adjustable		7.05
*ST-242Y	Adjustable		7.05

EIGHT INCH

Model D8-R with Field Coil			
Stock No.	Impedance	Field Coil	List Price
ST-132	V.C.	2500	\$ 6.05
*ST-132X	Adjustable	2500	7.30
ST-140	V.C.	1000	6.05
*ST-140X	Adjustable	1000	7.30

Model PM8-D with Permanent Magnet			
Stock No.	Impedance		List Price
ST-328	500 ohm		\$ 8.05
ST-329	V.C.		7.55
*ST-329X	Adjustable		8.80
*ST-329Y	Adjustable		8.80



Illustrates appearance of 8", 10" and 12" Speakers

8, 10 AND 12 INCH

A superior line of 8, 10 and 12 inch speakers for Radio Receivers, Public Address and general use. All equipped with either large field coils or heavy Permanent Magnets. Millions of these speakers are in use throughout the world as equipment in acoustic requirements of every kind. Voice coils in Field Coil Speakers are 1 1/2" in diameter, 8 ohm impedance; in PM Speakers 1" in diameter, 6 ohm impedance. Power handling ability ranges from approximately 6 watts in 8" models to 9 watts in 12", conservative rating. All feature high sensitivity and all may

be had with voice coil only or with fixed or adjustable impedance transformers.

EIGHT INCH

Model C8-R with Field Coil			
Stock No.	Impedance	Field Coil	List Price
ST-147	500 ohm	2500	\$ 8.25
ST-148	V.C.	2500	6.90
*ST-148X	Adjustable	2500	8.55
*ST-148Y	Adjustable	2500	8.55

Model PM8-C with Permanent Magnet			
Stock No.	Impedance		List Price
ST-227	500 ohm		\$10.75
ST-230	V.C.		9.35
*ST-230X	Adjustable		11.00
*ST-230Y	Adjustable		11.00

TEN INCH

Model C10-R with Field Coil			
Stock No.	Impedance	Field Coil	List Price
ST-159	500 ohm	2500	\$10.20
ST-160	V.C.	2500	8.80
*ST-160X	Adjustable	2500	10.45
*ST-160Y	Adjustable	2500	10.45

Model PM10-C with Permanent Magnet			
Stock No.	Impedance		List Price
ST-243	500 ohm		\$13.50
ST-246	V.C.		12.40
*ST-246X	Adjustable		14.05
*ST-246Y	Adjustable		14.05

TWELVE INCH

Model C12-R with Field Coil			
Stock No.	Impedance	Field Coil	List Price
ST-171	500 ohm	2500	\$11.55
ST-172	V.C.	2500	10.20
*ST-172X	Adjustable	2500	11.85
*ST-172Y	Adjustable	2500	11.85

Model PM12-C with Permanent Magnet			
Stock No.	Impedance		List Price
ST-247	500 ohm		17.05
ST-250	V.C.		15.70
*ST-250X	Adjustable		17.35
*ST-250Y	Adjustable		17.35

All the above speakers may be had with 12500 ohm field coils at no increase in price; there is a price increase for any other values. Fixed impedance transformers are available as follows: For Models C8-R, C10-R and C12-R—Z-1879, 4500 ohms CT; Z-1880, 7000 ohms; Z-1881, 14,000 ohms CT. For Models PM8-C, PM10-C and PM12-C—Z-1520, 500 ohms; Z-1643, 4500 ohms CT; Z-1642, 7000 ohms; Z-1582, 14,000 ohms CT. List Price \$1.50 when ordered with speakers; \$1.50 when ordered less speakers.

● ***Model "X" Transformers** . . . Model "X" Adjustable Impedance Transformers are designed to match conventional "Plate" Impedance Values, and the following values have been selected: 4500 ohms, 7000 ohms, 10,000 ohms and 14,000 ohms. A center tap is provided at all these values for use with tubes connected in pushpull.

Stock numbers including an "X" specify Transformers of the kind just described.

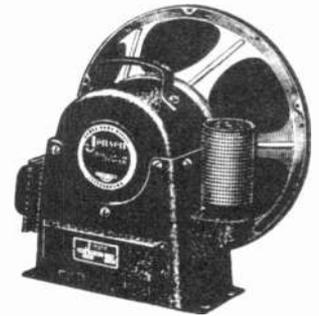
● **Model "Y" Transformers** . . . Stock numbers include a letter "Y" specify an Input Transformer designed to match conventional "Line" Impedance Values, the values selected being 500 ohms, 1000 ohms, 1500 ohms and 2000 ohms, with no center tap

JENSEN SOUND EQUIPMENT

Auditorium Speakers

... Undeniably the Best Known and Respected High Quality Loud Speakers available ... Second only to the New Jensen 18-Inch Speakers in Performance, Efficiency, and Power-Handling Ability ... Recommended for every use where Efficiency and Accuracy of Reproduction are Prime Requirements ...

In efficiency, response characteristics, and a high degree of all-around excellence, Jensen Auditorium Speakers have consistently set the highest standards. Three types of response characteristics are offered. Series M Speakers are generally used where good overall performance is required, such as for the reproduction of both voice and music. Series V Speakers provide predominant efficiency in the middle high frequency range and are to be preferred where voice reproduction is the chief requirement. Series L Speakers provide predominant efficiency in the low frequency range and are not used except as a part of Jensen Full Range Installations in conjunction with suitable filters and high frequency reproducers. HF Models provide extended range performance with uniform response out to 8000 cycles.



MODEL		With Regular Input Type	With 400-ohm Input Type	Less Input with 8-ohm V.C. Type	LIST PRICE With Input	Less Input
M-10A.C.	110v.-60 Cy.	3001	3009	3005	\$76.50	\$73.50
	110v.-25 Cy.	3002	3010	3006	83.50	80.50
M-20D.C.	110v.-D.C.	3051	3057	3054	51.50	48.50
	220v.-D.C.	3052	3058	3055	51.50	48.50
M-20D.C.	Field for FS-1 or FS-2	3060	3062	3063	51.50	48.50
	110v.-60 Cy.	3101	3109	3105	76.50	73.50
V-10A.C.	110v.-25 Cy.	3102	3110	3106	83.50	80.50
	110v.-D.C.	3151	3157	3154	51.50	48.50
V-20D.C.	220v.-D.C.	3152	3158	3155	51.50	48.50
	Field for FS-1 or FS-2	3160	3161	3162	51.50	48.50
L-10A.C.	110v.-60 Cy.	3901	3904	3907	76.50	73.50
	110v.-25 Cy.	3902	3905	3908	83.50	80.50
L-20D.C.	110v.-D.C.	3951	3955	3959	51.50	48.50
	220v.-D.C.	3952	3956	3960	51.50	48.50
L-20D.C.	Field for FS-1 or FS-2	3954	3958	3962	51.50	48.50

GENERAL DESIGN DATA

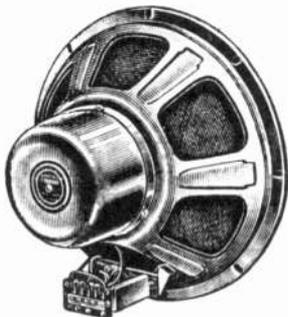
Frequency Response ... In accordance with the description above. Write to our Engineering Department for further information about response characteristics. **Power-Handling Capacity** ... 18 watts continuously; peaks of 25 watts and very little objectionable distortion is introduced by the speaker at even higher levels of input power. Physically the moving structure will handle up to 40 watts except at sustained low frequencies. **Efficiency** ... About 400 percent more efficient than conventional speakers having equivalent cone area. **Voice Coil Impedance** ... 8 ohms at 400 cycles.

A.C. AND D.C. DESIGNS

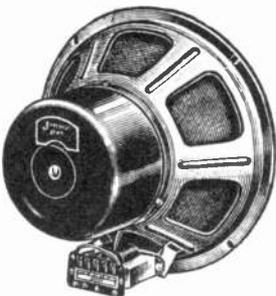
All models available for A.C. or D.C. operation in accordance with the following description: Any D.C. operating value may be specified with some delay in delivery. A.C. models for special voltage values are available at an increase in price. **Field Coil Wattage** ... Maximum 33; normal 26; minimum 20. **Baffle** ... Minimum, flat baffle recommended 4 ft. x 4 ft. Maximum necessary, 10 ft. x 10 ft. **Dimensions** ... Cone housing diameter 13 1/2 inches. **Weight Packed** ... A.C. models 56 lbs. D.C. models 46 lbs.

TWELVE AND FIFTEEN INCH SPEAKERS

Orthodynamic, Concert and Standard Models • Field Coil and Permanent Magnet Designs



Model A-15



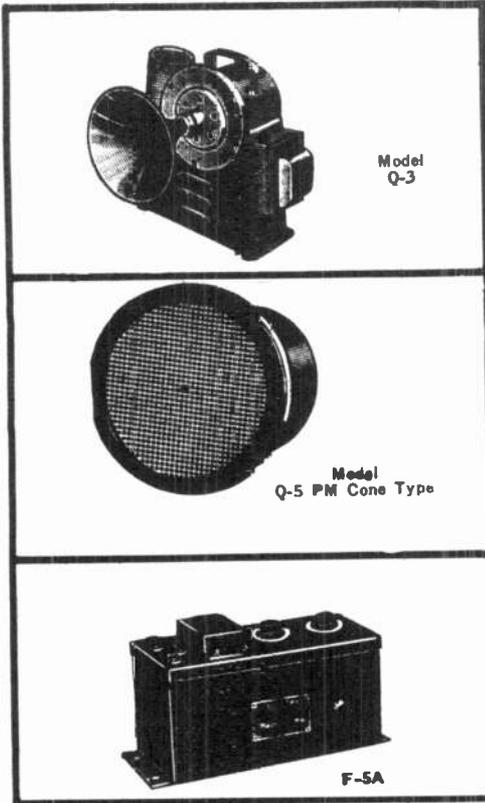
Model A-12PM

SPEAKERS WITH FIELD COILS		FIFTEEN INCH SPEAKERS		(ORDER BY STOCK (ST) NO.)	
Model	High Fidelity Type	Standard Fidelity Type	Field Coil	Impedance	List Price
A-15	ST-306	ST-307	2500 ohms	8 ohms	\$29.45
A-15	ST-308	ST-309	"	500 ohms	32.75
A-15	ST-306X	ST-307X	"	Adjustable "X"	33.55
A-15	ST-306Y	ST-307Y	"	Adjustable "Y"	33.55
B-15X	ST-314	ST-315	"	8 ohms	20.90
B-15X	ST-316	ST-317	"	500 ohms	22.85
B-15X	ST-314X	ST-315X	"	Adjustable "X"	23.40
B-15X	ST-314Y	ST-315Y	"	Adjustable "Y"	23.40
C-15R	.....	ST-322	"	8 ohms	14.85
C-15R	.....	ST-323	"	500 ohms	16.80
C-15R	.....	ST-322X	"	Adjustable "X"	17.35
C-15R	.....	ST-322Y	"	Adjustable "Y"	17.35
PERMANENT MAGNET SPEAKERS					
A-15PM	ST-298	ST-300	.....	8 ohms	\$45.40
A-15PM	ST-298X	ST-300X	.....	Adjustable "X"	49.50
A-15PM	ST-298Y	ST-300Y	.....	Adjustable "Y"	49.50
A-15PM	ST-299	ST-301	.....	500 ohms	48.70
PM15-B	ST-302	ST-304	.....	8 ohms	29.70
PM15-B	ST-302X	ST-304X	.....	Adjustable "X"	32.20
PM15-B	ST-302Y	ST-304Y	.....	Adjustable "Y"	32.20
PM15-B	ST-303	ST-305	.....	500 ohms	31.65
SPEAKERS WITH FIELD COILS					
TWELVE INCH SPEAKERS					
A-12	ST-211	ST-202	2500 ohms	8 ohms	\$21.75
A-12	ST-211X	ST-202X	"	Adjustable "X"	24.20
A-12	ST-211Y	ST-202Y	"	Adjustable "Y"	24.20
A-12	ST-210	ST-201	"	500 ohms	23.65
B12-X	.....	ST-184	"	8 ohms	16.50
B12-X	.....	ST-184X	"	Adjustable "X"	19.00
B12-X	.....	ST-184Y	"	Adjustable "Y"	19.00
B12-X	.....	ST-183	"	500 ohms	18.15
PERMANENT MAGNET SPEAKERS					
A12-PM	ST-260	ST-257	.....	8 ohms	\$38.25
A12-PM	ST-260X	ST-257X	.....	Adjustable "X"	40.75
A12-PM	ST-260Y	ST-257Y	.....	Adjustable "Y"	40.75
A12-PM	ST-258	ST-255	.....	500 ohms	40.15
PM12-B	ST-282	ST-254	.....	8 ohms	25.30
PM12-B	ST-282X	ST-254X	.....	Adjustable "X"	27.80
PM12-B	ST-282Y	ST-254Y	.....	Adjustable "Y"	27.80

860 ohm field coils for "A" Models and 1250 ohm coils for "B" and "C" Models are available at no price increase; other values available at higher prices.

JENSEN SOUND EQUIPMENT

NEW MODEL HIGH FREQUENCY SPEAKERS



Voice Coil Impedance—16 ohms at 3000 cycles on all models. Q Model Speakers are not offered with high impedance input transformers as standard equipment. All models must be operated from Filters, and Jensen Filters are designed to operate directly into voice coil (s).

A. C. Design—Models Q and Q-3 with tube rectifier; standard for voltages and frequencies as shown in listing below.

D. C. Design—With field coil resistance as shown in listing below. Other resistance values are readily available on order.

Field Coil Wattage—Model Q and Q-3 maximum 15, normal 12, minimum 10.

Frequency Response—Model Q Speakers with high-frequency cut-off at approximately 8000 cycles are recommended for Theatres and most other public address installations. Model Q-3 is more highly efficient than Model Q; high-frequency range is extended to 10,000 cycles with less than 10 dB attenuation at 18,000 cycles. This speaker is recommended for audition instruments, broadcasting stations and similar applications.

Model Q and Q-3—High Efficiency Metal Diaphragm Horn Type Speakers

Model	Type	Field Coil Power Source	LIST PRICES	
			With Reflectors	Less Reflectors
Q	3601	110v., 60-cy.	\$56.15	\$52.15
Q	3621	110-v., D.C.	40.75	36.80
Q	3622	220-v., D.C.	40.75	36.80
Q	3624	Jensen Field Supply	40.75	36.80
Q-3	3641	110-v., 60-cy.	81.15	76.75
Q-3	3661	110-v., D.C.	65.80	61.30
Q-3	3662	220-v., D.C.	65.80	61.30
Q-3	3663	Jensen Field Supply	65.80	61.30

Model Q-5 PM Cone Type High Frequency PM Speaker Type No. 3696, Input impedance 16 ohms, Frequency Range 1,600 to 16,000 cycles. List Price..... \$20.55

Order by Type Number.

Model	Impedance Input	Channels	Type No.	List Price
F5-A	500	2	3309	\$39.40
F7-A	500	1	3338	29.10

The New Jensen 18-inch Speakers

... The Largest ... Most Powerful ... and Most Capable Speakers ever offered ... Completely Dust and Dirt Proofed ...



The size and unusual performance ability of these speakers might classify them as special purpose speakers but certainly only in the sense that their use will be demanded where the absolute in performance is the essential requirement. In all models amplitude distortion has been reduced to a minimum never before reached; middle frequency response has been improved, and power handling and efficiency factors increased beyond any point previously available in loud speakers. The High Fidelity Models (HF) provide remarkable extended range performance out to 9000 cycles. The Standard Fidelity Models (M) do not have the extended range performance and are particularly recommended for more general applications, the high frequency range extending to approximately 5500 cycles. V Models are especially recommended where the reproduction of voice is the principal requirement, since they have rising efficiency in the middle and upper frequency range. L Models are specifically for use in wide range systems and provide greatly improved low frequency response with sharp attenuation above 3000 cycles.

GENERAL DESIGN DATA

Frequency Response . . . Frequency response varies in accordance with the discussion above. For more specific information write to our Engineering Department. **Power-Handling Capacity** . . . From 25 to 40 watts. Distortion products at the minimum value are exceptionally low and even at the maximum value less distortion is introduced than that generally present in so-called "high power" loud speakers. **Efficiency** . . . The highest degree of conversion efficiency ever attained in electro-dynamic core speakers is incorporated in these new 18-inch models. The actual efficiency of course depends on the frequency selected for the measurement, but in all cases these speakers are several hundred percent more efficient than 12-inch speakers of conventional design. **Voice Coil Impedance** . . . All voice coils have a nominal impedance of 8 ohms at 100 cycles. **Field Coil Wattage** . . . Maximum 33; normal 26; minimum 20. **A.C. and D.C. Designs** . . . **Weight Packed** . . . A.C. models 78 lbs. D.C. models 68 lbs.



MODEL		With 8 ohm voice coil Type		With 500 ohm input Type	With 4400 ohm center tapped input Type	LIST PRICE With Input	Less Input
		FOR A.C. OPERATION					
L-18A.C.	110v.-60 Cy.	5701	5704	5707	5708	\$89.50	\$86.50
	110v.-25 Cy.	5702	5705	5708	5709	96.50	93.50
M-18A.C.	110v.-60 Cy.	5801	5804	5807	5808	89.50	86.50
	110v.-25 Cy.	5802	5805	5808	5809	96.50	93.50
V-18A.C.	110v.-60 Cy.	5901	5904	5907	5908	89.50	86.50
	110v.-25 Cy.	5902	5905	5908	5909	96.50	93.50
HF-18A.C.	110v.-60 Cy.	6001	6004	6007	6008	92.50	89.50
	110v.-25 Cy.	6002	6005	6008	6009	99.50	96.50
FOR D.C. OPERATION							
L-18D.C.	110v. Field	5710	5713	5716	5717	\$64.50	\$61.50
	220v. Field	5711	5714	5717	5718	64.50	61.50
	Field for FS-1	5712	5715	5718	5719	64.50	61.50
M-18D.C.	110v. Field	5810	5813	5816	5817	64.50	61.50
	220v. Field	5811	5814	5817	5818	64.50	61.50
	Field for FS-1	5812	5815	5818	5819	64.50	61.50
V-18D.C.	110v. Field	5910	5913	5916	5917	64.50	61.50
	220v. Field	5911	5914	5917	5918	64.50	61.50
	Field for FS-1	5912	5915	5918	5919	64.50	61.50
HF-18D.C.	110v. Field	6010	6013	6016	6017	67.50	64.50
	220v. Field	6011	6014	6017	6018	67.50	64.50
	Field for FS-1	6012	6015	6018	6019	67.50	64.50

JENSEN SOUND EQUIPMENT

MODEL KM and KV REPRODUCERS

The Complete Loud Speaker—No Baffles Required

All Model KM and KV Reproducers consist of a specially designed Jensen Speaker and a cabinet for totally enclosing the speaker. This cabinet is shipped knock-down in a kit—easy to handle, assemble and install and low in cost.

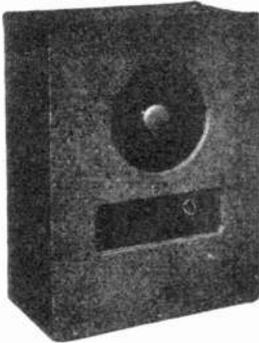
The job of designing and building baffles is taken away from the local dealer and placed with Jensen engineers whose application of new scientific principles present to the trade the first complete loud speaker—no baffles necessary. And altogether new standards of loud speaker performance ability, low cost and convenience are established.

Whole octaves added to music, speech crisp and intelligible, objectionable resonance and boom eliminated, performance independent of acoustic environment. . . . They mark a new era as definite as that created by the electro dynamic speaker . . . the loud speaker with a nondescript baffle or box is as obsolete as an automobile with a hand crank.

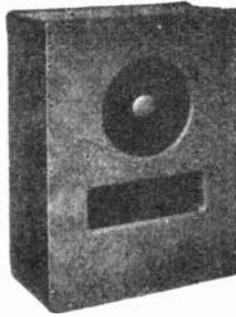
These results are due to the discovery and the development of the entirely new and exclusive Jensen **Peri-dynamic** and **Bass Reflex** Principles . . . dominating, basically new discoveries in the acoustic art.

MODEL KM with BASS REFLEX

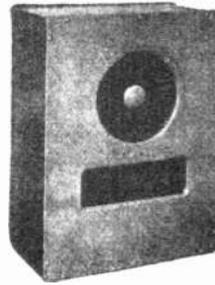
where reproduction of music is the predominant requirement. Four sizes—all with **Bass Reflex** and **Peri-dynamic** Principles.



Model KM-15
For 15" Speaker



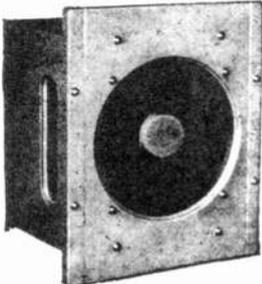
Model KM-12
For 12" Speaker



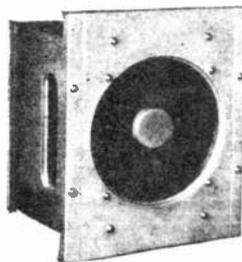
Model KM-10
For 10" Speaker



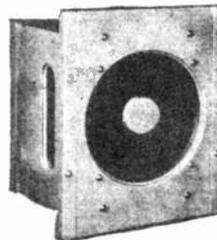
Model KM-8
For 8" Speaker



Model KV-12
For 12" Speaker



Model KV-10
For 10" Speaker



Model KV-8
For 8" Speaker

MODEL KV

where reinforcement of speech is the predominate requirement. Three sizes, all with **Peri-dynamic** Principle.

MODEL KM REPRODUCERS . . .

Model	Type No.	List Price
KM-8	ST-346	\$22.00
KM-8	ST-347	22.85
KM-8	ST-348	24.50
KM-10	ST-349	27.55
KM-10	ST-350	31.05
KM-12	ST-351	32.10
KM-12	ST-352	35.45
KM-12	ST-373	40.10
KM-12	ST-379	37.10
KM-12	ST-380	45.85
KM-12	ST-381	57.60
KM-15	ST-382	45.60
KM-15	ST-383	53.35
KM-15	ST-384	53.60
KM-15	ST-386	67.85

MODEL KV REPRODUCERS . . .

Model	Type No.	List Price
KV-8	ST-386	\$12.90
KV-8	ST-387	15.40
KV-10	ST-388	16.15
KV-10	ST-389	19.65
KV-12	ST-390	19.60
KV-12	ST-391	22.95
KV-12	ST-392	27.60
KV-12	ST-393	24.60
KV-12	ST-394	33.35
KV-12	ST-395	45.10

REPRODUCER Plus

Model	List Price
BR-8	\$16.00
BR-8	16.00
BR-8	16.00
BR-10	19.80
BR-10	19.80
BR-12	22.85
BR-15	26.60

REPRODUCER Consists of

Model	Type No.
GRR	ST-353
PM8D	ST-354
PM8C	ST-355
G10R	ST-356
PM10C	ST-357
C12R	ST-358
B12X	ST-359
A-12	ST-360
PM-12C	ST-361
PM12B	ST-362
A12PM	ST-363
B15X	ST-364
A15	ST-365
PM15B	ST-366
A15PM	ST-367

Speaker

Size	List Price
8"	\$ 6.00
8"	6.85
8"	8.50
10"	7.75
10"	11.25
12"	9.25
12"	12.60
12"	17.25
12"	14.25
12"	23.00
12"	34.75
15"	19.00
15"	26.75
15"	27.00
15"	41.25



BRACKET #3010



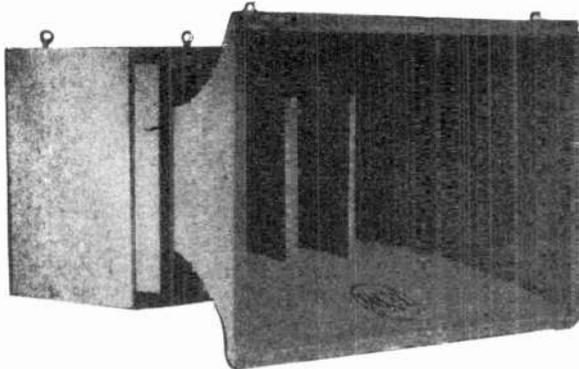
SPECIAL BRACKETS . . . If operating or other circumstances require that reproducers be tilted downward, then the special brackets and fixtures shown here are recommended. See drawing below.

For Model KV Reproducer order 1-Part No. SA-2006 and 2-Part No. 3010.

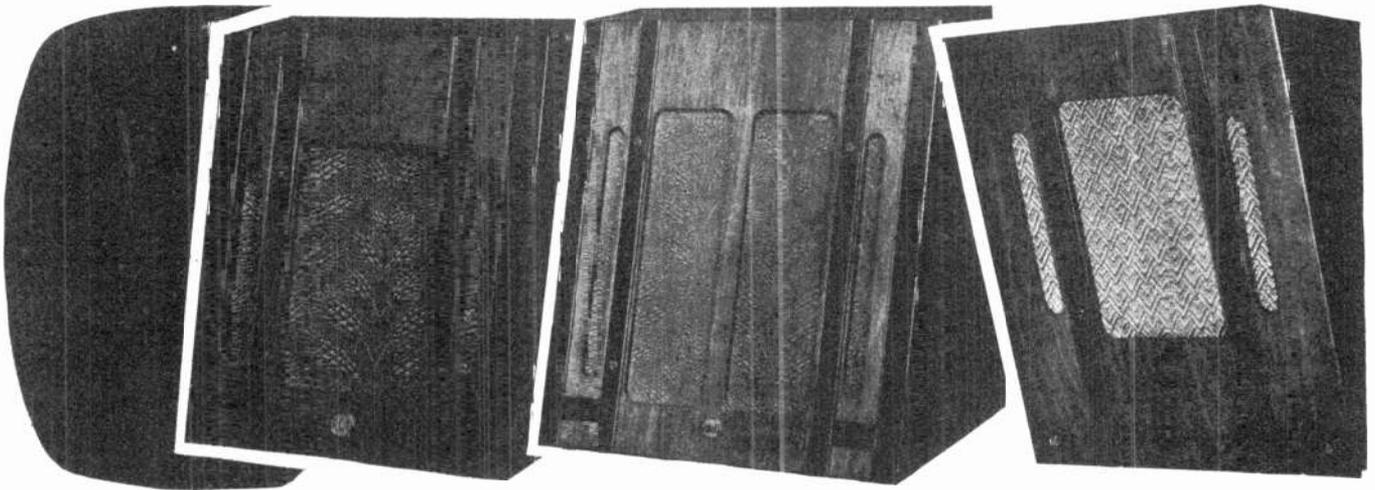
For Model KM Reproducer order 1-Part No. SA-2007 for KM-8 and 2-Part No. SA-2007 for all other "KM" Models. Order 2-Part No. 3010 for all KM Models.

List Price—Part No. SA-2006, 70c; SA-2007, 80c; 3010, 10c.

R. C. A. SOUND Baffles



RCA Sound Projector—This efficient short baffle sound projector is designed for use with RCA 12-inch speaker units, of either the electrodynamic or permanent field type. It features an extremely wide distribution angle (90° horizontal, 50° vertical) and includes high frequency equalizers for obtaining a smooth overall response. A new elastic gray wrinkle-baked finish withstands severe changes in climatic conditions. While not entirely weatherproof, this speaker may be used out-of-doors and is provided with a shield to protect the cone from ordinary adverse weather conditions. Size: Length 27 inches, Width 27¼ inches, Height 17¾ inches. Weight: Net 28 lbs., Shipping 55 lbs.
 MI 4428—Code SCAEP (less speaker unit) ***28.25**



RCA Metal Housing—This metal speaker housing is designed for applications where rugged unit of neat appearance is desired. It is made of steel and finished in an attractive brown wrinkle lacquer. For MI 6248-A speaker unit or other 8-inch speakers of similar dimensions. It is 9⅝" in diameter, 4" deep, and weighs only 2 lbs. (less the speaker unit). Shipping weight, 4½ lbs.

MI 6296—Code SCILD ***1.80**

RCA Semi-Flush Baffle—This attractive baffle is designed for restaurants, hotels and others who desire a semi-flush housing that may be mounted high up on the wall and yet will project sound to those who are listening. It is made of wood, attractively finished in walnut, and will accommodate most 8-inch loudspeakers. Must be used with MI 6161-A Wall Box. Dimensions 11¼" wide, 13⅜" high and 4½" deep at its maximum depth, and weighs 2 lbs. less speaker unit. Shipping weight, 5 lbs.

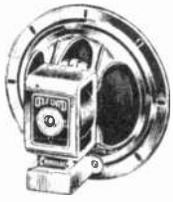
MI 6293—Code SCHK ***7.55**
 MI 6161-A—Code YXANC—Wall Box **.90**

RCA Sloping Front Housing—For 8-inch type loudspeakers, such as the RCA MI 6248-A, this housing will be found extremely useful. It may be mounted either on the wall or on a table or desk. It is attractively finished in walnut and improves the tone quality of the speaker. An excellent unit for hotel rooms, office buildings, restaurants and other multiple outlet P.A. installations. Dimensions: 10⅝" wide, 12½" high, 7½" deep. MI 6292—Code SCIFL. ***8.35**

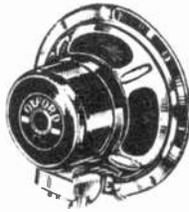
RCA Sloping Front Housing—This attractive unit will accommodate the RCA MI 6247-A 12-inch speaker and others of similar dimensions. It may be used either for mounting on the wall or for placing on a table, desk, etc. It is made of wood, attractively finished in walnut, and is an ideal unit for use with multiple speaker P.A. installations. Dimensions: 14½" wide, 16½" high, 10⅝" deep (maximum). Weight: Net, 4 lbs.; Shipping, 6 lbs. MI 6294. Code SCESC. ***8.90**

OXFORD SPEAKERS

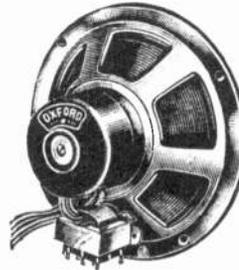
A new series of popularly priced speakers, built to the most exacting standards of quality. They may be used for replacements with full confidence that they will meet every original requirement of the set manufacturer—in many cases far surpassing the original speaker in performance.



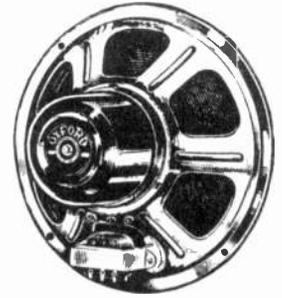
65-O



8-F



11-O



12-O

SPECIFY Field When ORDERING

Model	Size	Depth	V.C. Size	V.C. Imp. Ohms	Trans.	Power Cap. Watts	Shpg. Wt.	List
3-O	3 1/2"	2 3/8"	5/8"	3	Semi-Univ.	2	1 1/2 lbs.	\$2.75
5-O	5"	2 1/2"	5/8"	3.5	Semi-Univ.	3	2 lbs.	3.15
65-O	6 1/2"	3 3/8"	3/4"	4.5	Univ.	5	3 1/4 lbs.	4.30
8-O	8"	4 1/8"	3/4"	4.5	Univ.	6	4 1/2 lbs.	5.15
8-F	3"	4 5/8"	1"	4.5	Univ.	7	5 3/4 lbs.	6.25
11-O	11"	5 1/4"	1"	4.5	Univ.	9	6 3/4 lbs.	7.25
12-O	12"	5 5/8"	1"	4.5	Univ.	10	8 lbs.	8.25

Oxford "PERMAG" permanent-magnet speakers all have full size magnets, assuring a high flux density across the voice coil. Each model matches in sensitivity a comparable electro-dynamic speaker.



3AMP

Model	Size	Depth	Voice Coil Size Ohms	Power Capacity Watts	Trans.	Ship. Wt.	List
3AMP	3 1/2"	2 1/8"	5/8" — 3	1 1/2	None*	1 1/4 Lbs.	\$3.15

PREMIER MAGNETIC SPEAKERS

MAGNETIC SPEAKERS

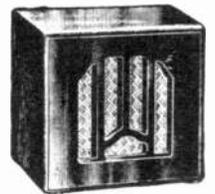


Newly developed magnetic speakers of improved design and performance. Sturdy construction assures long dependable service.

Model	Size	Shpg. Wt.	List Price
M-30	3 inch	1/2 lb.	\$1.65
M-50	5 inch	3/4 lb.	1.75
M-60	6 1/2 inch	1 1/4 lbs.	2.10
M-80	8 inch	1 1/2 lbs.	2.75

MAGNETIC SPEAKERS in Cabinets

These speakers are the high quality standard magnetics, housed in attractive Walnut finished cabinets as illustrated. Front and back have identical openings and are covered with good quality grille cloth; thus presenting a beautiful all-round appearance.



Model	Size	Cabinet Size	Shpg. Wt.	Vol. Cont. On-Off Swt.	List Price
MC-50	5"	7x7x4"	2.4 lbs.	None	\$4.30
MC-60	6 1/2"	7x7x4"	2.5 lbs.	None	4.70
MC-80	8"	9x9x5"	4 lbs.	None	5.80
MCV-50	5"	7x7x4"	2.9 lbs.	With	6.50
MCV-60	6 1/2"	7x7x4"	3 lbs.	With	7.00
MCV-80	8"	9x9x5"	5 lbs.	With	8.10

TRIMM HEADPHONES



No. 70

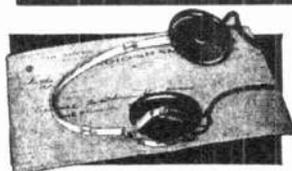
TRIMM PROFESSIONAL HEADSET

The choice of countless headset users—the original Trimm headset. Double unit watch case type. Bakelite shell and cap, forged magnet of chrome steel, impregnated coils; six foot moisture proof wear resisting cord, entirely concealed terminals. Fabric covered wire headband, No. 691. May be secured in any resistance. Standard resistances, 4000, 3000, 2000, 75 (500 ohms impedance) ohms D. C. per pair.

No. 70 Code TRUCD.....\$4.20

SINGLE UNIT PROFESSIONAL with wire headband (No. 695), six foot cord. No. 72 Code TRUCB\$2.60

SINGLE UNIT PROFESSIONAL WITH LORGNETTE HANDLE No. 75 Code TRUCL\$4.20



No. 106

SPECIAL 24,000 OHM IMPEDANCE TRIMM FEATHERWEIGHT

The headset built specifically for the Amateur. Precision built throughout, embodying results of years of experience. Combines ultra sensitivity with rugged construction, and yet is very light in weight.

No. 106 (No. 683 headband) Code TRADX\$10.00

No. 107 (No. 681 headband) Code TRADC\$10.00

TRIMM DEPENDABLE HEADSET



No. 65

Long a favorite with amateurs. Double unit bakelite shell and cap, heavy forged magnet, six foot cord, fabric covered wire headband (No. 692.) 2000 and 40 ohms D. C. resistance per pair.

No. 65 Code TRUXL.....\$3.40

SINGLE UNIT DEPENDABLE. 1000 and 40 ohms D. C. resistance.

No. 67 Code TRUXC\$2.00

EAR CUSHIONS



Sponge rubber ear cushion provides the utmost comfort to the headset user. Especially useful for audiometric testing, monitoring, laboratory work, because of reduced sound leakage.

No. 656 (Featherweight) Code TMALD, per pr.\$0.56

No. 660 (Western Electric, Trimm Professional, and other watch case type headsets) Code TMAXD per pr.\$0.56

TRIMM OSCILLATOR



(Bone Conduction Unit) A tiny oscillator placed back of the ear which conducts sound by means of vibration direct to the auditory nerve. An exclusive design giving greater efficiency. Extremely light and compact. Furnished with extra light-weight headband. (Available in 6, 14, 80, 500, 1000, 2000 ohms D. C.)



No. 207

No. 207 Code TRODC\$17.00

BRANDES HEADPHONES



Brandes Superior Matched Tone Headsets

LIST PRICE

BS-2, 2000 ohms D.C. 10000 ohms impedance at 1000 cycles.....\$3.10

The Brandes "Superior" Headset has been on the market since 1908. It was one of the first headsets available to amateurs. Millions of these sets have been made and they are used in every country in the world. It is as popular today as it ever was, which attests for its high quality and ruggedness.

It is the outside terminal type. The diameter of the diaphragm is 2-1/8". Aluminum cases. Black lacanite or aluminum unbreakable caps. Double coils, two in each receiver. Magnets made of chrome magnet steel 1/4" square. It has a braid covered band, adjustment of which can be made permanent by means of a knurled thumb nut. Cotton covered cord four and a half feet long.

CANNON HEADPHONES



CANNON-BALL President

LIST PRICES

PC-2, 2000 ohms D.C. 10000 ohms impedance at 1000 cycles.....	\$4.00
PC-3, 3000 ohms D.C. 15000 ohms impedance at 1000 cycles.....	4.50
PC-5, 5000 ohms D.C. 25000 ohms impedance at 1000 cycles.....	5.50

It is of the concealed terminal type. The diameter of the diaphragm is 2-1/16". Aluminum cases. Bakelite or aluminum unbreakable caps. Double coils, two in each receiver. The magnets are made of chrome magnet steel 1/4" square.

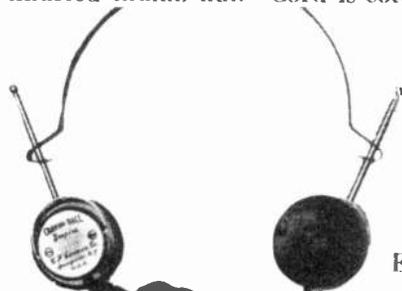


Master CANNON-BALL

LIST PRICES

MC-2, 2000 ohms D.C. 10000 ohms impedance at 1000 cycles.....	\$3.10
MC-3, 3000 ohms D.C. 15000 ohms impedance at 1000 cycles.....	3.50
MC-5, 5000 ohms D.C. 25000 ohms impedance at 1000 cycles.....	5.00

It is of the concealed terminal type. The diameter of the diaphragm is 2-1/16". Aluminum cases. Bakelite or aluminum unbreakable caps. Double coils, two in each receiver. Magnets made of chrome magnet steel 1/4" square. It has a braid covered headband, adjustment of which can be made permanent by means of a knurled thumb nut. Cord is cotton, four and a half feet long.



Cannon-Ball

A New Lightweight Headset

LIST PRICE

EC-2, 2000 ohms D.C. 10000 ohms impedance at 1000 cycles.....	\$2.10
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It is of the concealed terminal type. The diameter of the diaphragm is 1-7/16". Aluminum cases. Black lacanite or aluminum unbreakable cap. Double coils, two in each receiver. A round chrome magnet of substantial size insures powerful magnetism. Cotton cords four and a half feet long. Headband is spring steel with adjustable yokes.



DIXIE

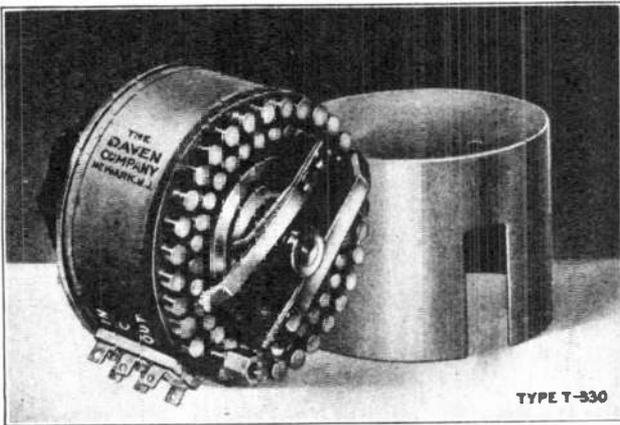
"The Old Faithful"

LIST PRICE

CD-2, 2000 ohms D.C. 10000 ohms impedance at 1000 cycles.....	\$2.60
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It is the outside terminal type. The diameter of the diaphragm is 2-1/16". Aluminum cases with black lacanite or aluminum unbreakable caps. Double coils, two in each receiver. Magnets made of chrome magnet steel 1/4" square. It has a braid covered band, adjustment of which can be made permanent by means of a knurled thumb nut. Cord is cotton, four and a half feet long.

DAVEN ATTENUATORS



THE TYPE "T-330" ATTENUATOR was designed to advance at once, and at a single step, the criteria of quality, space, and cost as applied to mixing and main gain controls.

RANGE OF CONTROL:—Thirty steps of attenuation. The standard range is tapered from 1½ db to a total loss of 60 decibels on the next to the last step and approximately 128 decibels on the last contact.

INSERTION LOSS:—Zero.

ACCURACY OF CALIBRATION:—The accuracy is within 5% at any or all steps, measured at 1,000 cycles.

FREQUENCY ERROR:—There is no frequency discrimination over the range of 30 to 17,000 cycles.

NOISE LEVEL:—The noise level introduced by this unit is below that caused by thermal agitation and shot effect in any apparatus with which it may be used.

RESISTORS:—The best insulated resistance wire obtainable is used.

SWITCH:—The switch is a heavy-duty, laminated, positive wiping type. Switch blade and contact materials are carefully chosen to minimize the thermo-electric effect, and consequently reduce the noise level. No pigtail is used, separate switch blades and contact rings are used instead, which also helps to prevent the introduction of noise.

SHIELDING:—The unit is shielded against stray fields and protected from dust by means of an aluminum cover and front plate.

DIMENSIONS:—Diameter _____ 2¾ inches
Back of Panel depth 2-1/16 inches

WEIGHT:—Shipping weight 22 ounces.
Net weight 12 ounces.

TYPE	TERMINAL IMPEDANCE	CODE WORD	NET PRICE	TYPE	TERMINAL IMPEDANCE	CODE WORD	NET PRICE
T-330 A	30/30	TOGA	\$17.50	T-330-F	500/500	TENF	\$17.50
T-330 B	50/50	TELB	\$17.50	T-330-G	600/600	TEEG	\$17.50
T-330-C	125/125	TEAC	\$17.50	T-330-AB *	30/50	TEAB	\$17.50
T-330-D	200/200	TEND	\$17.50	T-330-BD *	50/200	TABD	\$17.50
T-330-E	250/250	TARE	\$17.50	T-330-FD *	500/200	TIDF	\$17.50

* Unequal impedances designed having minimum loss for "T" network.

Daven Ladder Attenuators Type No. LA-220

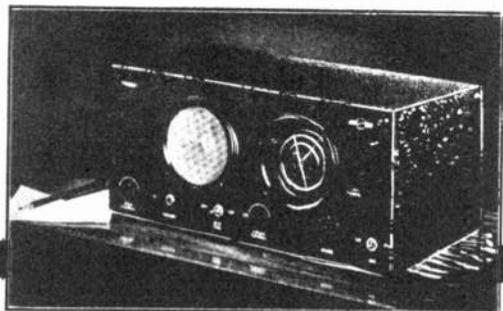
CIRCUIT: LADDER NETWORK.
NOISE LEVEL:— 150 db. or better.
NUMBER OF STEPS: 30
MINIMUM ATTENUATION: 2.5 db.
MAXIMUM ATTENUATION: Infinite.
ATTENUATION ON NEXT TO LAST STEP: 45 db.
ATTENUATION PER STEP: 1.5 db.
FREQUENCY ERROR: Plus or minus 0.5 db. over the range of 30 to 10,000 cycles, and 1 db from 10,000 to 30,000 c.p.s.

RESISTANCES: Unifilar winding on thin bakelite strips. Silk enameled resistance wire used throughout.
SHIELDING: Aluminum cover and front panel.
DIMENSIONS: 2 3/4" diameter x 2 1/16" in depth.
MOUNTING: Two mounting holes for No. 8-32 screws, 1/2" apart on horizontal center line.
RANGE: See table below.

TYPE	TERMINAL IMPEDANCE	ATTENUATION		NUMBER OF STEPS	WEIGHT		CODE WORD	NET PRICE
		TOTAL	PER STEP		NET	SHIPPING		
LA-220	30/30	45 db.	1.5 db.	30	10 oz.	20 oz.	LATH	\$12.50
"	50/50	"	"	"	"	"	LARK	"
"	60/60	"	"	"	"	"	LACE	"
"	90/90	"	"	"	"	"	LANE	"
"	125/125	"	"	"	"	"	LASH	"
"	200/200	"	"	"	"	"	LAUD	"
"	250/250	"	"	"	"	"	LATE	"
"	500/500	"	"	"	"	"	LAWN	"

HALLICRAFTER SHORT WAVE RECEIVERS

SKY BUDDY



The Sky Buddy

Net Price \$29.50

A REAL junior model communication receiver that's hard to beat in sensitivity and selectivity even when it's compared with higher priced sets! Look at these features—and then look at this price! Tuning from 554 KC to 18.1 MC (16.6 to 555 meters) in three bands. Band 1—545 KC to 1680 KC; Band 2—1680 to 5500 KC; Band 3—5500 to 18,100 KC. Single iron core I.F. stage and improved mechanical band spread (36 to 1). Direct calibration tuning eliminates complicated charts and tables. Illuminated main dial. Automatic volume control. Beat Frequency oscillator. Headphone jack. Hum-free self contained power supply. Built-in speaker; 5 tubes: 6A7—1st Detector-Oscillator; 6F7—Intermediate Amplifier and Beat Frequency Oscillator; 75—End Detector, AVC and 1st Audio Amplifier; 42—Power Output Stage; 80—Rectifier. Size: 17 by 7½ by 8¾ inches deep. Shipping wt. 20 lbs. For use on 110-120 volt, 50-60 cycle, A.C. current only.

A COMPLETE communication receiver with every control needed for efficient reception. Remarkable sensitivity and selectivity made possible with a high gain iron core I.F. transformer, equal in performance to two conventional air core stages and specially designed preamplifier. Added selectivity and image frequency rejection given by preselector ahead of the first detector. Variable beat frequency oscillator for CW and weak signal reception. R.F. and audio gain control. Automatic volume control and send-receive switch. Signal strength indicator. Illuminated main and band spread dial. Hum-free power supply affords quiet headphone operation. Rigid construction assures steady signals. Mechanical band spread—direct calibration tuning, no charts, no tables, and tone control. Built-in speaker. Headphone jack. Three bands, from 17.6 MC to 540 MC; Band 1—540 to 1700 KC; Band 2—1600 to 5400 KC; Band 3—5300 to 18,000 KC. Seven tubes: 4 metal and 3 glass 7B—R.F. Preamplifier; 6A7—Detector-Oscillator; 6F7—I.F. Amplifier and Beat Frequency Oscillator; 75—2nd Detector, AVC and A.F. Amplifier; 42—Power Output Stage. Size: 8¾ by 7¼ by 10 inches deep. Ship. wt. 29 lbs. For 110-120 volt, 50-60 cycle A.C. operation only.



The Sky Chief (complete with seven tested Raytheon tubes) . . . Net Price \$44.50



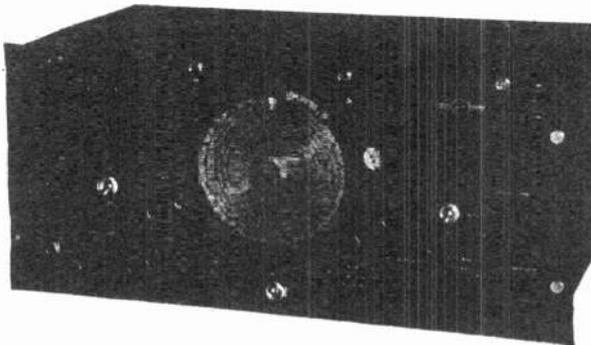
Sky Challenger II

Just Check These Many Technical Features:

Iron core I.F. transformer (2 stages). Air trimmed R.F. Preamplifier. Direct calibration tuning—no charts—no tables. Automatic Volume Control. Beat Frequency Oscillator (variable input). Tone Control. Send-Receive (Standby) Switch. Headphone Jack. Hum Free Power Supply. Undistorted power output—4 watts. 9 tubes: 3 metal, 3 glass; 6K7—RF-Preamplifier; 6L7—Mixer; 6C5—Oscillator; 6K7—1st RF Stage; 6K7—2nd RF Stage; 6Q7C—2nd Detector, AVC and 1st AF Stage; 6F6C—Power Output Stage; 80—Rectifier; 6K7—Beat Frequency Oscillator. Size: 8½ by 18½ by 10¼ in. deep. Ship. wt. 37 lbs. For 110-120 volt, 60 cycle A.C.

- NET PRICE
- MODEL S-18 (less Crystal) . . . \$77.00
 - MODEL SX-18 (with Crystal) . . . \$89.00
 - 8-Inch PM SPEAKER in Case . . . \$10.00

HALLICRAFTER SHORT WAVE RECEIVERS



The
ULTRA SKY RIDER

- No Plug-in Coils
- Individual Coil for Each Band
- 10 All-Metal Tubes
- Generous Isolantite and Steatite Insulation
- Continuous Electro-Mechanical Band Spread
- Iron Core Expanding I.F. Transformer
- Built-in Power Pack
- Frequency Calibrated Micro-Vernier 4-Band Dial
- Antenna Compensator
- Moderate Price

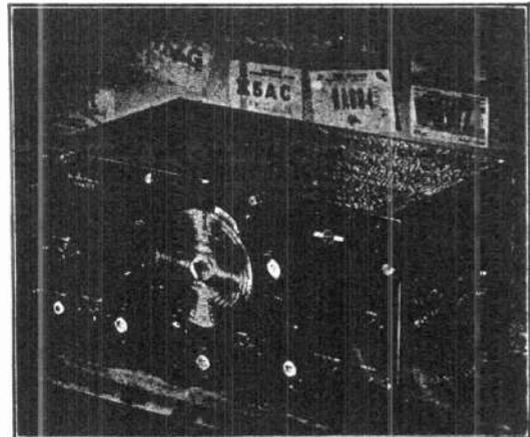
Size: 8 3/4 by 19 by 10 inches deep. Ship. wt. 45 lbs. For 110-120 volt, 50-60 cycle A.C.

TUNE in 5 meter stations with the same ease as signals on the lower frequencies. Direct dial calibration—no charts or tables. Unique electro-mechanical band spread system. Image frequency rejection achieved by choosing an I. F. of 1600 KC. Band-expander circuit can be cut in to receive badly “wobulated” signals typical of most ultra high frequency transmissions. The I. F. expander broadens the selectivity of the amplifier sufficiently to allow transmitter carrier-shift without attenuation.

Frequency range: 5.65 to 79.5 MC (3.75 to 53 meters). 4 Band 338 degree calibrated illuminated dial. Band 1—5.65 to 11.45 MC; Band 2—10.5 to 21.35 MC; Band 3—19.6 to 38.3 MC; Band 4—36.4 to 79.5 MC. A. V. C. and tone control. Send-recv (stand-by) switch. Headphone jack. Preamplifier. 1600 KC Iron core I. F. transformers—two stages expanded in three steps. Air trimmers. Single signal crystal control, heat frequency oscillator (variable input control). Undistorted power output of 3.5 watts, 10 metal tubes; 6K7—R. F. preamplifier; 6K7—1st Detector-Mixer; 6C5—Oscillator; 6K7—1st I.F. amplifier; 6L7—2nd I.F. amplifier; 6R7—2nd Detector, AVC and Beat Frequency Oscillator; 6J7—Noise Silencer Amplifier; 6Q7—1st Audio, Noise Silencer Rectifier; 6F6—Power Output Stage; 5Z4—Rectifier.

MODEL S-10 (less Crystal) Net Price \$ 99.50
 MODEL SX-10 (with Crystal) Net Price 114.50

The **SKY RIDER**
COMMERCIAL



A SPECIAL receiver covering in 5 bands the frequencies of 100 KC to 11.5 MC (3000 to 26.1 meters). Splendid sensitivity and selectivity characteristics. Improved image frequency rejection at the high frequencies is achieved by the use of highly efficient iron core I.F. transformers tuned to 1600 KC. Calibrated 338 degree main tuning dial eliminates all complicated charts and tables.

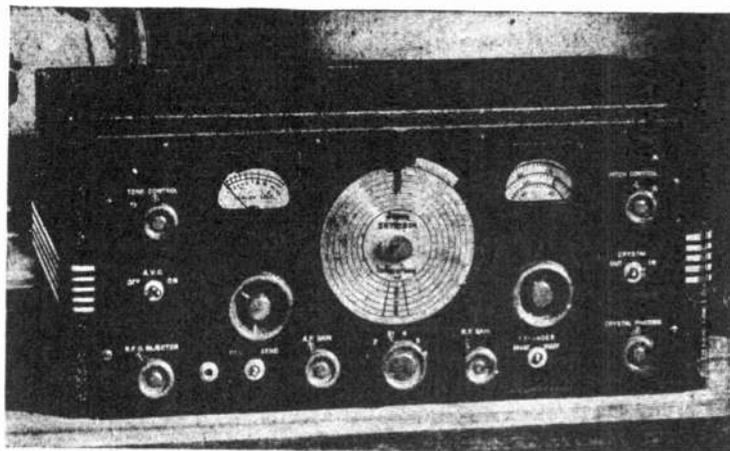
Illuminated dial. Preamplifier, iron core I.F. transformers (two stages) tuned to 1600 KC. Air trimmers. Automatic volume control, and tone control. Signal strength indicator. Single signal crystal control. Beat frequency oscillator (variable input control). Send-recv (standby) switch. Headphone jack. Hum free power supply. Undistorted power output of 14 watts. 11 tubes, 10 metal and 1 glass. 6K7—R.F. Preamplifier; 6L7—1st Detector-mixer; 6C5—Oscillator; 6K7—1st I.F. Stage; 6K7—2nd I.F. Stage; 6R7—2nd Detector, AVC and 1st A.F.; 6K7—Electron coupled Beat Frequency Oscillator; two 6L6—Push-pull Power Output Stage; 5Z4—Rectifier; 6C5—Signal Strength Indicator.

- Micro-Vernier Band Spread
- Direct Calibration Tuning—No Charts or Tables
- 1600 K.C. Iron Core I.F. System
- 338 Degree Dial
- 14 Watts Undistorted Output
- Field Strength Indicator
- All Metal Tubes
- Illuminated Band Spread & Main Tuning Dial

5 Bands: Band 1—100 to 280 KC; Band 2—250 to 610 KC; Band 3—600 to 1530 KC; Band 4—1715 to 4300 KC; Band 5—4300 to 11,500 KC. Size: 8 3/4 by 19 by 10 inches deep. Ship. wt. 48 lbs. For 110-120 volt, 50-60 cycle A.C.

MODEL S-12 (less Crystal) Net Price \$ 99.50
 MODEL SX-12 (with Crystal) Net Price 114.50

HALLICRAFTER SHORT WAVE RECEIVERS



AMERICA'S LEADING COMMUNICATIONS RECEIVER

HERE is a receiver tuning from 5 meters to the top of the broadcast band, with high sensitivity on all amateur bands (not merely the 20 or 10 meter band); wide range, variable selectivity (single signal razor sharpness to broad high fidelity); an effective, efficient band spread that would equal or better the standards set by the A.R.R.I. Handbook; improved image and signal to noise ratio, and finally, an "S" meter that would work on weak signals.

The 1938 Super Skyrider incorporates a frequency range of 62,000 to 545 KC. Six bands cover everything of "air" interest—5 meters, 7 meters (2-way police), all broadcast frequencies, foreign short wave, aircraft, relay broadcasting, etc. Band 1—Frequency 545 KC to 1550 KC; Band 2—1550 KC to 4.3 MC; Band 3—4.2 MC to 10.2 MC; Band 4—9.8 MC to 20.5 MC; Band 5—19 MC to 36 MC; Band 6—35 MC to 62 MC. Remember, in tuning all these frequencies, no charts or graphs are needed! Directly calibrated dial. A Band Pointer is unique tuning aid, found only on the Super Skyrider. THE AVERAGE OVER-ALL SENSITIVITY OF THE RECEIVER IS BETTER THAN 1 MICROVOLT.

SELECTIVITY: There is a wide range of variable selectivity, from single signal razor-edge sharpness to broad high fidelity. Few and improved iron core I.F. transformer circuits allow this "Wide Range Selectivity" control. (7.5 KC to 25.5 KC band width at 100 times signal frequency.) With crystal in circuits, selectivity better than one KC, giving a total ratio of variable selectivity of over 30 to 1.

BAND SPREAD: The Super Skyrider not only satisfies the most exacting band spread qualifications, but betters them. Band spread is accomplished in a unique electro-mechanical manner, highly efficient electrically; simple and smooth mechanically. A special high frequency condenser (see illustration on page 8) with double rotors and single stator units makes a tuning unit with the band spread section an integral part of the main condenser. This simple and sensible design feature, by eliminating extra wiring and parallel insulator losses in the tuned circuits, achieves worthwhile improvements, particularly at the higher frequencies. The added mechanical rigidity gained by such a system makes for steadier signals and smoother tuning ability. The new dynamic balanced tuning and the large controls represents a new and exclusive concept in band spread technique. Over 1000 degrees of band spread calibration better than 5 KC per division on the 20 meter band, and 25 KC per complete turn of the knob.

Other Outstanding Super Skyrider Features: 11 tubes; 4 metal, 7 glass; 6K7—R.F.; 6L7—1st Detector; 6J5G—Oscillator; 6K7—I.F.; 6K7—I.F.; 6R7C—2nd Detector, AVC, and 1st Audio; two 6V6G—Power Output; 6J7G—Beat Oscillator; 6J7C—Signal Indicator Amplifier; 5Z3—Full Wave Rectifier. Improved antenna circuits give greater signal to noise ratio. Illuminated band spread and Signal meter dial. Air trimmed R.F. circuits. Ceramic insulation in tuning tank circuits and R.F. sockets. Undistorted power output of 13 watts. Maximum power output of 18 watts. Size: 11" deep by 9 1/4" high by 21" long. Controls include Tone Control, AVC (on-off), BFO injector, Rec. Send Switch, AF Gain, Band Switch, RF Gain, Selectivity (Broad-Sharp), Pitch Control, Crystal (out-in) and Crystal Phasing. Ship. wt. 50 lbs. For 110 volt, 50 to 60 cycle A.C. operation only.

The 1938 SUPER SKY RIDER



THE ONLY TUNING DIAL OF ITS KIND!

There's one physical feature alone that distinguishes the Super Skyrider from all other receivers—the central tuning dial. Accurately, directly calibrated for all six bands . . . no charts or graphs needed to read this dial. Automatic band pointer . . . always indicates the frequency band on which you are tuning.

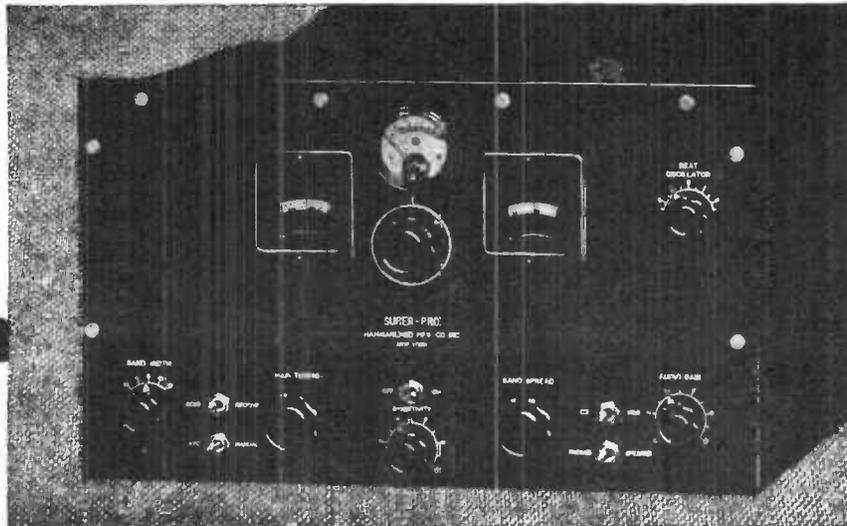


LARGE MATCHING HALLCRAFTERS SPEAKER

12-inch PM Dynamic Speaker. Impedance matches receiver output to produce high fidelity audio. Metal cabinet acoustically treated with wood baffle front to eliminate vibration. Customary high quality Hallcrafters construction; sleek modern lines match the modern design of the 1938 SUPER SKYRIDER cabinet.

	NET PRICE
MODEL S-16 (less Crystal)	\$ 99.00
MODEL SX-16 (with Crystal)	111.00
12-Inch PM DYNAMIC SPEAKER in Cabinet	12.00

HAMMARLUND SHORTWAVE RECEIVERS



THE "SUPER-PRO"

THE Hammarlund "Super-Pro" is a 16-tube superheterodyne designed to meet every rigid precision specification of the professional operator and advanced amateur. It is replete with exclusive distinctive features. Among these are the remarkable new Hammarlund tuning unit with its unusual 5-band silver plated cam switch; 20 individual laboratory adjusted tuning coils on Isolante bases; complete 4-gang tuning condenser, and a 12-gang band spread condenser — an engineering triumph of compactness and precision! Other outstanding features are — electrostatically shielded input; 2 tuned R.F. stages on all bands; four air tuned I.F. transformers; directly calibrated, continuously variable "Band-Width" panel control; visible tuning meter; tuning dial accurately calibrated in megacycles and kilocycles; AVC and Manual gain control; graduated audio gain and sensitivity panel controls; speaker phone switch; panel control of beat oscillator; separate grid bias supply; C.W. modulation switch, and variable crystal filter. Complete coverage with all models as described below. Crystal filter provides selectivity from knife-like point desired for C.W. to a wider degree of selectivity required for practical phone reception. Complete chassis, duo-shield-sealed, thoroughly tropic proofed. The "Super-Pro" receiver consists of two major units — receiver proper and power unit. Receiver in metal cabinet, 18½" wide, 14¾" deep and 10½" high. Power supply in metal cabinet, 13" wide, 7½" deep and 8½" high.

Standard table model "Super-Pro" in wrinkle finished metal cabinet, power supply also in wrinkle finished cabinet, 16 tubes, and matched 8" electro-dynamic speaker..... List \$405.00

Quartz crystal filter model complete in metal cabinets as described above, 16 tubes and 8" speaker. List \$435.00

Above prices apply to the 7½ to 260 meter, 15 to 560 meter or 15 to 2000 meter models, for 110V. or 220V. 60 cycle current. Rack models are \$37.50 additional. Twenty-five cycle models are \$20.00 additional. Special 12" high-fidelity speaker is \$25.00 additional.

Manufactured by HAMMARLUND MANUFACTURING CO., Inc.,

NATIONAL SHORTWAVE RECEIVERS

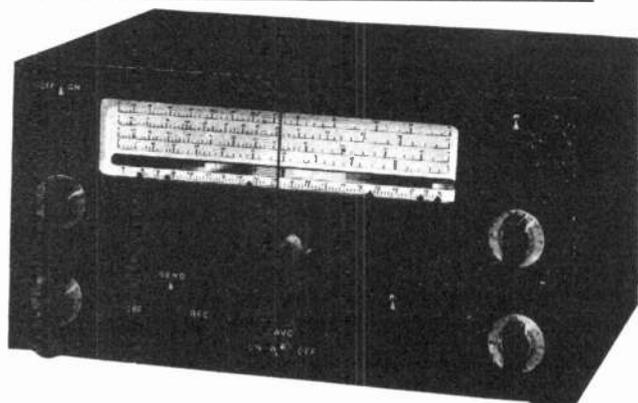
NATIONAL NC-80X

This inexpensive receiver has exceptional operating characteristics. Ten tubes are used in a high gain superheterodyne circuit. The IF amplifier is of entirely new design, operating at a frequency of 1560 KC, and providing a high order of image suppression, better, in fact, than that obtainable in many receivers having elaborate preselectors. The crystal filter (2nd IF stage) has continuously variable selectivity from 400 cycles to 5 KC. The range of the phasing circuit (heterodyne elimination) has been similarly extended. The crystal filter remains in the circuit at all times. The 25L6G beam power tube delivers an undistorted output of 2 watts when using either AC or DC, 115 volt supply.

\$88.00

NC-80

Net, complete with tubes, coils, speaker



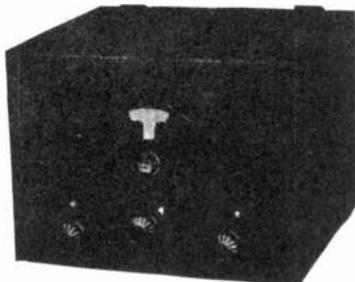
The tuning system, likewise entirely new, employs a multiple scale dial of the full-vision type, accurately calibrated in megacycles. Several unusual features are incorporated, such as the mirror for overcoming parallax, and the adjustable frequency markers, by means of which any particular stations, or frequencies, such as band limits, may be "logged" on the dial itself. Two vernier reduction ratios are available, 16 and 80 to 1, with a separate knob for each.

Automatic plug-in coils are used, controlled by a knob on the front panel, as in the NC-100. The frequency coverage is continuous, except for a small gap at 1560 kc., from 550 kc. to 30 mc., in four ranges.

The NC-81X is a special amateur model covering the following bands only: 1.7-2.0 mc., 3.5-4.0 mc., 7.0-7.3 mc., 14.0-14.4 mc. and 28-30 mc. The dial is calibrated in megacycles.

NC-80X — complete with tubes, crystal filter, 8" PM speaker chassis, etc. for 115v. AC or DC. **Net Price, \$88.00**
 NC-81X — Amateur Model, complete with tubes, crystal filter, 8" PM speaker chassis, etc. for 115v. AC or DC. **Net Price, \$88.00**
 Note: Either of the above receivers can be supplied modified for Battery Operation 6v. heater, 135v. B-supply. To order, add "B" to symbol number. List prices are the same as the corresponding AC-DC model.
 Type DCS-8 Metal Cabinet for 8" speaker, same finish as receiver. **Net Price, \$4.80**
 Larger speakers or cabinets cannot be supplied for these receivers.

NATIONAL SW-3



AVAILABLE IN THREE MODELS — ACSW-3 for AC operation — 6DCSW3 for 6 volt DC operation — 2DCSW3 for 2 volt DC operation. AC Models use "60" Series Coils. DC Models use "10" Series Coils.

The SW-3 Receivers employ a circuit consisting of one R.F. stage transformer coupled to a regenerative detector and one stage of impedance coupled audio. This circuit provides maximum sensitivity and flexibility with the smallest number of tubes and the least auxiliary equipment. The single tuning dial operates a precisely adjusted two gang condenser; the regeneration control is smooth and noiseless, with no backlash or fringe howl; the volume control is calibrated from one to nine in steps corresponding to the R scale.

Tubes required — 2 Volt AC Model; two 58, one 27 — 6 Volt DC Model; two 36, one 37 — 2 Volt DC; two 32, one 30.

SW-3, any model, without coils, phones, tubes or power supply. **Net Price, \$21.00**

5880-AB Power Supply, 115 V, 60 cycle, without 80 Rectifier. **Net Price, \$17.70**

General Coverage Coils

Catalog Number	Range	Net Price Per Pair
10 or 60	9. to 15. ...	\$3.00
11 or 61	13.5 to 25. ...	3.00
12 or 62	23. to 41. ...	3.00
13 or 63	40. to 70. ...	3.00
14 or 64	65. to 115. ...	3.00
15 or 65	115. to 200. ...	3.00
16 or 66	200. to 360. ...	3.30
17 or 67	350. to 550. ...	3.30

Five additional sets of coils are available to cover up to 3000 meters.

Band Spread Coils

10A or 60A	— 10 meter	\$3.00
11A or 61A	— 20 meter	3.00
13A or 63A	— 40 meter	3.00
14A or 64A	— 80 meter	3.00
15A or 65A	— 160 meter	3.00

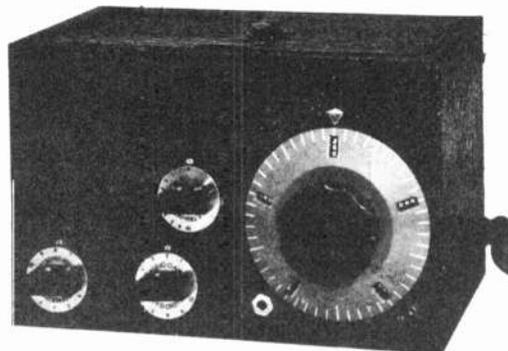
NATIONAL ONE-TEN

Designed chiefly for the experimenter, the One-Ten Receiver fulfills the need of the experimenter for an adequate receiver to cover the field between one and ten meters.

A four tube circuit is used, composed of one tuned R.F. stage, a self-quenching super-regenerative detector, transformer coupled to a first stage of audio which is a resistance coupled to a power output stage. Tubes required: 954-R.F.; 955-Detector; 6C5-1st Audio; 6F6-2nd Audio.

Type 110 Receiver and 6 sets of coils, without tubes, speaker or power supply. **Net Price, \$51.00**

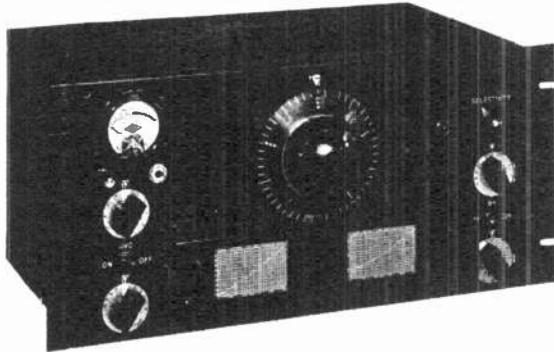
Type 5886 Power Supply for above receiver, less tube. **Net Price, \$17.70**



NATIONAL SHORTWAVE RECEIVERS

NATIONAL

HRO



\$209.70

HRO
(TABLE MODEL)
Net, complete
with tubes, coils,
speaker
and power unit

The two preselector stages give remarkable image frequency suppression, weak signal response and high Signal-to-Noise

Ratio. The two high gain L.F. stages employ Litz-wound coils and are tuned with air condensers. The useable sensitivity and selectivity are exceptional. Other circuit details are automatic and manual volume control, a vacuum tube voltmeter calibrated in "S" units for carrier intensities, a phone jack, a Send-Receive switch and a Lamb Single-Signal crystal filter. This filter makes selectivity adjustable over a wide range and the circuits are so precisely balanced that heterodyning signals may be completely phased out.

When Standard HRO coils are used for general coverage, each of the 4 coils includes two amateur bands and the spectrum between. A simple switching device is provided which makes these same coils band-spread their respective amateur bands (except 160) over a span of 400 divisions on the dial.

For those who require the high performance of the Standard HRO but do not need its extreme versatility, the HRO Junior is offered. The circuit and mechanical details of both receivers are identical in every respect, but the lower priced model has been greatly simplified by omitting the Lamb Single-Signal crystal filter, the "S" meter, and by designing coils for continuous band spread only.

NET PRICES

STANDARD HRO Receiver, table model, complete with tubes and four sets of coils covering range 1.7 MC to 30 MC, but no speaker or power supply — 2½ volt A.C. or 6 volt battery model. (Not illustrated) **Net Price, \$179.70**

STANDARD HRO Receiver, relay rack model — 2½ volt A.C. or 6 volt battery model. (As illustrated) **Net Price, \$192.00**
Specify Grey or Black finish.

Additional sets of coils are available only as listed below.

50-100 KC	Net Price, \$22.50
100-200 KC	Net Price, 18.00
175-400 KC	Net Price, 16.50
500-1000 KC	Net Price, 12.00
900-2000 KC	Net Price, 12.00

HRO JUNIOR RECEIVER table model, complete with tubes and one set of coils, 10 to 20 meters (2 amateur bands) but no speaker or power supply — 2½ volt A.C. or 6 volt battery model. **Net Price, \$108.00**

Additional HRO Junior Coils (2 amateur bands per coil). **Net Price, \$9.90**

MCS Table-model Metal Cabinet and 8" Dynamic Speaker (P.M. type — requires no power supply) with impedance matching transformer for a single Class A Pentode (7000 ohms). **Net Price, \$14.10**

5897 AB Power Supply — less tube — for above receivers. **Net Price, \$15.90**

NATIONAL

NC-100X



\$120.00

NC-100
Net, complete with
tubes, speaker

These 12 tube super-heterodynes except for the speaker are self-contained in a table model cabinet which is readily adaptable to relay rack mounting.

One stage of R.F. and two stages of I.F. are used. Low-loss insulation and high-Q coils give ample sensitivity and selectivity. Separate R.F. and Audio Gain Controls permit complete control of the receiver. A 6E5 tuning indicator tube, with provision for signal strength measurement, provides an added convenience. Other controls are Tone, C.W. Oscillator, AVC with amplified and delayed action, a B+ switch, and a phone jack. A self-contained power supply provides all necessary voltages including speaker field excitation.

The range changing system is unique in that it combines the mechanical convenience of a coil switch with the electrical efficiency of plug-in coils. The PW Dial and Drive, direct reading to one part in 500. Station logging is consistent and calibration permanent.

The NC-100 covers the range of 540 KC to 30 MC and is available with or without a crystal filter. The NC-101X is built and designed strictly for the amateur bands and covers the ranges: 1.7-2.0 MC, 3.5-4.0 MC, 7.0-7.3 MC, 14.0-14.4 MC, and 28.0-30.0 MC. The Lamb Single-Signal Crystal Filter, with separate controls for phasing and selectivity, is standard equipment on the NC-101X.

The battery models use 10 tubes. Power output of A.C. model — 10 watts; Battery model — 2 watts.

NET PRICES

NC-100 — complete with tubes.
AC model — 10" speaker chassis. **Net Price, \$120.00**

Battery model — 8" speaker chassis. **Net Price, \$110.50**

NC-100X — complete with tubes and crystal filter.
AC model — 10" speaker chassis. **Net Price, \$142.50**

Battery model — 8" speaker chassis. **Net Price, \$133.00**

NC-100S — complete with tubes.
AC model — 12" Rola G-12 Speaker. **Net Price, \$133.50**

NC-100XS — complete with tubes and crystal filter.
AC model — 12" Rola G-12 Speaker. **Net Price, \$156.00**

NC-101X — complete with tubes.
AC model — 10" speaker chassis. **Net Price, \$129.00**

Battery model — 8" speaker chassis. **Net Price, \$120.00**

DCS-10 — Metal Cabinet for 10" speaker, same finish as receiver. **Net Price, \$5.10**

DCS-8 — Metal Cabinet for 8" speaker, same finish as receiver. **Net Price, \$4.80**

Note: Cabinets for 12" speaker chassis cannot be supplied.

RRA Relay Rack Adapters, designed for mounting any of the above receivers in a standard relay rack. **Net Price, per pair, \$1.50**

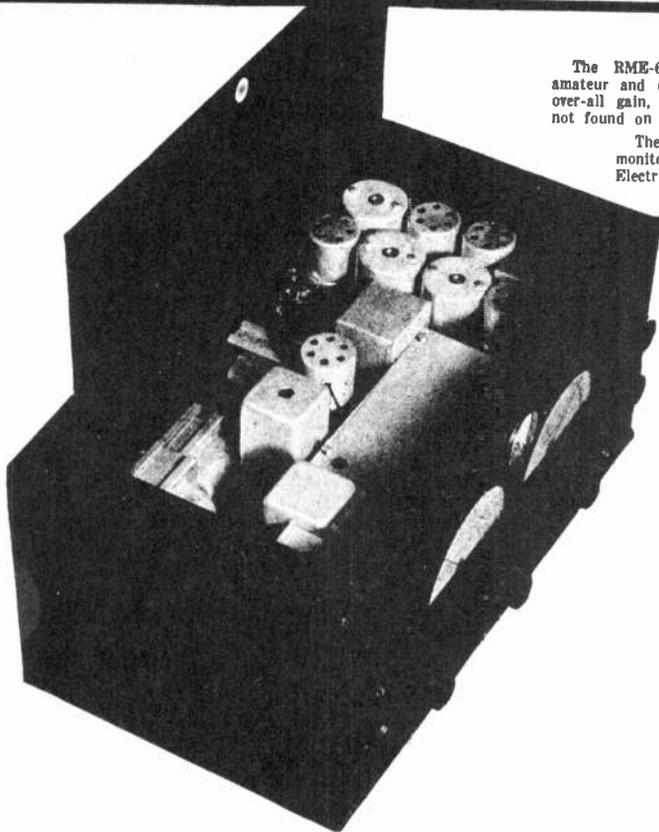
Note: 230 volt 50 cycle and 115 volt 25 cycle models of above receivers available at slightly higher price.

R. M. E. SHORTWAVE RECEIVERS

The RME-69 Single Signal Super Receiver was designed and built as a modern receiver for amateur and communication use. It is characterized by its low background noise, exceptionally high over-all gain, finger-tip tuning mechanism, and inclusion of such individual devices which are usually not found on ordinary receivers.

The bridge circuit R and DB meter is a decided and practical innovation. So is the monitor circuit built into every set. All operating controls are adjustable from the front. Electrical band-spread dial in addition to the main dial was considered essential. Phone jack is on the front panel, loudspeaker outlets on the rear chassis apron. Provision is made for either Marconi or doublet type antenna connections. The chassis is built of cast aluminum, solid, rigid, holding critically adjusted circuits in calibration.

A variety of optional features are available on the RME-69 for individual requirements (if desired). A noise suppressor circuit (built in at the factory only), break-in contacts provided on the monitor switch in order to simplify operating procedure, additional widening of band-spread scale for the CW ham, substitution of a lower frequency range for the regular broadcast band (i.e. 170 KC to 450 KC or 150 KC to 300 KC) combination battery and AC operation, may be had on order. This extreme flexibility obtainable in the one model more than satisfies the operator when choosing a year-around receiver.



8" PM Speaker in crinkle finish cabinet.

THESE FEATURES ARE STANDARD ON EVERY RME-69 RECEIVER

PLANETARY VERNIER DIAL DRIVE

... giving one of the smoothest and easiest tuning devices ever placed on an all-band communication receiver. With the large tuning knob employed, rotation of the indicator is possible by mere finger touch. Every operator will welcome this innovation in tuning, especially since hours of operation will not mean hand fatigue.

FULL ELECTRICAL BAND-SPREAD

... maintaining a separate and distinct band-spread scale. This more expensive method of tuning is adopted because it is far more practical and flexible.

INDIVIDUAL DIAL OPERATION

... two dials, a megacycle and a band-spread, are featured on the new RME-69. These are each five inches in diameter and give adequate spacing on all divisions. They present a very attractive appearance.

SIX BAND TUNING RANGE

... having a continuous frequency range from 550 KC to 32,000 KC (9 to 550 meters). Calibration held to exceedingly close limits. Amateur bands grouped for a minimum amount of tuning.

CALIBRATED DECIBEL-R METER

... always in the circuit giving a continuous indication of incoming signal strength. Serving also as an output meter in checking IF frequency alignment. Calibrated in decibels and also in the customary R values.

BUILT-IN MONITOR CIRCUIT

... serving as send-receive switch. Used primarily to monitor phone and CW quality when transmitter is on the air.

FIXED COUPLING I.F. TRANSFORMERS

... set for optimum coupling value consistent with the desired sensitivity and highest gain. Any lowering in the degree of sensitivity which is available in the variable IF coupling units is not in keeping with progress in superheterodyne design, especially in amateur receivers.

SIX VOLT TUBES

... of known and established characteristics and stable in operation. 1st RF-6D6; 1st Det-6C6; I.F.-2-6D6; IF osc.-6D6; Beat osc.-6D6; 2nd Det-6B7; Audio-42; Rect.-80. Tubes included are those used for final laboratory check, assuring perfect alignment and adjustment to the receiver when shipped.

CRYSTAL FILTER CIRCUIT

... to cope with the interference problem to the maximum degree. We believe that no superheterodyne receiver of modern design should be without such a filter. You will be surprised at the effectiveness of this circuit in the RME-69.

QUALITY AND WORKMANSHIP

... very rugged construction, throughout, solid cast-aluminum chassis base, improved design, and high quality workmanship are to be found in this new RME-69 Single Signal Super.

PRICE ON RME RECEIVERS AND ACCESSORIES

RME-69 Single Signal Super Receiver. Housed in black or gray crinkle steel cabinet, with 465 KC crystal, set of tubes, and 8" PM dynamic speaker in black or gray crinkle finished baffle. 110 volt, 60 cycle model. Shipping weight 61 pounds. CODE—BABELNet \$151.20

RME-69 Single Signal Super Receiver only. In black or gray crinkle steel cabinet with 465 KC crystal, 110 volt, 60 cycle model. CODE—BEZELNet 134.40

RME-69 Single Signal Super Receiver only. In black or gray crinkle steel cabinet, with 465 KC crystal, 25 to 60 cycle, 110 or 220 volt model. CODE—BIMELNet 141.00

RME-69 Single Signal Super Receiver only. In black or gray crinkle steel cabinet, with 465 KC crystal, combination 110 volt, 60 cycle and battery model. CODE—BURENNet 144.00

RME-69 Single Signal Super Receiver only. In black or gray crinkle steel cabinet, with 465 KC crystal. Battery model. CODE—BODARNet 134.40

LS-1 noise silencer unit built into RME-69 Single Signal Super Receiver, any model. Including one each 6L7, 6J7, 6K7, 6H6 tubes. CODE—DINASADD Net 11.40

Complete set of nine tubes. Hygrade-Sylvania. Fire 6D6; one 6C6; one 6B7; one 42; one 80. CODE—CONESNet 4.95

Permanent magnet dynamic speaker. Eight inch diameter, dust proof model, speaker cord attached, housed in black or gray crinkle steel cabinet. Shipping weight 10 3/4 pounds. CODE—COMBSNet 11.85

Permanent magnet dynamic speaker only. Eight inch diameter, dust proof model. No housing. Speaker cord attached. Shipping weight 6 pounds. CODE—CAPERNet 7.80

RME-69 Super equipped with extra pair of binding posts on rear of chassis apron and wired to open B-supply circuit when working break-in. CODE—COLORADD Net 1.20

RME-69 Super equipped with extra pair of binding posts on rear of chassis apron and special relay control contacts provided on monitor switch for special break-in operation to control transmitter. CODE—CENTSADD Net 2.70

Special color finish made to order on cabinet, rack, or baffle. CODE—EXERTEach, Net 3.60 (Prices subject to change without notice)

R. M. E. SHORTWAVE RECEIVERS

AN UP-TO-DATE . . .
SIGNAL INTENSIFIER and
IMAGE REJECTOR

The DB-20 Preselector in combination with the RME-69 places at your disposal the first wide range precision receiver having three matched stages of radio frequency combining five efficiently designed circuits. The results obtained are beyond anything ordinarily experienced in radio receivers for high frequency operation.

HERE ARE THE DETAILS:

Frequency coverage is from 550 KC to 32,000 KC (9 to 550 meters) coinciding with the range incorporated in the RME-69 Receiver.

Average gain of the two stages of tuned circuits is uniform between 20 to 25 db. when used in conjunction with the RME-69.

Signal to image ratio averages 50,000 to 1.

Power supply is self-contained, not depending on the power from the receiver.

Input circuit is so designed that either a single wire Marconi type antenna or one of the doublet types may be used.

Output impedance of the unit is approximately 300 ohms so that direct connection may be made to the input of the RME-69 without mismatch.

The DB-20 has its own gain control in addition to the regular six band switch and finger-tip control mechanism.

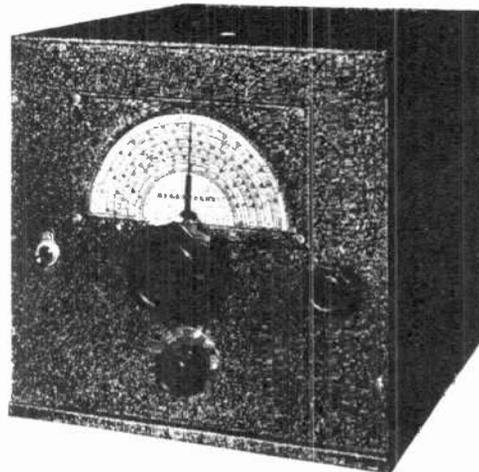
The cabinet is identical in design and finish to the regular RME-69 cabinet and matches it in every detail.

The entire unit is rigidly built and tested to RME specifications.

The tubes used in the DB-20 are: two 6K7 amplifiers and one 80 rectifier.

With the volume control on the DB-20, the incoming signal strength may be increased from the normal level of the standard RME-69 to a value 20 to 25 decibels above this level. At all times the greatly increased selectivity of the five tuned RF circuits are utilized.

Since the DB-20 has its own power supply, thus isolating it entirely from the RME-69, the only interconnecting circuit is the two-wire link which couples the output of the pre-selector to the receiver.



The five carefully designed RF circuits in the RME-69 and DB-20 are calibrated in megacycles throughout the entire range from 9 meters to 550 meters. The unit is rigidly built, carefully tested, and meets all operating requirements.

DB-20 Preselector, gray or black crinkle finish cabinet, overall dimensions 9 3/4" high, 9 3/4" wide, 10 1/2" deep, including two 6K7 tested tubes, interconnecting plug and cord. Shipping weight, twenty-two pounds. 110 volt, 60 cycle. CODE—MONEL Net \$42.60

Same as above but with special transformer for other than 110 volt, 60 cycle operation. Net 46.80

DB-20 Preselector mounted on relay rack panel, 8 3/4" x 19" x 3/16", gray or black crinkle finish, including two 6K7 tested tubes, 110 volt, 60 cycle. CODE—MINKS Net 52.20

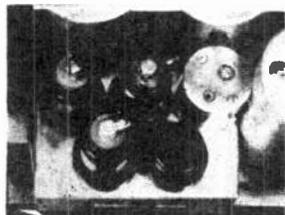
Same as above but with special transformer for other than 110 volt, 60 cycle operation. Net 56.40

THE RME LS-1 NOISE SUPPRESSOR

The unit shown illustrates the mounting of the four tube noise suppressor in the RME-69 Receiver. Small, compact, and well-designed, it fits into the position ordinarily occupied by the first and second IF tubes (2-6DBs). For proper installation and functioning this unit must be built in at the factory. Its purpose is to effectively cope with the friction type of interference and similar electrical disturbances especially on the higher frequencies. When properly operated it effectively reduces the noise level and permits copying of an otherwise smothered signal. The low cost coupled with the advantages derived from this circuit makes the installation of the LS-1 suppressor well worth while.

LS-1 Noise Suppressor complete with tubes, 1-6K7, 1-6J7, 1-6L7, 1-6H6, initially installed in new receiver at factory. CODE—DINAR Net \$11.40

Extra cost for installation of LS-1 noise suppressor in receiver already sold, add to above. Net \$4.00



R. C. A. SHORT WAVE RECEIVERS

ACR-111 COMMUNICATIONS RECEIVER

Two Tuned R-F Stages • Plunger-Type Air-Dielectric Trimmer Capacitors • Constant-Percentage Electrical Band-Spread • Electron-Ray Tuning Tube and Signal-Strength Indicator • Three Magnetite-Core I-F Transformers • Delayed and Amplified A.V.C. • Unique Stand-By Pilot Light • All Controls on Front Panel • 540 to 32,600 Kilocycles, Continuous

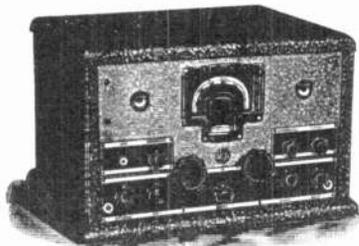
• 16 Tubes; 14 All-Metal, 2 Glass • Separate Dust-Pr of 8 in. Dynamic Speaker • Band Change by Self-Cleaning Switch • Handsome, Rugged Metal Cabinet—21" x 12 3/4" x 16 1/4" • Quartz Crystal I-F Filters • Noise Suppressor • Noise Limiter • Individual Dial for Each Range • Separate Calibration Spread Dial • High Signal to Noise and Image Ratio • Dial Calibrated in Megacycles • Large Tuning Knobs with Crank Handles.

GENERAL SPECIFICATIONS

WEIGHT—Cabinet Equipment: 70 lbs.; Shpg. Weight, 87 lbs. Rack Mounting Equipment: 55 lbs.; Shpg. Weight, 70 lbs.

CIRCUIT: 16-tube Superheterodyne, two tuned r-f stages, air dielectric trimmer capacitors in high frequency circuits, two 460 kc. magnetite-core transformer coupled—i-f stages with crystal filter, separate h-f oscillator, A.V.C., noise suppressor, noise limiter, heterodyne oscillator, audio amplifier, push-pull output stage, electron-ray tuning and signal strength indicator, and an integral power supply.

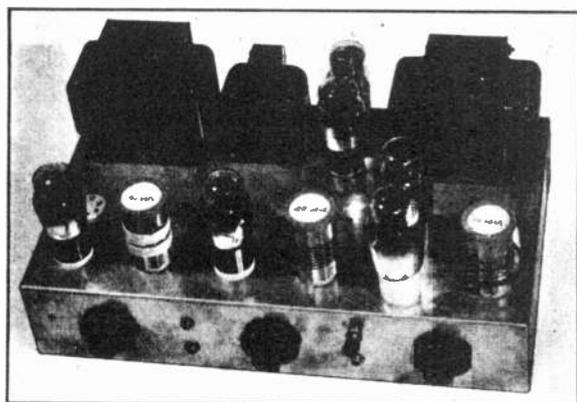
POWER SUPPLY: Built-in; Rating A, 50/60 cycles, 105-125 volts; Rating B, 25 cycle, 110/125 volts available on special order; Rating C, 100/130—140/160—195/250 volts 40-60 cycles. Primary power consumption 120 watts. Power output 5 watts (undistorted), 8 watts maximum.



ACR-111 Net Price \$189.50

R. T. TRANSMITTING EQUIPMENT

The Bi-Push Excitor or Transmitter



The Bi-Push and Power Supply
(One Chassis)

The Radio Television Supply Company offers the Bi-Push in kit form or can arrange to provide it wired and tested. All parts used are of nationally known lines such as National, Hammarlund, IRC, Amphenol, GE, RCA, etc. All chassis are punched and drilled. The kits are complete with tubes, but less crystal. We also stock the little Decker air-wound, plug-in coils, which are properly "jumpered" for the Bi-Push. These may be had in sets, for use with either 80 or 40 meter crystals, at a small additional cost.

This unit, giving approximately 40 watts output on 10, 20 and 40 meters, with but one crystal and three single-winding coils, makes an ideal phone or c.w. transmitter for the low power man and an ideal excitor for the high power man. No neutralization, no shielding, and no interchange coupling adjustments are required.

The three coils, shown in the diagram, look tricky but are easy to wind. With the crystal in the left 5 prong tube socket coil 1 in socket A, coil 2 in socket B, and coil 3 in socket C. we have a 40 meter push-pull crystal oscillator, driving a 20 meter push-push doubler, driving a 10 meter push-pull doubler to over 40 watts output.

To go on 20 meter we insert crystal in socket A, coil 1 in socket B and coil 2 in socket C, giving a 40 meter push-pull crystal driving a 20 meter push-push doubler. The output is the same as on 10 meters. To go on 40 meters we insert crystal in B, and coil 1 in C. We now have a push-pull RK49 crystal oscillator that delivers approximately 40 watts and keys very nicely, provided a good crystal is used. We use RK-49's instead of the 6L6G. These tubes have a prong isolantite base which will stand the RF better than tubes with the "mud" bases. The characteristics of the RK-49 are the same as the 6L6G.

On 20 meters the plate voltage is automatically removed from the 6A6 and on 40 meters the voltage is removed from both 6A6's.

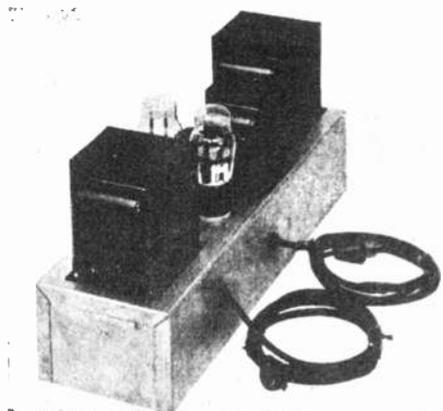
The tubes require high grid leak bias for efficient push push doublers and this causes high crystal current when tube is used as a push-pull oscillator. A 3 position switch is used to short out the gridleak on whatever stage is being used as a crystal oscillator.

Be sure it is thrown to the proper position before changing bands. The current runs around 70 ma. on 10 and 20 meters and around 85 ma. on 40 meters.

The coils illustrated are wound on Hammarlund SWF-5 coil forms. To wind them, 10 to 15 feet of number 18 d.c.c. and 8 to 10 feet of enameled copper wire is required.

Number the coil pins clockwise, starting with grid or isolated pin as 1, looking down into the form, from the top, however the socket connections shown in the diagram are from the bottom view. Drill three small holes spaced along the form 1-1/8" and we will number these 1, 2 and 3 starting at the bottom of the form.

For the 10 meter coil, take about three feet of the number 16 enameled copper wire and insert one end through hole 1, then solder to tip of pin 3, inside the coil from where the jumpers are placed. Wind 3 equally spaced turns and bring the wire through hole 3. Pull the wire through pin 4 and solder. Now with short lengths of the same wire jumper pin 1 to pin 3 and pin 2 to pin 4.



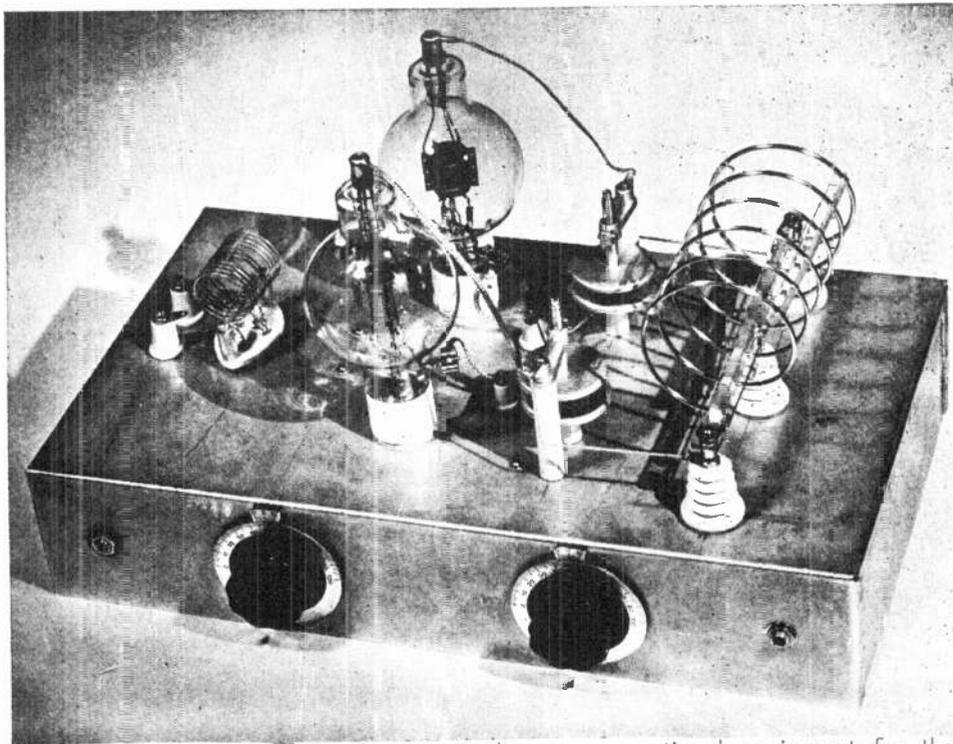
- Bi-Push excitor (RF portion, chassis 5"x17"x3 1/2") KIT—\$23.75
- Power Supply (chassis 5"x17"x3 1/2") KIT— 18.75
- Bi-Push and Power Supply (on one chassis 10"x17"x3 1/2") KIT— 41.75

- RF portion completely wired \$33.75
- Power supply completely wired 23.75
- Bi-Push & Power Supply completely wired 56.75

- Decker Bi-Push Coils (set of 3) \$ 3.00
- If substituted in Bi-Push per set (additional) 2.35

R. T. TRANSMITTING EQUIPMENT

The "10-20" FINAL



The "10-20" Final is an unusually neat and efficient layout of parts; second, it is designed specifically for operation on the 14 Mc. and 28 Mc. bands; and third, a number of different makes and types of tubes may be used merely by inserting the proper pair, no changes in the design being necessary.

You will notice that two small feed-through insulators are brought through the chassis for the grid leads. These same leads are connected, below chassis, to the normal grid terminal on the four-prong sockets. Thus, tubes of the 35T, RK37, T55, or 808 type may be used merely by inserting them and connecting the plate caps. Also, tubes of the 100TH, HF100, RK38, or similar type may be inserted, for higher power operation, by connecting the side grid lead and connecting the plate caps.

Thus, the amateur, with a somewhat limited pocket-book, may start out with one of the less expensive types, and, as the outlook becomes more favorable, he may progress to the larger tube complement with no change in his final amplifier.

A Bi-Push exciter, or similar arrangement with 40-50 watts output on the 14 and 28 Mc. bands, will give ample excitation for the operation of any of the above-mentioned tubes at their full rated input. As a matter of fact, one of these exciters will give more than ample excitation for the smaller tubes. In this case the excitation may be reduced either by lowering the plate voltage on the exciter, by slightly detuning the crystal stage, or by using loose coupling between the exciter and the grid circuit of the final amplifier.

The circuit design is entirely conventional for an amplifier of this type. One thing might be mentioned: there is no r.f. choke shown in the photograph, either in the plate or grid circuits of the tubes. One is indicated

in the circuit diagram as optional equipment for the plate circuit, since, with certain types of antenna coupling, it may be a help in keeping r.f. from entering the power supplies and associated equipment. It is not shown specifically because, with the most conventional types of antenna feed, two-wire lines and twisted pair feeders, it will not be needed. When something is not actually needed in a circuit, it is always best not to use it. However, under some conditions when single-wire is being used, it may be advisable to incorporate this plate circuit choke.

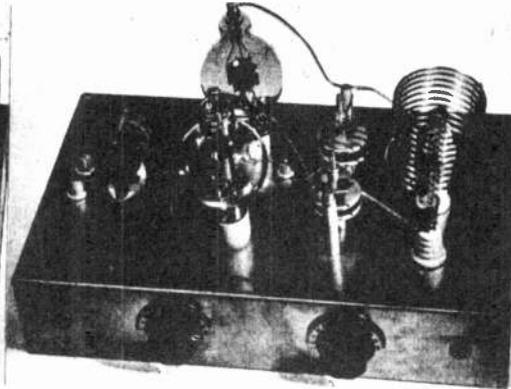
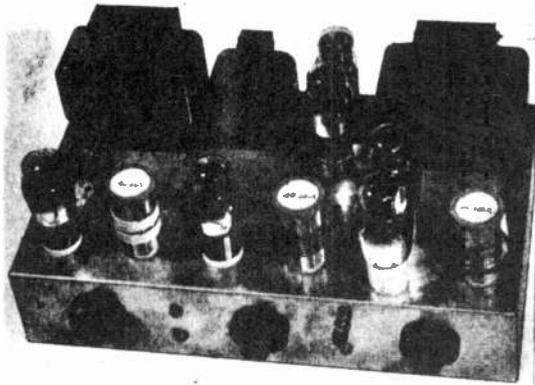
The parts used in this amplifier seemed to fit in very nicely with under-chassis mounting. This type of mounting is desirable from the appearance standpoint and also because it allows the use of very short inter-connecting leads. A glance at the under-chassis view, on next page will show the unusual shortness of these leads. Another advantage of this type of mounting is that dust cannot collect on the tuning condensers and other components where its presence would be undesirable.

Circuit Constants

The filament transformer is mounted below-deck for the sake of appearance and short leads, and, instead of having its center-tap grounded in the conventional manner, a 100 ohm, 25 watt resistor is inserted between this lead and ground. This, in effect, puts a small amount of protective cathode bias on the tubes.

The grid bias resistor, which also acts in the capacity of an r.f. choke to isolate the center of the grid inductance from ground, is of 2500 ohms resistance. Taps are provided to allow for the variations in grid bias required by different tubes or by the same tubes when operating at different plate voltages.

R. T. TRANSMITTING EQUIPMENT



The "10-20" coupled to the Bi-Push

The plate tank condenser, a 50-mmfd. per section, 6000-volt affair, is also mounted below-chassis and is operated with its rotor insulated from ground. The grid condenser, with its rotor grounded, serves to determine the nodal point for the neutralizing circuit. Its capacity is 100 mmfd. per section, ample capacity to determine the nodal point and also ample to discourage any parasitics that might like to find a home.

The grid coils are by Decker and are wound with the link as an integral unit. The link terminals are brought out to the end of the chassis where they may be connected to the output of the exciter unit. Incidentally, those coils shown in the photograph are for 28 Mc. operation. The chassis is 10" by 17" by 3 3/4" high, just the proper size for relay rack mounting.

In these days with 10 and 20 so hot, this little amplifier with one-half or one kw. input, dependent on which tubes are used, should really put your call up near the top of the w.a.z. list.

This "10-20" Final makes an ideal companion to the Bi-Push, or any exciter with similar output. The Radio Television Supply Company offers this "10-20" in Kit form, or can arrange to provide it wired. Two sets of coils are included, grid and plate coils for 10 and 20 meters. The chassis is properly punched for easy assembling. Although the under-chassis view does not show it, we include a National 500 m.a. RF choke for the H.V. lead. The filament transformer is wound to take two 100TH's very easily—in fact, it will handle 5 volts at 20 amps.

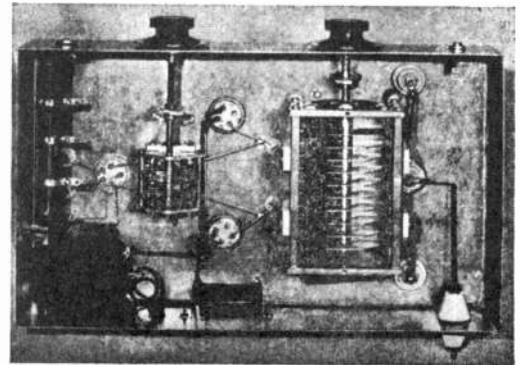
The plate tank condenser is a 6000 V. Hammarlund, and the grid condenser a National, resistors are IRC, and sockets, Amphenol.

As in the Bi-Push, you effect a saving of about \$2.00 when taking advantage of our Special Kit prices.

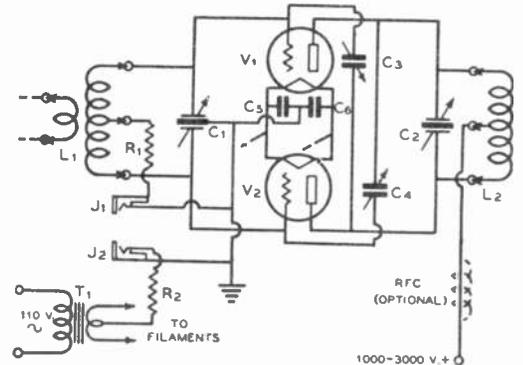
- The "10-20" Final—less tubes (chassis 10"x17"x3 3/4")..... KIT—\$32.50
- The "10-20" Final—wired 40.00
- Two matched Eimac 100TH Tubes..... 27.00
- Two matched Eimac 35T Tubes..... 16.00

All other tubes, also will be matched in our laboratory.

All prices F.O.B. Los Angeles



Bottom view of amplifier showing grid and plate tuning condensers.



SCHEMATIC DIAGRAM

- C1—100 mmfd. per section midget
- C2—50 m m f d., 6000 volts per section
- C3,C4—800 - type neutralizing condensers
- C5,C6—.005 mfd. mica condensers
- R1 — 2500 ohms, 80 watts
- R2 — 100 ohms, 25 watts
- J1,J2 — Closed circuit jacks
- L1—Decker plug-in coils
- L2—Special coils - 28 Mc., 6 turns; 14 Mc., 10 turns
- T1—Filament trans., appropriate for tubes being used
- V1,V2—See Text

R. C. A. TRANSMITTING TUBES

Type No.	Net Price	DESCRIPTION	Elec- trodes	Max. Plate Dissipation Watts	Cathode Type	Cathode Volts
203-A	\$15.00	R-F Power Amplifier, Oscillator, Class B Modulator	3	100	Filament	10.0
204-A	97.50	Oscillator, R-F Power Amplifier, Class B Modulator	3	250	Filament	11.0
211	15.00	R-F Power Amplifier, Oscillator, A-F Power Amplifier, Modulator	3	100	Filament	10.0
800	10.00	R-F Power Amplifier, Oscillator, Class B Modulator	3	35	Filament	7.5
801	3.45	R-F and A-F Power Amplifier, Oscillator, Modulator	3	20	Filament	7.5
802	3.50	R-F Power Amplifier Pentode	5	10	Heater	6.3
803	34.50	R-F Power Amplifier Pentode	5	125	Filament	10.0
804	15.00	R-F Power Amplifier Pentode	5	40	Filament	7.5
805	13.50	R-F Power Amplifier, Oscillator, Class B Modulator	3	125	Filament	10.0
806	22.00	R-F Power Amplifier, Oscillator, Class B Modulator	3	150	Filament	5.0
807	3.50	R-F Power Amplifier Pentode	4	21	Heater	6.3
808	7.75	R-F Power Amplifier, Oscillator, Class B Modulator	3	50	Filament	7.5
809	2.50	R. F. Power Amplifier O Bias Triode lator	3	25	Filament	6.3
831	265.00	Oscillator, R-F Power Amplifier	3	400	Filament	11.0
834	12.50	R-F Power Amplifier and Oscillator	3	50	Filament	7.5
837	8.50	R-F Power Amplifier Pentode	5	12	Heater	12.6
838	16.00	Class B Modulator, R-F Power Amplifier, Oscillator	3	100	Filament	10.0
840	6.00	R-F Pentode	5	.....	Filament	2.0
841	3.25	R-F Power Amplifier, Oscillator, A-F Voltage Amplifier	3	15	Filament	7.5
842	3.25	A-F Power Amplifier, Modulator	3	12	Filament	7.5
843	12.50	Power Amplifier, Oscillator	3	15	Heater	2.5
844	18.00	Screen-Grid R-F Power Amplifier	4	15	Heater	2.5
845	15.00	Modulator, A-F Power Amplifier	3	75	Filament	10.0
849	160.00	Modulator, A-F and R-F Power Amplifier, Oscillator	3	400	Filament	11.0
850	37.50	Screen-Grid R-F Power Amplifier	4	100	Filament	10.0
851	350.00	Modulator, A-F and R-F Power Amplifier, Oscillator	3	750	Filament	11.0
852	16.40	Oscillator, R-F Power Amplifier	3	100	Filament	10.0
860	32.50	Screen-Grid R-F Power Amplifier	4	100	Filament	10.0
861	295.00	Screen-Grid R-F Power Amplifier	1	400	Filament	11.0
864	1.00	Amplifier (Low Microphonic Design)	3	.....	Filament	1.1
865	12.75	Screen-Grid R-F Power Amplifier	4	15	Filament	7.5
868	3.70	Phototube	2	.....	.....	.....
917	4.75	Phototube (High-Vacuum Type)	2	.....	.....	.....
918	4.50	Phototube (High Sensitivity)	2	.....	.....	.....
919	4.75	Phototube (High-Vacuum Type)	2	.....	.....	.....
920	5.25	Twin Phototube	4	.....	.....	.....
921	2.00	Cartridge Phototube (Gaseous Type)	2	.....	.....	.....
922	2.00	Cartridge Phototube (High-Vacuum Type)	2	.....	.....	.....
923	2.60	Phototube (High Sensitivity)	2	.....	.....	.....
954	5.00	Detector, Amplifier Pentode (Acorn Type)	5	.....	Heater	6.3
955	3.00	Amplifier Detector Oscillator (Acorn Type)	3	.....	Heater	6.3
956	5.00	Super-Control R-F Pentode (Acorn Type)	5	.....	Heater	6.3
991	.90	Voltage Regulator	2	.....	.....	.....
1602	2.75	Amplifier Triode (Low-Microphonic Type)	3	15	Filament	7.5
1603	4.75	Amplifier Pentode (Low-Microphonic Type)	5	.....	Heater	6.3
1608	4.00	Power Amplifier, Oscillator	3	20	Filament	2.5
1609	1.60	Amplifier Pentode (Low Microphonic Design)	5	.....	Filament	1.1
1610	2.00	Crystal-Oscillator Pentode	5	6	Filament	2.5
1612	3.25	Pentagrid Amplifier (Low Microphonic Design)	7	.....	Heater	6.3

RCA906



RCA801



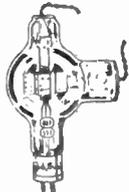
RCA800



RCA802



RCA955



RCA858

Type No.	Net Price	RECTIFIERS	Elec- trodes	Max. Peak Inverse Volts	Cathode Type	Cathode Volts
217-A	\$20.00	Half-Wave, High-Vacuum	2	3500	Filament	10.0
217-C	20.00	Half-Wave, High-Vacuum	2	7500	Filament	10.0
836	11.50	Half-Wave, High-Vacuum	2	5000	Heater	2.5
866	1.50	Half-Wave, Mercury-Vapor	2	7500	Filament	2.5
866-A	4.00	Half-Wave, Mercury-Vapor	2	10000	Filament	2.5
872	14.00	Half-Wave, Mercury-Vapor	2	7500	Filament	5.0
872-A	16.50	Half-Wave, Mercury-Vapor	2	10000	Filament	5.0
878	11.00	Half-Wave, High-Vacuum for Cathode-Ray Tubes	2	20000	Filament	2.5
879	3.00	Half-Wave, High-Vacuum for Cathode-Ray Tubes	2	7500	Filament	2.5
885	2.00	Gas-Triode for Cathode-Ray Sweet Circuit Control	3	300	Heater	2.5

Type No.	Net Price	CATHODE-RAY TUBES	Elec- trodes	Max. Anode No. 2 Volts	Cathode Type	Cathode Volts
903	\$86.00	9 in., Electromagnetic Deflection, High-Vacuum	5	7000	Heater	2.5
904	52.50	5 in., Electrostatic-Magnetic Deflection, High-Vacuum	5	4600	Heater	2.5
905	45.00	5 in., Electrostatic Deflection, High-Vacuum	4	2000	Heater	2.5
906	13.50	3 in., Electrostatic Deflection, High-Vacuum	4	1200	Heater	2.5
907	48.75	5 in., Electrostatic Deflection, High-Vacuum, Short Persistence Screen	4	2000	Heater	2.5
908	18.00	3 in., Electrostatic Deflection, High Vacuum, Short Persistence Screen	4	1200	Heater	2.5
909	49.00	5 in., Electrostatic Deflection, High-Vacuum, Long Persistence Screen	4	2000	Heater	2.5
910	21.25	3 in., Electrostatic Deflection, High-Vacuum, Long Persistence Screen	4	1200	Heater	2.5
911	22.50	3 in., Electrostatic Deflection, High-Vacuum (Electron gun of low-magnetic material)	4	1200	Heater	2.5
912	163.40	5 in., Electrostatic Deflection, High-Voltage, High-Vacuum	4	15000	Heater	2.5
913	4.00	1 in., Electrostatic Deflection (Medium Persistence Screen)	4	500	Heater	6.3

Effective Sept. 7, 1937—Prices subject to change without notice.

EIMAC TRANSMITTING TUBES

EIMAC 35T



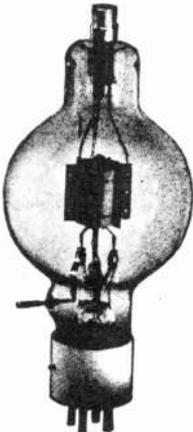
The EIMAC 35T tube has the lowest interelectrode capacities of any transmitting vacuum tube available today. The EIMAC 35T while having extremely small physical size has really tremendous power capabilities. The use of tantalum electrodes and a sparkling clear glass bulb uncontaminated by "getter" makes possible the small physical size of the 35T. The rated class "C" output for telegraphy on all frequencies below 50 megacycles is 170 watts. The telephony output is 120 watts. The above outputs are for a single tube. The 35T is an excellent class "B" audio tube and can be operated with zero grid bias at plate potentials up to 700 volts. The maximum class "B" audio output from a pair of 35T's

is 235 watts. The 35T is particularly adaptable to high frequency work due to the small interelectrode capacities. The 35T makes an excellent crystal oscillator tube with outputs of 60 watts or so at 3.5 megacycles. The 35T is very effective in frequency multiplying circuits.

Filament voltage	..... 5 to 5.1
Filament current	..... 4 amperes
Amplification factor	..... 30
Maximum plate current	..... 150 milliamperes
Maximum plate dissipation	..... 70 watts
Normal plate dissipation	..... 35 watts
Maximum plate voltage	..... 2000

Net Price \$6.00

EIMAC 100TH

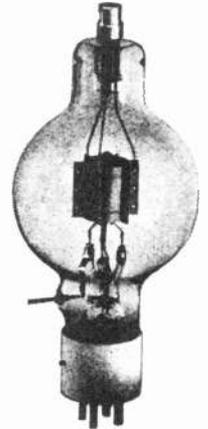


The 100TH tube has a high amplification factor. An improved grid design makes the 100TH tube exceedingly easy to excite and this tube makes an ideal class "C" radio frequency tube, a class "B" modulator tube, or a frequency multiplier tube. The class "C" output from a single tube is 300 watts at 75% plate efficiencies but actually 400 watts or better can be obtained without exceeding any tube rating. The class "B" audio output from a pair of 100TH tubes can be as high as 500 watts. The 100TH tube operates at zero bias at plate potentials up to 1250 volts on the plate. The class "B" output at 1250 volts is 240 watts. The 100TH is fast becoming one of the favorite tubes used by ultra high frequency experimenters.

Filament voltage	..... 5 to 5.1
Filament current	..... 6.5 amperes
Amplification Factor	..... 30
Maximum plate current	..... 225 milli-amperes
Plate dissipation (normal)	..... 100 watts
Maximum plate voltage	..... 3000

Net Price \$13.50

EIMAC 100TL

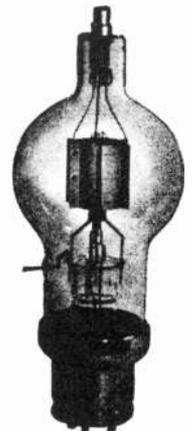


The 100TL tube is one of the new additions to the EIMAC line and supercedes the older 50T tube. The 100TL incorporates some interesting mechanical changes the most notable being the new low loss grid and plate connectors. The new connectors have greatly reduced the lead losses common to the older designs and has greatly increased the ultra high frequency capabilities of these tubes. The 100TL tube is finding wide application in diathermy equipment and fills the requirement for a low first cost tube that will give high outputs and long life in this grueling service. The 100TL can be used in equipment now using the older 50T though the 100TL tube carries heavier ratings and is capable of greater outputs. The 100TL tube has approximately the same power capabilities as the 100TH tube.

Filament voltage	..... 5 to 5.1
Filament current	..... 6.5 amperes
Amplification factor	..... 12
Maximum plate current	..... 225 milliamperes
Plate dissipation (normal)	..... 100 watts
Maximum plate voltage	..... 3000

Net Price \$13.50

EIMAC 250TL



The 250TL tube supercedes the older 150T tube and is interchangeable in equipment now using the older tube. The 250TL is capable of operation at much higher inputs than the older 150T. The 250TL incorporates a new style grid and anode connector which materially reduce losses occurring at these points when compared to the more conventional arrangements. The new connectors permit successful operation on radio frequencies heretofore thought too high. The 250TL tube makes an excellent tube to be used in high power diathermy machines and is at the present time being extensively used in the better machines. The 250TL tube is capable of approximately the same outputs as the 250TH.

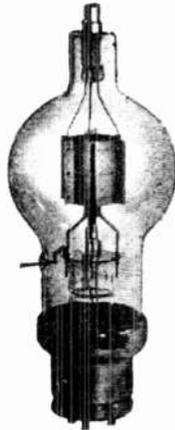
Filament voltage	..... 5 to 5.1
Filament current	..... 10.5 amperes
Amplification factor	..... 13
Maximum plate current	..... 350 milli-amperes
Plate dissipation (normal)	..... 250 watts
Maximum plate voltage	..... 3000

Net Price \$24.50

EIMAC TRANSMITTING TUBES

EIMAC 250TL

The 250TL tube supercedes the older 150T tube and is interchangeable in equipment now using the older tube. The 250TL is capable of operation at much higher inputs than the older 150T. The 250TL incorporates a new style grid and anode connector which materially reduce losses occurring at these points when compared to the more conventional arrangements. The new connectors permit successful operation on radio frequencies heretofore thought too high. The 250TL tube makes an excellent tube to be used in high power diathermy machines and is at the present time being extensively used in the better machines. The 250TL tube is capable of approximately the same outputs as the 250TH.



Filament voltage 5 to 5.1
 Filament current 10.5 amperes
 Amplification factor 13
 Maximum plate current 350 milli-amperes
 Plate dissipation (normal) 250 watts
 Maximum plate voltage 3000

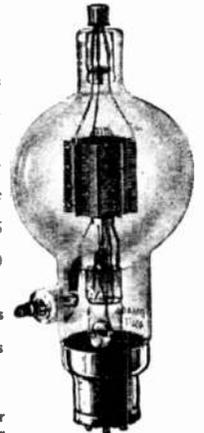
Net Price \$24.50

EIMAC 1000UHF

The EIMAC 1000UHF tube is particularly designed for high power outputs on frequencies as high as 150 megacycles. The tube is

EIMAC 450TL & 450TH

The Eimac 450TL and 450TH are finding wide application in Broadcasting services as this tube is capable of replacing to advantage some of the more costly tubes. Communication companies are using the 450TL and 450TH for operation in their high frequency equipment. A pair of 450TL or 450TH tubes are capable of an antenna power of better than 2500 watts when used in telegraphic transmitters.



450TL Amplification factor 16
 (Replaces older 300T)
 450TH Amplification factor 30

CHARACTERISTICS (Both Types)
 Filament voltage 7.5
 Filament current 12 amperes
 Maximum plate current 500 milli-amperes
 Plate dissipation (normal) 450 watts
 Maximum plate voltage 6000 volts

F.C.C. RATINGS
 High level modulation 500 watts carrier power
 Low level modulation 125 watts carrier power

Net Price \$75.00

physically small in size in order to minimize lead inductance. The tube is designed to operate with forced draft on the glass bulb. Provision is made to force cool the grid and plate stems. The plate dissipation under forced air draft is 1000 watts.

PRICE ON APPLICATION

GAMMATRON TRANSMITTING TUBES

HK-154 GAMMATRON

This addition to the Gammatron Line gives the amateur and experimenter something radically new in a comparatively low voltage transmitting tube. The outputs in either audio or radio frequency circuits are exceptionally high. Ratings apply at all frequencies up to 60 megacycles (5 meters)! The most modern and finest type of construction is used, incorporating such advantageous features as tantalum grid and plate, tungsten supporting rods, thoriated tungsten filament, all-glass insulation and Nonex glass envelope. Grid and plate terminals extend from the sides of the envelope, thereby minimizing the length of external connecting leads and assisting materially with symmetrical layouts.

GENERAL CHARACTERISTICS:

Grid and plate Tantalum
 Filament Thoriated Tungsten
 Base Medium 4 Pin

Filament voltage 5.0 volts
 Filament current 6.5 amps.
 Plate dissipation 50. watts
 Maximum plate voltage 1500. volts
 Maximum plate current 175. ma.
 Average amplification constant 6.7
 Average plate impedance 1750. ohms

Class "A" Audio Performance (Single Tube):

Plate voltage 500 to 1250 volts
 Plate current 40 to 60 ma.
 Grid bias -45 to -190 volts
 Power output 3.5 to 15.5 watts.

Class "B" Audio Performance (Two Tubes):

Plate voltage 750 to 1500 volts
 Plate current 230 to 350 ma.
 Grid bias -190 to 265 volts
 Power output 150 to 250 watts
 Suggested driver: Pair of 2A5 or 42 tubes as push-pull triodes with 350 plate volts.

Class "B" Radio Performance (Single Tube):

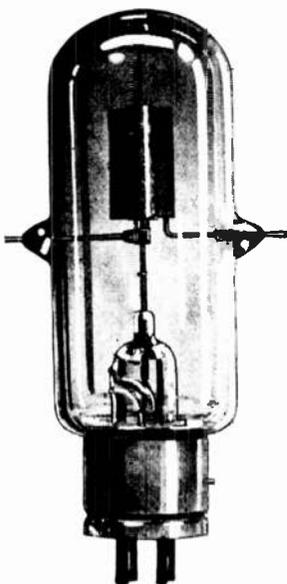
Plate voltage 750 to 1500 volts
 Plate current 52 to 75 ma.
 Grid bias -100 to -265 volts
 Carrier output 18 to 28 watts

Class "C" Radio Performance (Single Tube):

Plate voltage 750 to 1500 volts
 Plate current 167 to 175
 Grid bias -260 to -590 volts
 Power output 85 to 200 watts.

F.C.C. Broadcast Ratings (Final stage):

High level modulation 75 watts per tube
 Low level modulation 25 watts per tube

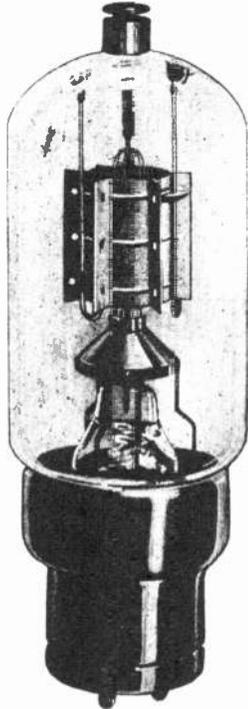


HK-154 Net \$12.50

TANTALUM USED FOR PLATES AND GRIDS!

N

GAMMATRON TRANSMITTING TUBES



HK-354 GAMMATRON—\$24.50

The Type HK-354 Gammatron transmitting tube is the original Tantalum element tube. It was made commercially available to the amateur and experimenter early in 1934. At the present time it stands foremost among tubes and will be found superior in every respect. As with other Gammatrons this tube has tantalum elements, tungsten supports, Nonex glass, thoriated filament, all-glass insulation and in addition uses extremely rigid three-post plate and grid supports. A cage type of grid insures complete plate current control. The tantalum plate and grid exclude need of a getter and allow safe operation at a red heat, without danger of the tube becoming gassy. Cheaper plate materials are inferior and liberate gas freely when operated at a red heat.

GENERAL CHARACTERISTICS:

Grid and plate	Tantalum
Filament	Thoriated Tungsten
Base	Standard 50 watt
• • •	
Filament voltage	5.0 volts
Filament current	10. amps.
Plate dissipation	150. watts
Maximum plate voltage	4000. volts
Maximum plate current	300. ma.
Average amplification constant	14.
Average plate impedance	2800. ohms

Class "B" Audio Performance (Two Tubes):

Plate voltage	1000 to 3000 volts
Plate current	230 to 390 ma.
Grid bias	-60 to -205
Power output	160 to 665 watts
Suggested driver	Two or four 2A6 or 42 tubes as push-pull triodes with 350 plate volts.

Class "C" Radio Performance (Single Tube):

Plate voltage	1500 to 4000 volts
Plate current	255 ma.
Grid bias	-300 to -700 volts
Power output	270 to 840 watts.

F.C.C. Broadcast Ratings (Final Stage):

High level modulation	250 watts per tube
Low level modulation	50 watts per tube
Grid bias modulation	50 watts per tube

HK-253 GAMMATRON —

A high vacuum half-wave rectifier for use where the time delay required with mercury rectifiers cannot be tolerated. Filament 5 volts, 10 amperes. Maximum inverse peak voltage 10,000 volts. Maximum load current 7.0 ma. Tube drop, 120 volts.

HK-253-A	(Standard 50 watt base)	\$20.00
HK-253-B	(Industrial base)	20.00

HK-353 GAMMATRON —A half-wave mercury rectifier for use in circuits of moderate voltage and high current. This tube is particularly suited for use with a Heintz and Kaufman Ltd. rectifier in conjunction with the HK Type 300 Engine Generator. Filament 1.25 volts, 13 amperes. Maximum inverse peak voltage 1000 volts. Maximum load current 2.5 amperes.

HK-353	Medium 4 Pin Base	\$12.00
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HK-354-C GAMMATRON —An ultra-high frequency style HK-354. Has identical electrical characteristics except that input capacity is half that of the HK-354. Grid connection is at side of envelope, both grid and plate caps are welded to connecting rods. A superior ultra-high frequency tube.

HK-354-C	(Standard 50 watt base)	\$24.50
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HK-354-D GAMMATRON —Similar to HK-354-C, but with amplification factor of 22. May be had in standard HK-354 style on special order.

HK-354-D	(Standard 50 watt base)	\$24.50
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HK-354-E GAMMATRON —Similar to HK-354-C, but with amplification factor of 35. May be had in standard HK-354 style on special order.

HK-354-E	(Standard 50 watt base)	\$24.50
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HK-354-F GAMMATRON —Similar to HK-354-C, but with amplification factor of 50. May be had in standard HK-354 style on special order.

HK-354-F	(Standard 50 watt base)	\$24.40
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TANTALUM USED FOR PLATES AND GRIDS!

HK-653 GAMMATRON —A half wave mercury rectifier for use in circuits of moderate power and high voltage. This tube is of the hot cathode type. Filament 5 volts, 6.5 amperes. Maximum inverse peak voltage 10,000 volts, (15°-50°C). Average current 1.75 amperes. Peak current 7.5 amperes.

HK-653-A	(Standard 50 watt base)	\$18.50
HK-653-B	(Industrial base)	18.50

HK-654 GAMMATRON —A medium size triode for broadcast and commercial services. Ultra-high frequency construction; grid connection is at side of envelope. Filament 7.5 volts 15 amperes. Plate dissipation 300 watts amplification factor 22. F.C.C. ratings; high level 500 watts; low level 125 watts; grid bias 100 watts.

HK-654	(Standard 50 watt base)	\$75.00
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THE TYPE **54**

GAMMATRON

HIGH POWER TRIODE

- No "getter" • Tantalum plate
- 50 watt plate • Tantalum grid
- Mu-27 • Nonex envelope

Max. plate ma-150

Max. pl. volts-2000 **\$6⁷⁵**

Full ratings to

100 megacycles

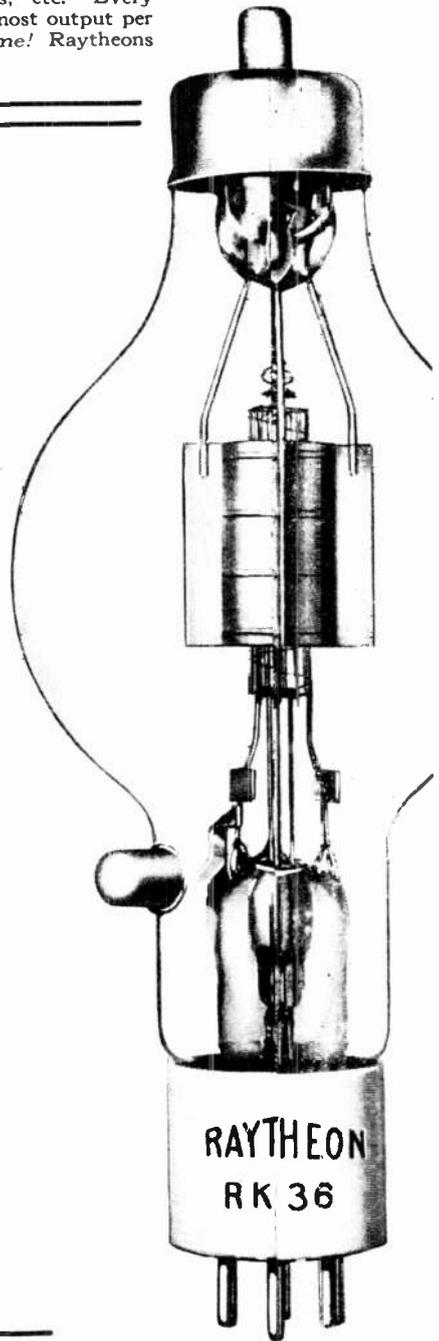
RAYTHEON TRANSMITTING TUBES

RAYTHEON—the first tube manufacturer to come to the rescue of the radio amateur! The first to build a transmitter tube especially designed for amateurs! Always—Raytheon has led the way. The first efficient triode . . . the first transmitting pentode . . . and the first zero bias Class B modulator . . . all were first introduced by Raytheon! That's why the amateurs who use Raytheon tubes

are among the record breakers and leaders in amateur transmitting! Only the finest materials in the world go into Raytheon Amateur Tubes—Tantalum plates, Nonex hard glass bulbs, Isolantite bases, etc. Every Raytheon tube is built to give the most output per dollar over the longest period of time! Raytheons are your best bet!

All prices given below are net for the amateur
OUTPUT

No.	NET	TYPE	FILAMENT		PURPOSE	RATED VOLTAGES				POWER	
			Volts	Amps		Plate	Grid	Scr. G.	Supp. G.	Pl. Diss.	Output
RK-10	\$3.50	Triode.....	7.5	1.25	Thor.	{ Osc.-Rf. Amp 450	120			12W	15W
						{ Class B Mod 425	-50			12W	25W*
RK-18	10.00	Triode	7.5	3.0	Thor.	{ Osc. Rf. Amp 1000	150			35W	40W
						{ Class B Mod 1000	-50			35W	100W*
RK-19	7.50	Full W. Rect.	7.5	2.5	K	LOW DROP 125 v. R.M.S. PER ANODE 600 MA.					
RK-20	15.00	Rf. Pentode...	7.5	3.0	Thor.	{ Osc.-Rf. Amp 1250	-100	300	0	40W	64W
						{ Osc.-Rf. Amp 1250	-100	300	+45	40W	80W
						{ Supp. Mod. Phone. 1250	-100	300	-45	40W	18W
RK-21	5.00	Half W. Rect.	2.5	4.0	K	LOW DROP 1250v. R.M.S. PER ANODE 600 MA.					
RK-22	7.50	Full W. Rect.	2.5	8.0	K						
RK-23	4.50	Rf. Pentode...	.5	2.0	K	{ Osc.-Rf. Amp 500	-90	200	0	10W	18W
						{ Osc.-Rf. Amp 500	-90	200	+45	10W	24W
						{ Supp. Mod. Phone. 500	-90	200	-45	10W	5.5W
RK-24	2.25	Triode	2.0	0.12	Oxide	5 Meter Osc.	180	-45		1.5W	1.2W
RK-25	4.50	Rf. Pentode...	6.3	0.8	K	CHARACTERISTICS SAME AS RK 23					
RK-28	38.50	Rf. Pentode...	10.0	5.0	Thor.	{ Osc.-Rf. Amp 2000	-100	400	0	100W	160W
						{ Osc.-Rf. Amp 2000	-100	400	+45	100W	200W
						{ Supp. Mod. Phone. 2000	-100	400	-50	100W	60W
RK-30	10.00	Triode	7.5	3.25	Thor.	{ Osc.-Rf. Amp 1250	-175			35W	65W
						{ Class B Mod 1250	-70			35W	106W*
RK-31	10.00	Triode.....	7.5	3.0	Thor.	Class B Mod.....	1250	0		40W	140W*
RK-32	12.00	Triode.....	7.5	3.25	Thor.	{ Ultra H. F. 1250	-250			50W	65W
						{ Oscill.-Amp. 1250	250			50W	65W
RK-34	3.50	Dual Triode...	6.3	0.8	K	{ Osc.-Rf. Amp 300	-36			10W	14W
						{ Class B Mod 300	-15			10W	12W
RK-35	8.00	Triode.....	7.5	.25	Thor.	Ultra H. F.	1000	-320		35W	61W
RK-36	14.50	Triode	5.0	5.00	Thor.	Osc.-Rf. Amp 2000	-360			100W	225W
RK-49	2.10		6.3	0.9	Thor.	A. F. Ampl. 400	-50			21W	25W



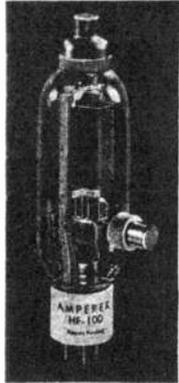
Three brand new tubes—just out of the laboratory!

- RK-37—High Mu Triode Net \$ 8.00 60 W
- RK-38—High Mu Triode Net \$14.50 225 W
- RK-39—Beam Power Tetrode Net \$ 3.50 35 W

(* Indicates Value for Two Tubes.)

AMPEREX TRANSMITTING TUBES

HF-100



High and normal R. F. power amplifier, oscillator, class B modulator.

The HF-200 is another of the highly proficient ultra-high frequency generators of original AMPEREX design and development. The outstanding features of low voltage high current and a high ratio of transconductance to interelectrode capacitance are also properties of this tube.

GENERAL CHARACTERISTICS

Filament: Voltage 10-11 volts
 Current 3.4 amperes
 Amplification Factor 18
 Grid to Plate Transconductance
 @ Plate Current of 150 ma. 5000 micromhos
 Direct Interelectrode Capacitances:
 Grid to Plate 5.8 uuf
 Grid to Filament 5.2 uuf
 Plate to Filament 1.2 uuf

Net Price \$24.50

HF-300



R. F. power amplifier, oscillator, class B modulator.

The HF-300 has found favor with many broadcasters and transmitter designers as a substitute for the 204A. A study of the operational data will disclose its superiority, in many classes of service, to the latter tube. It, also, like the HF-100 and HF-200, is an efficient ultra-high frequency generator and possesses the characteristic common to AMPEREX designed tubes, of a high ratio of transconductance to interelectrode capacitance.

GENERAL CHARACTERISTICS

Filament: Voltage 11-12 volts
 Current 4 amperes
 Amplification Factor 23
 Grid to Plate Transconductance
 @ 150 ma. 5600 micromhos
 Direct Interelectrode Capacitances (App.):
 Grid to Plate 6.5 uuf
 Grid to Filament 6.0 uuf
 Plate to Filament 1.4 uuf

Net Price \$35.00

An ultra-high, normal R. F. power amplifier and oscillator and class B audio amplifier or modulator.

The HF-100 is one of a distinctive group of low voltage high current tubes, an original development of the AMPEREX ENGINEERING LABORATORIES. It is in addition characterized by an extraordinary high ratio of transconductance to interelectrode capacitance, a characteristic which is responsible for its outstanding efficiency in ultra-high frequency circuits.

GENERAL CHARACTERISTICS

Filament: Voltage 10-10.5
 Current 2 amperes
 Amplification Factor 23
 Grid to Plate Transconductance
 @ 100 ma. 4200
 Direct Interelectrode Capacitances:
 Grid to Plate 4.5 uuf
 Grid to Filament 3.5 uuf
 Plate to Filament 1.4 uuf

Net Price \$12.50

HF-200



Low Distortion zero-bias class B amplifier and modulator, high efficiency R. F. frequency multiplying power amplifier, conventional R. F. power amplifier.

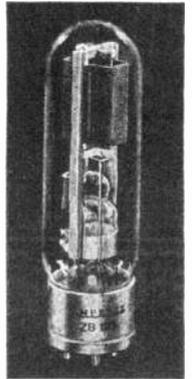
The ZB-120 is an exclusive AMPEREX development. In common with other tubes of original AMPEREX design it is a low voltage high current type and possesses a high ratio of transconductance to interelectrode capacitance. Although it approaches nearer the ideal in a zero-bias class B tube it is also a highly efficient performer in many other classes of service.

GENERAL CHARACTERISTICS

Filament: Voltage 10-10.5 volts
 A.C. or D.C.
 Current 2 amperes
 Amplification Factor 90
 Grid to Plate Transconductance
 @ 120 ma. 5000 micromhos
 Direct Interelectrode Capacitances:
 Grid to Plate 5.2 uuf
 Grid to Filament 5.3 uuf
 Plate to Filament 3.2 uuf

Net Price \$10.00

ZB-120



AIR COOLED THREE ELECTRODE VACUUM TUBES

TYPE	PRICE	CODE	Fil. Voltage	Fil. Current Amps.	Max. Plate Dis. Watts
203A	\$15.00	A Beech	10.0	3.25	100
205D	5.00	A Elm	4.5	1.6	15
211	15.00	A Fir	10.0	3.25	100
211B	17.50	A Redwood	10.5	3.25	120
211C	17.50	A Cedar	10.0	3.25	120
211D	15.00	A Ash	10.0	3.25	100
211H	17.50	A Oak	10.0	3.25	120
242A	12.50	A Walnut	10.0	3.25	85
242B	12.50	A Cypress	10.0	3.25	100
242C	15.00	A Amber	10.0	3.25	100
261A	17.50	A Sassafras	10.0	3.25	120

TYPE	PRICE	CODE	Fil. Voltage	Fil. Current Amps.	Max. Plate Dis. Watts
264B	\$1.75	A Cherry	1.5	.3	
800	10.00	A Holly	7.5	3.25	50
805	15.00	A Locust	10.0	3.25	125
830	8.75	B Plum	10.0	2.0	40
830B	10.00	A Spruce	10.0	2.0	60
838	15.00	A Currant	10.0	3.25	120
841	3.25	A Maple	7.5	1.25	20
842	3.25	A Willow	7.5	1.25	20
845	15.00	A Hemlock	10.0	3.25	100
852	16.40	A Dogwood	10.0	3.25	100
864	1.50	A Tulip	1.1	.25	

MERCURY VAPOR RECTIFIERS

TYPE	PRICE	CODE	Fil. Voltage	Fil. Curr. Amps.	Peak Inverse Voltage	Peak Plate Current Amps.	
249B	\$10.00	A Laurel	2.5	7.5	7500	1.5	Shielded Filament
258B	9.85	A Bayberry	2.5	7.5	7500	1.5	Shielded Filament
267B	23.00	A Lily	5.0	6.75	7500	2.5	Shielded Filament
353A	17.50	A Chestnut	5.0	6.75	10000	2.5	Shielded Filament
575A	35.00	A Magnolia	5.0	10.0	15000	5.0	Shielded Filament
866A	4.00	A Basswood	2.5	5.0	10000	1.0	Shielded Filament
872	14.00	A Cottonwood	5.0	10.0	7500	2.5	
872A	16.50	A Gum	5.0	7.5	10000	5.0	Shielded Filament

TAYLOR TRANSMITTING TUBES

HIGH FREQUENCY TUBES



T-125

125 WATTS

PLATE DISSIPATION

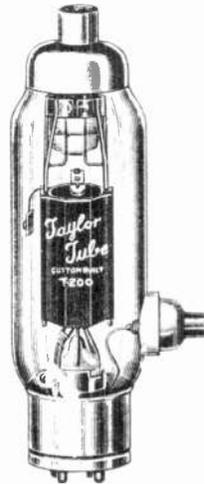
Carbon-Tantalum
Anode

Fil.—10 Volts—4 Amps.
Plate—2000 Volts—200 M. A.
Amp. Factor—25
Grid to Plate—4.5 mmf.
Max. D.C. Grid Cur.—60 M.A.

PLATE LEAD—TOP
GRID LEAD—SIDE

Net Price

\$13.50



T-200

HEAVY DUTY
200 WATTS
PLATE DISSIPATION

The T-200 is a Heavy-Duty High Frequency Tube. Compare the ratings on the T-200 with competitive tubes and you will discover why the Taylor T-200 is leading in sales.

Fil. 10 to 11 volts—4 amps.
Plate—unmodulated 2500 v.
modulated—2000 volts
—350 M.A.
Amp. Factor—17
Grid to Plate—7 mmf.
Max. D.C. Grid Cur.—80 M.A.
Size—9½" x 3¾"
Plate Lead—Top
Grid Lead—Side

The T-200 is widely used in high-power diathermy apparatus because it can stand up in Heavy Duty operation. The T-200 is the perfect tube for full 1 K.W. Phone Rigs on 20 meters. Easy to drive—Easy to neutralize!

Net Price
\$21.50

N
World Radio History



T-55

**The Fastest Selling Amateur
Transmitting Tube**

55 WATTS

PLATE DISSIPATION

The T-55 is the ideal tube for medium Power Transmitters or Diathermy apparatus work on ultra High Frequencies.

Fil. 7.5 Volts—2.75 amps.
Plate 1500 volts—150 M.A.
Modulated
Amp. Factor—20
Grid to Plate—4 mmf.
Max. D.C. Grid Cur.—40 M.A.
Size—7" x 2⅝"
Isolantile UX Base
Plate Lead—Top

Net Price

\$7.00



**TAYLOR
T-20**

20 Watts Plate Dissipation. Efficient performance on all bands from 5 to 160 meters. Fil. 7.5 Volts, 1.75 Amps. Plate 750 Volts. 75 M.A. Amp. Factor 20.

Net \$2.25

**TAYLOR
866 JR**

Half Wave Mercury Vapor Rectifier for medium Voltages. Fil. 2.5 Volts, 2.5 Amps. Max. R.M.S. AC 1250 Volts. Max. D.C. current per pair (choke input) 250 M.A.



Net \$1.00

BLILEY CRYSTALS

**TYPE LD2 MOUNTED CRYSTAL
FOR THE 80 and 160-METER BANDS**

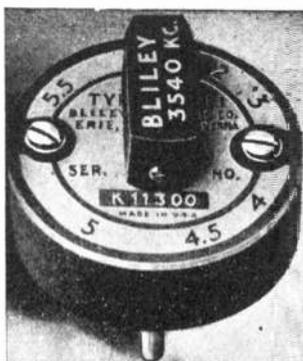


The type LD2 amateur frequency crystal is a mounted, precision low drift crystal for the 80 and 160-meter amateur bands. The crystal is carefully cut from selected Brazilian Quartz, ground to exacting precision, accurately calibrated and rigidly tested. It possesses unusual activity and has a frequency drift of less than 4 cycles/MC./°C.

Type LD2—Within 5 KC. of specified frequency or choice from dealer's stock Net **\$4.80**
Supplied to exact integral specified KC's.....Net **\$5.90**

VARIABLE FREQUENCY CRYSTAL UNIT

TYPE VF1



A variable frequency 80-meter crystal unit which provides positive frequency control without appreciable loss of activity or stability. By a mere twist of the control knob, the crystal frequency can be changed up to 6 KC., plus, from the fundamental frequency engraved on the control knob; 12 KC. when doubling, or 24 KC. when quadrupling to 20 meters.

Type VF1—Within 5 KC. of specified minimum frequency in the 80-meter band Net **\$7.50**
Minimum frequency at exact integral specified KC's. in the 80-meter band Net **\$10.00**

**TYPE BC3 MOUNTED CRYSTAL
FOR THE 40, 80-METER BANDS**

The one-piece molded Bakelite holder is designed to plug into a standard 5 prong tube socket and may be mounted in any position. The cover plate also serves as one crystal electrode. This aids in the dissipation of heat developed by the crystal in oscillating, thereby reducing actual frequency drift.

Type BC3—Within 5 KC. of specified frequency or choice from dealer's stock.

\$3.35
NET

Supplied to exact integral specified KC's.

\$4.95
NET



**TYPE HF2 MOUNTED CRYSTAL
FOR THE 10 AND 20-METER BANDS**



A fully dependable crystal unit for the 10 and 20-meter amateur bands. Engineered by Bliley, this precision-ground crystal simplifies the construction of 5, 10 and 20-meter transmitters by reducing the necessary number of frequency multiplications to a minimum. In use, the HF2 Unit for 20-meters is directly applicable to conventional circuits. With the HF2 10-meter Unit, specifically recommended for 5-meters,

Type HF2—14.0 to 14.4 MC., drift 20 cycles MC./°C., within 15 KC. of specified frequency* Net **\$5.75**
Within 5 KC. of specified frequency Net **\$10.00**
14.4 to 15.0 MC., drift 20 cycles /MC./°C., within 30 KC. of specified frequency* Net **\$5.75**
Within 5 KC. of specified frequency Net **\$15.00**
28.0 to 30.0 MC., drift 43 cycles /MC./°C., within 50 KC. of specified frequency* Net **\$5.75**

*Or choice from dealer's stock.

STANDARD FREQUENCY CRYSTAL UNIT

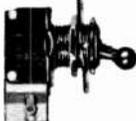
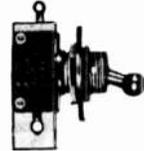
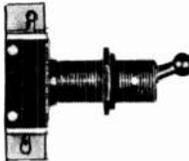
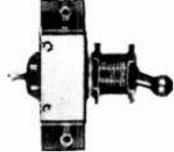
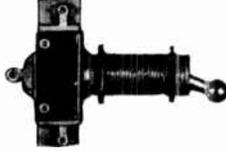
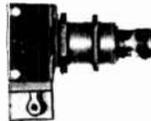
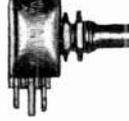
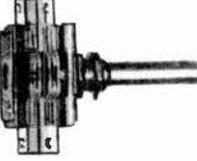
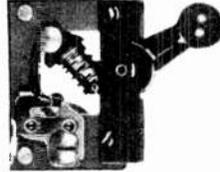
TYPE SOC100



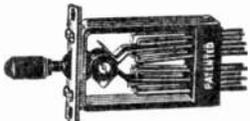
The B 5 unit for 40-meters has a higher activity, and will safely handle 35% more RF current, than the popular LD2 40-meter crystal unit which it replaces at no increase in cost. For 20-meters, the B 5 unit now extends the advantages of low frequency-drift and high activity to the higher frequencies. For better frequency control use a B 5 crystal unit in your transmitter.

Type B 5—7.0 to 7.3 MC., within 5KC. of specified frequency* Net **\$4.80**
Frequency to exact integral specified KC's.....Net **\$5.90**
14.0 to 14.4 MC., within 15 KC. of specified frequency* Net **\$7.50**
Within 5 KC. of specified frequency.....Net **\$12.00**
14.4 to 15.0 MC., within 30 KC. of specified frequency* Net **\$7.50**
Within 5 KC. of specified frequency.....Net **\$17.50**
*Or choice from dealer's stock.

HART AND HEGEMAN SWITCHES

 <p>20994 SPST 13/32 in. Sleeve Available in nickel or gun metal with on-off plate. List 40c</p>	 <p>21615 SPST 1 in. Sleeve Available in nickel or gun metal with on-off plate. List 50c</p>	 <p>21350A SPDT 13/32 in Sleeve Available in nickel or gun metal with Hi-Lo plate. List 55c</p>	 <p>21661F SPDT 1 in. Sleeve Available in nickel or gun metal with Hi-Lo plate. List 60c</p>	 <p>20982AM DPST 13/32 in. Sleeve Available in nickel or gun metal with plate. List 65c</p>
 <p>20902A DPST 1 in. Sleeve Available in nickel or gun metal with plate. List 70c</p>	 <p>20905Z DPDT 13/32 in. Sleeve Available in nickel or gun metal. List 75c</p>	 <p>20905C DPDT 1 in. Sleeve Available in nickel or gun metal. List 50c</p>	 <p>3391 SPST 3/8 in. Sleeve Push bottom type nickel plated available norm on—norm off. List 40</p>	 <p>80323B SPST 10 AMP Insulated with 13/32 in. Sleeve Nickel plated. List 85c</p>
 <p>4043CH SPDT Normally off. 13/32 in. Sleeve. Nickel plated. List 50c</p>	 <p>4044CH SPDT Normally off 13/32 in. Sleeve Nickel plated. List \$1.50</p>	 <p>1561 SPST Rotary type 13/32 in. Sleeve Short shaft nickel plated. List 45c</p>	 <p>1561L SPST Rotary Type 13/32 in. Sleeve Long shaft nickel plated. List 50c</p>	 <p>1570 DPST Rotary with 13/32 in. Sleeve Nickel plated. List 65c</p>
 <p>1575E DPDT Rotary Type 13/32 in Sleeve Long shaft nickel plated. List 85c</p>	 <p>20987 SPST 15 AMP. Insulated with nickel plated indicating on ar off plate. List \$1.60</p>	 <p style="text-align: center;">Switches for any purpose</p>		

SWITCHES

<p>Porcelain Base Knife Switches</p>  <p>For many radio and electrical uses, especially suitable for aerial and ground. Copper contacts and blades.</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Poles</th> <th>Throw</th> <th>List</th> </tr> </thead> <tbody> <tr> <td>4057</td> <td>1</td> <td>S</td> <td>\$0.20</td> </tr> <tr> <td>4058</td> <td>1</td> <td>D</td> <td>.24</td> </tr> <tr> <td>4059</td> <td>2</td> <td>S</td> <td>.34</td> </tr> <tr> <td>4060</td> <td>2</td> <td>D</td> <td>.38</td> </tr> <tr> <td>4061</td> <td>3</td> <td>D</td> <td>.78</td> </tr> </tbody> </table>	No.	Poles	Throw	List	4057	1	S	\$0.20	4058	1	D	.24	4059	2	S	.34	4060	2	D	.38	4061	3	D	.78	<p>Miniature Bakelite Knife Switches</p>  <p>Bases of fine grade of bakelite. Contacts securely fastened so that they will not loosen or break out under normal conditions of use. Nickel-plated metal parts. Single pole types 1 1/2" long, double pole 2 1/2".</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Poles</th> <th>Throw</th> <th>List</th> </tr> </thead> <tbody> <tr> <td>4049</td> <td>1</td> <td>S</td> <td>\$0.50</td> </tr> <tr> <td>4050</td> <td>1</td> <td>D</td> <td>.34</td> </tr> <tr> <td>4051</td> <td>2</td> <td>S</td> <td>.72</td> </tr> <tr> <td>4052</td> <td>2</td> <td>D</td> <td>.88</td> </tr> <tr> <td>4053</td> <td>3</td> <td>S</td> <td>1.24</td> </tr> <tr> <td>4054</td> <td>3</td> <td>D</td> <td>1.26</td> </tr> <tr> <td>4055</td> <td>4</td> <td>S</td> <td>1.46</td> </tr> <tr> <td>4056</td> <td>4</td> <td>D</td> <td>1.58</td> </tr> </tbody> </table>	No.	Poles	Throw	List	4049	1	S	\$0.50	4050	1	D	.34	4051	2	S	.72	4052	2	D	.88	4053	3	S	1.24	4054	3	D	1.26	4055	4	S	1.46	4056	4	D	1.58	<p>NEW IMPROVED PEARL PUSH BUTTON Cat. No. 168</p>  <p>Pearl Center, 3/8" Dia., Nickel Plated Rim, Redesigned and Strengthened. Reinforced base will not push out.</p> <p>LIST PRICE25</p>	<p>FEDERAL Anti-Capacity Switches</p>  <p>—4 P.D.T. LIST PRICE \$2.90 —D.P.E.T. LIST PRICE \$2.45 —D.P.S.T. LIST PRICE \$2.45</p>
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PIONEER MOTORS

RED TOP COMBINATION A.C. - D.C. POWER PLANTS
GAS-O-LECTRIC (Petrol Driven)

AN all-purpose combination A.C. and D.C. power plant—all in one plant. This double feature affords exclusive advantages not to be found in any other power plant on the market.

In addition to keeping storage batteries charged at all times, and providing "city" electric lighting, it will operate many A.C. and D.C. electrical appliances.

Equipped with a pulley to drive cream separators, grinders, water pumps, washers, etc., by means of a "V" belt.

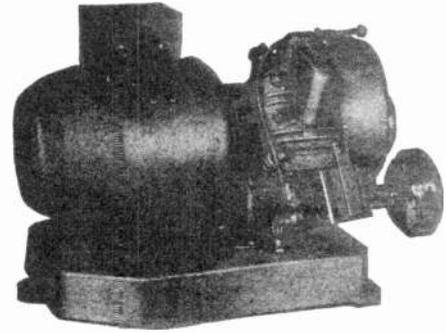
These combination power plants available as follows: 110-volt A.C., 300 watts; and either 6, 12, or 32-volt D.C. up to 325 watts for battery charging.

An outstanding feature of the RED TOP A.C. - D.C. Power Plant is that the generator is mounted directly on the crank shaft of the engine.

Automatic push button starter, with auxiliary rope-pull starter for use when battery is dead. Gasoline tank cast iron base with one gallon capacity, sufficient to operate plant from 12 to 16 hours.

Remote control and also filter and ignition shielding (for radio operation) available at small extra cost.

This unique RED TOP Combination A.C. - D.C. Gas-O-Lectric Power Plant provides the last word in "city" electricity at extremely low cost. Its market is limitless. Since it is the only one of its kind available it affords tremendous sales and profit possibilities for the jobber and the dealer.



SPECIFICATIONS
COMBINATION A.C. - D.C.

ENGINE: 4-cycle single cylinder "L" head type. Forced draft air cooling. Operates at 1800 R.P.M. $\frac{1}{2}$ horse power. 2- $\frac{1}{8}$ inch bore. 1- $\frac{1}{2}$ inch stroke. Automatic metered splash system lubrication. Mechanical governor maintains constant engine speed regardless of load on generator.

GENERATOR: Complete generator mounted directly on the crank shaft of engine. 4-pole type. 60 cycle. D.C. commutator and A.C. collector rings are on outer end of armature facilitating inspection for maintenance. Removable generator end cover. Armature connected to crank shaft bearing by semi-rigid coupling designed expressly for this application by our engineers. Outer end of armature shaft runs in a bearing of the oilless type. There is also a reservoir to hold sufficient oil for several hundred hours operation. Bearing itself is mounted in a sturdy cast iron bracket. Outlet box mounted on top of generator contains cut-out. A.C. outlet and 2 heavy terminals with wing nuts for D.C.

STARTING: Automatic push button starting. Fully enclosed high tension magneto for ignition mounted in the fly wheel facilitates quick starting by means of the auxiliary rope-pull starter furnished with plant.

ADDITIONAL FEATURES: Pulley on engine to drive small machinery. Muffler (detachable for exhaust pipe extension installation), automatic cut-out relay, auxiliary rope-pull starter. Ready for instant operation.

REMOTE CONTROL and also **FILTER** and **IGNITION SHIELDING** (for radio operation) available at small extra cost.

TYPE	DESCRIPTION	OUTPUT WATTS		NET WEIGHT	CODE	List Price
		A.C.	or D.C.			
IH6	110 Volt A.C. also D.C. for use with 6-volt batteries (shown above).....	300	200	98 lbs.	NADIR	\$ 98.50
IHR6	110 Volt A.C. also D.C. for use with 6-volt batteries with remote control; also ammeter and voltmeter in control box.....	300	200	102 lbs.	NIDUS	
IH12	110 Volt A.C. also D.C. for use with 12-volt batteries.....	300	250	98 lbs.	NASAL	104.95
IHR12	110 Volt A.C. also D.C. for use with 12-volt batteries with remote control; also ammeter and voltmeter in control box.....	300	250	102 lbs.	NOISY	134.95
IH32	110 Volt A.C. also D.C. for use with 32-volt batteries.....	300	325	98 lbs.	NATTY	109.95
IHR32	110 Volt A.C. also D.C. for use with 32-volt batteries with remote control; also ammeter and voltmeter in control box.....	300	325	102 lbs.	NOMAD	139.95
IMR6-12-32 same as IHR6-12-32						
IM6	110 Volt A.C. also D.C. for use with 6-volt batteries with meters.....	300	200	101 lbs.	MERIT	109.50
IM12	110 Volt A.C. also D.C. for use with 12-volt batteries.....	300	250	101 lbs.	MEZZO	114.95
IM32	110 Volt A.C. also D.C. for use with 32-volt batteries.....	300	325	101 lbs.	MEDIC	119.95
Overall dimensions: { IH series: 19 $\frac{1}{4}$ " length, 13 $\frac{3}{8}$ " height, 16 $\frac{1}{2}$ " width. { IM and IHR series: 19 $\frac{1}{4}$ " length, 16 $\frac{1}{2}$ " height, 16 $\frac{1}{4}$ " width.						
IHF	Filter and ignition shielding.....			2 lbs.	NOVEL	8.95
IHMU	Special silent muffler.....			1 $\frac{1}{2}$ lbs.	MOREY	2.95

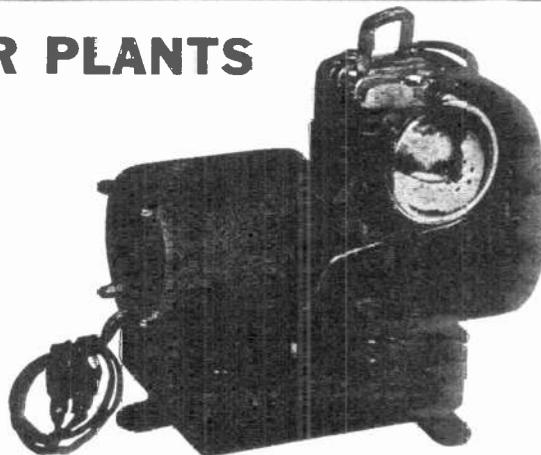
These combination plants furnish either A.C. or D.C. (Not designed to furnish full rating of both at same time).

PIONEER MOTORS

RED TOP D. C. POWER PLANTS

GAS-O-LECTRIC

(Petrol Driven)



ENGINE: 4-cycle single cylinder "L" head type. Air cooled. Operates at 2200 R.P.M. ½ horse power, 2 inch bore, 1½ inch stroke. Combination pump and splash lubrication. Pneumatic type governor maintains engine speed to accommodate generator load and requires no adjustments. Aluminum alloy connecting rod and pistons. ½ pint crank case oil capacity—2 quart "built in base" fuel tank.

BEARINGS: No outboard or third bearing. There are only two bearings—the main bearings on the crank shaft—both lubricated by the crank case oil, eliminating periodic lubrication and attention.

GENERATOR: Shunt wound, 2-pole, self-excited type generator providing ideal characteristics for battery charging. Armature mounted directly on engine crank shaft. Charging rate governed by condition of battery. So designed to eliminate possibility of armature or field coil burn-out should battery become disconnected. Equipped with automatic cut-out relay to prevent battery discharge back through the generator when it is not operating or when the generator voltage is lower than the battery. An ammeter is provided to show "charge" or "discharge."

STARTING: Automatic push-button starting. Fully enclosed high tension magneto to facilitate quick starting at all times and enables starting independent of a battery with the auxiliary rope-pull starter furnished with the plant.

ADDITIONAL FEATURES: Carrying handle, muffler (detachable for exhaust pipe extension installation), rubber cushions under mounting bracket (the RED TOP "floats" on rubber), leads and battery clips, pulley to operate appliances. Ready for instant operation.

TYPE	DESCRIPTION	OUTPUT	NET WEIGHT	CODE	List Price
BS6	For use with 6-volt storage batteries (shown above)	175 watts	51 lbs.	NABOB	\$54.50
BS12	For use with 12-volt storage batteries (shown above)	175 watts	51 lbs.	NICHE	57.95
Overall dimensions: 15 ½" length, 13 ¾" height, 11 ¼" width.					
BM6-12 same as BS6-12					
BSF	Filter for elimination of radio interference for BS model.....		1 lb.	NOSEE	2.50
IHD12	For use with 12-volt storage batteries (same design as IH shown on page T-10 except no A.C.) operates at 2100 R.P.M.....	375 watts	95 lbs.	MAIZE	89.95
IHD24	For use with 24-volt storage batteries (same design as IH shown on page T-10 except no A.C.) operates at 2100 R.P.M.....	375 watts	95 lbs.	MATYR	96.50
IHD32	For use with 32-volt storage batteries (same design as IH shown on page T-10 except no A.C.) operates at 2100 R.P.M.....	375 watts	95 lbs.	MAZEL	94.45
Overall dimensions: 19 ¼" length, 13 ¾" height, 16 ¼" width.					

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"BABY JUMBO" PORTABLE ELECTRIC POWER PLANTS WITH PUSH-BUTTON STARTING

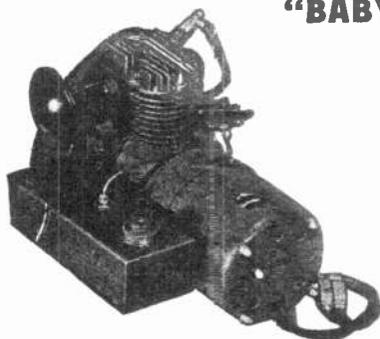
6, 12, 32, and 110-Volt—5/8 H.P. 4-Cycle, Single Cylinder Engine For Farm—Boats—Camps—Trailers—Contractors—Roadside Stands

Anyone can now enjoy the convenience and comfort of electricity—and he doesn't have to be a master mechanic to do it. This energetic little "plant" is extremely simple in design. It's sturdily built for long life under heavy-duty service. The complete unit is easily moved about—it weighs only 46 pounds. It will furnish current for a lighting system, charge batteries, run electrically-driven tools, and operate the washing machine, cream separator, water pumps, and other belt-driven machines.

Fuel Consumption—Fifteen hours on one gallon at 150 watts. Oil consumption, 2 ounces in 10 hours.

Generator—Self-excited, two-pole for highest efficiency. Armature mounted directly on crank shaft, outer end supported in oil-less self-aligning bearing. Surplus oil for 1000 hours' operation. Easily removable cover provides ready inspection of commutator, brushes, and bearings.

Starting—A touch of the push button automatically starts the motor, with current provided by the storage battery. An emergency rope-pull starter is also provided.



NEW "CUB" TYPE "LB" PLANTS

6 or 12 Volts, 200 Watts

PUSH BUTTON STARTING BATTERY IGNITION

PIONEER now furnishes this remarkable plant at the amazingly low list price of \$38.50. The engine is the same as those used on the popular plants shown at the right, with the exception that the small current for the ignition is taken from the storage battery. For installations where engines of this type are satisfactory, the type LB plants have no equal. **Weight—49 Lbs.**

Code	Type No.	List Price
Feggo	LB6C 100 Watts for use with 6-volt batteries Rope-pull starter	\$38.50
reign	LB6X 200 Watts for use with 6-volt batteries Push-button starter	49.95
Felon	LB12X 200 Watts for use with 12-volt batteries Push-button starter	49.95

Furnished with carrying handle. Wooden base \$1.00 additional to List Price.

STANDARD MODEL with HIGH TENSION MAGNETO

Code	Type No.	For Use With	Output Watts	Wt. Lbs.	List Price
Fable	L6	6-volt batteries	150	46	\$52.95
Fanny	L6M	6-volt batteries (Marine Type)	150	49	57.50
False	L6X	6-volt batteries	200	49	57.50
Fatal	L6XM	6-volt batteries (Marine Type)	200	52	62.50
Facer	L12	12-volt batteries	150	46	57.50
Famed	L12X	12-volt batteries	250	49	64.45
Favor	L12XM	12-volt batteries (Marine Type)	250	52	69.95
Faint	L32	32-volt batteries	250	49	64.45
Fairy	L32R	For operation of 32-volt lights or D.C. appliances without batteries	250	49	64.45
Faker	L110	For operation of 110-volt lights or D.C. appliances without batteries	250	49	64.45

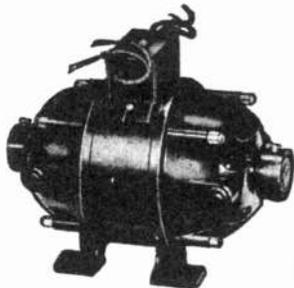
Wooden base and carrying handle furnished on Marine Type units. If wanted on other types add \$2.00 to List Price.

Accessories—All plants for use with storage batteries are furnished complete with ammeter, cutout relay, leads, and battery clips. Simply fill with gas and oil, connect with battery, press the starter button, and it goes to work.

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PIONEER MOTORS

PIONEER DYNAMOTORS



Use Pioneer "Silver Band" Dynamotors for Better Performance in Sound Systems, Police Units, Aircraft, Marine and Broadcast Service.

FEATURES

- No ripple or voltage variation.
- Nothing to adjust!
- Compact, light weight, and completely enclosed in dust-tight case.
- Welded steel ring construction—end brackets of tough, high quality malleable iron.
- Armature, dynamically balanced, runs on grease-sealed bearings insures quiet, smooth operation.

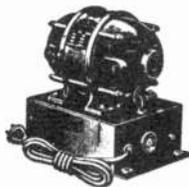
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Code	Type No.	Output		Input		Wt. Lbs.	SIZE			List Price
		Volts	M.A.	Volts	A.		Lgth. Ins.	Width Ins.	Hgt. Ins.	
Gavel	E1W272	250	50	6	4.7	7 1/2	5 1/2	4 1/2	4 1/2	\$35.00
Gayal	E2W353	250	50	6	4.8	9 1/2	6 1/2	4 1/2	4 1/2	40.00
Galea	E1W339	250	100	6	7.5	7 1/2	5 1/2	4 1/2	4 1/2	35.00
Gecko	E2W397	250	150	6	13.2	9 1/2	6 1/2	4 1/2	4 1/2	40.00
Genet	E2W351	300	100	6	9.7	9 1/2	6 1/2	4 1/2	4 1/2	40.00
Gatch	E2W243	300	150	6	14.0	9 1/2	6 1/2	4 1/2	4 1/2	40.00
Genus	E2W256	350	150	6	15.2	9 1/2	6 1/2	4 1/2	4 1/2	42.00
Giant	E2W438	400	125	6	14.2	9 1/2	6 1/2	4 1/2	4 1/2	42.00
Gaily	E3W413	500	100	6	15.0	11	6 3/4	4 1/2	4 1/2	47.50
Girth	RA0W158	300	200	6	18.0	16	8	5 1/2	5 1/2	75.00
Given	RA1W201	400	225	6	25.0	17 1/2	8 1/2	5 1/2	5 1/2	82.50
Glade	RA1W189	500	200	6	27.0	17 1/2	8 1/2	5 1/2	5 1/2	85.00
Glair	RA1W331	600	200	6	31.0	17 1/2	8 1/2	5 1/2	5 1/2	87.50
Grate	RA1W549	750	125	6	25.0	17 1/2	8 1/2	5 1/2	5 1/2	90.00
Glint	RA3W550	750	250	12	24.0	23 1/2	9 1/2	5 1/2	5 1/2	97.50
Gonad	RA2W475	1000	150	12	20.0	19 1/2	8 1/2	5 1/2	5 1/2	105.00
Grist	RA3W534	1000	250	12	32.0	23 1/2	9 1/2	5 1/2	5 1/2	115.00

All units may be furnished for any D.C. input other than listed above at an addition of 15% to list price. Add "X" to code word and follow with input voltage re-quired.

List Price Standard Filter for "E" units...\$19.50 Transient Filter for "RA" units...\$25.00
 "EA" units, using aluminum wherever possible to reduce weight \$10.00 additional to list price of corresponding "E" unit.
 Most "RA" units may be furnished in "DA" frame at 15% less than "RA" list. Prices Slightly Higher in West and South

PIONEER ROTARY CONVERTERS



Converts 6, 12, 32, 110, 220 Volts Direct Current to 110 Volts Alternating Current

Rotary converters with and without filters for operation of: Public Address Systems, Power Amplifiers, Radio Receivers, Electric Phonographs, A. C. Motors, Neon Signs, and any other similar apparatus requiring a reliable source of A. C.

Here's a PIONEER double-wound rotary converter of dynamotor construction with separate D. C. and A. C. windings. Less heating and longer brush life result from the engineered PIONEER converter design! The double-wound converter results in more efficient commutation than is obtainable with "tapped" winding.

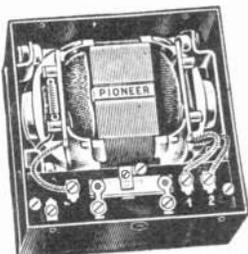
Converters are rated in volt amperes—the Power Factor of the load determines the size of converter to be used—all PIONEER converters are engineered for the apparatus with which they are to be used.

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CODE	Type No.	INPUT		OUTPUT		LIST PRICE	
		D.C. Volt.	D.C. Current	A.C. Volt.	Volt-Amps	Less Filter	With Filter
Daily	640	6	13.3 amps	110	40	\$48.50	\$56.50
Dance	660	6	19	110	60	61.00	69.00
Darky	1240	12	7.5	110	40	36.50	44.00
Daurit	1280	12	11.8	110	80	44.50	52.00
Death	1212	12	17.5	110	120	52.00	60.00
Debar	1216	12	20.0	110	160	72.50	81.00
Debit	3240	32	2.78	110	40	36.00	42.00
Decay	3280	32	4.7	110	80	37.50	43.00
Defer	3211	32	5.6	110	110	39.00	45.50
Deity	3215	32	7.8	110	150	43.00	51.00
Delta	3220	32	10.0	110	200	48.00	56.00
Delve	3225	32	13.0	110	250	53.00	61.00
Demos	3230	32	15.0	110	300	61.00	71.00
Denim	1140	110	0.8	110	40	36.00	42.50
Dense	1180	110	1.30	110	80	37.50	45.00
Depot	1111	110	1.78	110	110	39.00	45.50
Depth	1115	110	2.23	110	150	43.00	50.50
Derby	1120	110	2.80	110	200	48.00	56.00
Derma	1125	110	3.55	110	250	53.00	61.00
Deter	1130	110	3.85	110	300	61.00	71.00

All Pioneer 6 and 12-volt converters operate on ball bearings. Can be supplied on other units—add \$3.50 to the list price.

PIONEER GEN-E-MOTOR Auto "B" Eliminators New Compact Models



Complete with built-in filter units, for use as battery eliminators for auto receivers using "B" batteries, and for installation in auto sets where it is desired to remove the filter system used with the old vibrator unit. The entire unit is housed in a sturdy metal case measuring 2 1/4" x 5 3/4" x 5 1/4". The Gen-E-Motor is floated in rubber, assuring complete freedom from vibration. The armature is supported by two sets of ball bearings. Shpg. Wt. 7 1/2 lbs.

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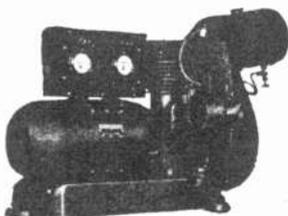
Code	No.	Output Volts	M.A.	Battery Drain	List Price
Baggy	5135-A	135	30	1.80	\$19.50
Balmy	5180-A	180	30	2.50	19.50
Halsa	5200-A	200	40	3.15	19.50
Bandy	5225	225	50	4.3	19.50
Banjo	5250	250	50	4.7	19.50

The above units may be furnished with intermediate tap for 50c additional. Use code word "TAPPO" in addition to code word for standard unit. Shipping weight 7 1/2 lbs.

Model "H" For Amplifiers and Sound Trucks

Code	No.	Output Volts	M.A.	Battery Drain	List Price
Basic	7565	265	75	7.75	\$34.00
Baste	7300	300	100	9.5	37.50

"GOLD CROWN" GAS-ELECTRIC PLANTS



GENERATOR SPECIFICATIONS—Self-excited type generator. 4 Pole. Armature mounted directly on engine crankshaft. Brush holders designed for perfect commutation so that spring of worn brush cannot touch or scratch the D.C. commutator or A.C. collector rings. Sturdy cast-iron end bracket keeps the armature in perfect alignment. Large ventilating fan mounted on armature assures cool operation. 1800 R.P.M.

ENGINE SPECIFICATIONS—4-cycle single-cylinder engine—600 and 700 Watt Plant Engines: 1 h.p.; bore, 2 1/4"; stroke, 2 1/4". Fuel tank capacity 1 gallon for at least 6 hours' operation at rated load. Oil capacity, 1 quart. Oil consumption, 1 pint in 10 hours' normal operation. 1000 Watt Plant Engines: 2 h.p.; bore, 2 5/8"; stroke, 2 1/2". Fuel tank capacity, 1 gallon for at least 4 hours' operation at rated load. Oil capacity—1 1/2 quarts. Oil consumption—1 pint in 8 hours' normal operation. 1500 and 1800 Watt Plant Engines: 3 h.p.; bore 2 3/4"; stroke 3 1/2". Fuel tank capacity, 1 1/2 gallons. One gallon will operate engine 3 hours at rated load. Oil capacity—2 quarts. Oil consumption—1 pint in 7 hours' normal operation.

JANETTE CONVERTERS

FOR CONVERTING DIRECT CURRENT TO SINGLE PHASE ALTERNATING CURRENT
FOR RADIO RECEIVERS,
AMPLIFIERS, PHONOGRAPHS, SOUND PICTURES, ETC.

For Loads of 85 to 100% Power Factor



Fig. 1. Type CA-18-F Converter for radio use with filter in base. Construction typical on units up to 225 watts output.

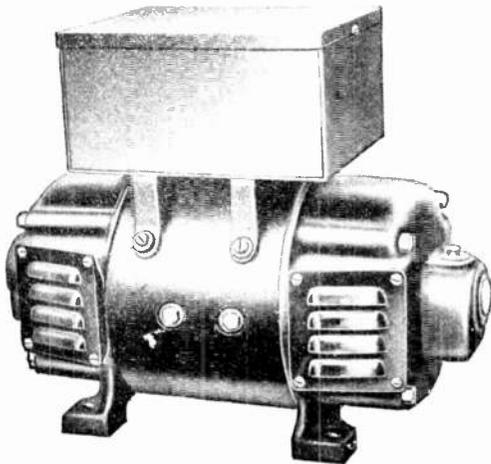


Fig. 3. Type CE-14 with filter.

CAPACITY* IN WATTS		PRICES FOR CONVERTERS				** D.C. Amperes Input (60 cycle output)	*CODE
60 Cycles	50 Cycles	Frame Size	▲ With Filters	Frame Size	Without Filters		

115 VOLTS DIRECT CURRENT TO SINGLE PHASE—110 VOLTS—A. C. (±) 3600 R.P.M.—SLEEVE BEARINGS
230 Volts—Add \$2.00 list for converters wound for 230 volt D. C. primary.**

110 150	90 120	CA-18-F CA-18-F	\$45 75 50 50	CA-18 CA-18	\$38 50 43 50	115 Volts	115 Volts
						1.9	RAGAR RACIN
225 300 500	175 250 400	CA-16-F	58 75	CA-16	48 50	3.0	RAWAR
		C-13-F	71 00	C-13	61 00	4.0	RADUM
		CE-14-F	93 50	CE-14	82 50	6.4	RAKE
+750 1000	600 800	CE-12-F	139 25	CE-12	121 00	8.5	RAXEF
		CE-10-F	172 75	CE-10	148 50	13.0	RAXUP

6 VOLTS DIRECT CURRENT TO SINGLE PHASE—110 VOLTS—A. C. (±) 3600 R.P.M.—BALL BEARINGS

40 60	40 60	CA-18-F CA-18-F	56 75 71 00	CA-18 CA-18	48 50 62 75	15.0 24.0	RABIM RABOT
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12 VOLTS DIRECT CURRENT TO SINGLE PHASE—110 VOLTS—A. C. (±) 3600 R.P.M.—BALL BEARINGS

80 120 160	80 120 160	CA-18-F CA-18-F C-13-F	51 75 60 00 84 75	CA-18 CA-18 C-13	48 50 56 00 72 50	15.0 18.0 22.0	RABWY RABBO RABCH
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32 VOLTS DIRECT CURRENT TO SINGLE PHASE—110 VOLTS—A. C. (±) 3600 R.P.M.—SLEEVE BEARINGS

110 150	90 120	CA-18-F CA-18-F	45 75 50 50	CA-18 CA-18	38 50 43 50	6.5 8.5	RAKNE RAJAH
225 300 500 650	175 250 400 600	CA-16-F	58 75	CA-16	48 50	11.5	RAHAM
		C-13-F	71 00	C-13	61 00	15.0	RATED
		CE-14-F	93 50	CE-14	82 50	18.0	RASPE
		CE-12-F	139 25	CE-12	121 00	27.0	RAXON

JONES PLUGS



P-4-CCT



S-4-CCT



No.	Contacts	Net
P2CCT	2	\$0.37
P4CCT	4	.45
P6CCT	6	.54
P8CCT	8	.62
P10CCT	10	.70
P12CCT	12	.79



No.	Contacts	Net
S2CCT	2	\$0.40
S4CCT	4	.50
S6CCT	6	.61
S8CCT	8	.71
S10CCT	10	.81
S12CCT	12	.91



No.	Contacts	Net
S2AB	2	\$0.30
S4AB	4	.36
S6AB	6	.42
S8AB	8	.48
S10AB	10	.54
S12AB	12	.60



No.	Contacts	Net
S2RST	2	\$0.42
S4RST	4	.52
S6RST	6	.63
S8RST	8	.73
S10RST	10	.83
S12RST	12	.93

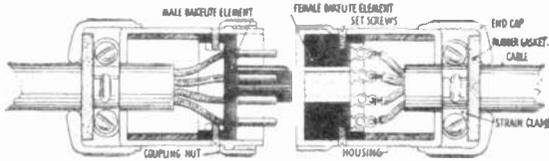


S-4-SFT



S-4-RST

AMPHENOL CONNECTORS



CUT-AWAY VIEW OF OCTAL CONNECTOR

OCTAL CONNECTORS

The 8 contact plug follows the principle of the octal metal tube base and has the bakelite keyed pilot to guide prongs and contacts together. A sturdy, compact connector with metal shell locking ring and gasket cap, cadmium plated. A standardized universal plug—when less than 8 conductor cable is used merely cut off the prongs not required or omit wiring them. Bakelite elements, male or female, are interchangeable in either housing or chassis connector. An especially efficient screw clamp adjustable to any cable diameter with rubber gasket washer fits under end gasket caps to relieve contacts of any cable strain. Illustrations half actual size.



Chassis Type—Female

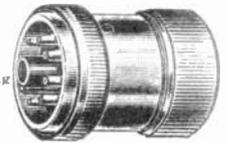
With lock washer and hex locking nut. Requires 1 1/2" chassis hole.

- PO4F—4 contact
- PO5F—5 contact
- PO6F—6 contact
- PO7F—7 contact
- PO8F—8 contact

List Price \$0.60

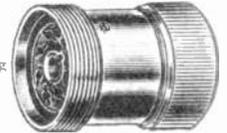
(Numerical indicates no. of contacts.)

Carries Coupling Ring



Cable Type—Male
O4M, O5M, O6M, O7M, O8M
(Numerical indicates no. of prongs.)
List Price \$1.25 Ea.

Carries Coupling Threads



Cable Type—Female
O4F, O5F, O6F, O7F, O8F
(Numerical indicates no. of contacts.)
List Price \$1.25 Ea.

MINIATURE CABLE CONNECTORS

Molded bakelite female element the same as on Microphone Connectors. Same contact spacing. Black Japanned metal cap held with set-screw. Cap has 1/4" cable outlet hole. Brass shell, burnished, cadmium-plated.
Cat. No. List Price
MPF3—3 Prong Type \$20.00 per C
MP4F—4 Prong Type \$20.00 per C



Same construction as above except uses standard male microphone bakelite element
Cat. No. List Price
MPM3—3 Prong Type \$20.00 per C
MPM4—4 Prong Type \$20.00 per C



SIDE CABLE OUTLET

Designed to be placed between a microphone and stand having 3/32" threads. Its purpose is to provide an outlet for the microphone cable where it is not desired to run it through the stand tubing. Efficient cable grip relieves strain.

SC03—Side Cable Outlet—List Price \$0.75 ea.

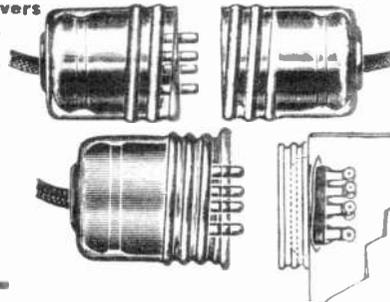


AMPHENOL Cable Connector Covers

The cable to cable type consists of two shielding shells which slip over our regular Cable Connectors and serve to lock the two sections together. By using soft rubber washers these shells can be made moisture proof. Diameter overall 1 1/2", length 2 1/4".

The cable to chassis type has the same design as the cover listed above, except that the female section has a flange to fit under an AMPHENOL socket. When mounted on a chassis. Diameter 1 1/2", length 1 3/4".

C-CAB Cable Type \$25.00 C
C-CHA Chassis Type \$25.00 C
All illustrations half actual size.



Chassis Type

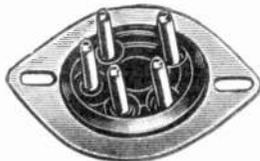
With knurled ring, lock washer and hex locking nut. Requires 3/4" chassis hole.

- | | | |
|------|----------|------------|
| Type | Contacts | List |
| PC3F | 3 Female | \$0.50 ea. |
| PC4M | 4 Male | .55 ea. |
| PC4F | 4 Female | .55 ea. |



AMPHENOL Plug Replacement Type

The same mounting as our Replacement Socket, using chassis type plug listed above.



- | | | |
|------|--------|-----------|
| Type | Prongs | List |
| RCP4 | 4 | \$12.00 C |
| RCP5 | 5 | 12.00 C |
| RCP6 | 6 | 12.00 C |
| RCP7 | 7 | 12.00 C |
| RCP8 | 8 | 14.00 C |

MICROPHONE CONNECTORS

For Single Conductor



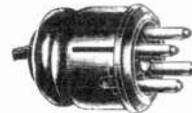
A new AMPHENOL Hi-Speed Cable Coupling Unit specially adapted for single cable or similar connections. A completely shielded indestructible contact which cannot be accidentally pulled apart. Designed to permit instant connection or dis-connection of cables. Diagram shows method of soldering shield to clamp and soldering wire to eyelet. The side set screw depresses into the soldered shield deeply, firmly gripping the cable to relieve soldered contact of strain. The coupling ring lock the contact securely against vibration. Finished in polished chrome. Accommodates cables up to 5/16 inch in diameter. Available in three types:

- | | |
|-----------------------|-------------|
| Cat. No. MC1F—Female | List \$0.50 |
| Cat. No. MC1M—Male | List .40 |
| Cat. No. PC1M—Chassis | List .30 |

AMPHENOL Cable Connectors

Made of our regular AMPHENOL sockets, snugly covered by a steel cap that fits tightly, but may be pried with an ordinary screw driver. Diameter 1 1/4", length 1 1/2". Shields and protects cable.

- | | |
|-------------|-----------|
| Female | List |
| PF4 4 Cont. | \$25.00 C |
| PF5 5 | 25.00 C |
| PF6 6 | 25.00 C |
| PF7 7 small | 25.00 C |



- | | |
|-------------|-----------|
| Male | List |
| PM4 4 Prong | \$25.00 C |
| PM5 5 | 25.00 C |
| PM6 6 | 25.00 C |
| PM7 7 small | 25.00 C |

Cable Type



- | | | |
|--------------|------------|--------------|
| Female | List | Male |
| MC3F 3 Cont. | \$1.00 ea. | MC3M 3 Prong |
| MC4F 4 Cont. | 1.10 ea. | MC4M 4 Prong |

Stand Type—Female



Often used with MCM connectors for microphone stand work. 3/32" female thread.

- | | | |
|------|----------|------------|
| Type | Contacts | List |
| SC3F | 3 | \$1.00 ea. |
| SC4F | 4 | 1.10 ea. |

Laboratory Chassis Die

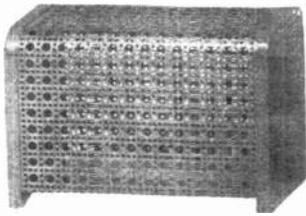
For punching AMPHENOL socket holes in chassis or metal plates. In the experimental laboratory this punch and die is practical, inexpensive and reasonably fast.

Type LO1 for small base sockets, LD2 for large base sockets, and LD3 for Microphone connectors.

- | | | |
|------|-------|-------------|
| Type | Hole | List |
| LD1 | 1/16" | \$10.00 ea. |
| LD2 | 1/8" | 10.00 ea. |
| LD3 | 3/16" | 3.00 ea. |

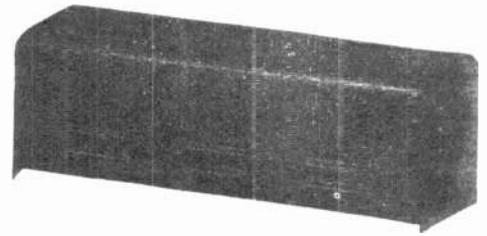


CHASSIS AND METAL CONTAINERS



Type A

Chassis
Dust Covers



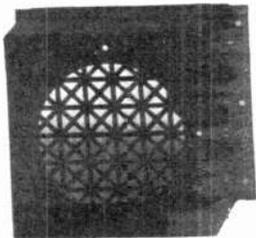
Type B

These covers are similar in construction to those supplied by us to manufacturers of professional amplifiers. Constructed of heavy steel, carefully reinforced and spot-welded at all corners. The ends of the covers are slotted to allow removal without removing screws from the chassis base. Height of cover is 5 3/4" for all types. Furnished in either black or aluminum gray ripple enamel. Please specify which finish when ordering.

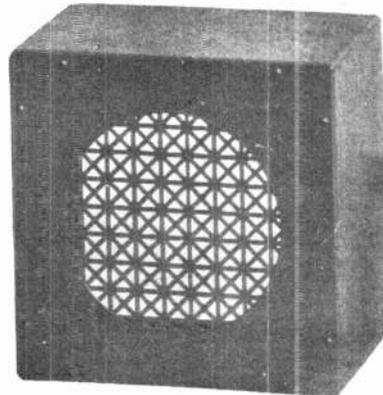
List Price

Cat. No.	Covers Chassis Size	Shpg. wt.	Type A	Type B	Type C
DC-1	5" x 9"	2 lbs.	\$1.65	\$1.45	\$1.55
DC-2	6" x 14"	3 "	2.10	1.90	2.00
DC-3	8" x 12"	3 "	2.30	2.05	2.15
DC-4	8" x 17"	5 "	2.50	2.10	2.25
DC-5	10" x 14"	7 "	2.60	2.15	2.30
DC-6	10" x 17"	10 "	3.30	2.75	3.00

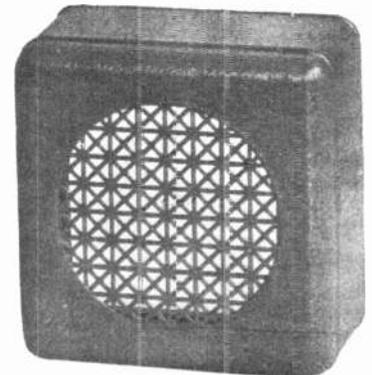
Speaker Cabinets



Type A



Type B



Type C

Cat. No.	Hole size	Spkr. size	H.	W.	D.	Shpg. wt.	List Price
SP-1—Type A	4 "	5"	5 5/8" x	5 5/8" x	3 "	3 lbs.	\$3.00
SP-1— " B	4 3/4"	6"	9 "	9 "	6 "	7 "	4.00
SP-2— " B	6 1/2"	8"	11 "	11 "	7 "	8 "	5.00
SP-3— " B	9 "	10"	13 "	13 "	8 "	14 "	7.00
SP-4— " B	11 "	12"	15 "	15 "	8 "	18 "	9.25
SP-1— " C	6 "	8"	8 1/2" x	8 1/2" x	5 1/2"	8 "	5.00

Metal Panels - Blank

These steel panels are No. 16 gauge cold rolled sheet steel and are furnished in either a beautiful crystallized black or aluminum gray ripple finish. Please specify which finish when ordering.

Cat. No.	Size	Shpg. wt.	List Price	Cat. No.	Size	Shpg. wt.	List Price
P-1	7" x 10"	1 lb.	\$.65	P-8	8" x 16"	1 lb.	\$1.00
P-2	7" x 12"	1 "	.75	P-9	8" x 18"	1 "	1.10
P-3	7" x 14"	1 "	.85	P-10	8" x 21"	2 lbs.	1.40
P-4	7" x 18"	1 "	1.10	P-11	8" x 24"	2 "	1.75
P-5	7" x 21"	1 "	1.40	P-12	10" x 14"	2 "	1.55
P-6	8" x 12"	1 "	.85	P-13	10" x 18"	2 "	1.80
P-7	8" x 14"	1 "	.90	P-14	10" x 24"	2 "	2.20

CHASSIS AND METAL CONTAINERS

Standard Relay Racks

BLACK OR GRAY RIPPLE FINISH

These relay racks are ideal for use on all types of transmitters and public address systems. They are constructed of 1/8" pressed steel, securely welded. Mounting holes are accurately drilled and tapped for the amateur standard 19 inch panels whose heights are in multiples of 1 3/4 inches. Furnished with either type base. Specify which finish and base desired when ordering. Shipped knocked down with necessary bolts and nuts. Easy to assemble.



Type A Base



Type B Base

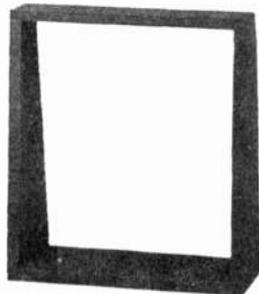
Base Widths 20"
Depth:
Type A, 4" - Type B, 10"

Cat. No.	Panel Space	Shpg. Wt.	List Price
SRR-1	14 "	13 lbs.	\$ 6.50
SRR-2	21 "	15 lbs.	7.50
SRR-3	28 "	17 lbs.	10.00
SRR-4	36 3/4"	21 lbs.	14.50
SRR-5	43 3/4"	24 lbs.	11.50
SRR-6	71 3/4"	50 lbs.	22.50

Table Relay Rack

BLACK OR GRAY RIPPLE FINISH

These units are constructed so panels may be mounted either on the sloping or vertically side. Both sides being drilled and tapped for the amateur standard 19 inch panels whose heights are in multiples of 1 3/4 inches. Light in weight and sturdily built. Specify which finish when ordering.



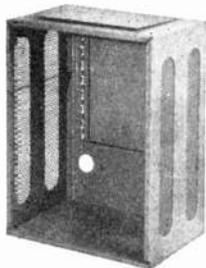
Cat. No.
TRR-1
TRR-2

Base width, 20" — Depth, 10"

Cat. No.	Panel Space	Shpg. Wt.	List Price
TRR-1	21"	18 lbs.	\$ 8.25
TRR-2	28"	21 lbs.	10.85

Multi-Use Metal Cabinets

FOR STANDARD 19" RACK PANELS



These cabinets are ideal for small transmitters, P. A. amplifiers, oscillators, receivers, test equipment, and similar apparatus. They are drilled and tapped to fit the standard amateur 19" rack panels, whose heights are in multiples of 1 3/4 inches, and they may be used with any chassis up to 17"x13" in size

All cabinets are rigidly constructed of 1/16" thick cold rolled steel, with all joints electrically welded. Steel grilles on the sides provide ample ventilation. Equipped with hinge doors.

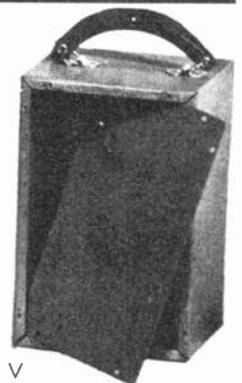
Furnished in either black or gray ripple finish crystalline enamel. Specify which finish when ordering.

- SINGLE UNIT: Size 8 3/4"x19"x13", for single 8 3/4"x19" panel. Has hinged door on top only. Shipping weight 20 lbs. Cat. No. SMC-1. List Price.....\$10.75
- Cabinet for single 10 1/2"x19" panel. Cat. No. SMC-2. List Price.....\$11.25
- DOUBLE UNIT: Size 17 1/2"x19"x13", for two 8 3/4"x19" panels. Has door on top and door on rear panel. Shipping weight 30 lbs. Cat. No. DMC-1. List Price.....\$17.75
- TRIPLE UNIT: Size 26 1/4"x19"x13", for three 8 3/4"x19" panels. Has door on rear panel only. Shipping weight 40 lbs. Cat. No. TMC-1. List Price.....\$19.25
- QUAD UNIT: Size 35"x19"x13", for four 8 3/4"x19" panels. Has door on rear panel only. Shipping weight 48 lbs. Cat. No. QMC-1. List Price.....\$22.75

These cabinets are useful for housing transceivers, oscillators, test equipment, amplifiers, etc. Made of sheet metal steel, securely welded at all joints. Front and back panels are removable, being secured by self-tapping screws. Both types and sizes are furnished with a leather handle. Furnished in either black or aluminum gray ripple enamel. Specify which finish and type when ordering.



Type H



Type V

Portable Cabinets

Cat. No.	Size	Shpg. wt.	List Price
PC-1	12"x7 3/4"x6 1/2"	9 lbs.	\$3.25
PC-2	15"x7 3/4"x6 1/2"	11 lbs.	4.00

U CHASSIS FOR ABOVE PORTABLE CABINETS

PCC-Type V	6 1/2"x6 1/4"x1 1/2"	.60
PCC-Type H	11"x6 1/4"x1 1/2"	.80

CHASSIS AND METAL CONTAINERS

Steel Relay Rack Panels - 19" Wide

BLACK OR GRAY RIPPLE FINISH - BLANK

These are standard panels made of high grade steel $\frac{1}{8}$ " thick, and are uniformly, slotted for either amateur rack notching (first notch $\frac{7}{8}$ " from end) or with notches to fit W. E. rack (first notch $\frac{1}{4}$ " or $1\frac{1}{2}$ " from end.)

Indicate type wanted by using "A" after catalog number for amateur or "W" for Western Electric.

Available in 12 standard sizes. Please specify which finish desired when ordering.

Cat. No.	Width	Shpg Wt.	List Price	Cat. No.	Width	Shpg Wt.	List Price
RRP-1	1 $\frac{3}{4}$ "	2 lbs.	\$.90	RRP-7	12 $\frac{1}{4}$ "	6 lbs.	\$2.20
RRP-2	3 $\frac{1}{2}$ "	3 "	1.00	RRP-8	14 "	6 "	2.50
RRP-3	5 $\frac{1}{4}$ "	3 "	1.10	RRP-9	15 $\frac{3}{4}$ "	7 "	2.80
RRP-4	7 "	3 "	1.15	RRP-10	17 $\frac{1}{2}$ "	8 "	3.20
RRP-5	8 $\frac{3}{4}$ "	4 "	1.50	RRP-11	19 $\frac{1}{4}$ "	9 "	3.40
RRP-6	10 $\frac{1}{2}$ "	5 "	1.85	RRP-12	21"	10 "	3.80

Speaker Panels

These speaker panels have opening covered with a steel grille. They are furnished in either a black or gray ripple enamel finish. Please specify which finish when ordering. Also specify "A" to fit amateur rack or "W" to fit Western Electric rack.

Cat No.	Panel size	Hole size	Speaker size	Shpg. wt.	List price
SP-1	8 $\frac{3}{4}$ "	4 $\frac{5}{8}$ "	6"	4 lbs.	\$3.00
SP-2	10 $\frac{1}{2}$ "	6 $\frac{1}{2}$ "	8"	6 "	3.65
SP-3	12 $\frac{1}{4}$ "	8 $\frac{1}{2}$ "	10"	7 "	4.85
SP-4	14 "	10 "	12"	8 "	5.25

Meter Panels

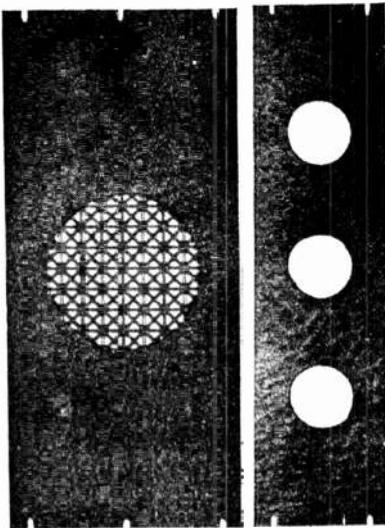
All meter panels are 5 $\frac{1}{4}$ " high. They are drilled with holes either for 2" or 3" meters as specified. They are furnished in either a black or gray ripple enamel finish. Specify which when ordering. Also specify "A" to fit amateur rack or "W" to fit Western Electric rack.

Cat. No.	No. of Holes	Shpg. wt.	List Price
MP-1	1	3 lbs.	\$1.30
MP-2	2	" "	1.50
MP-3	3	" "	1.75
MP-4	4	" "	2.10
MP-5	5	" "	2.50

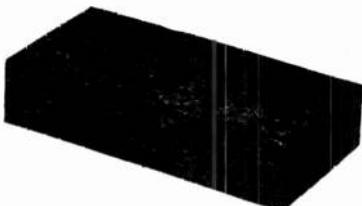
Blank Steel Chassis Bases

These chassis are stamped from one piece cold rolled steel, and have four solid sides with welded corners. The bottom edges are folded in to provide additional reinforcement, and are drilled for bottom plates, which may be purchased separately when required. Furnished in three finishes, black or aluminum gray ripple enamel and a bright cadmium electro plated finish. Please specify which finish when ordering.

Cat. No.	D	L	H	Shpg. wt.	List Price
B-1*	5"	9"	2"	2 lbs.	\$.75
B-2	6"	9"	2"	" "	1.00
B-3	6"	8"	2 $\frac{1}{2}$ "	2 "	1.00
B-4	6"	12"	3"	2 "	1.25
B-5*	6"	14"	2 $\frac{1}{2}$ "	3 "	1.30
B-6	7"	9"	2"	2 "	1.05
B-7	7"	11"	2"	2 "	1.20
B-8	7"	13"	2"	2 "	1.25
B-9*	8"	12"	2 $\frac{1}{2}$ "	3 "	1.40
B-10*	8"	17"	3"	4 "	1.75
B-11	10"	12"	3"	4 "	1.60
B-12	4"	17"	3"	4 "	1.30
B-13*	10"	14"	3"	4 "	1.80
B-14*	10"	17"	3"	5 "	1.90
B-15	12"	17"	3"	7 "	2.75
B-16	13"	17"	3"	7 "	2.75



Black Ripple Finish

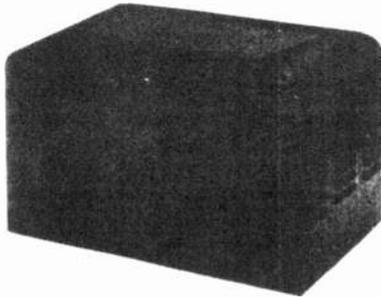


Bright Cadmium Plated

CHASSIS AND METAL CONTAINERS

Streamline Hinged Cabinets

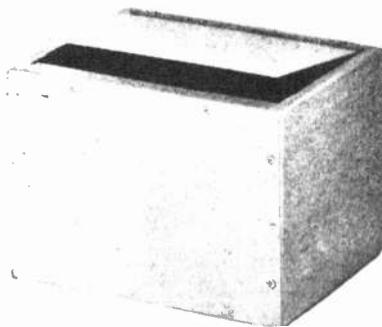
BLACK OR GRAY RIPPLE FINISH



Curved design to meet the modern trend. Made of finest grade auto body steel with hinged lids. Louvers provide ample ventilation through sides. Furnished complete with front panel which can be removed by taking out the self-tapping screws.

Cat. No.	Cabinet size			Chassis size			Shpg. wt.	List Price
	D.	L.	H.	D.	L.	H.		
SC-1	7"	10"	8"	7"	9"	2"	15 lbs.	\$5.25
SC-2	7"	12"	8"	7"	11"	2"	17 "	6.15
SC-3	7"	14"	8"	7"	13"	2"	18 "	7.50
SC-4	10"	18"	12"	10"	17"	3"	20 "	8.90
SC-5	12"	17 1/2"	10 1/2"	12"	17"	3"	20 "	9.10
SC-6	13"	18"	12"	13"	17"	3"	25 "	9.75

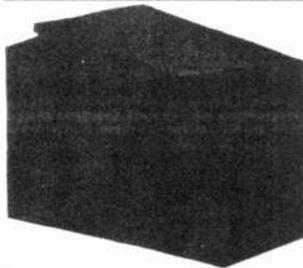
Hinged Cover Metal Cabinets



Ideal for housing receivers, amplifiers, test equipment, etc. Furnished complete with front panel which can be removed by taking out the self-tapping screws. Furnished in either black or gray ripple enamel. Specify which finish when ordering.

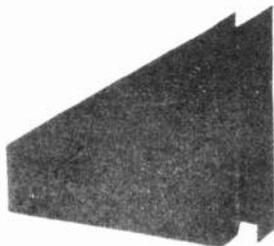
Cat. No.	Cabinet size			Chassis size			Shpg. wt.	List Price
	D.	L.	H.	D.	L.	H.		
MC-1	6 1/4"	10"	7"	6"	9"	2"	4 lbs.	\$3.35
MC-2	7 1/4"	12"	7"	7"	11"	2"	6 "	3.80
MC-3	7 1/4"	14"	7"	7"	13"	2"	8 "	4.10
MC-4	8 1/4"	13"	8"	8"	12"	2 1/2"	10 "	4.80
MC-5	8 1/4"	18"	8"	8"	17"	3"	13 "	6.25
MC-6	10 1/2"	15"	8"	10"	14"	3"	15 "	6.25
MC-7	13 1/2"	18"	12"	13"	17"	3"	17 "	8.25

Steel Boxes



Cat. No.	Size			Shpg. wt.	List Price
	D.	L.	H.		
SB-1	6"	6"	6"	3 lbs.	\$1.35
SB-2	6"	9"	5"	4 "	1.85
SB-3	8"	9"	6"	5 "	2.25
SB-4	7"	10"	8"	6 "	2.50
SB-5	10"	10"	8"	7 "	3.00
SB-6	10"	14"	8"	9 "	3.25
SB-7	8"	12"	11"	9 "	3.25

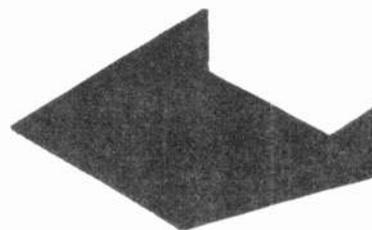
Chassis Mounting Brackets



For mounting shelves and chassis to rack panels. Made from heavy gauge cold rolled steel. Furnished in three finishes, black, gray and cadmium to match the chassis. Specify which finish when ordering. Panels must be at least 7" high.

Cat. No.	Size	Shpg. wt.	List Price
CMB-1	For 6" base	1 lb.	\$1.10
CMB-2	" 7" "	1 "	1.20
CMB-3	" 8" "	2 lb.	1.25
CMB-4	" 10" "	3 "	1.35
CMB-5	" 12" "	3 "	1.65

Rack Shelf



This shelf may be mounted to the standard 19" panels by means of sheet-metal screws.

Furnished in either black or gray ripple enamel. Specify which finish when ordering.

Cat. No.	Size	Shpg. wt.	List Price
RS-1	11"x17"x3"	4 lbs.	\$2.00

NATIONAL COMPANY DIALS

NATIONAL "HRO" & "O" DIALS

FIGS. 1a & 1b

The 1 3/8" dia. HRO dial (Fig. 1a) is etched nickel silver and fits 1/4" shafts. Reads from 0 to 10 over 180°
Net Price, each \$3.45

The insulated 3 1/2" dia. O dial (Fig. 1b) is circular-grained German Silver and fits 1/4" shafts.
Available with No. 2 scale. Net Price, each \$3.90

The type HRK Knob used on the O dial is also available alone. Fits 1/4" shafts. **Net Price, \$3.51**

The type ODL locking device with thumbscrew control is available for use with the type "O" dial for transmitter applications. **Net Price, each \$3.30**

NATIONAL "N" & "NW" DIALS

FIGS. 2 & 3

Precision Dials, Type-N, have engine divided scales and verniers of solid German Silver. The Verniers are flush, eliminating errors from parallax.

The four-inch Type N dial (Fig. 3) employs a smooth and powerful planetary mechanism with a 5 to 1 ratio. No. 2, 3, 4 or 5 scale. **Net Price, each \$4.05**

The six-inch Type NW dial (Fig. 2) has a variable ratio drive that is unusually powerful at all settings. It is recommended for use on large transmitter and precision instruments. No. 2, 3, 4 or 5 scale. **Net Price, each \$9.00**

NATIONAL "A" DIAL

FIG. 4

The original "Velvet Vernier" Dial, Type A, is still an unchallenged favorite for general purpose use. It is exceptionally smooth and entirely free from backlash. The mechanism is contained within the bakelite knob and shell. Ratio 5 to 1. No. 2, 4 or 5 scale in 4" diameter. No. 2 scale in 3 3/8" diameter. **Net Price, each \$1.80**

NATIONAL "B" & "BM" DIALS

FIGS. 5, 6

"Velvet Vernier" Dial, Type B (Fig. 6) provides a compact variable-ratio drive that is smooth and trouble free. The mechanism is inclosed in a black bakelite case, the dial being read through a window. No. 1 or 5 scales. **Net Price, each \$1.65. Illuminator \$3.30 extra**

The Type BM Dial (Fig. 5) is a smaller version of the Type B Dial for use where space is limited. It is similar to the Type B Dial in appearance and mechanism, but does not have the variable-ratio device. No. 1 or 5 scales. **Net Price, each \$1.50**

NATIONAL "H" DIAL

FIG. 7

Projection Drum Dial, Type H, employ the proved and popular non-conducting cord drive with spring take-up. The dial scale is optically projected in illuminated figures on a ground glass screen, considerably enlarged. Parallax is entirely absent. Condenser shaft must be parallel to panel. No. 2, 3 or 4 scale. **Net Price, each \$3.30**

NATIONAL MICROMETER DIAL AND PRECISION CONDENSER

The Micrometer dial reads direct to one part in 500. Division lines are approximately 1/4" apart. The dial revolves ten times in covering the tuning range, and the numbers, visible through the small windows change every revolution to give consecutive numberings by tens from 0 to 500. The condenser is of extremely rigid construction, with four bearings on the rotor shaft. The drive, at the mid-point of the rotor, is through an enclosed preloaded worm gear with 20 to 1 ratio. Each rotor is individually insulated from the frame, and each has its own individual rotor contact, of the multi-fingered brush type. Stator insulation is Sreatite.

PW Condensers are available in 2, 3 or 4 sections, in either 160 or 225 mmf per section. Larger capacities cannot be supplied. The single section PW condenser is supplied in capacities of 150, 200, 350 and 500 mmf, single spaced. Capacities up to 125 mmf can be supplied double spaced. The rotor is not insulated on the single section model. Plate shape is straight-line frequency when the frequency range is 2:1.

PW-1, Single Section.

Net Price, \$9.00

PW-2, Two Section.

Net Price, \$12.00

PW-3, Three Section.

Net Price, \$14.40

PW-4, Four Section.

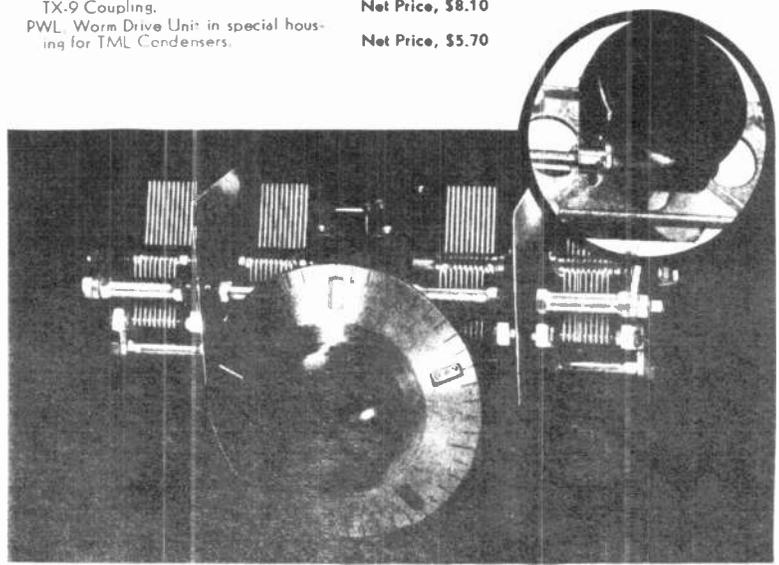
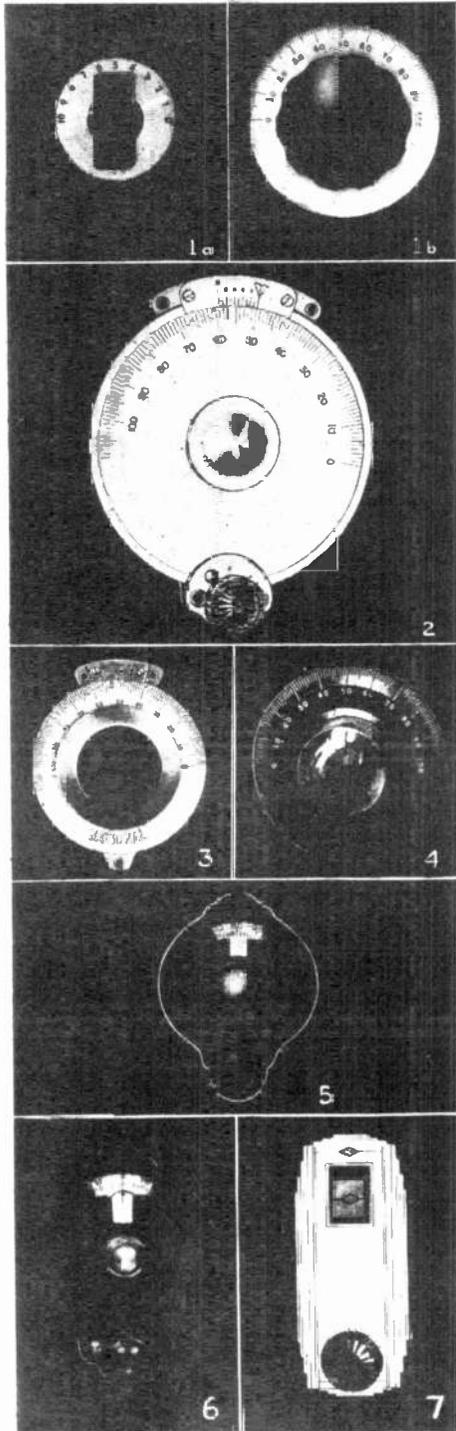
Net Price, \$16.50

PW-0, Dial and Worm Drive, only, with TX-9 Couplings.

Net Price, \$8.10

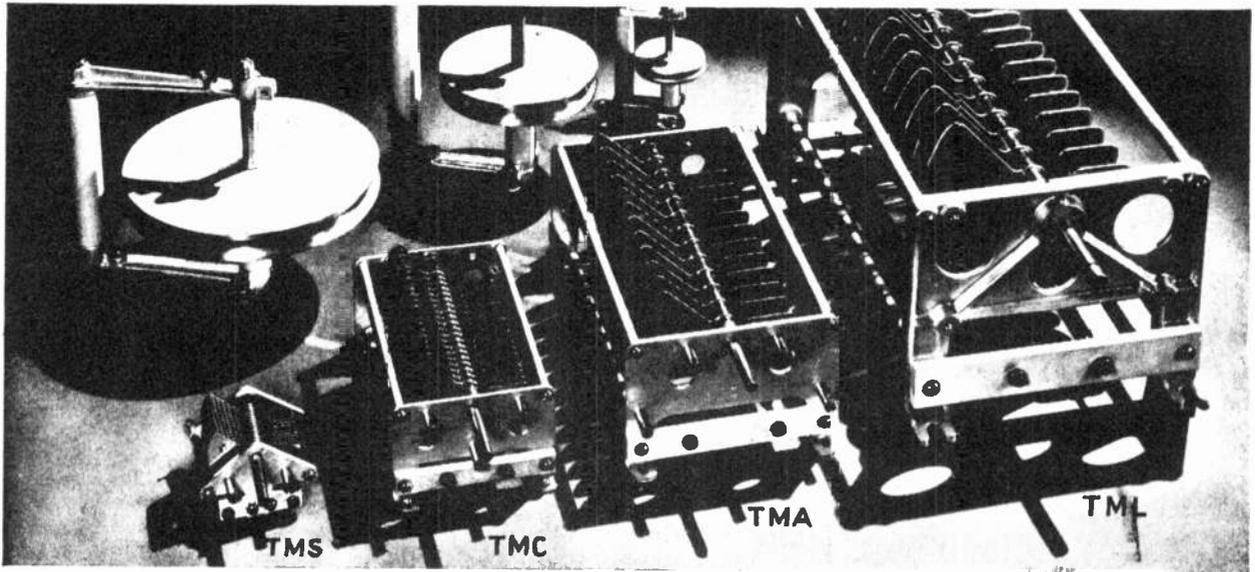
PWL Worm Drive Unit in special housing for TML Condensers.

Net Price, \$5.70



DIAL SCALES			
Scale	Divisions	Rotation	Direction of Condenser Rotation for increase of dial reading
1	0-100-0	180°	Either
2	0-100	180°	Counter Clockwise
3	100-0	180°	Clockwise
4	150-0	270°	Clockwise
5	200-0	360°	Clockwise
5	0-150	270°	Counter Clockwise

NATIONAL COMPANY TRANSMITTING CONDENSERS



Capacity	Peak V.	Plates	Cat. Symbol	Net Price
100 Mmf.	1,000	10	TMS-100	\$1.50
150	1,000	14	TMS-150	1.65
250	1,000	23	TMS-250	1.80
300	1,000	27	TMS-300	2.16
50-50	1,000	5-5	TMS-50D	2.25
100-100	1,000	9-9	TMS-100D	2.70
35	2,000	8	TMSA-35	1.80
50	2,000	11	TMSA-50	1.95
50 50	2,000	11-11	TMSA-50D	2.40
50 Mmf	3,000	7	TMC-50	\$2.40
100	3,000	13	TMC-100	2.70
150	3,000	21	TMC-150	3.15
300	3,000	39	TMC-300	3.90
100 100	3,000	13-13	TMC-100D	4.50
300 Mmf.	3,000	23	TMA 300	\$7.20
200 200	3,000	16 16	TMA 200D	9.00
50	6,000	8	TMA-50A	3.90
100	6,000	17	TMA-100A	6.00
150	6,000	23	TMA-150A	7.20
230	6,000	35	TMA-230A	9.60
50 50	6,000	9 9	TMA 50DA	6.60
100 100	6,000	15 15	TMA 100DA	10.50
100	9,000	23	TMA-100B	8.10
150	9,000	35	TMA-150B	10.20
60 60	9,000	15 15	TMA 60DB	11.10
50	12,000	13	TMA-50C	4.80
100	12,000	27	TMA 100C	8.70
40 40	12,000	11 11	TMA 40DC	8.10
75 Mmf.	20,000	17	TML-75E	\$15.60
150	15,000	27	TML-150D	15.90
100	15,000	19	TML-100D	14.10
50	15,000	9	TML-50D	9.90
245	10,000	35	TML-245B †	17.10
150	10,000	21	TML-150B †	15.60
100	10,000	15	TML-100B †	15.00
75	10,000	11	TML 75B †	10.80
500	7,500	49	TML-500A †	21.00
350	7,500	33	TML 350A †	16.80
250	7,500	25	TML 250A †	15.60
30 30	20,000	7 7	TML 30DE	15.90
60 60	15,000	11 11	TML 60DD	17.10
100 100	10,000	15 15	TML 100DB †	18.90
60 60	10,000	9 9	TML 60DB †	16.50
200 200	7,500	21 21	TML 200DA †	21.00
100 100	7,500	11-11	TML 100DA †	17.10

NATIONAL Type TMS

Type TMS is a condenser designed for transmitter use in low power stages. It is compact, rigid, and dependable. Provision has been made for mounting either on the panel, on the chassis, or on two stand-off insulators.

Insulation is Isolantite. Voltage ratings listed are conservative.

NATIONAL Type TMC

The TMC is designed for use in the power stages of transmitters, where peak voltages do not exceed 3000. The frame is extremely rigid and arranged for mounting on panel, chassis or standoff insulators. The plates are aluminum, with buffed edges. Insulation is Isolantite, located outside of the concentrated electrostatic field. The stator in the split stator model is supported at both ends.

NATIONAL Type TMA

The TMA is a larger model of the popular TMC. The frame is extremely rigid and arranged for mounting on panel, chassis or standoff insulators. The plates are of heavy aluminum with rounded and buffed edges. Insulation is Isolantite, located outside of the concentrated field.

NATIONAL Type TML

The TML condenser is a 1 KW job throughout. Isolantite insulators, specially treated against moisture absorption, prevent flashovers. A large self-cleaning rotor contact provides high current capacity. Thick capacitor plates, with accurately rounded and polished edges, provide high voltage ratings. Sturdy cast aluminum end frames and dural tie bars permit an unusually rigid structure. Precision end bearings insure smooth turning and permanent alignment of the rotor. End frames are arranged for panel, chassis or standoff mounting.

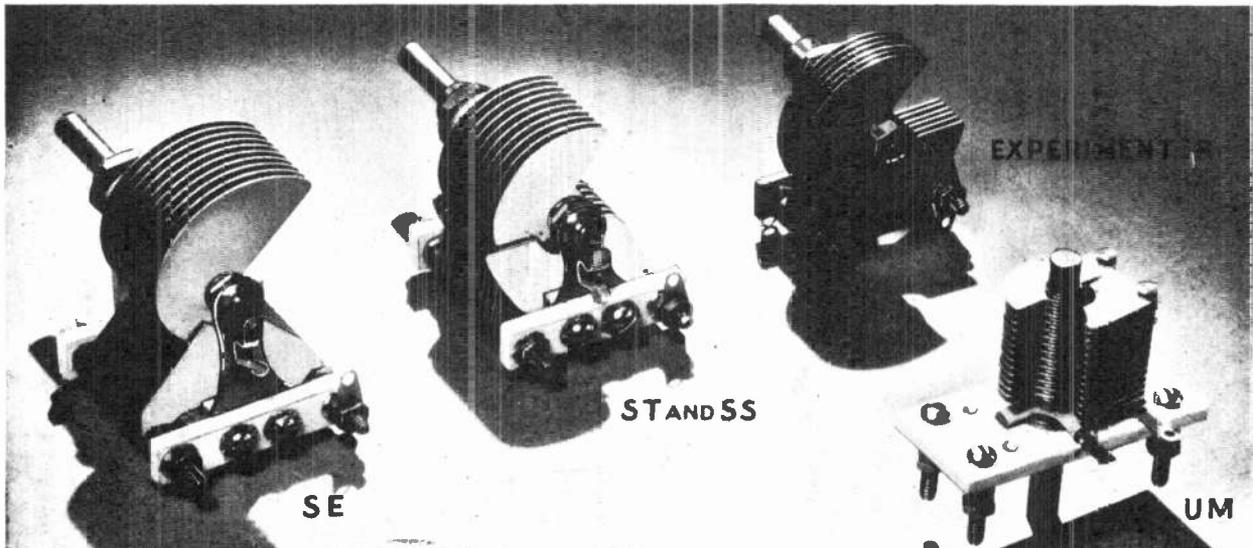
NATIONAL Neutralizing Condensers

For neutralizing 10, 45, 47 or similar tubes in amplifier or buffer stages, Type STN is similar to ST receiving models but is spaced for 3000 volts and has a maximum capacity of 18 Mmf. **Net Price, \$1.20.**

For use with 203A, 852, 204A, etc., the Type TCN is similar to the TMC above. It has a rating of 6000 volts. Max. cap. 25 Mmf. **Net Price \$2.40.**

The smallest disk-type neutralizing condenser illustrated below is suitable for the RCA-800, etc. (Type NC 300, **Net Price \$1.80.**) The medium-sized model is suitable for the HK-345, Rf 36, 300-T, and 852. (Type NC-150, **Net Price \$3.90.**) The largest model is for the WE-251A and similar tubes. (Type NC-500, **Net Price \$7.50.**)

NATIONAL COMPANY RECEIVING CONDENSERS



NATIONAL Type ST and SS

The ST Condenser has 180° Straight-Line-Wavelength plates. General construction is the same as the SE Condenser although its overall height is less. For minimum overall length, a single bearing model — the STHS — is offered. All other models are double bearing. Two split-stator models are available.

The SS Condenser has 180° Straight-Line-Capacity plates and except for this detail is the same in all other respects as the ST Condenser. When ordering, substitute SS for ST under the catalog symbol column in the listing at the right.

NATIONAL Type SE

The SE Condenser has 270° Straight-Line-Frequency plates. Insulation is Isolantite. All models have two rotor bearings, the front bearing being insulated to prevent noise. The rotor contact is through a constant impedance pigtail. The SEU models are suitable for high voltages as their plates are thick polished aluminum with rounded edges. The other SE models do not have this feature.

NATIONAL Type UM

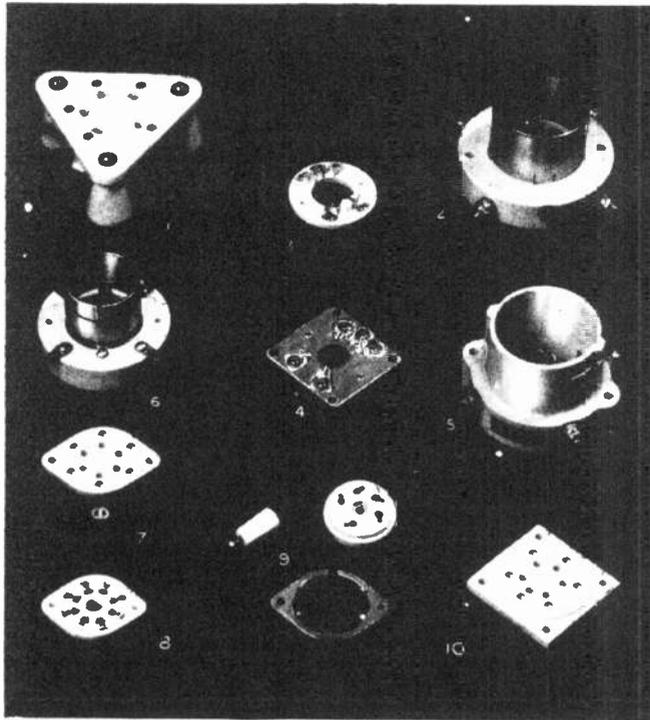
The UM Condenser is designed for ultra high frequency use and is small enough for convenient mounting in our square shield cans. They are particularly useful for tuning receivers, transmitters and exciters. Shaft extensions at each end of the rotor permit easy ganging when used with one of our flexible couplings. The UMB-25 Condenser is a balanced stator model, two stators act on a single rotor. The UM can be mounted by the angle foot supplied or by bolts and spacers.

NATIONAL "Experimenter" Models

The National "Experimenter" Type Condensers are low-priced models suitable for general experimental work. They are of all-brass construction, except for the Bakelite insulation. The rotor has only one bearing. Plates can be removed without difficulty if desired.

Capacity	Air Gap	Plates	"Cat. Symbol	Net Price
15 Mmf.	.018"	3	STHS- 15	\$.84
25	.018"	4	STHS- 25	.90
50	.018"	7	STHS- 50	.96
35	.026"	8	ST- 35	.90
50	.026"	11	ST- 50	1.08
75	.026"	15	ST- 75	1.20
100	.026"	20	ST-100	1.35
140	.026"	28	ST-140	1.50
150	.026"	29	ST-150	1.50
200	.018"	27	STH-200	1.65
250	.018"	32	STH-250	1.80
300	.018"	39	STH-300	1.95
335	.018"	43	STH-335	2.10
50-50	.026"	11-11	STD- 50	2.10
100-100	.018"	14-14	STHD-100	2.70
15 Mmf.	.055"	6	SEU- 15	\$1.50
20	.055"	7	SEU- 20	1.65
25	.055"	9	SEU- 25	1.65
50	.026"	11	SE- 50	1.80
75	.026"	15	SE- 75	1.95
100	.026"	20	SE-100	2.10
150	.026"	29	SE-150	2.25
200	.018"	27	SEH-200	2.25
250	.018"	32	SEH-250	2.40
300	.018"	39	SEH-300	2.40
335	.018"	43	SEH-335	2.55
15 Mmf.	.017"	6	UM 15	\$.75
35	.017"	12	UM 35	.90
50	.017"	16	UM 50	.96
75	.017"	22	UM 75	1.02
100	.017"	28	UM-100	1.14
25	.050"	14	UMA- 25	1.11
25	.017"	4-4-4	UMB 25	1.11
15 Mmf.	.045"	5	EX 15	\$.51
25	.045"	7	EX 25	.51
35	.045"	10	EX- 35	.60
50	.017"	6	EX 50	.54
100	.017"	12	EX 100	.60
140	.017"	15	EX-140	.75

NATIONAL COMPANY PARTS



NATIONAL LOW-LOSS SOCKETS

1 is a wafer type Isolantite socket for power Pentodes such as the RK-28 and the RCA-803.
Type JX-100S, as illustrated. **Net Price, \$2.16**
Type JX-100, same but without stand-off insulators. **Net Price, \$1.80**

2 is a fifty watt socket with sturdy side wipe contacts employing the conventional bayonet-lock metal shell.
Type XM-50. **Net Price, \$1.05**

3 is an Isolantite socket for the Triode Acorn tube. The socket contacts are of improved design.
Type XCA. **Net Price, \$3.90**

4 is for the Pentode Acorn tube and is made with the same type of contacts as the XCA, on a square copper base with built-in by-pass condensers.
Type XMA. **Net Price, \$1.20**

5 is another 50 watt socket made entirely of low-loss Steatite and is for higher frequencies and voltages than the XM-50.
Type XC-50. **Net Price, \$2.10**

6 is a socket, similar in construction to the XM-50, designed for those tubes using the type UX base.
Type XM-10. **Net Price, \$3.75**

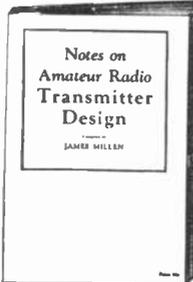
7 is one of the complete line of National Isolantite Receiving Sockets that fit all standard receiving tubes. **Net Price, \$3.36**

8 is an Isolantite wafer socket for the Octal (metal) tubes. **Net Price, \$3.36**

9 is a new socket of Isolantite with a contact that grips the tube prong for its full length and a metal ring for six-position mounting. All sockets except Octals are supplied with a stand-off insulator that allows center mounting for bread board layouts. Octals are supplied with two metal stand-offs. CIR Series. **Net Price, each \$3.24**

10 is a square Isolantite coil socket designed to fit National 6 pin coils. A wafer type socket, similar to figure 6, is also available to fit these same coil forms.
Square Coil Socket. **List Price, \$4.45**
Wafer Coil Socket. **List Price, \$3.36**

BOOKS



"Notes on Amateur Radio Transmitter Design" by James Millen is a source book of ideas, rich in suggestions for the construction of modern and efficient transmitters. The six chapters cover equipment from exciter to antenna, and are an invaluable supplement to such treatises as the ARRL Handbook.

Net Price \$5.50

"A 500-watt Amateur Phone Transmitter" is a reprint in booklet form of two articles which appeared in the May and June issues of "QST" Magazine, and which have aroused much interest. Copies of this booklet are free while they last. All of the parts necessary for the construction of the transmitter, including the special panels and chassis, are regularly listed items.

NATIONAL SHAFT COUPLINGS

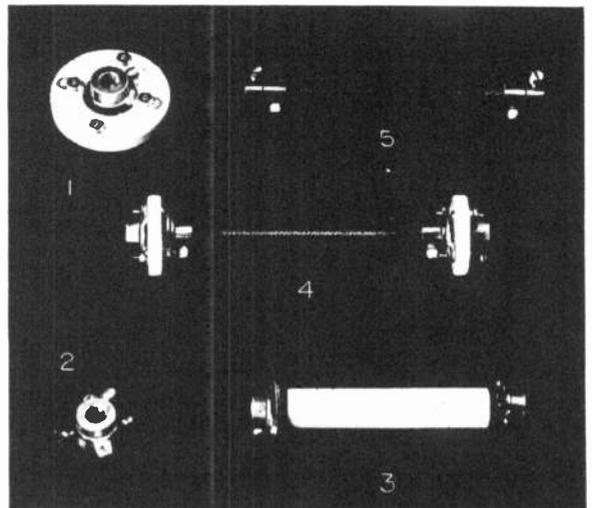
1 is a small coupling of Steatite, providing high electrical efficiency when used to isolate circuits.
Type TX-9. **Net Price, \$3.66**

2 is a popular small coupling, free from backlash. Insulation is canvas bakelite.
Type TX-10. **Net Price, \$3.33**

3 is a coupling providing high insulation with compact size. Insulation is glazed Isolantite.
Type TX-1 (leakage path 1"). **Net Price, \$3.60**
Type TX-2 (leakage path 2 1/2"). **Net Price, .66**

4 is a flexible shaft which provides a driving means between offset shafts, or shafts at angles up to 90 degrees, and virtually eliminates mis-alignment problems. Isolantite insulators are provided at each end.
Type TX-12. **Net Price, \$3.75**

5 is a flexible shaft without the insulation of the TX-12, but otherwise the same.
Type TX-11. **Net Price, \$3.36**



NATIONAL COMPANY PARTS

NATIONAL R. F. CHOKES

R-100. Isolantite mounting, continuous universal winding in four sections. For pig-tail connections or standard resistor mountings. Inductance 2½ m.h.; distributed capacity, 1 mmf.; D.C. resistance 50 ohms; Current rating, 125 M.A. For low powered transmitters and high frequency receivers.



Net Price, \$36

R-152, R-154, R-154U.

These transmitter chokes have honeycomb coils

(0.6 amps. rating) wound on Isolantite cores. The R-152 is designed for the 80 and 160 meter bands; inductance 4 m.h., D.C. resistance 10 ohms. The R-154 and R-154U give maximum impedance on the 20, 40 and 80 meter bands; inductance 1 m.h., D.C. resistance 6 ohms. The R-152 and R-154 are as illustrated. The R-154U does not have the small insulating pillar and the third mounting foot.

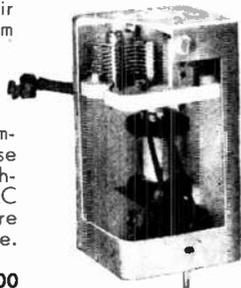


R-152 or R-154. Net Price, \$1.35
R-154U. Net Price, \$1.05

R-201. A two-section honeycomb-output choke in R-39 case, suitable for output circuit of second detector in H.F. receivers (475 KC Intermediate Frequency). Inductance, approximately 12 m.h., D.C. resistance approximately 120 ohms. Net Price, \$.75

NATIONAL I. F. TRANSFORMERS

This new I.F. Transformer has air dielectric condensers (isolated from each other by an aluminum shield) and Litz wound coils mounted on an Isolantite base which is treated against moisture absorption. The aluminum shield can, housing the assembly, measures 4½" x 2¾" x 2". These transformers are available with or without Iron Cores in the 450-550 KC model; the 175 KC model is air core only. For iron core add \$.30 to price. Type IFC Transformer (air core)



Net Price, \$3.00

Type IFCO Oscillator (air core only)

Net Price, \$3.00

NATIONAL FIXED TUNED EXCITER TANK

Similar in general construction to the I. F. transformer described above, this unit has two 25 mmf, 2000 volt air condensers and an unwound XR-2 coil form.

Type FXT, without plug-in base. Net Price, \$2.70

Type FXTB, with base (either 5- or 6-prong). Net Price, \$2.94

NATIONAL PLUG-IN BASE AND SHIELD

The low-loss R-39 base is ideal for mounting condensers and coils when it is desirable to have them shielded and easily removable. Shield can is 2" x 2¾" x 4½". Two models are available; 5- or 6-prong.



Type PB-10, (Base and Shield). Net Price, \$.45

Type PB-10A, (Base only). Net Price, .24

NATIONAL COIL FORMS

RECEIVER COIL FORM. These well-known R-39 forms (illustrated at right) are machinable, permitting the experimenter to groove and drill them to suit individual requirements. They are available in 4-, 5- and 6-prong types. Length, 2¼". Dia. 1½".



XR-4, XR-5, or XR-6. Net Price, \$.45



Also R-39, these small coil forms are designed with excellent form factor, contributing to high efficiency in H. F. circuits. Diameter, 1"; Length, 1½"; Wall thickness, 1/16". Type XR-1 has four prongs, others are plain. Type XR-1, four prongs. Net Price, \$.30

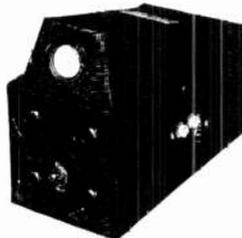
Type XR-2, without prongs. Net Price, \$.21

Type XR-3, 9/16" dia. x ¾" long. Net Price, \$.18

NATIONAL OSCILLOSCOPE

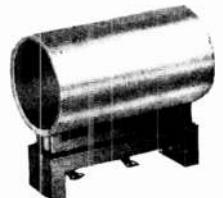
This Oscilloscope gives a graphic picture of operating conditions in your transmitter; such as percentage modulation, signal distortion and peak voltage. The units are self-contained, power supply and controls are built in. An audio signal from the transmitter is used as a linear sweep, as the trapezoid pattern thus obtained is more easily interpreted. The conventional linear sweep may be added at any time. A self contained 60 cycle sweep is provided.

Type CRM Oscilloscope 1" Screen. Net Price, less tubes, \$11.10
Tubes required: One RCA 913, One 6X5.



BUFFER COIL FORM & SOCKET.

The Isolantite Coil Form (drilled for leads) is 1¾" diameter x 3½" long and may be used as shown or mounted on stand-offs. The Coil Plug may be used separately as a base for air-wound plug-in coils, the tube prongs serving as coil anchoring points. The molded R-39 Socket employs five sturdy side-wipe contacts, three on one side and two on the other for symmetrical wiring of the buffer circuit.



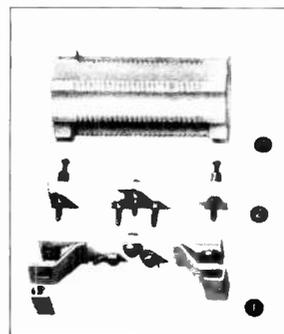
Type UR 13 Buffer Coil Form Assembly. Net Price, \$1.50

Type XR 13 Coil Form only. Net Price, .66

Type PB 5 Plug only. Net Price, .45

Type XB 5 Socket only. Net Price, .45

TRANSMITTER COIL FORM AND SOCKET. The new UR-10A Assembly consists of the XR-10A coil form (figure 3) for 20 and 40 meters and the new Isolantite Plug-in Base and Socket (figures 2 and 1 respectively). The Plug has five prongs and is easily attached by two screws to the Coil Form or may be used alone as a base for air wound coils. The socket, with five matching jacks, is supplied with special attachments for mounting directly on the tie bars of our TMA Transmitting Condenser.



Type UR-10A Coil Form Assembly. Net Price, \$2.76

Type XR-10A Coil Form only. Net Price, .90

Type PB-15 Plug-in Base only. Net Price, .81

Type XB-15 Socket only. Net Price, 1.05

Type XR-12A. Coil Form only for 160 meters. Net Price, \$1.50

NATIONAL COMPANY PARTS

NATIONAL STRAIN INSULATORS

The antenna insulator illustrated at the left is particularly suited to general use. It has a long leakage path, ample strength for all but the heaviest loads, and high efficiency. Made of Steatite. Type AA-6, Net Price, \$21. The small aircraft-type insulator at the right is ideal where compactness is desirable. Type AA-5, Net Price, \$18

NATIONAL SPREADERS

The Steatite spreaders at the right provide a six-inch line spacing, and when used with No. 12 wire will give feeders having a surge impedance of 600 ohms. Type AA-3, Net Price, \$18. The Isolantite insulators at the left when used to space 3/4" tubes 2" apart will give a "Q" transformer matching a 72 ohm center-fed half-wave antenna to a 600 ohm line. Type QB, Net Price, \$21

NATIONAL STAND-OFFS

With metal base and cap	Cone type, with internal thread at each end
Type GS-1 (1/2" x 1 3/8") Net, \$15	Type GS-5 (1 1/4") Net, \$15
Type GS-2 (1/2" x 2 7/8") Net, \$21	Type GS-6 (2") Net, \$27
Type GS-3 (3/4" x 2 7/8") Net, \$54	Type GS-7 (3") Net, \$45
Type GS-4 (3/4" x 4 7/8") Net, \$66	

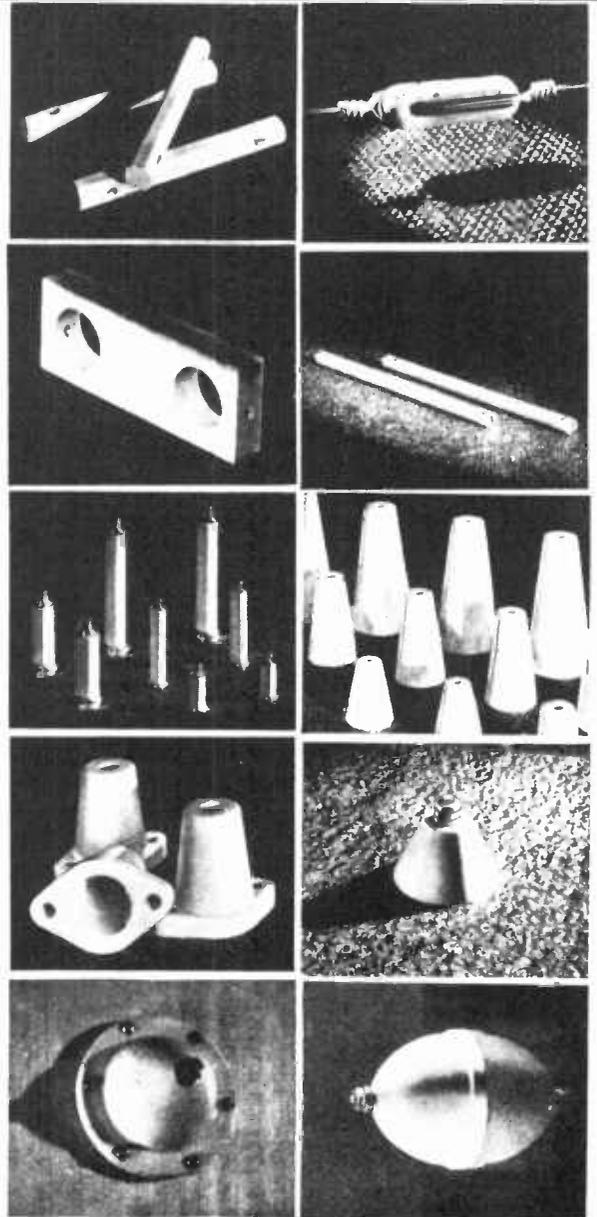
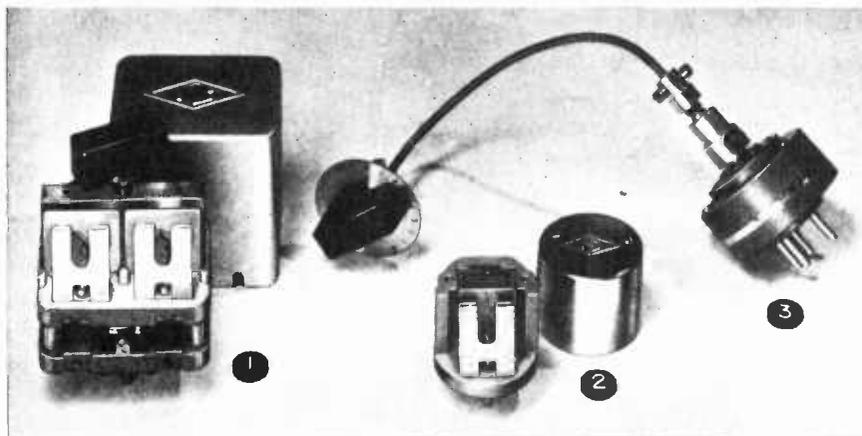
NATIONAL LEAD-THROUGHS

The combination lead-through bushing and stand-off insulator pictured at the right is available either plain (Type GS-8, Net Price \$21) or with a jack (Type GS-9, Net Price \$30). The bushings shown at the left are made in two sizes and are sold in pairs with the necessary metal fittings. Type XS-1 (Fits 1" Hole) Net Price, per pair, \$45. Type XS-2 (Fits 1 1/2" Hole) Net Price, per pair, \$54

NATIONAL BOWLS

Larger in size than the bushings listed above, these Steatite bowls are suitable for lead-in purposes and high voltages. Type XS-3 (Fits 2 3/4" Hole) Net Price, per pair, \$3.00. Type XS-4 (Fits 3 3/4" Hole) Net Price, per pair, \$3.90. Type XS-5 (with flange for bolting down, 5 1/4" Dia.) Net Price, each, \$4.50, per pair with metal fittings, \$9.30

NATIONAL CRYSTAL HOLDERS



These crystal holders are moulded of low-loss R-39 and have prongs moulded in for easy plug-in mounting.

1 is a new type holder that will accommodate 4 crystals and has a built-in low-capacity switch for selecting frequencies. It accommodates crystals up to 1" square and is very convenient when an immediate choice of frequencies is desirable.

Type 4 in 1 — pressure type. Net Price \$4.50
2 is a holder for a single crystal in which crystals may be changed readily.

Type CHR — for use in receivers, resonator type.

Type CHS — for use in transmitters, Pressure, Constant Air-Gap, type.

Type CHT — for use in transmitters, Pressure type, no air gap.

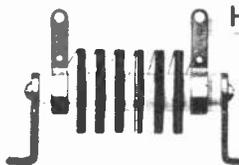
Net Price, less crystal, of \$1.50 each

3 is a novel holder permitting front-of-panel tuning of the crystal over a range of one part in 600 without loss in output. Only specially selected crystals should be used.

Type CHV (less crystal) Net Price, \$5.70

Type CHV (with 80 meter Hollister crystal that will double into the 20 meter phone band) Net Price, \$19.50

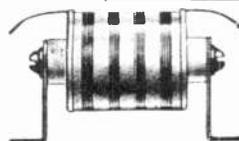
HAMMARLUND PRODUCTS



HEAVY DUTY CHOKES FOR TRANSMITTING

For parallel feed in high powered transmitters — 20- 40- 80- and 160-meter amateur bands. High equivalent impedance more than 500,000 ohms. Effective from 1,500 to 15,000 kc. with exception of frequencies between 5,300 and 6,400 and between 8,000 and 9,000. Six thin universal pies. Isolantite core. Insulated mounting brackets secured to Isolantite core with short machine screws. Brackets removable and choke mounted with a single machine screw. Ind. — 2.5 mh. Dist. cap. less than 1.5 mmf. D.C. res. — 8 ohms. Max. recommended D.C. (continuous) 500 ma. Overall size, less brackets — 1 3/16" x 2 1/2".

<u>CODE</u>	<u>LIST</u>
CH-500.....	\$1.75

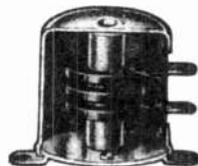


ISOLANTITE R.F. CHOKES

For S.W. and ultra-S.W. receivers and transmitters. Effective over broadcast band too. Recommended as grid choke for multistage transmitters. Isolantite spool. Four sectionalized windings, moisture proofed protected by radio frequency lacquer and cellophane covering. Choke 1 3/8" x 7/8". Flexible leads. Removable brackets.

Ind. — 8 mh. D.C. res. — 70 ohms. Dist. cap. — 3 mmf. Current carrying cap. — 125 ma.

<u>CODE</u>	<u>LIST</u>
CH-8.....	\$1.10



R.F. SHIELDED CHOKES

For use in high gain circuits. Universal impregnated wound pies enclosed in an aluminum shield 1 1/2" high x 1 3/8" in diameter. Mounting legs on 1 11/16" center. Connections to terminal are on one side of the can properly indicated. Inductance — 10 mh. D.C. resistance — 65 ohms. Current carrying capacity — 100 ma.

<u>CODE</u>	<u>LIST</u>
CH-10-S.....	\$1.00



R.F. HIGH IMPEDANCE CHOKES

Popular R.F. choke with special impregnated helical winding enclosed in bakelite case, 1 13/16" high and 1 5/16" in diameter. Ideal for detector plate circuit and R.F. filtering systems in general. Two types — 85 mh. with dist. cap. of 3 mmf. and D.C. res. of 250 ohms, and 250 mh. with dist. cap. of 2 mmf. and D.C. res. of 420 ohms. Current carrying cap. of both types 60 ma.

<u>CODE</u>	<u>LIST</u>
RFC-85.....	\$2.00
RFC-250.....	2.25



R.F. MIDGET CHOKES

Invaluable item where space is at a premium. It is so small in size and light weight that it can be supported by own leads. 5 impregnated universal wound pies 1/4" impregnated Isolantite core insuring ruggedness and stability. Ind. — 2.1 mh. D.C. res. — 35 ohms. Dist. cap. — 1 mmf. Current carrying cap. — 125 ma. Length across caps 1 1/2". Diameter 1/2".

<u>CODE</u>	<u>LIST</u>
CHX.....	\$.60

STANDARD AND MIDGET EQUALIZERS



Standard type illustrated at left, popular model for neutralizing, balancing and trimming. Mica dielectric — phosphor bronze flexible plates, bakelite base 1 1/4" x 1 1/16".

<u>CODE</u>	<u>CAPACITY</u>	<u>LIST</u>
EC-35	3-35 mmf.....	\$.30
EC-80	25-80 mmf.....	.40

The midget equalizer shown at right is an extremely small condenser designed expressly for trimming R.F. coils, but useful, of course, for many other purposes. Self-supporting in wiring. Isolantite base 3/8" x 3/4". Mica dielectric, phosphor bronze spring plates.



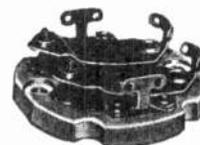
<u>CODE</u>	<u>CAPACITY</u>	<u>LIST</u>
MEX	3-30 mmf.....	\$.30

PADDING CONDENSERS



New improved type. Contains Isolantite base. Most expensive imported mica used. Tested for capacity, power factor, and breakdown at 500 V D.C. 1" x 1 1/8". Base mounting center: 1/4".

<u>CODE</u>	<u>CAPACITY</u>	<u>LIST</u>
MICS-70	10- 70 mmf.....	\$.50
MICS-140	70- 140 mmf.....	.60
MICS-220	140- 220 mmf.....	.70
MICS-1000	600-1000 mmf.....	1.00



TRIMMING CONDENSERS

New double Isolantite type with all the outstanding features of the single type. Phosphor bronze flexible plates shaped to provide substantially straight line capacity increase. Constant capacity and power factor maintained under all varying conditions of temperature, humidity, and vibrations. Base 1 15/16". Mounting centers 1 1/2".

<u>CODE</u>	<u>CAPACITY</u>	<u>LIST</u>
MICD-70	10- 70 mmf.....	\$.80
MICD-140	70-140 mmf.....	.90
MICD-220	140-220 mmf.....	1.00



FLEXIBLE COUPLINGS

This coupling permits tandem operation of any number of independent units without requiring exact shaft alignment. A great convenience and time saver. The sides of the condenser are insulated from each other, allowing instruments in gang to be operated as independent electrical units. Bakelized canvas with brass bushings for 1/4" shaft. Four rust proofed and hardened steel screws provide against shafts slipping. Overall diameter 1 1/2".

<u>CODE</u>	<u>LIST</u>
FC.....	\$.60



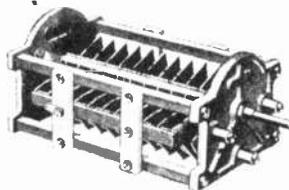
ULTRA S.W. COIL FORMS

An unusual coil form affording efficiency at ultra-high frequencies or within the 28-56 megacycle band. Isolantite with correct form factor and resultant minimum high frequency resistance guaranteeing absolute stability. Plenty of holes to facilitate any inductance desired and any type of wiring. Form is 1 1/8" in diameter and 2" long exclusive of prongs.

<u>CODE</u>	<u>LIST</u>
CF-5-M.....	1.00

HAMMARLUND CONDENSERS

TC TRANSMITTING CONDENSERS

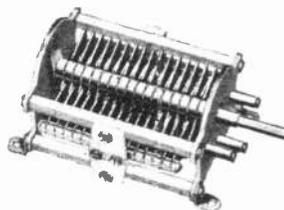


End plates of heavy cast aluminum. Isolantite cross bars. Non-inductive, self cleaning wiping contact. Polished heavy aluminum plates, accurately spaced. Round edged for extremely high voltage work. "A" types — 6500 V — .192" plate spacing; "B" types — 3000 V — .080" spacing; "BX" type — 3500 V — .100" spacing; "X" types — 2000 V — .080" spacing, and "C" types —

1000 V — .038" spacing. Overall width — 4 11 16".

CODE	CAPACITY	LIST
TC-30-A	30 mmf.	\$5.00
TC-50-A	50 mmf.	6.50
TC-100-A	100 mmf.	9.50
TC-150-A	150 mmf.	12.50
TC-225-A	225 mmf.	16.00
TC-100-B	100 mmf.	5.50
TC-150-B	150 mmf.	6.50
TC-225-B	225 mmf.	8.00
TC-335-BX	335 mmf.	12.00
TC-450-B	450 mmf.	12.00
TC-225-X	225 mmf.	6.00
TC-350-C	350 mmf.	5.00
TC-500-C	500 mmf.	5.50

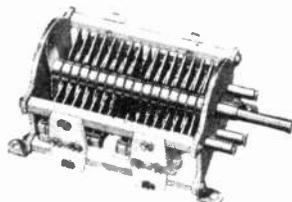
MTC TRANSMITTING CONDENSERS



Compact types. Isolantite insulation. Base or panel mounting. Polished aluminum plates. Stainless steel shaft. Size of 150 mmf. with .070" plate spacing only 4 1/2" behind panel. "A" model has .040" plate thickness, all others .025". "A" and "B" models — rounded plates. "C" types — plain plate edges. Self-cleaning wiping contact.

CODE	CAPACITY	LIST
MTC-35-A	35 mmf.	\$6.00
MTC-20-B	20 mmf.	3.25
MTC-35-B	35 mmf.	3.50
MTC-50-B	50 mmf.	3.90
MTC-100-B	100 mmf.	5.00
MTC-150-B	150 mmf.	6.10
MTC-50-C	50 mmf.	2.80
MTC-100-C	105 mmf.	3.05
MTC-150-C	150 mmf.	3.20
MTC-250-C	260 mmf.	3.60
MTC-350-C	365 mmf.	4.00

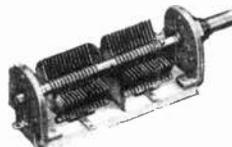
MTC SPLIT-STATOR TYPES



Same outstanding features as MTC singles except that stator sections are separate. Model 100-B with .070" plate spacing, only 5 1/8" behind panel. "B" models — rounded plates. "C" models — plain plate edges.

CODE	CAPACITY	LIST
MTCD-20-B	20 mmf. per sect.	\$5.25
MTCD-35-B	35 mmf. per sect.	5.75
MTCD-50-B	50 mmf. per sect.	6.50
MTCD-100-B	100 mmf. per sect.	8.75
MTCD-50-C	50 mmf. per sect.	4.50
MTCD-100-C	105 mmf. per sect.	5.00
MTCD-150-C	150 mmf. per sect.	5.25
MTCD-250-C	265 mmf. per sect.	6.00

H.F. DUAL CONDENSERS



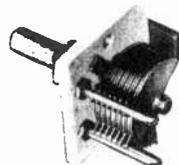
A compact dual — ideal as a high frequency tuning condenser, for tuning and neutralizing low-powered short wave and ultra-short wave transmitters, etc. Heavy B-100 Isolantite base equipped with new outstanding Hammarlund split rear bearing and individual noiseless wiping contact

for each section. Rotor contacts variable to several positions for shortest leads. Shield between sections for grounding. The 140 mmf. size only 1 1/2" high x 3 3/4" long behind panel. 1/4" shaft. Cadmium plated soldered brass plates.

CODE	CAPACITY	LIST
HFD-50	50 mmf. per sect.	\$2.75
HFD-100	100 mmf. per sect.	3.25
HFD-140	140 mmf. per sect.	3.75
*HFD-30-X	30 mmf. per sect.	3.25

* Double-Spaced

NEW H.F. CONDENSERS

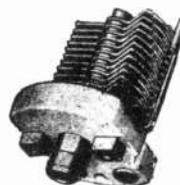


For tuning or trimming on high frequencies. Cadmium plated soldered brass plates. B-100 Isolantite. Base mounting, single hole panel mount, or panel mounting with bushings. 140 mmf. size 1 9/16" high, 1 13/16" behind panel.

CODE	CAPACITY	LIST
HF-15	15 mmf.	\$1.25
HF-35	35 mmf.	1.50
HF-50	50 mmf.	1.60
HF-100	100 mmf.	1.90
HF-140	140 mmf.	2.25
*HF-30-X	30 mmf.	1.85

* Double-Spaced

APC AIR PADDING CONDENSERS



For S.W. and ultra-S.W. For I.F. tuning, trimming R.F. coils or gang condensers, general padding, etc. Constant capacity under any conditions of temperature or vibration. Size 100 mmf. 1 7/32" x 15/16" x 1 1/8". Isolantite base. Cadmium plated soldered brass plates.

CODE	CAPACITY	LIST
APC-140	140 mmf.	\$2.25
APC-100	100 mmf.	1.90
APC-75	75 mmf.	1.70
APC-50	50 mmf.	1.50
APC-25	25 mmf.	1.30

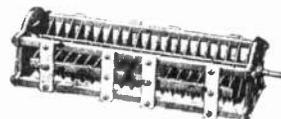
MCX CONDENSERS



Exceptional unit for ultra-s.w. receivers and transmitters particularly compact transmitter. Plate spacing — .0715". Great for tuning crystal controlled transmitter amplifier stages or for neutralizers up to 210's and 50 watters. In midline (MX) and straight line cap. types (SX).

CODE	CAPACITY	LIST
MC-20-SX	25 mmf.	\$2.00
MC-20-MX	25 mmf.	2.00
MC-35-MX	33 mmf.	2.25
MC-35-SX	33 mmf.	2.25
MC-50-MX	50 mmf.	2.75
MC-50-SX	50 mmf.	2.75

TCD SPLIT-STATOR TYPES

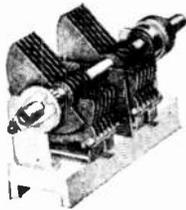


Identical to single types, except that stator sections are individual. With sections in series, breakdown voltage is doubled. "C" types use .038" plate spacing; "X" types — .080" plate spacing, and "A" types — .192" spacing.

CODE	CAPACITY	LIST
TCD-250-C	240 mmf. per sect.	\$8.00
TCD-500-C	500 mmf. per sect.	9.00
TCD-100-X	100 mmf. per sect.	9.00
TCD-225-X	225 mmf. per sect.	11.00
TCD-50-A	50 mmf. per sect.	12.00
TCD-100-A	100 mmf. per sect.	18.00

HAMMARLUND PRODUCTS

SPLIT-STATOR CONDENSERS



Like single midgets, these incorporate every requirement imperative to highest quality. Specifications identical to single types except that shield plate is located between stator sections. Also equipped with new Hammarlund noiseless wiping contact and split type rear bearing. Overall length behind panel — 3/4". Strong Isolantite base. Single hole panel mount.

CODE	CAPACITY	LIST
MCD-140-S	140 mmf. per sect.	\$4.00
MCD-140-M	140 mmf. per sect.	4.00
MCD-100-M	100 mmf. per sect.	3.50
MCD-100-S	100 mmf. per sect.	3.50
MCD-50-S	50 mmf. per sect.	3.00
MCD-50-M	50 mmf. per sect.	3.00

"M" — Midline Plates "S" — Straight Line Cap. Plates

MC MIDGET CONDENSERS

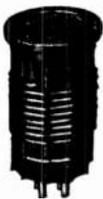


Ideal variables for ultra-short wave and short wave tuning, laboratories, etc. Isolantite insulation. All contacts riveted or soldered. Vibration proof. New improved Hammarlund split type rear bearing, and noiseless wiping contact. Cadmium plated soldered brass plates. Shaft — 1/4".

CODE	CAPACITY	LIST
MC-325-M	325 mmf.	\$3.50
MC-250-M	260 mmf.	3.00
MC-200-M	200 mmf.	2.75
MC-140-M	140 mmf.	2.50
MC-140-S	140 mmf.	2.50
MC-100-M	100 mmf.	2.25
MC-100-S	100 mmf.	2.25
MC-75-M	80 mmf.	2.00
MC-75-S	80 mmf.	2.00
MC-50-M	50 mmf.	1.66
MC-50-S	50 mmf.	1.66
MC-35-S	35 mmf.	1.50
MC-20-S	20 mmf.	1.40

"M" — Midline Plates "S" — Straight Line Cap. Plates

XP-53 COIL FORMS AND KITS



Outstanding forms using new low loss insulation material — XP-53. Natural coloring eliminating losses. Groove ribbed for air spaced windings. Flange grips, meter indexes. Moulded threaded shell in form. 1 1/2" diameter and 2 7/8" long exclusive of prongs. Kits with wound coils for MC-140 M condenser also available.

CODE	LIST
SWF-4 (four prongs, coil form only)	\$3.35
SWF-5 (five prongs, coil form only)	.35
SWF-6 (six prongs, coil form only)	.40

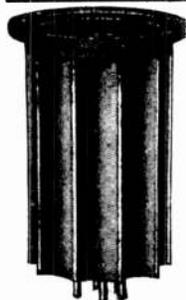
ISOLANTITE S.W. COIL FORMS



Popular coil form so many fans are using today. Black enameled wooden knob. Removable paper indicating disc protected by celluloid. Surface "non-skid." Plenty of holes — eliminates drilling. Slotted bottom for primary or tickler. Four, five, and six prong types. 1 1/4" diameter. 2 1/2" long exclusive of knobs and prongs.

CODE	LIST
CF-4 (four prongs)	\$1.25
CF-5 (five prongs)	1.25
CF-6 (six prongs)	1.25

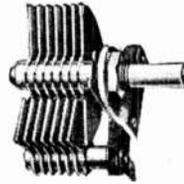
TRANSMITTING FORMS



Another outstanding coil form for transmitting using that remarkable new low loss insulating material XP-53 dielectric, the same substance that is used for the above coils. Color, also natural. Forms are groove ribbed for air spaced windings. May be permanently mounted on a special pair of brackets, supplied with each form, or mounted in the familiar plug-in coil fashion. 2 1/4" in diameter and 3 3/8" long exclusive of prongs.

CODE	LIST
TCF-4 (4 prongs)	\$3.70
TCF-5 (5 prongs)	.70

STAR MIDGET CONDENSERS

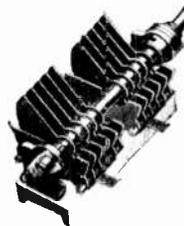


For receiving and transmitting, for short wave tuning, regeneration, antenna coupling, vernier, etc. Low loss, natural bake-lite insulation. Non-corrosive aluminum plates. Phosphor bronze spring plate affords proper tension and smooth contact and also provides perfect contact. Single hole mounting. 1/4" shaft. 5 16" mounting bushing. 1 9 16" x 1 3/4" high. Depth behind panel from 11 16" to 1 7/8" depending on capacity. Exceptionally light in weight and strong and compact in construction. Tinned soldered lugs on the front end are supplied to simplify wiring. Plates of straight line capacity type.

CODE	CAPACITY	LIST
SM-15	15 mmf.	\$1.85
SM-25	25 mmf.	.85
SM-50	50 mmf.	.90
SM-100	100 mmf.	1.00
SM-140	140 mmf.	1.25
*SM-35-X	35 mmf.	1.00
*SM-50-X	50 mmf.	1.25

* Double Spaced Transmitting Type.

MCD DOUBLE SPACED CONDENSERS



Identical to split-stator condensers except that plates are widely spaced — actual air gap between rotor and stator plates — .0715". No shield between stators. Equipped with new Hammarlund noiseless wiping contact, and split type rear bearing. Condenser ideal for ultra-high frequency transmitters using up to 245's or 210's in push-pull.

CODE	CAPACITY	LIST
MCD-35-MX	33 mmf. per sect.	\$3.50
MCD-35-SX	33 mmf. per sect.	3.50

"MX" — Midline Plates "SX" — Straight Line Cap. Plates

ALUMINUM TUBE AND COIL SHIELDS



Complete isolation afforded by this tube shield shown at left, for full use of enormous amplification available from new high gain 2.5 and 6.3 volt R.F. pentodes. Special draw-in neck completes shielding between control grid and plate. Removable top entirely shields control grid cap. Body, cap, and base all of heavy aluminum and designed for maximum cooling. Measures 4 3/8" high x 1 3/8" diameter. Mounting center 1 27 32".

CODE	LIST
TS-50	\$3.40

The Hammarlund coil shield shown at right is a very effective housing for coils. It is constructed of heavy aluminum and is a 2-piece affair. It is 3" in diameter. Base has mounting holes.



CODE	LIST
CS-3	\$3.50

ISOLANTITE SOCKETS

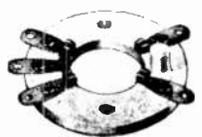


Standard socket at left. Lowest losses. Constant resistivity. Gripped prongs — cannot shift. Guide groove. Rust-proof side gripping contacts. Glazed top and sides. Sub-panel or base mounting. 2 1/4" x 1 3/8".

CODE	LIST
S-4 (4 prongs)	\$1.60
S-5 (5 prongs)	.60
S-6 (6 prongs)	.60
S-7 (large base, 7 prongs)	.60
S-7-B (small base, 7 prongs)	.60
S-8 (8 prongs)	.75

Acorn socket at right. Isolantite. For new high frequency acorn tubes — 954 or 955. 1 1/4" diameter. Five double grip silver plated phosphor bronze prongs. Top, sides, and plug glazed.

CODE	LIST
S-900	\$1.50



E. F. JOHNSON TRANSMITTING PARTS

PORCELAIN CONE INSULATORS



New porcelain cone insulators combine the excellent insulating qualities of other Johnson porcelain pieces with the convenience of single hole mounting. A wide range of sizes is offered filling practically every stand-off insulator need in transmitter construction.



Cushion washers are included, as well as machine screws both top and bottom, and in four jack types. The three smaller jack types use the Johnson 74 jack and the largest size, the Johnson 76. Finished in white glaze overall, they present an extremely attractive appearance.

Cat. No.	Ht.	Diameter		Thread	Net Price
		Top	Bottom		
600	5/8"	1 1/2"	5/8"	6-32	\$0.09
601	1"	1 1/2"	3/4"	8-32	.11
601J	1"	1 1/2"	3/4"	Jack	.14
602	1 1/2"	1 1/2"	1"	8-32	.14
602J	1 1/2"	1 1/2"	1"	Jack	.17
603	2"	5/8"	1 1/8"	10-32	.15
603J	2"	5/8"	1 1/8"	Jack	.18
604	3"	3/4"	1 1/2"	10-32	.21
604J	3"	3/4"	1 1/2"	Jack	.30

THRU-PANEL INSULATORS



The carefully worked out line of Johnson Thru-Panel Insulators reflect the same qualities possessed by the Stand-Off types. Low absorption porcelain (highly important in R.F. circuits); smooth glazing; solid brass



nickel plated hardware with milled nuts; cushion washers, flat, large area mounting surfaces; longer bottom sections with extended leakage path; soldering terminals on jack types—are features of Johnson design.

Cat. No.	Body Height	Hardware	Net Price	
	Top	Bottom		
40	1 1/4"	1/2"	10-32	\$0.15
40J	1 1/4"	1/2"	74 Jack	.18
42	7/8"	3/8"	10-32	.12
42J	7/8"	3/8"	74 Jack	.15
44	7/8"	3/8"	6-32	.10
45	1 1/8"	1/2"	10-32	.21
45J	1 1/8"	1/2"	74 Jack	.24
4576J	1 3/8"	1 1/4"	76A Jack	.33
46	2 3/4"	1"	1/4-20	.39
46J	2 3/4"	1"	76 Jack	.48
47	4 1/2"	1 1/2"	3/4-20	.57
47J	4 1/2"	1 1/2"	76 Jack	.66

45, 45J and 4576J are Style E, others Style F

STRAIN INSULATORS

The No. 32 Airplane Strain Insulator is also very useful for light guys and receiving antennas. The new No. 38 "Cruciform" Strain Insulator is specially designed for R.F. applications, having low capacity, long leakage path, light weight. Both are 1 1/2" long, of white glazed low absorption porcelain.

Cat. No.	Net Price
No. 32—Airplane Insulator	\$0.04 1/2
No. 38—Strain Insulator	.09

FEEDER SPREADERS

Every amateur transmitting and receiving need is supplied by these new 2", 4", and 6" feeder spreaders. 3/8" x 1/4" cross section, of white glazed low absorption porcelain.

Cat. No.	Length	Net Price
No. 132	2" long	\$0.09
No. 134	4" long	.12
No. 136	6" long	.15
No. 146	6" heavy duty	.24

NEW LEAD-IN BUSHINGS



50, 51, 52



54



55



90-90

Used either as panel or antenna lead-in bushings or in other applications such as in mounting of heavy equipment. Strong, well made and designed with long leakage paths in proportion to size. Nos. 53 and 54 are sold without hardware. Threaded 3/4" brass rod may be obtained for various applications. Metal mounting flanges also available. 50-54 are of porcelain. 55 is of Alsmag 196.

Cat. No.	Ht.	Diam.	Length	Net Price
50	1 1/2"	3/4"	2"	\$0.12
51	1 1/2"	1 1/4"	2 7/8"	.18
52	1 1/2"	1 3/4"	4 1/4"	.27
53	1 3/4"	2 1/2"	.....	.18
54	4"	3 1/2"	.....	.42
55	1 1/4"	5/8"	1 1/4"	.18
90	Mounting Flange for No. 53			.15
91	Mounting Flange for No. 54			.18
240	Threaded Brass Rod 1/4" x 8" long			.15
241	Threaded Brass Rod 1/4" x 10" long			.18
242	Threaded Brass Rod 1/4" x 15" long			.24

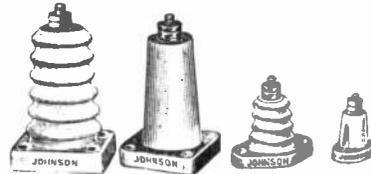
ALSMAG 196 CONES

The new cone shaped insulators of Alsmag 196 have numerous applications in transmitter construction. The extremely low loss-factor of this material makes 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, making them extremely easy to mount. Sizes are available from 5/8" to 3" inclusive, thus covering a wide field of application. Strongly constructed and designed to withstand rough usage.



Cat. No.	Ht.	Top Diameter	Bottom Diameter	Thread	Net Price
500	5/8"	1 1/8"	5/8"	6-32	\$0.09
501	1"	1 1/2"	3/4"	8-32	.15
502	1 1/4"	1 3/4"	1"	8-32	.18
503	2"	2 1/2"	1 1/4"	10-32	.24
504	3"	3 1/2"	1 1/2"	10-32	.39

STAND-OFF INSULATORS



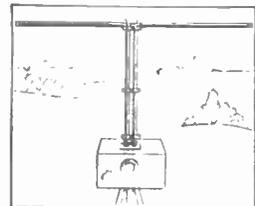
The original Johnson Stand-Off Insulators are characterized by perfection of ceramic design, logical proportions and range of sizes, accuracy, and, most important, a very superior quality of porcelain and hardware. Styles B and C have unbreakable cadmium plated drawn steel bases and as usual mount in very little space. Jack types are available in most sizes.

Cat. No.	Body Height	Hardware	Style	Net Price
20	1 1/8"	10-32	D	\$0.08
20J	1 1/8"	74 Jack	D	.10
22	1"	8-32	D	.05 1/2
22J	1"	74 Jack	D	.07 1/2
24	5/8"	6-32	D	.04 1/2
60	4 1/2"	1/4-20	A	.39
62	2 3/4"	1/4-20	A	.21
65	1 3/8"	10-32	C	.12
65J	1 3/8"	74 Jack	C	.15
66	2 3/4"	1/4-20	B	.21
66J	2 3/4"	76 Jack	B	.30
67	4 1/2"	1/4-20	B	.33
67J	4 1/2"	76 Jack	B	.42

The JOHNSON "Q" ANTENNA



Special 5 Meter "Q" Antenna



This special form of "Q" antenna is designed for convenient installation with fixed or portable transmitters. May be mounted directly on the transmitter case, or suspended in the air with an open wire transmission line to the equipment. The 5QM is a special model. Mylex insulated in place of porcelain.

Cat. No.	Band (meters)	Net Price
5Q	5	4.20
5QM	5	6.00
10Q	10	4.71
10QS	10	5.19
20Q	20	7.35
20QS	20	8.70
40Q	40	13.56
80Q	80	25.20

S indicates straight tubing

ANTENNA INSULATORS



107
112
120



151
153

These insulators are of genuine WET PROCESS porcelain with smooth white glazing. The all-porcelain types are 1" in diameter and will stand 1500 pounds pull. Their long leakage path, low capacity, and freedom from moisture absorption result in exceptional efficiency. The Commercial Type is 1 1/2" in diameter for uses where much greater strength is necessary. The aluminum alloy fittings are non-corrosive.

Cat. No.	Length	Net Price	Cat. No.	Length	Net Price
107	7"	\$0.42	151	15 1/4"	\$5.40
112	12"	.54	152	12"	6.45
120	20"	.90	153	18"	9.00

TRANSPPOSITION INSULATORS

Much used for both receiving and transmitting feed lines. This original Johnson insulator simplifies installation, weighs very little, does not twist the line, and has high insulating value. White glazed low absorption porcelain.



Cat. No.	Net Price
No. 31—Transposition Insulator	\$0.09

E. F. JOHNSON TRANSMITTING PARTS

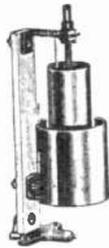
TYPE N CONDENSERS

Increasing popularity of the low C tubes made necessary the development of a new neutralizing condenser designed especially for use with such tubes. As a result of careful design and construction the Johnson Type N condenser offers many features heretofore unavailable. The "plates" of the condenser are polished aluminum cups supported on an Alsimag 196 (see "Data on Insulating Material," this page) frame. This type of construction permits mounting the condenser directly on a metal chassis.

Adjustment of capacity is made by means of a micrometer screw which permits very fine adjustment. In tuning the condenser there is no change in voltage rating from minimum to maximum. (Contrast with other types.) A locking device permits locking the condenser at any setting within the range of the condenser.

The Type N occupies minimum space and may be mounted vertically or horizontally.

Although designed primarily for use in neutralization, the Type N is well suited for tuning grid or plate circuits in ultra high frequency equipment, especially in diathermy applications.



Cat. No.	Capacity		Spacing	Net
	Min.	Max.		
N125	12	2.5	.125	1.95
N250	12	3.0	.250	2.70
N375	12	3.5	.375	3.60

HANDLE INDICATORS

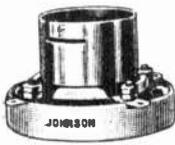


Highly attractive solid molded Bakelite controls which enhance the appearance of any equipment. "Window" design makes possible three separate scales if desired. No. 204 has 4" diameter etched scale with polished figures on black background, and fits 1/4" shaft. No. 205 is similar, with 6" scale, fits 3/8" shaft, and has removable bushing for 3/4" shaft.

	Net Price
No. 204—Handle Indicator	\$0.60
No. 206—Handle Indicator	.75

Transmitting Tube Sockets

Johnson transmitting tube sockets have been for years the accepted standard. Tens of thousands yearly have gone into high grade transmitters and medical and industrial equipment. All have heavy side-wiping spring phosphor bronze contacts, extended to form an integral soldering terminal and cadmium plated. The No. 211 filament springs are double, to handle heavy filament currents as in rectifiers. All have heavy nickel-plated brass shells, supporting the tube by its base rather than the prongs. Porcelain bases are of excellent quality low absorption material in white or brown glaze. Specify color.



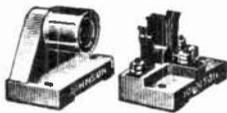
"FB" models are for front-of-panel mounting, and are enclosed in lustrous black finished cast aluminum housings.

Note in particular the No. 216 socket, for "giant" 5 prong bases such as on RCA803 and RK28 tubes.

Cat. No.	Type of Base	Diam. eter.	Ht.	Code Word	Net Price
210	"UX"	2 1/2"	1 7/8"	SOLUS	\$1.51
210FB	"UX"	3"	2 1/4"	SOOT	1.50
211	"50 watt"	3 1/4"	2 1/8"	SORE	.75
211FB	"50 watt"	4"	2 3/8"	SORRY	2.10
216	5 prong	3 3/4"	2 3/8"	SOAR	1.50

"250-Watt" Socket Set

A new improved mounting for 204A, 849 and similar tubes. Plate terminal has "safety cup" which prevents accidental dislodgement of the tube. White-glazed low-absorption porcelain insulation.



No. 215—"250 Watt" Socket Set. Code word, SOLIF. Net Price \$2.10

FLEXIBLE SHAFTS



Phosphor bronze flexible shafts are available in two lengths. When used with suitable couplings, control of units at angles up to 90 degrees with the panel is permitted.

Cat. No.	Hub. Diam.	Length	Net Price
253	3/4"	3"	\$0.21
254	3/4"	6"	.30

PLUGS AND JACKS "BANANA SPRING" TYPE



Nickel-silver springs, and high grade nickelled brass screw machine parts with accurate threads and milled nuts. Studs extend full length of springs. 77A plug has long screw for mounting on ceramic coil forms, etc.

75C is a tapped plug with 3/8" 6-32 machine screw in head. 75D is designed for riveting or soldering. Spring is of beryllium copper.

Cat. No.	Length	Thread	Net Price
74 Jack	1 1/2"	1/4-28	\$0.04
75 Plug	3/4"	6-32	.04 1/2
75A Plug	3/4"	6-32	.04 1/2
75C	1"	6-32	
75D	3/8"	+	.05 1/2
76 Jack	1 3/8"	3/8-24	.15
76A Jack	1 3/8"	1/2-20	.15
77 Plug	1 1/8"	1/2-28	.12
77A Plug	1 1/8"	10-32	.15

* Lengths do not include screw thread.
† Hollow rivet shank .140" diam. x 3/2" long.

"SPRING SLEEVE" TYPE



Strong, low resistance plugs and jacks, no "wobble." Made of brass, brightly nickelled, with phosphor bronze spring. Plugs will fit into copper tubing of same size as body, and have holes in threaded ends for soldering leads. 73A plug has long screw for mounting on ceramic coil forms, etc.

Cat. No.	Length*	Thread	Net Price
70 Jack	1 1/2"	1/4-20	\$0.21
71 Plug	1 1/2"	3/4-28	.08 1/2
72 Jack	1 1/2"	10-32	.15
73 Plug	1 1/2"	10-32	.04 1/2
73A Plug	1"	10-32	.04 1/2

* Lengths do not include screw thread

PANEL BEARINGS

No. 255 is a cadmium plated brass panel bearing for panels up to 3/8" thick. Furnished separately or with 3" or 6" cadmium plated brass shafts.



Cat. No.	Net Price
255—Panel bearing	\$0.09
256—Panel bearing with 3" shaft	.18
257—Panel bearing with 6" shaft	.24

ENAMELED COPPERWELD ANTENNA WIRE



Johnson Enameled Copperweld Antenna Wire is the ideal material for transmitting doublets, directional antenna systems, and other applications where the wire must not stretch nor sag. It has a steel core, welded to a heavy copper exterior and enameled, combining high R.F. conductivity, freedom from corrosion, and almost three times the strength of ordinary enameled copper antenna wire. Supplied in 100, 150, 200, 500 and 1000 ft. coils, or in special lengths.

Cat. No.	B&S Ga.	Ft. per lb.	Strength	Net per 100 ft.
346	8	22	1700 lbs.	\$2.55
348	10	34 1/2	1130 lbs.	1.65
350	12	54	720 lbs.	1.14
352	14	85	480 lbs.	.75

FLEXIBLE COUPLINGS



Flexible Couplings two insulated with Alsimag 196 are available in two sizes, No. 250 taking a 1/4" shaft and No. 251 a 3/8" shaft. Flexibility is obtained by phosphor bronze spring with no backlash.

	Net Price
No. 250—1/4" shaft, 1 3/8" diameter	\$0.48
No. 251—3/8" shaft, 2 1/4" diameter	.75

SOLID INSULATED COUPLING

No. 252 is a solid insulated coupling of Alsimag 196 for use where high quality insulation is desirable. Takes 1/4" shaft at either end. So designed to have extremely long leakage path in proportion to length.

Length	1 3/8"
Diameter	1 1/4"
Leakage Path	1 1/8"
No. 252 Coupling	Net \$0.39

STRAIN INSULATORS



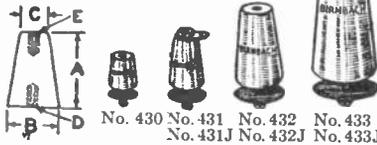
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	Net Price
No. 32—Airplane Insulator	\$0.04 1/2
No. 38—Strain Insulator	.09

BIRNBACH PRODUCTS

STEATITE CONE STANDOFF INSULATORS

A complete range of heights having threaded holes and jacks is available. Condenser, coils, tube sockets and high frequency apparatus can be mounted on them with a minimum of labor and expense. They are available only in a white glaze Steatite.

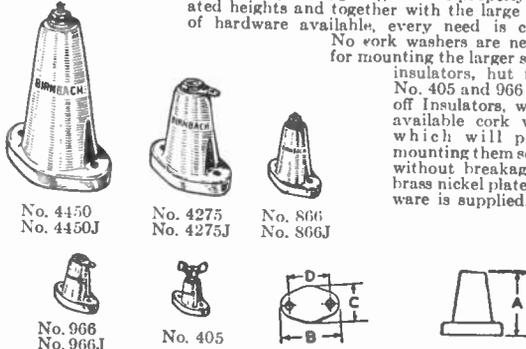


No.	A	B	C	Threaded Holes		Mtg. Hole	Std. Pkg.	List Price each
430	5/8	5/8	7/8	6-32	6-32	1/8	100	\$0.10
431	1	7/8	1 1/8	8-32	8-32	1/8	50	.15
431J	1	7/8	1 1/8	8-32	8-32	1/8	50	.20
432	1 1/2	1 1/8	1 3/8	10-32	10-32	1/8	50	.20
432J	1 1/2	1 1/8	1 3/8	10-32	10-32	1/8	50	.25
433	2 3/4	1 3/4	2 1/4	1/4-20	1/4-20	3/8	25	.25
433J	2 3/4	1 3/4	2 1/4	1/4-20	1/4-20	3/8	25	.50

STANDOFF INSULATORS

The sizes range from 3/8" to 4 1/2" high in five properly graduated heights and together with the large variety of hardware available, every need is covered.

No cork washers are necessary for mounting the larger standoff insulators, but for the No. 405 and 966 Stand-off Insulators, we have available cork washers which will permit mounting them securely without breakage. All brass nickel plated hardware is supplied.

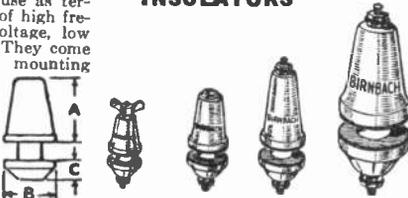


No.	A	B	C	D	Mtg. Hole	Hardware	Std. List Price each
405	3/8	3/8	3/8	1	1/8	6-32	100 \$0.06 1/2
966	1	1 3/8	1 3/8	1 1/4	1/8	8-32	50 .07 1/2
966J	1	1 3/8	1 3/8	1 1/4	1/8	No. 403 Jack	50 .10
866	1 1/2	1 1/8	1 1/8	1 1/4	1/8	10-32	25 .12
866J	1 1/2	1 1/8	1 1/8	1 1/4	1/8	No. 403 Jack	25 .15
866SJ	1 1/2	1 1/8	1 1/8	1 1/4	1/8	No. 395 Jack	10 .35
4275	2 3/4	2 3/4	2	2 1/2	1/4	1/4-20	10 .30
4275J	2 3/4	2 3/4	2	2 1/2	1/4	No. 399 Jack	10 .55
4450	4 1/2	3 3/8	2 1/2	2 5/8	1/2	1/4-20	5 .50
4450J	4 1/2	3 3/8	2 1/2	2 5/8	1/2	No. 399 Jack	5 .75

For Stand-off Insulators with Wing Nuts add \$0.05 to List Price. Specify White or Brown Glaze.

FEEDTHRU STANDOFF INSULATORS

Highly vitrified, low absorption porcelain is used throughout. They are ideal for use as terminals on all kinds of high frequency and high voltage, low frequency devices. They come supplied with cork washers which permit a secure and shakefree installation to be made with a minimum breakage. Brass nickel-plated hardware is supplied.



No.	A	B	C	Mtg. Hole	Hardware	Std. List Price each
458	5/8	5/8	7/8	1/8	6-32	25 \$0.12
478	1	7/8	1 1/8	1/8	8-32	25 .20
478J	1	7/8	1 1/8	1/8	10-32	25 .25
4125	1 1/2	1 1/8	1 3/8	1/8	10-32	25 .25
4125J	1 1/2	1 1/8	1 3/8	1/8	No. 403 Jack	25 .30
4234	2 3/4	2	2 1/4	1/4	1/4-20	10 .55
4234J	2 3/4	2	2 1/4	1/4	No. 399 Jack	10 .80

For Stand-off Insulators with Wing Nuts add \$0.05 to List Price. Specify White or Brown Glaze.

CORK WASHERS

No.	Standard Package	List Price
12—For No. 405 Insulator	1000	\$ 4.50
13—For No. 458 Insulator	1000	4.50
14—For No. 478 or No. 4125 Insulator	1000	4.50
15—For No. 4234 or No. 766 Insulator	1000	11.25
Cork Washers for No. 966 Insulator	1000	8.00



Headset Phone Cords

These cords are closely woven and are very durable and strong.

No.	List Price each
104—5-ft., Pin Tips on both ends	\$0.60
105—5-ft., Pin & Spade Tips	.50
107—5-ft., Pin & Eye Tips	.60
108—8-ft., Pin & Eye Tips	.75
109—10-ft., Pin & Eye Tips	1.00



Speaker Cords

Made of stranded wire, insulated with rubber, with a closely woven brown mercerized cotton overall.

No.	List Price each
102—5-ft., Pin Tips on both ends	\$0.35
103—5-ft., Pin & Spade Tips	.35
106—5-ft., Pin & Eye Tips	.35
413—10-ft., Pin & Eye Tips	.55
414—20-ft., Pin & Eye Tips	.75
701—5-ft., 4-wire Crosley Pin & Eye Tips	.60



Speaker Extension Cords

These Extension Cords are constructed of stranded annealed copper wire insulated with rubber over which a brown mercerized cotton braid is closely woven. Complete with easily attached bakelite connector.

No.	List Price each
166—10-ft.	\$0.75
120—20-ft.	1.00
121—30-ft.	1.35
122—40-ft.	1.55
123—50-ft.	1.75
124—100-ft.	3.25
151—Bakelite Extension Cord Connector, only	.30

Ground Rods



Radiator or water pipe grounds do not always give a low resistant ground which is so necessary for the reduction of man-made static. These Ground Rods, driven into the ground, will afford a highly efficient permanent ground. Copper plated.

No.	Std. Pkg.	List Price
616—4-ft.	12	each \$0.60
618—6-ft.	12	each .85

Brown Porcelain



List Price, Each

INSULATED STAPLES and TACKS

These are essential for the securing of leadin, ground, and other wires for installations.

No.	Per Box	Std. Pkg.	List Price Per M
R 100—Plain	100	1000	\$2.75
D 50—Plain	50	1000	3.00
C 40—Colored	40	1000	3.50
C 41—Perfection Tacks—White or Brown	1000	1000	3.00

Lightning Arrester



Made of brown glazed porcelain body with nickel-plated hardware. Suitable for outdoor or indoor use. Complete with mounting screws and instructions.

No. 650—Std. Pkg. 50 \$0.25 Each

Lightning Arrester



A low price Lightning Arrester designed for easy installation. Comes complete with nickel-plated hardware and instructional

No. 65—Std. Pkg. 100 \$0.15 Each

Doublet Arrester



This Arrester is of the air gap type which is the accepted means of protecting doublet antennas from lightning. Installation instructions are printed on the box.

No. 2650—Std. Pkg. 25 \$0.35 Each

Porcelain Insulator Nail-It Knobs



No.	List Price
669—Porcelain Nail-It Knob	per 100 \$4.00
666—Brown Porcelain Insulators	per 100 4.00

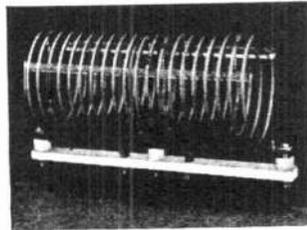


No.	List Price
663—3"	per 100 \$6.00
664—7"	per 100 8.00
667—12"	per 100 20.00
Bakelite Eyes	
963—3"	per 100 \$6.00
964—7"	per 100 8.00

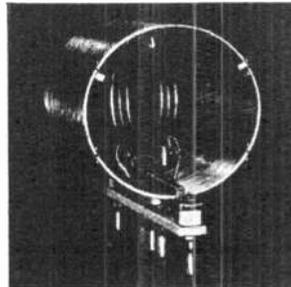
COTO RADIO PRODUCTS

LO-LOSS TRANSMITTING INDUCTORS

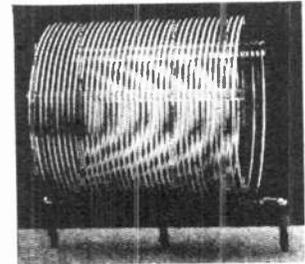
Standard mounting centers for the various groups of inductors, permit the inter-changing of units for All-Band operation.



"Maximum" Condenser Capacity Recommended
160M types 75 Mmf.
All others 35 Mmf.



Mounting Centers
T, TL, & TVL 7 1/2"
B, BT, BTL, BTVL 5 1/2"
A-4"



TYPE 40TL

TYPE 80TVL

TYPE 160BT

Type	Wire Size	No. Turns	Dia.	"Q"	Net
HI-PWR. TANKS					
160T	12	42	5"	480	\$2.34
80T	10	30	4"	500	1.98
40T	10	20	3"	300	1.74
20T	10	10	3"	175	1.38
10T	10	6	2 3/4"	210	1.32
HI-PWR. TANKS (with Fixed Link)					
160TL	12	42	5"	480	\$3.30
80TL	10	30	4"	500	2.94
40TL	10	20	3"	300	2.70
20TL	10	10	3"	175	2.34
10TL	10	6	2 3/4"	210	2.28
HI-PWR. TANKS (with Variable Link)					
160TVL	12	42	5"	480	\$3.90
80TVL	10	30	4"	500	3.54
40TVL	10	20	3"	300	3.30
20TVL	10	10	3"	175	2.94
10TVL	10	6	2 3/4"	210	2.68
ANTENNA					
160A	12	16	5"		\$1.38
80A	10	12	4"		1.23
40A	10	8	3"		.99
20A	10	5	3"		.87

Type	Wire Size	No. Turns	Dia.	"Q"	Net
LO-PWR. TANKS - C.T. BUFFERS					
160BT	14	36	4"	400	\$1.80
80BT	14	34	2 3/4"	390	1.71
40BT	14	22	2 3/4"	270	1.44
20BT	14	10	2 3/4"	200	1.23
10BT	14	6	2 3/4"	180	1.17
LO-PWR. TANKS - C.T. BUFFERS (with Fixed Link)					
160BTL	14	36	4"	400	\$2.76
80BTL	14	34	2 3/4"	390	2.67
40BTL	14	22	2 3/4"	270	2.40
20BTL	14	10	2 3/4"	200	2.19
10BTL	14	6	2 3/4"	180	2.13
LO-PWR. TANKS - C.T. BUFFERS (with Variable Link)					
160BTVL	14	36	4"	400	\$3.36
80BTVL	14	34	2 3/4"	390	3.27
40BTVL	14	22	2 3/4"	270	3.00
20BTVL	14	10	2 3/4"	200	2.79
10BTVL	14	6	2 3/4"	180	2.73
LO-PWR. TANKS - STRAIGHT BUFFERS					
160B.	14	36	4"	400	\$1.65
80B.	14	34	2 3/4"	390	1.59
40B.	14	22	2 3/4"	270	1.29
20B.	14	10	2 3/4"	200	1.08
10B.	14	6	2 3/4"	180	1.02



CONTROL WHEELS

In presenting these CONTROL WHEELS, 'Coto' establishes a new vogue in dial and indicator design for Radio Transmitter and Commercial applications where frequent and accurate adjustments must be made. Created to combine the advantages of both the dial and pointer

type controls, it has that professional appearance, so lacking in the former types.

The Control Wheel proper is moulded of genuine mirror-black bakelite and fitted with a polished nickel plated brass pointer mounted unobtrusively under one of the wheel struts.

DIMENSIONS: { Bakelite Wheel 3 1/4" Dia., Height 1 5/8"
Pointer Radius 1 1/2"; Scale Width 5 1/4"
Bakelite Wheel 2 1/4" Dia., Height 1 1/4"
Pointer Radius 1 1/4"; Scale Width 3 5/8"

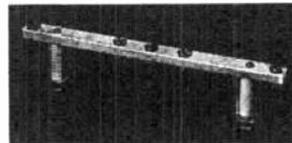
COMPLETE CONTROL WHEELS

CI-40	(3 1/4" size)	NET \$1.50
CI-45	(2 1/4" size)	NET \$1.20

CONTROL WHEELS ONLY

CI-41	(3 1/4" size)	NET \$1.20
CI-46	(2 1/4" size)	NET \$.90

STEATITE MOUNTING BASES



These units offer an accurate and convenient jack assembly for receiving COTO Inductors. The bar and insulators are of Steatite. All hardware is of nickel plated brass. Available in 2, 3 and 5 jack combinations.

Type	For Ind. Type	Jacks	Net
CI-8TM	T	3	\$1.14
CI-8TLM	TL, TVL	5	1.20
CI-8BM	B	2	1.08
CI-8BTM	BT	3	1.14
CI-8BTLM	BTL, BTVL	5	1.20



INDICATOR PLATES

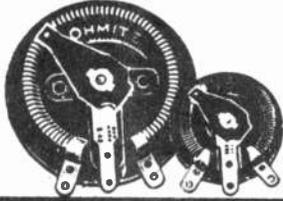
For use with the Control Wheels listed above, although these indicator plates may be mounted above 3 1/4" and 2" round meters. Available only in titles listed.

1. Oscillator	3. Grid	16. Class B. Mod.
2. Osc. Plate	3. Plate	17. Sp. Amp. Plate
3. Buffer	10. Tank	18. Fil. Voltage
4. Buffer Plate	11. Neutralize	19. Plate Voltage
5. Doubler	12. Pwr. Amp. Grid	20. % Modulation
6. Doubler Plate	13. Pwr. Amp. Plate	21. Gain Control
7. Buf. Dblr. Plate	14. Mod. Grid	22. Antenna
	15. Mod. Plate	

CI-42 (For CI-40) size 1 9/16" x 7/16" NET 9c
CI-47 (For CI-45) size 1 1/16" x 5/16" NET 9c

OHMITE RHEOSTATS

O H M I T E VITREOUS ENAMELLED RHEOSTATS



Every particle of material in the rheostats is either porcelain or metal: there is nothing to smoke or char. All models have insulated shafts and provision to keep the units from turning. Wire is wound over a porcelain core which is fused to porcelain base by vitreous enamel. Contact shoe is of metal-impregnated carbon-graphite. Ratings are for open air use. A trouble-free unit of small size and high wattage rating. Ohmite rheostats are also available in Models N, R and U, rated at 300, 500 and 1000 watts respectively.

INSULATED SHAFTS AND BUSHINGS

MODEL "H"—25 Watt Diameter 1 1/4": depth behind panel 1 1/4".					MODEL "K"—100 Watt Diameter 3 1/4": depth behind panel 1 1/4".						
Stk. No.	Total Ohms Resist.	Max. Current Mils.	List Price	Stk. No.	Total Ohms Resist.	Max. Current Mils.	List Price	Stk. No.	Total Ohms Resist.	Max. Current Mils.	List Price
0140	1	5000	\$4.50	0152	125	445	\$4.00	0440	0.5	12500	\$7.50
0141	2	3450	4.00	0153	175	375	4.00	0441	1	10000	7.50
0142	3	2880	4.00	0154	250	315	4.00	0442	2	7070	7.50
0143	6	2040	4.00	0155	350	267	4.00	0443	3	5730	7.50
0144	8	1770	4.00	0156	500	222	4.00	0444	5	4450	7.00
0145	10	1580	4.00	0157	750	173	4.00	0445	7.5	3650	7.00
0146	15	1290	4.00	0158	1000	155	4.50	0446	10	3150	7.00
0147	25	1000	4.00	0159	1500	129	4.50	0447	16	2500	7.00
0148	35	845	4.00	0160	2500	100	4.50	0448	25	2000	7.00
0149	50	709	4.00	0161	3500	84	4.75	0449	50	1420	7.00
0150	75	575	4.00	0162	5000	70	4.75	0450	75	1150	7.00
0151	100	500	4.00					0451	100	1000	7.00

MODEL "J"—50 Watt Diameter 2 1/4": depth behind panel 1 1/4".					MODEL "L"—150 Watt Diameter 4": depth behind panel 1 1/4".						
Stock No.	Total Ohms Resist.	Max. Current Mils.	List Price	Stock No.	Total Ohms Resist.	Max. Current Mils.	List Price	Stock No.	Total Ohms Resist.	Max. Current Mils.	List Price
0308	0.5	10000	\$5.00	0321	150	575	\$4.50	0524	0.5	15000	\$9.50
0309	1	7070	5.00	0322	225	470	4.50	0525	1	12500	9.50
0310	2	5000	5.00	0323	300	405	4.50	0526	2	8650	9.50
0311	4	3500	4.50	0324	500	315	4.50	0527	3	7070	9.50
0312	6	2880	4.50	0325	800	250	4.75	0528	5	5480	9.50
0313	8	2500	4.50	0326	1000	220	4.75	0529	7.5	4470	9.00
0314	12	2040	4.50	0327	1600	176	4.75	0530	10	3880	9.00
0315	16	1760	4.50	0328	2500	140	4.75	0531	15	3163	9.00
0316	22	1500	4.50	0329	3500	119	5.00	0532	25	2450	9.00
0317	35	1190	4.50	0330	5000	100	5.00	0533	35	2070	9.00
0318	50	1000	4.50	0331	8000	79	5.00	0534	50	1735	9.00
0319	80	790	4.50	0332	10000	70	5.00	0535	75	1415	9.00
0320	125	630	4.50					0536	100	1225	9.00

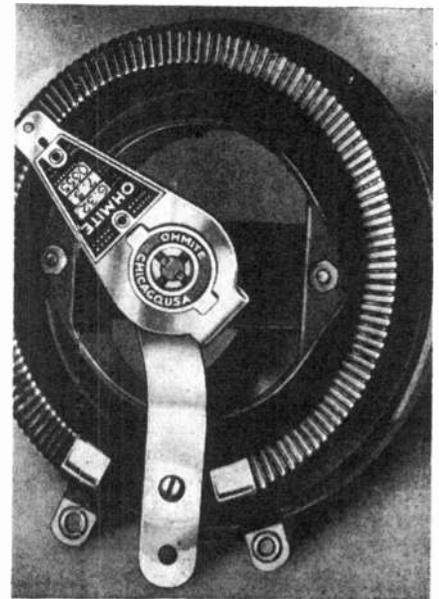
MODEL "N"—300 Watt RHEOSTATS					MODEL "R"—500 Watt RHEOSTATS				
Stock Number	Total Ohms Resistance	Max. Current Milli-amps.	App. No. Steps	List Price	Stock Number	Total Ohms Resistance	Max. Current Milli-amps.	App. No. Steps	List Price
0650	1	17,250	53	\$13.50	0850	1.5	18,200	64	\$19.50
0651	2	12,240	53	13.50	0851	2	15,800	68	19.50
0652	3	10,000	51	13.50	0852	2.5	14,100	69	19.50
0653	4	8,660	77	13.50	0853	3	12,900	61	19.50
0654	5	7,750	72	13.50	0854	4	11,200	64	19.50
0655	7.5	6,320	82	13.50	0855	5	10,000	108	19.50
0656	10	5,480	136	13.50	0856	8	7,900	100	19.50
0657	15	4,470	134	13.50	0857	12.5	6,300	104	19.50
0658	25	3,460	182	13.50	0858	16	5,600	162	19.50
0659	50	2,450	204	13.50	0859	25	4,480	175	19.50
0660	75	2,000	228	13.50	0860	40	3,540	195	19.50
0661	100	1,730	305	\$13.50	0861	80	2,520	315	\$19.50
0662	150	1,410	335	13.50	0862	125	2,000	354	19.50
0663	200	1,220	370	13.50	0863	175	1,690	435	19.50
0664	300	1,000	450	13.50	0864	250	1,410	485	19.50
0665	400	866	450	13.50	0865	325	1,240	483	19.50
0666	700	655	525	13.50	0866	500	1,000	650	19.50
0667	900	578	610	13.50	0867	750	817	555	19.50
0668	1,200	500	560	13.50	0868	1,000	707	775	19.50
0669	1,500	449	650	13.50	0869	1,500	577	930	19.50
0670	1,750	414	660	13.50	0870	2,000	500	900	19.50
0671	2,500	346	700	13.50	0871	2,500	447	900	19.50

DIMENSIONS MODEL "N"

Diameter 6 inches
Depth, behind panel..... 2 1/2 inches

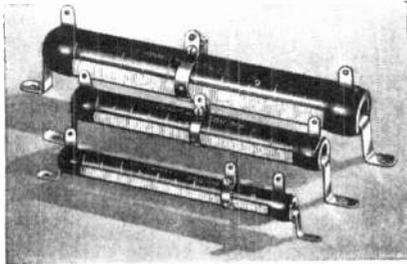
DIMENSIONS MODEL "R"

Diameter 8 inches
Depth, behind panel..... 2 1/2 inches



MODELS "N" and "R"

OHMITE RESISTORS



Dividohm resistors have many different uses. In radio service work they make ideal replacement voltage dividers; because the adjustable lugs make contact on the winding only at one point, several lugs may be used without shorting out much resistance. In experimental work Dividohms are used for adjusting circuits and for obtaining odd resistance values. In electrical production they are used on applications where it is desired to make adjustments at the factory or where varying line voltages must be considered.

10 Watt—25 Watt—50 Watt—75 Watt—100 Watt
160 Watt and 200 Watt Ratings.
With Patented percentage-of-resistance scale.
Patent No. 1,942,496

SIZE 2" x 1 1/16"
Rating—25 Watts in Open Air
Furnished with Brackets.
Mounting Centers 2 3/4".

Stock No.	Ohms Resistance	Max. Current in Mils.	List Price
0360	1	5,000	\$.85
0360B	2	3,540	.85
0361	3	2,890	.85
0362	5	2,240	.85
0362B	7.5	1,890	.85
0363	10	1,580	.85
0364	15	1,290	.85
0364B	20	1,140	.85
0365	25	1,000	.85
0366	50	707	.85
0367	75	577	.85
0368	100	500	.85
0369	150	410	.85
0370	200	354	.85
0371	250	316	.85
0371B	300	289	.85
0371C	400	250	.85
0372	500	224	.85
0373	750	182	.85
0374	800	177	.85
0375	1,000	158	.85
0375B	1,250	141	.85
0376	1,500	129	.85
0377	2,000	112	.85
0377B	2,250	105	.85
0378	2,500	100	.85
0379	3,000	91	.85
0380	3,500	84	.85
0381	4,000	79	.85
0381B	4,500	74	.85
0382	5,000	70	.85
0383	6,000	64	.95
0383B	7,000	60	.95
0383C	7,200	59	.95
0384	7,500	57	.95
0384B	8,000	56	.95
0384C	9,000	53	.95
0385	10,000	50	.95
0386	12,000	44	.95
0387	15,000	34	.95
0388	20,000	26	1.10
0389	25,000	23	1.10

SIZE 4" x 1 1/16"
Rating—50 Watts in Open Air
Furnished with brackets.
Mounting Centers 4 3/4".

Stock No.	Ohms Resistance	Max. Current in Mils.	List Price
0560	5	3,160	\$1.35
0561	10	2,240	1.35
0562	25	1,420	1.35
0563	50	1,000	1.35
0564	75	815	1.35
0565	100	707	1.35
0566	150	577	1.35
0567	200	500	1.35
0568	250	447	1.35
0568B	300	408	1.35
0568C	400	354	1.35
0569	500	316	1.35
0570	750	258	1.35
0571	800	250	1.35
0572	1,000	224	1.35
0572B	1,250	200	1.35
0573	1,500	183	1.35
0574	2,000	158	1.35
0574B	2,250	148	1.35
0575	2,500	142	1.35
0576	3,000	129	1.35
0576B	3,500	120	1.35
0577	4,000	112	1.35
0577B	4,500	105	1.35
0578	5,000	100	1.35
0578B	6,000	91	1.50
0578C	7,000	84	1.50
0578D	7,200	83	1.50
0579	7,500	81	1.50
0580	8,000	79	1.50
0580B	9,000	74	1.50
0581	10,000	70	1.50
0582	12,000	64	1.50
0583	15,000	57	1.50
0584	20,000	48	1.50
0585	25,000	43	1.50
0586	30,000	41	1.70
0587	40,000	35	1.70
0588	50,000	25	1.70
0589	60,000	20	2.00
0590	80,000	15	2.00
0591	100,000	12	2.00

SIZE 6" x 1 1/16"
Rating—75 Watts in Open Air
Furnished with Brackets.
Mounting Centers 6 3/4".

Stock No.	Ohms Resistance	Max. Current in Mils.	List Price
0769	5	3,870	\$1.75
0770	10	2,730	1.75
0771	15	2,230	1.75
0772	25	1,730	1.75
0773	50	1,220	1.75
0774	100	865	1.75
0774B	200	612	1.75
0775	250	545	1.75
0775B	300	500	1.75
0775C	400	424	1.75
0776	500	387	1.75
0777	750	316	1.75
0777B	800	308	1.75
0778	1,000	274	1.75
0778B	1,250	245	1.75
0779	1,500	223	1.75
0780	2,000	193	1.75
0780B	2,250	182	1.75
0781	2,500	173	1.75
0781B	3,000	158	1.75
0782	3,500	146	1.75
0782B	4,000	137	1.75
0782C	4,500	129	1.75
0783	5,000	122	1.75
0783B	6,000	112	2.00
0783C	7,000	103	2.00
0783D	7,200	102	2.00
0784	7,500	100	2.00
0784B	8,000	98	2.00
0784C	9,000	92	2.00
0785	10,000	86	2.00
0785B	12,000	79	2.00
0786	15,000	70	2.00
0787	20,000	61	2.00
0788	25,000	52	2.00
0789	30,000	47	2.25
0790	35,000	38	2.25
0791	40,000	33	2.25
0792	45,000	28	2.25
0793	50,000	25	2.25
0794	60,000	19	2.50
0795	80,000	17	2.50
0796	100,000	13	2.50

SIZE 6 1/2" x 7/8"
Rating—100 Watts in Open Air
Furnished with brackets.
Mounting Centers 7 3/4".

Stock No.	Ohms Resistance	Max. Current in Mils.	List Price
0956	5	4,470	\$2.00
0957	10	3,160	2.00
0958	25	2,000	2.00
0959	50	1,414	2.00
0960	100	1,000	2.00
0961	500	447	2.00
0962	1,000	316	2.00
0963	2,500	200	2.00
0964	5,000	141	2.00
0965	10,000	100	2.25
0966	15,000	81	2.25
0967	20,000	70	2.25
0968	25,000	50	2.25
0969	30,000	51	2.50
0970	40,000	38	2.50
0971	50,000	28	2.50
0972	75,000	16	2.75
0973	100,000	14	2.75

SIZE 8 1/2" x 1 1/4"
Rating—160 Watts in Open Air
Furnished with brackets.
Mounting Centers 9 3/4".

Stock No.	Ohms Resistance	Max. Current in Mils.	List Price
1156	5	5,660	\$2.50
1157	10	4,000	2.50
1158	25	2,530	2.50
1159	50	1,788	2.50
1160	100	1,266	2.50
1161	500	566	2.50
1162	1,000	400	2.50
1163	2,500	253	2.50
1164	5,000	179	2.50
1165	10,000	126	2.50
1166	15,000	103	2.90
1167	20,000	89	2.90
1168	25,000	80	2.90
1169	30,000	73	2.90
1170	40,000	55	2.90
1171	50,000	43	2.90
1172	75,000	27	3.25
1173	100,000	18	3.25



"Brown Devil"
Fixed Resistors
and
"DIVIDOHM"
Adjustable
Resistors



20 WATT — 2" x 1/2"

Ohms	Mils	Volts	Ohms	Mils	Volts	Ohms	Mils	Volts
30,000	21	635	55,000	11	550	80,000	8	693
35,000	18	648	60,000	10	600	85,000	7	635
40,000	17	694	65,000	10	650	90,000	6.5	600
45,000	13	585	70,000	9	650	95,000	6	600
50,000	11	550	75,000	9	670	100,000	6	633
List Price		\$.75	List Price		\$.100	List Price		\$.100

VITREOUS ENAMELED — 10 WATT — 1 1/4" x 3/8"

Ohms	Mils	Ohms	Mils	Ohms	Mils	Ohms	Mils	Ohms	Mils
1	3150	100	315	800	111	3500	51	12500	20
2	2230	150	258	900	105	4000	47	15000	18
3	1825	200	223	1000	100	4500	44	17500	17
5	1415	250	200	1200	91	5000	40	18000	16
7.5	1155	300	182	1250	89	6000	36	20000	15
10	1000	350	169	1500	79	7000	33	22500	15
15	815	400	158	1750	74	7800	32	25000	14
20	707	500	141	2000	69	8000	31	30000	8
25	630	600	129	2250	64	8500	30	40000	7
50	447	700	119	2500	61	10000	24	45000	6
75	365	750	115	3000	56	12000	20	50000	6

List Price, Brown Devils (1 to 50,000 Ohms).....\$0.40
List Price, Dividohms (1 to 10,000 Ohms only).....\$.60

I. R. C. WIRE WOUND RESISTORS

Moisture Proof—Greater Load Capacity—Greater Mechanical Strength—Lower Surface Temperature—Longer Life



Built to stand overloads, intense heat, dampness and humidity—even salt water immersion—these unique IRC Cement Coated Power Wire Wound Resistors have proved their worth in the most exacting electrical requirements and for all radio receiver and transmitting equipment. Due to their durable Cement Coating, non-hygroscopic ceramic core, careful winding with only the highest quality resistance wire and special IRC construction, you'll find these by far the coolest, longest-lived power resistors for every service replacement, amateur, experimental and broadcasting need.



ADJUSTABLES TYPES

10 WATTS
Type ABA-1 3/4" x 5/16"
Extra Bands List \$0.10
All Ranges List \$0.60

1 ohm	3150
2 "	2210
3 "	1830
5 "	1420
7.5 "	1150
10 "	1000
15 "	820
20 "	720
25 "	640
50 "	440
75 "	360
100 "	315
150 "	260
200 "	220
250 "	200
300 "	175
350 "	160
400 "	157
500 "	140
600 "	125
750 "	115
800 "	112
1,000 "	100
1,250 "	99
1,450 "	83
1,500 "	83
2,000 "	71
2,250 "	67
2,500 "	63
3,000 "	57
3,500 "	53
4,000 "	50
4,500 "	47
5,000 "	45
6,000 "	41
7,000 "	37
7,500 "	36
8,000 "	35
8,500 "	34
9,000 "	33
10,000 "	31

25 W. DHA—Cont'd
List \$1.10

20,000 ohms	35
25,000 "	32

50 WATTS

Type EPA-4 1/2" x 3/4"
Mtg. Brackets Incl.
Extra Bands List \$0.10

List \$1.35	
5 ohms	3165
10 "	2230
25 "	1390
50 "	1000
75 "	810
100 "	700
150 "	440
200 "	550
250 "	500
300 "	410
350 "	375
400 "	350
500 "	300
750 "	250
800 "	248
1,000 "	215
1,250 "	195
1,500 "	185
2,000 "	155
2,500 "	135
3,000 "	120
4,000 "	105
5,000 "	95
List \$1.50	
6,000 ohms	85
7,500 "	77
8,000 "	75
8,500 "	66
9,000 "	63
10,000 "	56
20,000 "	48
25,000 "	43

80 W. ESA—Cont'd
List \$2.00

6,000 ohms	122
7,500 "	100
8,000 "	98
10,000 "	86
15,000 "	70
20,000 "	81
25,000 "	55

List \$2.25

30,000 ohms	50
35,000 "	47
40,000 "	43
45,000 "	41
50,000 "	39

List \$2.50

60,000 ohms	55
80,000 "	30
0.1 meg.	27

100 WATTS

Type HAA-6 1/2" x 1 1/8"
Mounting Brackets Included

Extra Bands List \$0.15
List \$2.00

100 ohms	1000
200 "	710
400 "	500
500 ohms	447
750 "	365
1,000 "	318
1,500 "	250
2,000 "	220
2,500 "	200
3,000 "	180
4,000 "	155
5,000 "	140

List \$2.25

6,000 ohms	130
7,500 "	115
8,000 "	110
10,000 "	100
15,000 "	80
20,000 "	70
25,000 "	63

List \$2.50

30,000 ohms	58
40,000 "	50
50,000 "	44

List \$2.75

60,000 ohms	41
75,000 "	36
0.1 meg.	31

200 WATTS

Type HOA-10 1/2" x 1 1/8"
Mounting Brackets Included

Extra Bands List \$0.15—Net \$0.09
List \$3.00

100 ohms	1414
500 "	632
1,000 "	447
1,500 "	365
2,000 "	316
2,500 "	283
3,000 "	258
5,000 "	200
10,000 "	141

List \$3.50

5,000 ohms	115
20,000 "	100
25,000 "	90
30,000 "	81
40,000 "	70
50,000 "	63
60,000 "	57
75,000 "	51
0.1 meg.	44

25 WATTS

Type DHA-2 1/2" x 9/16"
Extra Bands List \$0.10

List \$0.85	
1 ohm	5000
3 "	2850
5 "	2200
10 "	1580
15 "	1290
25 "	1000
50 "	710
75 "	575
100 "	400
150 "	353
200 "	320
250 "	289
300 "	250
400 "	224
500 "	182
750 "	177
800 "	158
1,000 "	141
1,250 "	129
1,500 "	112
2,000 "	105
2,250 "	100
2,500 "	91
3,000 "	84
3,500 "	79
4,000 "	71

List \$1.70

30,000 ohms	30
40,000 "	34
50,000 "	30

List \$2.00

60,000 ohms	28
75,000 "	25

80 WATTS

Types ESA-6 1/2" x 3/4"
Mtg. Brackets Incl.

Extra Bands List \$0.10
List \$1.75

5 ohms	4000
10 "	2730
15 "	2230
25 "	1730
50 ohms	1220
100 "	865
200 "	612
250 "	545
300 "	500
400 "	430
500 "	387
750 "	316
800 "	305
1,000 "	274
1,500 "	223
2,000 "	193
2,500 "	173
3,000 "	158
3,500 "	145
4,000 "	137
5,000 "	122

List \$0.95

6,000 ohms	64
7,500 "	58
8,000 "	56
9,000 "	53
10,000 "	50
12,000 "	45
15,000 "	41

IRC PRECISION
WIRE WOUND RESISTORS

Designed for Use in Radio and Electrical Equipment That Aims at Perfection

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 volt-meters and milliameters, and for other equipment such as faders, gain control pads, etc. Normal tolerance is 1%. Closer tolerances may be obtained at slightly higher prices as follows: for 1/2% tolerance add 10%; for 1/4% of 1% add 15%; for 1/10 of 1% add 25%.



Type WW-4
1" x 1 1/8"



Type WW-1 2 1/8" x 1 1/8"
Type WW-2 2 1/8" x 7/8"

	WW-4 List	WW-1 List
0.1; 0.5; 1; 10; 25; 50; 100; 200; 250; 300 and 500 ohms	\$.85	\$1.15
1,000; 1,500 and 2,000 ohms	.90	1.15
2,500 ohms	.90	1.25
4,000; 5,000; 7,500 and 10,000 ohms	1.00	1.25
12,500 and 15,000 ohms	1.10	1.35
20,000; 22,500; 25,000; 30,000; 40,000 and 50,000 ohms	1.35	1.60
60,000 and 75,000 ohms	1.60	1.90
0.1 meg	1.85	2.10
0.125 meg	2.10	2.40
0.15; 0.175 and 0.2 meg	2.35	2.65
0.225 and 0.25 meg	2.60	2.90
0.3 meg	2.85	3.15
0.4 meg	3.00	3.15
0.5 meg	3.40	3.65
Type WW-2		
0.6 meg	\$ 4.25	
0.75 meg	4.50	
0.9 meg	4.75	
1.0 meg	5.25	
1.5 meg	7.50	
2.0 meg	10.00	
2.5 meg	12.50	

For list prices of odd ranges not shown, use same price as given for next higher size.

Type WW-3 (9/16" x 9/16") with wire leads or lug terminals obtainable on special order at same price as WW-4. Made in all ranges from 1 ohm to 0.15 meg.

WW-4 with wire lead terminals instead of lugs is available on special order.

GENERAL ELECTRIC CONDENSERS

TRANSMITTER CAPACITORS

General Electric d-c capacitors are guaranteed for continuous operation at voltages up to 10 per cent above the rated values shown below. Capacitors may be installed in any position.

PYRANOL

The high quality of General Electric Pyranol Transmitter capacitors is the result not only of extensive research into the design and manufacture of capacitors, but also of wide application experience. Thousands of units are in service in broadcasting sta-



TREATED

tions, in commercial transmitters, on shipboard, on airplanes—all over the world. Materials closely controlled as to quality, manufacturing processes under careful engineering and laboratory supervision, years of tested application experience—all these combine

Mu f	Model	List Price	*Retail Net Price	Net Wt in Lb
600 VOLTS D-C				
1	23F1	\$2.75	\$1.65	$\frac{3}{8}$
2	23F2	3.50	2.10	$\frac{1}{2}$
4	23F4	4.50	2.70	$\frac{5}{8}$
10	23F8	9.00	5.40	1 $\frac{1}{2}$

Mu f	Model	List Price	*Retail Net Price	Net Wt in Lb
1000 VOLTS D-C				
1	23F10	3.00	1.80	$\frac{7}{8}$
2	23F11	4.50	2.70	1 $\frac{1}{2}$
4	23F13	7.00	4.20	1
5	23F14	8.00	4.80	1 $\frac{1}{4}$
10	23F17	11.00	6.60	2
15	23F19	13.50	8.10	3 $\frac{1}{8}$

Mu f	Model	List Price	*Retail Net Price	Net Wt in Lb
1500 VOLTS D-C				
1	23F20	3.75	2.25	1 $\frac{1}{2}$
2	23F21	6.25	3.75	2 $\frac{1}{8}$
4	23F23	9.00	5.40	1 $\frac{1}{2}$
5	23F24	11.00	6.60	1 $\frac{7}{8}$
10	23F27	17.00	10.20	3 $\frac{1}{2}$
15	23F29	22.00	13.20	5 $\frac{1}{2}$

Mu f	Model	List Price	*Retail Net Price	Net Wt in Lb
2000 VOLTS D-C				
1	23F30	5.25	3.15	3 $\frac{3}{8}$
2	23F31	8.00	4.80	1 $\frac{5}{8}$
4	23F33	11.00	6.60	2 $\frac{1}{8}$
5	23F34	13.00	7.80	2 $\frac{1}{2}$
10	23F37	19.00	11.40	5
12	23F38	21.00	12.60	6

Mu f	Model	List Price	*Retail Net Price	Net Wt in Lb
2500 VOLTS D-C				
1	23F39	14.00	8.40	1 $\frac{1}{3}$
2	23F40	17.00	10.20	2
4	23F41	25.00	15.00	4

Mu f	Model	List Price	*Retail Net Price	Net Wt in Lb
3000 VOLTS D-C				
1	23F42	18.00	10.80	2 $\frac{3}{4}$
2	23F43	23.00	13.80	3 $\frac{1}{2}$
4	23F44	30.00	18.00	5 $\frac{1}{2}$

Mu f	Model	List Price	*Retail Net Price	Net Wt in Lb
4000 VOLTS D-C				
.5	23F45	23.00	13.80	2 $\frac{5}{8}$
1	23F46	26.00	15.60	3 $\frac{1}{2}$
2	23F47	30.00	18.00	5 $\frac{1}{2}$

Mu f	Model	List Price	*Retail Net Price	Net Wt in Lb
5000 VOLTS D-C				
.5	23F48	25.00	15.00	2 $\frac{3}{4}$
1	23F49	30.00	18.00	4 $\frac{3}{4}$
2	23F50	34.00	20.40	6 $\frac{3}{4}$

AEROVOX TRANSMITTING CONDENSERS



AEROVOX "HYVOL" OIL-FILLED CONDENSERS

In Rectangular Metal Cans

Selected paper section condensers filled and impregnated with "Hyvol," the new super-dielectric oil. Hermetically-sealed, leak-proof containers. High-tension pillar terminals. Mounting lugs at bottom. Extremely compact yet intended for heavy-duty continuous service in transmitters, amplifiers, etc.

Type	D.C. Volts	Cap. Mfd.	Size -in. L. - W. - D.	List Price
Type 609—600 V. D.C.	609	1	2 1/4 x 1 1/2 x 1 1/8	\$2.75
	609	2	2 3/8 x 1 1/2 x 1 1/8	3.50
Type 1009—1000 V. D.C.	1009	1	3 3/8 x 2 1/2 x 1 1/8	4.50
	1009	2	3 1/2 x 2 1/2 x 1 1/8	3.00
	1009	4	4 x 2 1/2 x 1 1/8	4.50
Type 1509—1500 V. D.C.	1509	1	4 3/4 x 2 1/2 x 1 1/8	5.00
	1509	2	4 x 2 1/2 x 1 1/8	3.75
	1509	4	4 1/2 x 2 1/2 x 1 1/8	5.50
Type 2009—2000 V. D.C.	2009	1	4 3/4 x 3 3/4 x 1 1/8	8.00
	2009	2	4 1/2 x 2 1/2 x 1 1/8	4.50
	2009	4	4 x 3 3/4 x 1 1/8	6.00

AEROVOX "HYVOL" OIL-FILLED CONDENSERS

In Round Aluminum Cans

Pure linen paper dielectric, impregnated and filled with the new super-dielectric oil, "Hyvol." Convenient round can, provided with ring mounting. High-voltage pillar terminals. Hermetically sealed and leak-proof container. Very conservative ratings for continuous operation, and therefore larger than inverted screw-mounting series.



Type	D.C. Volts	Cap. Mfd.	Size-ins. Dia.-Hgt.	List Price
1005	1000	1	2 x 5 1/4	\$2.70
1005	1000	2	2 x 5 1/4	3.35
1005	1000	4	2 1/2 x 5 1/4	4.85
1505	1500	1	2 x 5 1/4	2.85
1505	1500	2	2 1/2 x 5 1/4	3.90
2005	2000	1	2 x 5 1/4	3.55
2005	2000	2	2 1/2 x 5 1/4	4.75

Type 1005—1000 V. D.C.
Type 1505—1500 V. D.C.
Type 2005—2000 V. D.C.

AEROVOX "HYVOL" OIL-FILLED FILTER CONDENSERS

In Round Aluminum Cans—Inverted Mounting



Designed for inverted screw mounting with can grounded. With insulating washer, can may be insulated from metal chassis if preferred. Extremely compact for use in crowded assemblies. Hermetically sealed. Leakage-proof. Used extensively in filter circuits of power supplies, high-gain, high-fidelity amplifiers, television circuits, transceivers, etc.

Type	D.C. Volts	Cap. Mfd.	Size-Ins. Dia.-High	List Price
Type 610—600 V. D.C.	600	1	1 1/2 x 2 3/4	\$2.25
	600	3	1 1/2 x 4 1/2	2.75
	600	4	1 1/2 x 4 1/2	3.00
Type 1010—1000 V. D.C.	1000	1	1 1/2 x 2 3/4	2.25
	1000	2	1 1/2 x 4 1/2	2.75
Type 1510—1500 V. D.C.	1500	1	1 1/2 x 2 3/4	3.00
	1500	1	1 1/2 x 4 1/2	3.50

HIGH-VOLTAGE MOULDED MICA CONDENSERS



Type 1450
Size 1 1/4" x 1 1/4"



Types 1455-57
Size 1 1/4" x 1 3/8"



Types 1650-54
Size 1 1/8" x 1 1/4"

Type 1450 Test Voltage 1000v. D.C.			
Cap. Mfd.	List Price	Cap. Mfd.	List Price
.0001	\$.25	.002	\$.35
.00015	.25	.003	.40
.0002	.25	.004	.45
.00025	.25	.005	.45
.00037	.25	.006	.55
.0005	.25	.01	.70
.001	.30	.02	.95

Type 1455 Test Voltage 1000v. D.C.			
Cap. Mfd.	List Price	Cap. Mfd.	List Price
.0005	\$.35	.001	\$.40
.0001	.35	.002	.45
.00025	.35	.01	.80
.0005	.35	.02	1.20

Type 1456 Test Voltage 2500v. D.C.			
Cap. Mfd.	List Price	Cap. Mfd.	List Price
.00005	\$.60	.001	\$.75
.0001	.60	.002	.95
.00025	.60	.006	1.70
.0005	.60	.01	2.35

Type 1457 Test Voltage 5000v. D.C.			
Cap. Mfd.	List Price	Cap. Mfd.	List Price
.00005	\$.70	.0005	\$1.25
.0001	.70	.001	1.50
.00025	.90	.002	2.25

Type 1650 Test Voltage 1000v. D.C.			
Cap. Mfd.	List Price	Cap. Mfd.	List Price
.00005	\$.40	.001	\$.50
.0001	.40	.006	.85
.00015	.40	.01	1.15
.00025	.40	.02	1.85
.0005	.40	.05	3.85

Type 1651 Test Voltage 2500v. D.C.			
Cap. Mfd.	List Price	Cap. Mfd.	List Price
.00005	\$.70	.002	\$1.35
.00025	.70	.006	1.75
.0005	.70	.01	2.80
.001	.90	.02	3.95

Type 1652 Test Voltage 5000v. D.C.			
Cap. Mfd.	List Price	Cap. Mfd.	List Price
.00005	\$.90	.001	\$1.50
.0001	.90	.002	2.25
.00025	1.05	.006	3.50
.0005	1.25	.01	4.10

Type 1653 Test Voltage 7500v. D.C.			
Cap. Mfd.	List Price	Cap. Mfd.	List Price
.00005	\$1.10	.001	\$2.40
.0001	1.30	.002	3.20
.0002	1.50	.003	4.00
.00025	1.65	.004	4.50
.0005	2.00	.005	5.00

Type 1654 Test Voltage 10000v. D.C.			
Cap. Mfd.	List Price	Cap. Mfd.	List Price
.00005	\$1.25	.0005	\$2.75
.0001	1.60	.001	3.50
.00025	2.10	.002	5.00

PORCELAIN CASED MICA CONDENSERS

Ideal for those higher-frequency applications. Encased and hermetically sealed in glazed porcelain case. Heavy-duty terminals. Power loss due to dielectric absorption reduced to a minimum. Units operate at full load without heating up. Dimensions: 3 1/4" between mounting holes, 4" overall by 3" high.



Type	Cap. Mfd.	Max. D.C.V.	List Price
1996	.00005	12500	\$3.75
1996	.0001	12500	3.75
1996	.00025	12500	3.75
1996	.0005	12500	4.25
1994	.0005	7000	3.75
1992	.001	3500	3.75
1994	.001	7000	4.25
1996	.001	12500	5.00
1992	.0015	3500	4.00
1994	.0015	7000	4.75
1996	.0015	12500	5.50
1992	.002	3500	4.25
1994	.002	7000	5.25
1995	.002	10000	6.00
1996	.002	12500	6.50
1992	.003	3500	5.00
1994	.003	7000	6.00
1995	.003	10000	7.00
1996	.003	12500	8.00
1992	.005	3500	6.00
1994	.005	7000	7.00
1995	.005	10000	9.50
1992	.01	3500	7.00
1994	.01	7000	9.50
1991	.02	2000	7.00
1992	.02	3500	8.75
1992	.05	3500	11.50
1991	.1	2000	11.00

SANGAMO CONDENSERS

**TYPE A-10
1000 V. DC TEST**

Capacity, mfd.	List Price	Capacity, mfd.	List Price
.00005	\$.40	.005	.70
.0001	.40	.006	.85
.00015	.40	.008	1.00
.0002	.40	.01	1.15
.00025	.40	.012	1.20
.0005	.40	.015	1.25
.001	.50	.02	1.85
.0015	.50	.025*	2.30
.002	.50	.03*	2.50
.003	.60	.04*	3.25
.004	.60	.05*	3.85

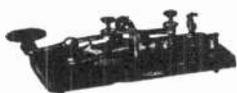
**TYPE A-25
2500 V. DC TEST**

Capacity, mfd.	List Price	Capacity, mfd.	List Price
.00005	\$.70	.003	1.55
.0001	.70	.004	1.55
.00015	.70	.005	1.75
.0002	.70	.006	1.75
.00025	.70	.008	2.25
.0005	.70	.01	2.80
.001	.90	.015*	3.35
.0015	1.15	.02*	3.95
.002	1.35	.025*	4.40

**TYPE A-50
5000 V. DC TEST**

Capacity, mfd.	List Price	Capacity, mfd.	List Price
.00005	\$.90	.002	2.25
.0001	.90	.003*	2.75
.00015	1.00	.004*	3.15
.0002	1.05	.005*	3.30
.00025	1.05	.006*	3.50
.0005	1.25	.008*	3.80
.001	1.50	.01*	4.10

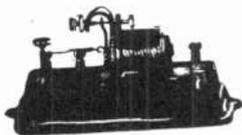
SIGNAL KEYS



112-K
KEY

This key is designed for learners who want something that is scientifically correct but moderate in price. Has black enamel metal base and is mounted on a mahogany finished wood base. Key lever is nickel plated. Contact points are platinum.

List \$2.25



PONY RELAY

All the metal parts on this pony relay are brass with lacquer finish, excepting armature which is polished and plated steel. Magnets are non-adjustable. Mounted on a mahogany finished wood sub base and cast iron black enamel base.

List

- M-104—4 Ohm \$5.50
- M-105—20 Ohm 5.75
- M-106—50 Ohm 6.00
- M-107—75 Ohm 6.50

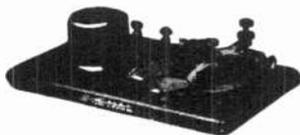


R-48
KEY

The beginner in the field of wireless approves this 1/4 K. W. Key for its desirability and inexpensiveness. It is well made with polished key lever and lacquered parts. Contact points are platinum.

List \$2.80

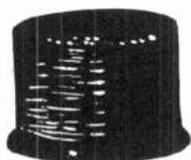
R-68 PRACTICE SET



Designed for those who want a well made instrument to learn the code. Set consists of a key and high frequency buzzer mounted on a mahogany finished wood base equipped with binding posts. The code is printed on a plate and fastened to the base between the key and buzzer. Buzzer is adjustable.

List \$3.40

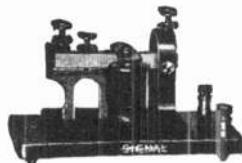
R-60 BUZZER



The R-60 high frequency buzzer is the same type used on the R-68 Wireless Practice Set. It is adjustable and has a standard resistance of 2 Ohms.

Finish is black crystallized lacquer.

List \$1.40

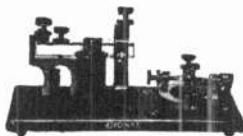


SOUNDER

The tone quality and instant action of this correctly designed sounder are well and widely known. All adjustments are simple and accurate. Bar frame is black enamel and has an aluminum sounding bar, brass bridge and black lacquered steel sounder plate. It is mounted on a mahogany finished wood base equipped with binding posts.

List

- 112-S—4 Ohm \$3.00
- 113-S—20 Ohm 3.50



LEARNER SET

On city, private and short lines learners will find this instrument easy to handle and having a clear, distinct tone. Bar frame and key base are black enamel, the bridge is brass, sounding bar is aluminum with black lacquered steel sounder plate. Key lever is nickel plated. Sounder and key are mounted on a mahogany finished wood base.

List

- M-110—4 Ohm \$5.00
- M-111—20 Ohm 5.50



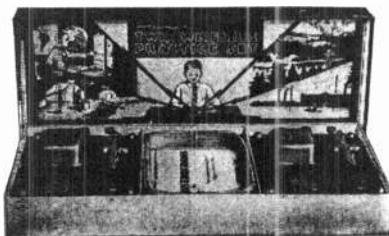
STANDARD KEY

This standard wireless key is designed to carry heavy currents. All brass construction with lacquer finish. Furnished with 3 16, 1/4 or 3/8 inch coin silver contacts. Navy type key knob.

List

- R-62—3/16" contacts \$3.85
- R-63—1/4" contacts 4.00
- R-64—3/8" contacts 4.25

R-70 TWIN PRACTICE SET



In this practice set is represented value that appeals to the beginner. Set includes two R-69 instruments, 75 feet of wire and instruction manual packed in an attractive, illustrative box.

List \$3.50

40

World Radio History

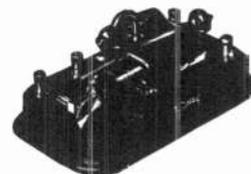
M-100
KEY



For rapid transmitting this key is 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.

List \$3.00

COMMERCIAL RELAY



The commercial relay is well designed and constructed for long, continuous service on commercial lines. Heel iron and armature are made of Norway iron. Has rubber covered adjustable coils. Mounted on mahogany finished wood sub base and cast iron black enamel base.

List

- 916—150 Ohm \$12.50
- 917—250 Ohm 12.75

KEY
R-50



For the amateur who wants an inexpensive, high grade wireless key, here is the proper instrument. It is equipped with a heavy, cast, well insulated base in a black finish, coin silver contacts, composition knob and nickel parts.

List \$1.50

R-69 PRACTICE SET



The R-69 Practice Set is for those who want an inexpensive instrument. Consists of a key lever, non-adjustable buzzer and code plate mounted on a metal base equipped with binding posts and rubber feet. Has maroon finished base and gold lacquered key lever and buzzer cover.

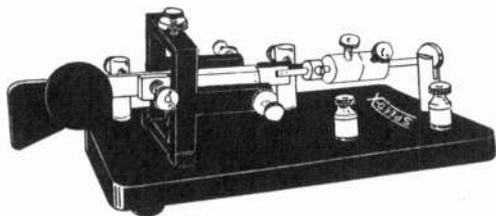
List \$1.75

SPEED-X KEYS

SPEED-X "HI-SPEED" SEMI AUTOMATIC KEYS

Our "HI-SPEED" models are of standard, time-tested design and construction that have met the approval of experienced amateurs and commercial users throughout the world. They are fully adjustable from lowest to highest speeds—ruggedly built to hold adjustment at all speeds—pure coin silver contacts. They are unconditionally guaranteed to meet the requirements of the most exact user. Furnished in 4 distinct attractive models. Left hand keys in all models \$2.00 List extra.

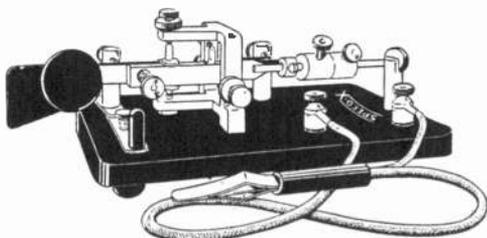
AMATEUR MODEL No. 515 LIST \$9.25



The Speed-X model 515 was designed for the amateur who demands a durable, heavy-duty Speed Key. The parts are finished in statuary bronze and the brown wrinkle on the base and casting make this an outstanding key in appearance. The same standard construction used on all of our speed keys is one of the features of this key. No switch or plug.

Base 3"x6 1/4"x3/8" Weight 2 1/2 lbs.

STANDARD MODEL No. 500 LIST \$13.50



Satisfied users all over the world and is rapidly becoming the universal Hi-Speed Key, used by amateurs and professionals alike. Adjustable from 8 words per minute to as high a rate as is desired. It has standard construction used throughout. Solid coin silver contacts. Heavy construction will hold adjustment at all speeds. Black wrinkled base and casting. All machine parts nickel plated. Complete with switch, cord and plug.

Base 3 1/2"x6 1/4"x1 1/2" Weight 3 1/2 lbs.

PROFESSIONAL MODEL No. 501 LIST \$17.50

Heavy Duty Hi-Speed Key, 1/4 inch coin silver contacts, pigtail connections to the vibrator arm, no current through the bearings. Vibrator arm extra fast and Dot U spring designed for heavy duty work. Polished Chromium on all machine parts and base.

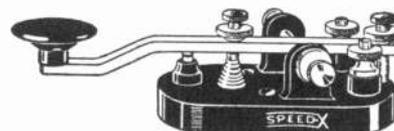
SPEED-X MOULDED BAKELITE MANUAL KEYS



Practice Type 300

The practice key is well built and inexpensive for the beginner. The base is moulded of Walnut Bakelite, all machine parts are finished in statuary bronze, this makes a very attractive combination. Perfect action—Simple adjustments, Coin Silver Contacts.

No. 300—Practice Key List \$1.50



Amateur Type 301

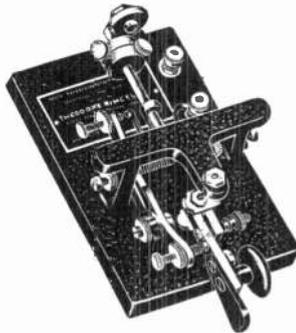
A new and outstanding development—a general purpose type—moulded Bakelite base—pigtail connections eliminates insulation problems—no current on bearings—coin silver contacts—all metal parts nickel plated.

- No. 301—Bakelite Key List \$2.15
- No. 301S—Bakelite Key with Switch List \$2.50
- No. 302—Model 301 with 1/4-in. Contacts . . . List \$2.40
- No. 302S—With Switch List \$2.75

MAC KEYS

**NEW 1938
Standard
MAC KEY**

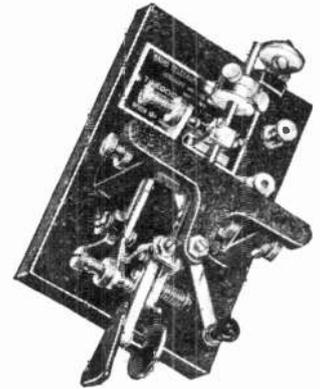
In all essential respects, this is the same MAC KEY as the Deluxe Model described above. Minor economies have been made to bring this semi-automatic key within reach of all operators. Base is black crackle finish. Metal parts are nickel-plated. Has big contacts and large adjustment screws. A bargain for those operators who want a real speed key, of championship calibre—for as little money as possible. New 1938 Standard Model



MAC KEY, NET PRICE **\$7.50**

**NEW 1938
Deluxe MAC KEY**

Here is a semi-automatic key so beautifully balanced and designed, that speedy, tireless, rhythmic sending is now easy for any operator. Has a remarkable new dot stabilizer, a specially tensioned Swedish steel mainspring, a big solid base that "stays put," large adjustment screws, big silver contacts. Pins and screws are case hardened. Flexible pig-tails carry current to both main lever and dash lever—so the case-hardened oversized pins may be treated for rust proofing. Bakelite used throughout—no fibre. All metal parts are chrome-plated.



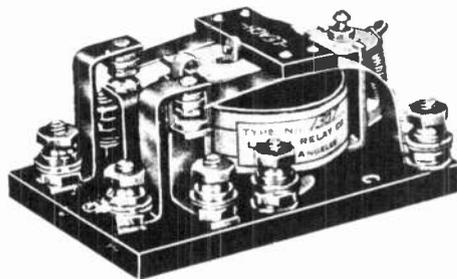
New 1938 Deluxe Model MAC KEY. NET PRICE **\$9.50**

LEACH RELAYS

Small Size Circuit Control Relays

Alternating and Direct Current

Type Numbers and Prices

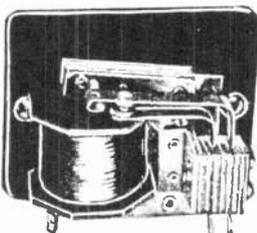


Type Number	D.C.	A.C.		Price
1201	1301	SPST	Double break. Normally open	\$5.00
1202	1302	SPST	Double break. Normally closed	5.00
1203	1303	SPDT	Double break	6.00
1204	1304	DPST	Single break. Normally open	5.50
1205	1305	DPST	Single break. Normally closed	5.50
1206	1306	DPST	Single break. Normally 1 open, 1 closed	5.50
1207	1307	DPDT	Single break	7.00
1211	1311	Same as 1201 & 1301	except locks-in electrically	7.00
1212	1312	Same as 1202 & 1302	except locks-in electrically	7.00
1213	1313	Same as 1203 & 1303	except locks-in electrically	8.00
1214	1314	Same as 1204 & 1304	except locks-in electrically	7.50
1215	1315	Same as 1205 & 1305	except locks-in electrically	7.50
1216	1316	Same as 1206 & 1306	except locks-in electrically	7.50
1217	1317	Same as 1207 & 1307	except locks-in electrically	9.00

GUARDIAN RELAYS

Guardian Keying-Relay

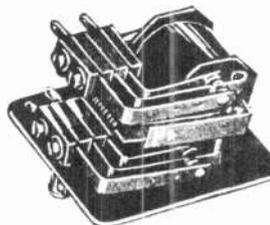
The exceptional speed of this "Guardian" Keying Relay, combined with its strong magnet coil and return spring, assures a clean make and break that will give the very best C.W. note and make copying easy.



MODEL K-100 GUARDIAN KEYING RELAY Contacts will handle up to 5,000 volts Operates on 5 to 15 volts AC. YOUR COST... **\$3.30**

Guardian Break-In Relay

MODEL B-100 RELAY is essentially a double-throw switch that is actuated by opening or closing a switch in the 110 volt AC line supplying power to its magnet coil. A frequently employed installation is to have the B-100 connect the antenna and plate voltage to the receiver when open. Closing a toggle switch in the 110 volt circuit to the relay magnet, placed near the key, 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. Many other desirable applications can be made.

MODEL B-100 GUARDIAN BREAK-IN RELAY. YOUR COST **\$4.50**

(Model B-100 is also supplied with closing coil for any other desired AC or DC voltage. Price on request).

Guardian Adjustable Overload Relay

Easily set to open 110 V. input when plate currents exceed any value from 150 to 500 m.a. When current exceeds desired value relay armature closes, opening contacts which are usually placed in plate power transformer primary. Pushing reset button on panel restores circuit only if overload has been removed.

MODEL X-100 — GUARDIAN ADJUSTABLE OVERLOAD RELAY. YOUR COST **\$7.20**

LITTLEFUSE FUSES

INSTRUMENT *high speed* LITTELFUSES

Designed especially for the protection of delicate test equipment, galvanometers, microameters, milliameters, volt meters, etc. Glass enclosed; 1" x 1/4" dia. accurately rated, high speed action, short time lag. Voltage rating up to 250 volts AC or DC. For higher voltages use fuses in series.



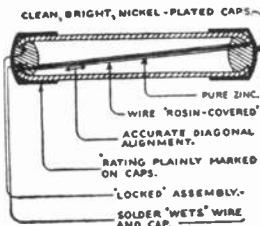
(\$100 protection guaranty against meter burnouts.)

APPLICATIONS

Cat. No.	Amperes Current Rating	Max. Load M.A.	Aver. Resist. 5 M.A. Load	Volt-Meter Ohms Per Volt	All Magnetic Movements	Thermo-Couples Types	List Price
1000	1/200	5	500	over 1000	Galvanometer	Up to 0-	5
1001	1/100	10	110	1000	Up to 0- 1	0- 5 to 0-	.20
1002	1/32	25	20	500-1000	0- 1 to 0- 10	0- 10 to 0-	.20
1003	1/16	60	5.0	100-500	0- 10 to 0- 25	0- 25 to 0-	.20
1004	1/8	100	3.0	20-100	0- 25 to 0- 75	0- 75 to 0-	.15
1004L	1/8	100	1.5	.....	0- 25 to 0- 75	0- 60 to 0-	.20
1005	1/4	200	6.2	10-20	0- 75 to 0-150	0- 115 to 0-	.15
1006	3/8	300	3.0	5-10	0- 150 to 0-250	0- 200 to 0-	.15
1007	1/2	400	2.5	3-5	0- 250 to 0-350	0- 300 to 0-	.15
1007A	3/4	600	.40	.....	0- 350 to 0-500	0- 400 to 0-	.15
1008	1	1000	.24	.....	0- 500 to 0-750	0- 600 to 0-	.10
1008A	1 1/2	1500	.18	.....	0- 750 to 0-1000	0-1000 to 0-	.10
1009	2	2000	.14	.....	0-1000 to 0-1500	0-1500 to 0-	.10
Spec. 1	3 to 15	Instrument Littelfuses up to 15 Amps. furnished on Request		.....	.....	.....	.15

3AG RADIO AMPLIFIER FUSES

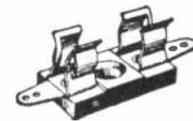
Glass enclosed 3AG type Radio fuses 1 1/4" x 3/4" dia. 250 volt rating, listed and approved by Underwriters Laboratories. These fuses are second to none on the market—why gamble with so called "cheap fuses"? Designed to operate indefinitely on 10% overload, and blow on 150% of rating. Operate accurately in any position. "Locked caps", no cement to loosen. Bright, clean caps.



Catalogue Number	Amperes Current Rating	Max. Voltage	List Price Each
1040	1	250	\$0.07
1041	1 1/2	250	.07
1042	2	250	.07
1043	3	250	.07
1044	1/8	500	.15
1045	1/4	500	.15
1046	3/8	500	.15
1047	1/2	500	.15
1080	5	25	.05
1081	10	25	.05
1082	15	25	.05
1083	20	25	.05

SPECIAL LITTELFUSES AND FUSE MOUNTINGS AVAILABLE ON APPLICATION

Single Pole Mounting



Black moulded bakelite base, 1 1/8" x 3/8" x 3/16" tinned. Shakeproof Terminals, and extra quality phosphor bronze nickel plated fuse clips. No. 8 F.H. M.S. mounting hole, 1 1/8" overall length including soldering terminals, 5/8" high. Cat. No. 1010 List Price \$.15 each

Fuse Retainer



Holds 3 AG type fuses. Excellent for test leads or battery cable for auto sets. Cadmium plated steel shell. Bayonet lock end takes cable up to 3/16" dia. Size 2 1/2" x 3/8" dia. Cat. No. 1070 List Price \$.15 ea.

Antenna Coupler



Cadmium plated Metal casing, bayonet lock end. Excellent for connecting auto antennas. Shielding may be soldered directly to casing. Size 1 3/8" x 3/8" dia. Used for lines up to 3/16" dia. Cat. No. 1071 List Price \$.10 each

Fusible Binding Post



Beautiful panel type fuse mounting for high class test equipment. Highly polished white essence of pearl knob. Overall length 1 3/8" —length behind panel 1 1/8". Takes panels up to 5/16" thick, 1/2" dia. mtg. hole. Max dia. knob 3/8". Supplied with two .050 extruded insulated washers. Cat. No. 1062 List Price \$.75 ea.

FUSE CLIPS



Standard clip for all 3AG and Instrument Littelfuses. Pure high quality Phosphor Bronze. Will not lose its spring under prolonged tension. Cat. No. 1011. List Price \$2.00 per 100

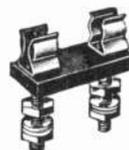
Meter Back Mounting



Mounts directly on meter binding post. Will not touch other posts on any standard meter. Lincen Bakelite base 1" x 1 1/8" x 1/16". Length, over screw terminals 1 1/4".

Cat. No. 1059 List Price \$.20 each

Panel Type Mounting



Used for concealed wiring, black bakelite base 1 3/16" x 1/2" x 3/16". Height 5/8". Studs 1" long, threaded 6-32 full length. Supplied with four nuts and washers. Cat. No. 1050

List Price \$.20 ea.

3AG SINGLE POLE OPEN TYPE



Bakelite base 1 1/8" x 1/2" x 3/16". Overall 2 3/8". Live parts space insulated. Shakeproof tinned soldering terminals. Mounting hole for No. 6 R H M S. Cat. No. 1060 List Price \$.15 each

For Aircraft Radio Transmitters, etc.



1000 V 3 INCHES LONG



2500 V 4 1/2 INCHES LONG



3000 V 5 1/2 INCHES LONG

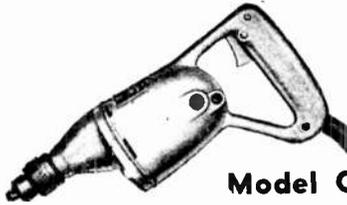
HIGH VOLTAGE RANGES

Cat. No.	Code Word	Rating Amp.*	Volts	Price ea.
2101	Hall	3/8	1000	\$0.35
2102	Hanger	1/2	1000	.30
2103	Happy	3/4	1000	.30
2104	Harbor	1	1000	.30
2105	Harp	1 1/2	1000	.30
2106	Harvest	2	1000	.30
2107	Hawk	1/2	2500	.35
2108	Helmet	3/4	2500	.35
2109	Hermit	1	2500	.35
2110	Hero	1 1/2	2500	.35
2111	Hill	2	2500	.35
2112	Home	1/2	3000	.40
2113	Hood	3/4	3000	.40
2114	Horn	1	3000	.40
2115	Host	1 1/2	3000	.40
2116	Hum	2	3000	.40

*Other amperage ratings than listed, supplied at 20% additional price.

SIGNAL ELECTRIC DRILLS

1/2" Light Duty

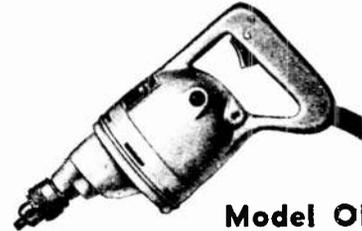


Model OB-8

\$19.50 List

The OB-8 light duty drill is designed for intermittent service. It is a good, high quality product, properly balanced, with an air-cooled handle having a comfortable grip. Light in weight, it is especially adaptable for radio repair work, wood and metal assembly, airplane construction, boat building and kindred applications.

1/2" Standard Duty

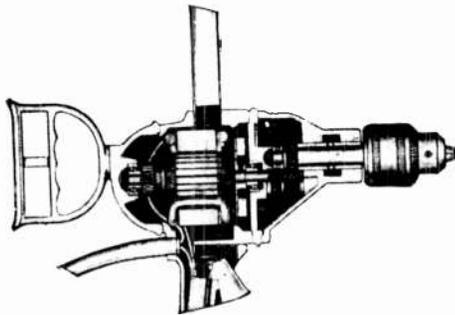


Model OB-4

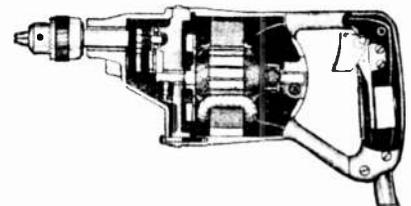
\$24.50 List

For general maintenance, construction and building work the OB-4 standard duty drill will give dependable service. It is popular with electricians, carpenters, machinists and repairmen. It has an abundance of power developed by a smooth-running universal motor. It is well balanced, has a comfortable grip and air-cooled handle.

Inside Views

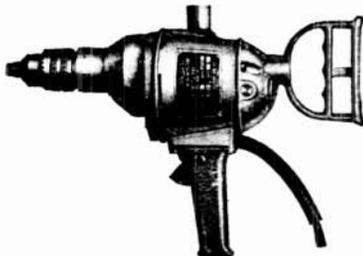


of



SIGNAL DRILLS

1/2" Standard Duty



Model OB-5

\$47.50 List

This standard duty half-inch drill has everything a good drill should possess—lots of power, proper speed, light weight, durability, high quality construction and correct balance. For general production, garage, machine shop and maintenance work where a drill receives hard use, it is recommended. Contractors, plumbers, electricians, and others will find it can be depended upon to give efficient service at all times. Attractively priced, this drill has established for itself a fine reputation that is recognized by users and distributors alike.

SPECIFICATIONS

Motor: Universal for direct or alternating current, 110-120 volts, 25-60 cycles.

	OB-8	OB-4	OB-5
Code Word	SEMED	SEMEB	SEMEC
List Prices (110-120 volts)	\$19.50	\$24.50	\$47.50
Special Voltages	10 percent addition list.		
Overall Length	12"	12 3/8"	16 1/2"
Bearings	Bronze wool packed with thrust ball spindle bearing.		Armature and spindle thrust high grade ball.
Capacity	1/4"	1/4"	1/2"
Speed (No load R.P.M.)	2950	1700	400
Amperes (No load)	1.0	.9	1.8
Switch	Trigger type with lock for continuous operation.		
Cord Length	8 feet	8 feet	15 feet
Net Weight	5 1/2 lbs.	7 1/4 lbs.	14 lbs.
Shipping Weight	7 lbs.	8 lbs.	16 lbs.
Pipe Handle	Detachable		
Cord	Heavy duty, rubber covered with rubber cord protector.		
Plug	Rubber.		
Brushes	Accessible from outside.		
Gears	Special alloy, heat treated.		
Housing	Durable aluminum alloy.		
Chuck	Almond, 3-jaw, with key.		

HOTSPOT SOLDER IRONS

(Approved by Underwriters' Laboratories)

Cat. No. 55— 55 Watts— 1/2" Tip
Weight 8 oz. List Price...\$1.25
Extra Tip...20 Extra Element .50



Cat. No. 85— 85 WATTS— 3/8" Tip
Weight 12 oz. List Price...\$3.00
Extra Tip...35 Extra Element...1.25



Cat. No. 10— 100 WATTS 3/8" Tip
Weight 1 lb. List Price...\$3.75
Extra Tip...40 Extra Element...1.50



Cat. No. 15— 150 WATTS 1/2" Tip
Weight 1 lb. 4 oz. List Price...\$4.50
Extra Tip...90 Extra Element...2.25



VASCO SOLDER IRONS

(Approved by Underwriters' Laboratories)



No. 85—A brand new iron in the VASCO line for high speed soldering on wiring and other light electrical work.

Cat. No.	Diameter of Tip	Watts	Net Weight	Length Over All	Diameter Over All	Approximate Shipping Weight	List Price	Extra Element No. 85E	Extra Tip No. 8538
85	3/8 in.	85	14 oz.	12 ins.	3/4"	2 bs.	\$5.50	2.35	\$0.35



No. 100—Used exclusively by radio factories, telephone switchboard work and other light duty production jobs.

Cat. No.	Diameter of Tip	Watts	Net Weight	Length Over All	Diameter Over All	Approximate Shipping Weight	List Price	Extra Element No. 100E	Extra Tip No. 10038
100	3/8 in.	100	16 oz.	12 7/8 ins.	7/8 in.	2 lbs.	\$7.20	\$3.60	\$0.40



No. 150—A medium weight iron for chassis spotting, radio work, small metal parts. Provides the extra heat needed for many jobs.

Cat. No.	Diameter of Tip	Watts	Net Weight	Length Over All	Diameter Over All	Approximate Shipping Weight	List Price	Extra Element No. 150E	Extra Tip No. 15012
150	1/2 in.	130	19 oz.	12 7/8 ins.	1 in.	2 lbs.	\$7.50	\$4.75	\$0.80



No. 180—An excellent iron for general shop and garage use. Large enough for light sheet metal work, and auto electricians.

Cat. No.	Diameter of Tip	Watts	Net Weight	Length Over All	Diameter Over All	Approximate Shipping Weight	List Price	Extra Element No. 180E	Extra Tip No. 20038
180	5/8 in.	200	28 oz.	13 5/8 ins.	1 1/4 ins.	3 lbs.	\$8.60	\$5.25	\$1.00

KRAEUTER TOOLS



**Electrician's
Diagonal
Cutting**

Length	Wt. per doz.	No.	Price Each
4½ in.	2 lbs.	6014½	\$1.50
5 in.	3 lbs.	6015	1.60
5½ in.	3¾ lbs.	6015½	1.75
6 in.	5 lbs.	6016	1.85
7½ in.	6¾ lbs.	6017½	2.00



**Auto
Electricians'
Pliers**

Length	Wt. per Doz.	No.	Price Each
4 in.	2½ lbs.	8314	\$1.15
5 in.	3½ lbs.	8315	1.25
6½ in.	5¾ lbs.	8316	1.45
7 in.	6¾ lbs.	8317	1.60
8 in.	9½ lbs.	8318	1.75



**"Sure-Grip"
Ignition
Pliers**

Length	Wt. per doz.	No.	Price Each
5 in.	¾ lbs.	435	\$1.00



**Ignition Pliers
Straight
Handles**

Length	Wt. per Doz.	No.	Dull Nickel Price Each
4½ in.	¾ lbs.	743	\$.50



**Extra Long
Nose Pliers**

Length	Wt. per doz.	No.	Price Each
7 in.	3½ lbs.	7717	\$1.40
With Side Cutters		7817	1.65



No. 2612

**Combination
Side Cutting**



Length	Wt. per Doz.	No.	Price Each
5½ in.	4 lbs.	9735½	\$1.40
7 in.	6¾ lbs.	9737	1.65

**Hy-Power
Side Cutting**



Length	Wt. per Doz.	No.	Price Each
6 in.	5¼ lbs.	8016	\$1.75
7 in.	8¼ lbs.	8017	2.00
8½ in.	11½ lbs.	8018½	2.25

**With
Stripping
Notch**



Length	Wt. per Doz.	No.	Price Each
6 in.	5¾ lbs.	S-2801	\$2.35
7 in.	8¼ lbs.		2.80
8½ in.	11½ lbs.		3.15

**Extra Heavy
Diagonal
Cutting**



Length	Wt. per doz.	No.	Price Each
6 in.	3¼ lbs.	6216	\$1.40

**Long Nose
Chain Pliers**



Length	Wt. per Doz.	No.	Price Each
6 in.	3¼ lbs.	1691	\$1.50

**Needle Nose
Side Cutting**



Length	Wt. per doz.	No.	Price Each
6 in.	3½ lbs.	6616	\$1.55
Without Cutters		6716	\$1.30

Radio Pliers

Supreme Kraeuter Finish Only

Diagonal cutting pliers specially developed for close cutting in radio and radio tube work. Complete with spring and stripping notch.

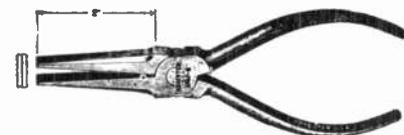
Length	Wt. per doz.	No.	Price Each
6 in.	5 lbs.	2612	\$2.35

Extra Long Reach Flat Nose Pliers

Supreme Kraeuter Finish and Industrial Finish

The long, flat nose is nicely tapered and beveled. No cutter. Adaptable to all the uses of a flat nose plier with the added feature of an extremely long nose.

Industrial Finish	Supreme Kraeuter Finish
Length	Length
Wt. per Doz.	Wt. per Doz.
No.	No.
Price Each	Price Each
6 in.	6 in.
5½ lbs.	5½ lbs.
7416	1741
1.30	\$1.50



No. 1741

RADIO ACCESSORIES

LIQUIDOPE

This genuine coil dope is specially prepared for coating and holding coil windings firmly in place. Coils treated with LIQUIDOPE are protected from characteristic changes. It is fast-drying and non-inductive.

LIST PRICE

- No. LD2—
2 oz. bottle.....\$0.35
- No. LDP—
1 pt. can..... 2.00



RADIO DIAL OIL

Fine complicated radio dial mechanisms require a special lubricant if they are to give long-lasting service. General Cement has developed such a lubricant in "Radio Dial Oil". It contains special processed, fine oils, treated with permanent lubricants that insure lubrication even after the oil has disappeared. Treat these automatic dials and fine movements with G-C Dial Oil and they will give lasting service.



LIST PRICE

- No. RD04—4 oz. can.....\$0.35

Dial Lite Coloring

Most of the radios have multi-colored dials, and you need this kit to replace colored lites. This new kit contains 6 bottles: solvent, 5 colors, red, green, blue, amber



and "the new purple," with dipping caps and brushes.

LIST PRICE

- No. DC6—Coloring Kit.....\$0.60

HandyPocketToolCase

"Saves the Pocket and the Tools"

Here's a high grade, two-partition case that will fit your hip pocket and hold all the necessary tools you need on the job. A very neat case, made of high grade Genuine Leather; it is double sewed for strength, with a snap on the flap. This case is very handy to have as it keeps your tools together, and they're there when you need them.



- No. PTCL.....LIST PRICE, \$1.00

NON-SLIP COMPOUND FOR RADIO DIALS

This compound is specially made for aiding in repair of slipping friction, and cable or cord driven dials. This compound will save the service man much work and insure a perfect job when used. It is easy to use, as it comes in powder form and should be applied freely to slipping parts.



- No. NSC4
- LIST PRICE \$0.30

Write for complete catalog and full description of General Cement Radio Products for Service Men.

COLOR CODING KIT

"Air Drying in a Few Minutes"

This kit consists of our brilliant colors of the highest grade lacquer enamel for color coding sockets, all-wave coils, jacks, wire terminals, and various parts of testing equipment. You can improve the appearance of



your equipment with this kit. Colors of red, green, blue and yellow furnished with solvent and brushes in this kit.

- No. CCK5.....LIST PRICE, \$0.60

Crystalizing Lacquer

"Decorates Metal and Wood"

This is a high grade Air Drying finishing lacquer that produces a fine professional finish on any metal parts on which it is applied. On drying it produces a beautiful crystal effect on the surface. It is easy to apply and requires no skill or special equipment.

LIST PRICE

- No. CLB2 —Black— $\frac{1}{2}$ pt...\$0.35
- No. CLB1P—Black—
Pint can..... 2.00
- No. CLC2 —Red, Green,
Blue Yellow, Brown —
 $\frac{1}{2}$ pt.45
- No. CLC1P—Pt. can..... 2.25



RADIO SERVICE CEMENT
"For Speaker Repairs"

A high grade cement specially prepared for Radio and Speaker Work. Unexcelled for cementing and replacing cones on dynamic speakers, repairing rattling or torn cones, cementing voice coils, spiders, etc. Can also be used for a bakelite or glass cement, in cementing loose tube bases and grid caps to glass, sealing adjustments, cementing parts to chassis, etc. Dependable, vibration proof, and fast drying. Will not crack or shrink paper cones.



- LIST PRICE
- No. SC2 —2 oz. bottle.....\$0.50
- No. SC6 —6 oz. economy bottle..... 1.35
- No. SC1P—1 pt. bottle..... 3.00

FIBRELOID SPEAKER SHIMS



This kit of Speaker Shims is made of specially tough and flexible Fibreloid (Celluloid) and is preferred for adjustments on certain types of speakers. Our kit consists of five different sizes that will take care of all speakers: .005, .0075, .010, .0125 and .015 inches. All sizes are colored and the different gauges are indicated on the attractive gold lettered snap case supplied with this kit.

- LIST PRICE
- No. FS5—Five Sizes—20 Shims to this kit.....\$0.60

G-C FINE OIL

"For the Shop, Office and Home"

This is a high quality fine oil that is specially suitable for Radio Work in Lubricating dials, condensers, controls, etc. It also makes an excellent household oil, and can be used for electric motors, sewing machines, door hinges and a thousand other uses. G-C Oil is put up in a practical can with a good screw spout and is very convenient to handle.



- No. FO4
- Practical 4 oz. can
- LIST PRICE.....\$0.30

GRAFOLINE

"Radio Contact Lubricant"

GRAFOLINE is absolutely necessary to insure proper and lasting repairs for all air-exposed contacts, switches, and wire-wound volume controls—wherever dust and dirt affect the quiet action of adjustable radio parts or controls. Radio Men need this compound for all-wave switches, wire-wound volume controls, to clean noisy tube prongs, etc.



- "It Cleans As It Lubricates"
- No. GR2
- LIST PRICE.....\$0.35

TELEPHONE BLACK

"Satin Finish Lacquer Enamel"

Telephone black is something new in metal finishes. Parts decorated with this lacquer present a fine rich appearance that really looks professional. This is also a good lasting finish as it is not glossy. G-C Telephone black is fast drying and covers in one coat.

- LIST PRICE
- No. TB2 — $\frac{1}{2}$ pt.\$0.40
- No. TB8 — $\frac{1}{2}$ pt. 1.25
- No. TB16—Pt. size 2.00

For those who prefer a glossy finish, a "gloss black" is available at the same prices as above.

RADIO ACCESSORIES

DRIVE CABLE & CORD FOR RADIO SETS—By the Spool

901—No. 1 Coble

Made of Phosphor Bronze; has 42 strands and used in 95% of radio sets on market.

25 ft. spool	List, \$1.18
50 ft. spool	List, 2.25
100 ft. spool	List, 4.00

902—No. 2 Coble

Made of Phosphor Bronze; has 18 strands, knitted, and will afford good service.

25 ft. spool	List, \$0.65
50 ft. spool	List, 1.40
100 ft. spool	List, 2.60



PHOSPHOR BRONZE BELTING

801—No. 1 Phosphor Bronze Belting

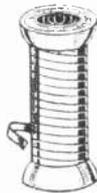
Exactly the same as used in Atwater Kent, Colonial, Crosley, Steinite and many other sets. $\frac{3}{16}$ " wide x .005" thick.

100 ft. spool	List, \$4.85
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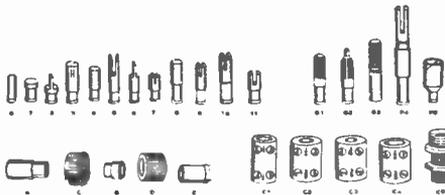
802—No. 2 Phosphor Bronze Belting

Used in Brunswick and Silver-Marshall sets. $\frac{3}{16}$ " wide x .006" thick.

100 ft. spool	List, \$7.00
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CABLE FITTINGS



0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11	List \$0.10 ea.
P5, A, B, C, D, E	List .10 ea.
Fastened to housing	additional List .15 ea.
G1, G2, G3, P4	List \$0.40 ea.
Fastened to cable or housing	additional List .45 ea.
C1, C2, C3, C4, CB1	List \$0.15 ea.

ASSORTED FITTINGS & GEARS

An attractive metal kit containing an assortment of 120 of the types shown above and used in Philco, Motorola, R.C.A., United Motors, Bosch, Crosley, Sparton, Atwater-Kent, Stewart Warner, Arvin, Zenith, Emerson and other automobile radios.

List Price, complete kit..... \$13.50



CONTROL CABLE AND HOUSING IN COILS

The same as originally used by the leading automobile radio set manufacturers—best quality procurable—parkerized—nothing better made.

LIST PRICES

	50-ft. lgth.	100-ft. lgth.	250-ft. lgth.
Cable Unsweaged	\$ 9.75	\$18.50	\$43.75
Cable Sweaged every 6 inches	18.50	36.00	87.50
Housing	8.50	16.00	38.75

CONTROL CABLE AND HOUSING CUT TO LENGTH

LIST PRICES

Length	Cable Only	Housing Only	Cable & Housing
18"	\$0.40	\$0.30	\$0.65
20"	.45	.34	.75
24"	.50	.40	.85
30"	.62	.45	1.05
32"	.67	.50	1.15
36"	.72	.54	1.25
42"	.82	.62	1.35
48"	.92	.70	1.45

HEAVY LINEN CORD

Exactly as original used in Silver Marshall, Philco, Brunswick and other make sets, both as to texture and thickness. Made of the finest black linen, braided, with a breaking strength of 200 lbs. per ft.

25 ft. spool	List, \$1.66
50 ft. spool	List, 3.00
100 ft. spool	List, 5.63

904—No. 4 Light Cord

Exactly as original used in RCA, Sonora and other make sets, both as to thickness and texture. Made of the finest black linen, braided, with a breaking strength of 150 lbs. per foot.

25 ft. spool	List, \$1.50
50 ft. spool	List, 2.69
100 ft. spool	List, 5.06



SPECIAL HEAVY DUTY DRIVE CORD

905—No. 5 Special Heavy Cord

Exactly as original, used in all Kolster and Grebe sets and where extra strong drive cord is required. Made of the finest gray linen, braided, with a breaking strength of 300 lbs. per foot.

25 ft. spool	List, \$2.00
50 ft. spool	List, 3.60
100 ft. spool	List, 7.00



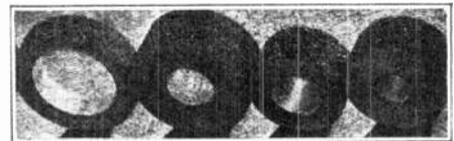
BOWDEN REMOTE CONTROL PUSH PULL CABLE

As used in Majestic, A. K., Arvin and others.



No.	Sheath	Cable	List
1107	8 ft.	9 ft.	\$1.60
1108	10 ft.	11 ft.	2.35
1109	12 ft.	13 ft.	2.80
1110	14 ft.	15 ft.	3.30
1111	16 ft.	17 ft.	3.75
1112	32 ft.	35 ft.	6.50

DIAL DRIVE FRICTION RUBBERS



Atwater Kent

- No. 1. Small
- No. 2 Large for gear

R. C. A.

- All numbers

Stewart Warner

- 102—104
- 105—120 No. 1 small
- 105—120 No. 2 large
- 113—114 Converter
- 126

Kennedy, Olsen and others

List Price, Each	10c	100 ASSORTED
24 ASSORTED		
List Price	\$1.50	List Price
		\$5.75

RADIO SERVICE SOLVENT

"Cleans and Dissolves"

This solvent is prepared for quickly loosening cement on speaker cones, spiders and voice coils, and for thinning the Cement when necessary.



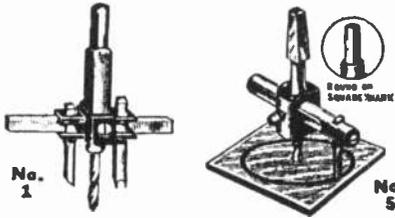
	LIST PRICE
No. SSL2 —Large 2 oz. bottle	\$0.25
No. SSL6 —6 oz. economy size	0.60
No. SSLIP—Pt. bottle	1.25

HYDROMETER



To determine the exact condition of any storage battery. Durable rubber bulb, clear readings on float. List Price

RADIO ACCESSORIES



"General" Adjustable Circle Cutters

Cut holes easily and quickly in metal, wood, bakelite, hard rubber, etc. Nos. 1 and 2 cut holes from 1" to 4" in diameter. No. 5 cuts holes from 1" to 6" in diameter. No. 1 cutter has an extra beading cutter attached. No. 5 cutter available with square or round shank. State type desired on order.

No. 1—With beading cutter	\$3.20
No. 2—Less beading cutter	1.80
Junior—Light work only—2 1/4" maximum	1.20
No. 5—Heavy Duty Model. For brace or electric drill	3.20
Extra Blades	.40



Socket Hole Punches

Consists of 2 units, punch proper and anvil, for knocking out socket holes. Ideal for constructor or experimenter. Available in following sizes: 3/8", 7/8", 1 1/8" and 1 3/8". Specify sizes desired. Average shipping weight 1 lb. each punch.

No. 2009—List Price \$2.85

Glass Insulators

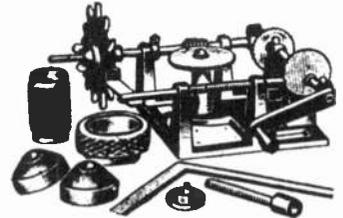


Made of crystal clear glass. Have a smooth surface which prevents dirt or ice to collect.

No.	Length	List Price
00	3"	per 100 \$5.00

MORRIS De Luxe Coil Winder

Will wind Honey Comb, Spiderweb, or Solenoid coils of various widths and diameters. Equal in appearance to factory-made coils. Includes all accessories necessary for winding the various types. Has recorder and indicator that counts turns. Black enamel finish. Shipping Wt. 6 lbs. List Price \$7.50



KESTER Paste Flux

An entirely new different, and more efficient soldering paste flux—designed for the serviceman, constructor, and for speeding up production. Made by a new viscosiforming process which makes possible a uniform non varying paste. All fluxing ingredients are finely divided and evenly distributed. Results in better soldering. Packed in handy-sized tins. Contains 2 ounces of flux. Only small quantity necessary for joints.



KESTER Radio Solder

Preferred by radio men everywhere. Will not spatter. Makes clean joints. Servicemen and other large users will find it more economical to buy their solder this way.

	Rosin Core		Acid Core		Alum. Solder	
Per Tin	No.	List	No.	List	No.	List
1-lb. Spool	2054	\$0.25	2057	\$0.25	2060	\$0.30
5-lb. Spool	2055	.94	2085	.94	2061	3.00
	2056	4.42	2059	4.42		

No. 2065—List Price \$0.24

FRICTION TAPE

Highest quality tap., kept fresh by tin foil wrapper. Always a radio, auto and household necessity. Rubber tape listed below is of live rubber under a layer of friction tape. Used for properly insulating electrical splices. Kept fresh by wrapper of tin foil. Available in small roll sizes for small requirements. Wrapped and packed in boxes.

Stock No.	Roll	List Price	10 Rolls
2017	2 oz.	\$0.10	\$0.90
2018	4 oz.	.14	1.25
2019	8 oz.	.29	2.84



RUBBER TAPE

2020	1/4 lb.	\$0.25	\$2.10
2021	1/2 lb.	.47	4.20

Genuine Mazda Pilot Bulbs

Used for radio dial lamps, indicators, etc. Standard carton contains 10 bulbs. Shipping Weight 8 oz., per box of 10.

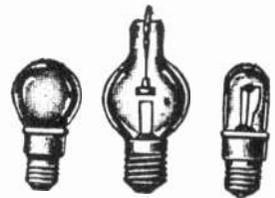
Volts	Amps.	Pkge.	List Price
2.5	0.50	10	\$0.90
3.2	0.45	of	1.17
6.8	0.50	10	.90

Special Air Cell Bulb	Victor-Mazda Pilot Bulb	Special Auto Radio Bulb
Tubular bulb, miniature base. 2-volts, 0.06-amps. Has lowest current drain of any bulb. List Price, ea. \$0.33	Intermediate base, frosted bulb. 110-volts. For use in Colonial, Victor, and other receivers. List Price, ea. \$0.28	Round bulb, miniature base. 6-8 volts, 0.15-amps. Small size. List Price, ea. \$0.13

GENUINE TUNGAR BULBS

Used in battery chargers, "A" eliminators, etc. All guaranteed. Tested before shipment.

Type	List Price
.6 amp.	\$4.00
2 amp. (new)	4.00
2 amp. (old)	4.00
6 amp.	6.00



25

Raytheon Rectifiers TYPE BH

A full wave rectifier, standard for most "B" eliminators. 360 V. R.M.S. per anode. 125 M.A. maximum. Shpg. wt., 1 lb. Use this original BH rectifier for replacement in "B" eliminators and sets.

LIST PRICE \$4.65

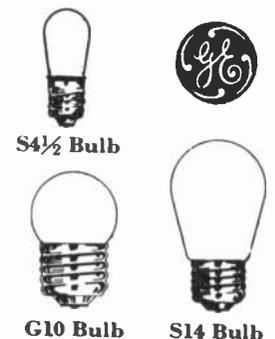
TYPE BA

A high current rectifier used in power supply units for sets having 201 A tubes wired in series. 360 M.A. Maximum. Shpg. wt., 1 lb.

LIST PRICE \$7.50

NEON GLOW LAMPS

Watts	Bulb	Screw Base	Resistance in Base ohms*	Aug. Current Rating Amps.	Operates on	Useful Life hrs.	NET Price
2	S14	Medium	3200	.020	A.C. or D.C.	3000	\$.50
1/2	G10	Medium	3500	.005	A.C. only	3000	.40
1	G10	Medium	3500	.010	A.C. or D.C.	3000	.40
1/4	S4 1/2	Candelabra	30,000	.002	A.C. or D.C.	3000	.40



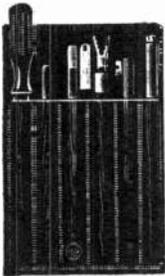
INSULINE PRODUCTS

"DE LUXE" NEUTRALIZING & ALIGNING TOOL KIT

Complete for Every Service Need

Designed to include, besides all the tools contained in our famous No. 998, two new and absolutely essential tools which are the I. C. A. No. 997 Magic Tuning Alignment Tool and the newly developed I.C.A. Flexible Screw Driver, for hard to reach spots, making a total of fourteen tools most of which telescope into one another forming six units when assembled into the attractive black leatherette carrying case.

No. 994—Tools complete with carrying case
List Price \$5.00



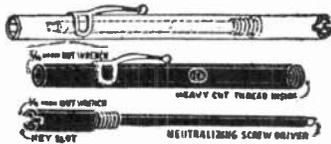
NEUTRALIZING AND ALIGNING TOOL KIT

Contains: 3 insulated screw drivers with metal nib (6", 5", 2 1/2"). 2 metal nut wrenches (5/8", 1/4"). Alligator side wrench; 1/4" square nut insulated wrench; 1/4" hexagon metal side wrench; 1/4" hexagon slotted insulated wrench; 1/8" hexagon insulated nut wrench; 6" insulated screw driver.

No. 998—With black leatherette carrying case.
List Price \$4.00



4-IN-1 NEUTRALIZING TOOLS, SCREW-DRIVERS, WRENCHES



Made of Fenoline—fully insulated.
No. 1019—Complete as above.
List Price \$0.65

NEUTRALIZING TOOLS WITH METAL NIBS



Sturdy and unbreakable.
No. 996.....List Price \$1.10

5-IN-1 NEUTRALIZING AND COMPENSATING TOOL



Has extra all metal screw driver.
No. 1022.....List Price \$1.00

ICA BALANCING TOOL



Enables serviceman to neutralize any radio without having to remove chassis from cabinet.
No. 1026.....List Price \$0.40

FORK TYPE NEUTRALIZING WRENCH AND SCREW-DRIVER



No. 1024.....List Price \$0.40

ICA MAGIC TUNING ALIGNING TOOL



Consists of bakelite rod with a brass cylinder at one end and an iron core at the other. Inserting the brass cylinder into a coil lowers its inductance, while inserting the end with the iron increases the inductance. For checking all-wave receivers without disturbing the adjustment of the trimmer capacities.
No. 997.....List Price \$0.90

ICA NARROW SHAFT ALIGNMENT TOOL



Bakelite shaft is only 5/32" in diameter.
No. 987.....List Price \$0.50

ICA SET TRIMMER NEUTRALIZING TOOLS



For Philco, Zenith, RCA, etc.
No. 992—6" long.....List Price \$0.75
No. 933—10" long.....List Price 1.00

BAKELITE SCREW-DRIVER



Made entirely of 3/4" bakelite rod with a sturdy blade for neutralizing and adjusting condensers, radio receivers or for use in places where a metal screw driver cannot be used electrically.
No. 1029.....List Price \$0.50

ICA FLEXIBLE SCREW-DRIVER

For the Hard to Reach Spots



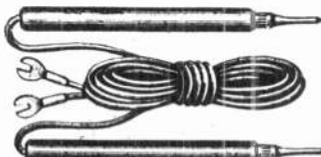
Allows access to screws in hard to reach and out-of-the-way places. Can go under objects or around corners.
No. 935.....List Price \$1.50

INSULATED AND HEXED NEUTRALIZING WRENCHES

Made of hexed sturdy black "Fenoline"—so made that when one part wears out or breaks you saw off that part and continue using the neutralizing wrench.
No. 985—6" long.....List Price \$0.20
No. 986—8" long.....List Price .30

LABORATORY TYPE TEST LEADS

With Heavy-Duty Laboratory Detachable Sharp Point Ends



No. 375.....List Price \$0.90

ALL-PURPOSE TEST LEAD KIT

Complete for Every Testing Need

Included in this test kit are:

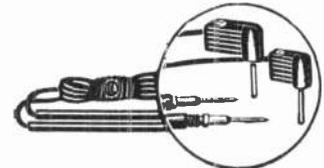
- 1 pr. Kinkless Test Leads.
 - 1 pr. insulated alligator clips—red and black.
 - 1 pr. insulated spade plugs—red and black.
 - 1 pr. insulated needle points—red and black.
- All neatly fitted into a leatherette compartment case.



No. 1005.....List Price \$2.25

ICA PENCIL TYPE TEST LEADS

With Finger-Grip Molded Tips

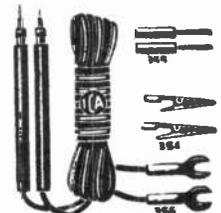


The Molded Finger Grip Tips are provided with set screws for easy renewal of wire. Length of test leads in 65 inches.

No. 373.....List Price \$1.25

TEST LEADS

Flexible, rubber-covered, kinkless wire, black and red, fitted into slim handles. Insulated for 5000 volts.



Pheno. Needle-Point Leads—54" Long

No. 379—Clips.....List Price \$0.70
No. 381—Terminals.....List Price .60
No. 382—Phone Tips.....List Price .60

De-Luxe Leads—50" Long

No. 354—Clips.....List Price \$0.70
No. 355—Tips.....List Price .60
No. 356—Terminals.....List Price .60

Long Pointed Leads—50" Long

No. 369—Tips.....List Price \$0.60
No. 383—Lugs.....List Price .60
No. 370—Clips.....List Price .70

Heavy Duty Leads

No. 385—Clips.....List Price \$0.90
No. 400—Phono. Plugs, insulated handles.
List Price\$1.10

RADIO ACCESSORIES

PRECISION CAPACITOR ANALYZER



The answer to a definite need for a better, more accurate, and complete Capacitor Analyzer. A valuable aid for the radio laboratory and for the wide-awake serviceman. A scientific instrument, well-built, accurate, reliable, and easy to use.

Measures Capacity — Will accurately measure capacity of all types of electrolytic, paper and mica condensers. Capacity range—.00002 to 70 mfd.

Measures Leakage, Etc.

—Directly indicates leaky, shorted, open, intermittent and power factor of all types of condensers.

Indicates Dielectric Resistance—Directly indicates the dielectric resistance of all types of insulation and insulators, between cable wires, coil windings, etc. This test is made at a D.C. potential exceeding 100 volts (which is supplied from a built-in power supply).

Direct Reading—All measurements made simply and directly, and require no complicated calculations or reference to charts or graphs.

Easy to Use—All indications are visual. Simplicity of operation means time and money saving.

Compact, Portable—Supplied in an attractive cabinet, with a removable top and a strong carrying-handle. Weight 7 lbs. Dimensions, 9 1/2" x 7 1/4" x 6 1/4".

Complete with instructions, but less "58" and "80" tubes.

List Price \$28.90

MORRILL CARBONIZED RESISTORS



ONE WATT

1 Watt
3/8 x 1 1/8 in.
100 ohms. to 5 Megs.
\$.20



TWO WATT

2 Watt
3/8 x 1 3/4 in.
100 ohms. to 5 Megs.
\$.40

Above 10 Megs.
Prices on
Application



THREE WATT

3 Watt
3/8 x 1 1/2 in.
100 ohms. to 10 Megs.
\$.60

Above 10 Megs.
Prices on
Application

Resistance Values for Ranges

Shown		
100	7000	300000
200	8000	400000
250	10000	500000
300	12500	750000
400	15000	Megohms
500	17500	1
600	18000	1.5
700	20000	2
750	25000	3
1000	30000	4
1500	40000	5
1800	50000	10
2000	60000	20
2500	75000	30
3000	100000	40
4000	150000	50
5000	200000	80
6000	250000	100

The ohmic value is marked on each resistor.

T or K—indicates 1000.
M—indicates 1,000,000.

SHALLCROSS

Non-Inductive Wire
Wound RESISTORS



TYPES	No.—watt
Standard Accuracy $\pm 1\%$	100—1
	102—1
STOCK RESISTORS	160—1

Ohms	List Price	Dealer's Cost *
0.1	\$1.25	\$0.81
10	1.25	.81
100	1.25	.81
250	1.25	.81
500	1.25	.81
1,000	1.25	.81
2,500	1.25	.81
5,000	1.25	.81
10,000	1.35	.88
15,000	1.50	.98
25,000	1.50	.98
30,000	1.50	.98
40,000	1.50	.98
50,000	1.50	.98
75,000	1.75	1.14
100,000	2.00	1.30
150,000	2.25	1.46
200,000	2.50	1.63
250,000	2.75	1.79
300,000	3.00	1.95
400,000	3.50	2.28
500,000	4.00	2.60
600,000	4.25	2.76
750,000	4.50	2.93
900,000	4.75	3.09
1,000,000	5.00	3.25

N

Pyrex Standoff Insulators



These high-grade Insulators are the last word in stand-off type units. Are absolutely non-hygroscopic. Unaffected by temperature changes. Oval base size 3 1/4 x 1 1/2". Diameter of glass 1 1/2". Have flash-over value when dry of 21.5 and 66 KV, respectively. Shipping weight 2 lbs.

3" high overall.
67106—List Price. \$2.25 *
—7" high overall. Shipping weight 8 lbs.
67107—List. Each \$2.50 *

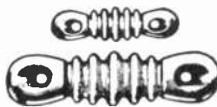


Shell Only

No fittings. For those who wish to provide their own rods and fittings. Shipping weight 4 lbs.

67009—4 3/4 x 6 1/4" \$1.00 *
67037—4 3/4 x 6 1/2" \$1.00 *

Pyrex Antenna Insulators



Strong and neat; a size for every amateur purpose.

Stock No.	Length Overall	Power Rating	* List Price
67007	3 3/4"	.....	\$0.25
67017	7 1/2"	250 watts	1.00
67021	12 1/4"	1 1/2 KW	3.00

Amateur Type

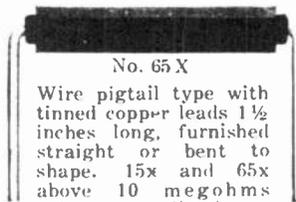


Diameter 2 1/2". Supplied with brass rod, 4 brass jam nuts, 2 brass washers, 2 rubber washers and 2 rubber gaskets. Shpg. Wt. 3 lbs.

No. 67104—15" rod. List Price * \$2.20
No. 67105—20" rod. List Price * \$2.30

25

J.S. White



No. 65X

Wire pigtail type with tinned copper leads 1 1/2 inches long, furnished straight or bent to shape. 15x and 65x above 10 megohms prices on application.

1 watt
2500 ohms to 10 megohms.
Also supplied from stock in values up to one million megohms.

List 40c

No. 15X type with Hexagonal threaded ends.

1.25 watts
1000 ohms to 10 megohms and higher.

List 60c



40



AMERICAN BEAUTY NO. S-318

AMERICAN BEAUTY IRONS

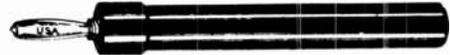
No.	Wattage	Tip	List Price
S-76	50 watt	light iron, flat tip	\$4.50
3138	100 watt	3/8" tip, popular size	7.20
3158	200 watt	1/2" tip, heavy	8.60
3734		Tip for S-76 iron	.30
3738		Tip for 3138 iron	.50
3758		Tip for 3158 iron	1.10
9273		Element for 3138 iron	3.60
9275		Element for 3158 iron	5.25
		Element for S-76 Iron	3.00

25

AMERICAN RADIO HARDWARE

LONG TEST PROD HANDLES

Code: LONGS No. 134—4" Long Prod Handles 25c each
 Code: POWER No. 151—6" Long Prod Handles 35c each



SHORT TEST PROD HANDLES

Code: SHORT—No. 135—2 1/2" Long Prod Handles 20c each



PHONO NEEDLE TIP TEST PRODS



These testing prods are equipped with chucks to hold the standard type phonograph needle and can be easily changed when the needle is broken. The chuck has a nut for holding the needle firmly. The needle tip will make contact through insulation or pitch and every service man should have a pair of these test prods. They are equipped with red and black fibre handles that are 4" long and 3/8" thick and have red and black wire for easy identification. Can be had with Spade Lugs, Phone Tips, or Alligator Clips.

Code:
 PHONO No. 230—4 1/2" Long, 50" wire with Phone Tips 50c pair
 QUEEN No. 240—4 1/2" Long, 50" wire with Spade Lugs 50c pair
 RANGE No. 250—4 1/2" Long, 50" wire with Alligator Clips 60c pair

ALLIGATOR ALIGNMENT WRENCH



Code: REACH No. 805 Alligator Jaw Wrench 35c each

ALIGNMENT SCREW DRIVER



Code: SITES No. 860 Alignment Screw Driver 20c each

SOCKET HEAD ALIGNMENT WRENCH



Code: ANVIL No. 820 Socket Head Alignment Tool 50c each

TUNING WANDS



Code: WANDS No. 825 Tuning Wand 90c each

SOLDERLESS INSULATED TEST PICK PROD HANDLES



Code: PICKS No. 145 Handle—5 1/2" Long 25c each
 Code: PITCH No. 149 Handle—7" Long 30c each

SMALL ALLIGATOR TESTING CLIPS



Code: CLIPS—No. 45AT—2" Long, 80c per doz.

LARGE SIZE ALLIGATOR TESTING CLIPS

Code: SKILL—No. 2 Clips—2 3/4" Long List .10 each

INSULATED PLUG TYPE AND WIRE TYPE ALLIGATOR CLIPS



Code: HOLDS No. 129 Clips—3" Long 15c each
 Code: GRIPS No. 130 Clips—2 1/4" Long 12 1/2c each



Banana Plug or Tip Type Jacks

Code: TIGHT No. 148 Jack 1 1/4" Long 15c each



Insulated Phone Tip Jacks

No. 138 Jacks 10c each



Banana Type

No. 125 Jacks 10c each



Insulated Banana Plug Jacks

No. 336 Insulated Jacks 15c each



Insulated Banana Plugs

INSERT No. 131 Plug 1 1/4" Long 12 1/2c each



Insulated Tapered Plugs

No. 133 Plugs 1 1/2" Long 10c each



Tip Pin Jacks

No. 137 Jacks 8c each



Heavy Duty Metal Binding Posts

No. 32 15c each



Insulated Banana Plug Jacks

JOINT No. 136 Jacks 3/4" Long 10c each



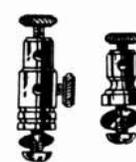
Insulated Sr. Solderless Phone Tip Plugs

LARGE No. 141 12c each
 SMALL No. 142 12c each



Insulated Binding Posts

No. 147 10c each

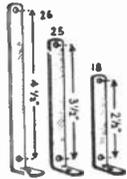
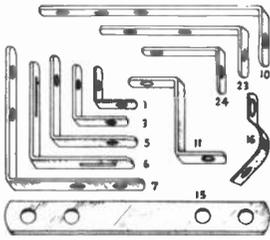


Single and Double Binding Posts

No. 31 Single Hole 10c each
 No. 33 Double Hole 15c each

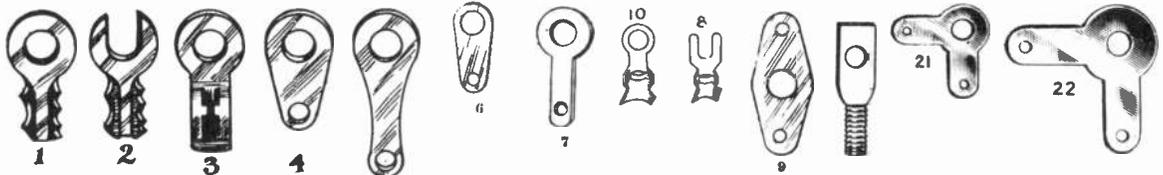
AMERICAN RADIO HARDWARE

ANGLES AND BRACKETS BRASS NICKEL PLATED



Code	No.	Name	Size	Width of Blank	List Price, Each.
ASPER	1	Coil Angle	1/2x1/2	3/8 in.	2c
BOOTH	2	Coil Angle	5/8x5/8	3/8 in.	3c
CLANG	3	Coil Angle	5/8x5/8	3/8 in.	2c
DARKY	4	Panel Angle	3/4x3/4	3/8 in.	3c
ELBOW	5	Panel Angle	1x1	3/8 in.	3c
FARMS	6	Adjustment Angle	1 1/8x1 1/8	3/8 in.	4c
GRIND	7	Corner Angle	1 1/2x1 1/2	3/8 in.	5c
HOBBY	9	2 Hole L Bracket	1/2x1	3/8 in.	6c
JUDGE	10	Large L Bracket	1/2x2 1/4	3/8 in.	6c
IMAGE	11	Coil Z Bracket	3/4" high	3/8 in.	7c
LAMPS	12	Medium Z Bracket	2" high	3/8 in.	5c
MADAM	15	Flat Strip	3" long	3/8 in.	6c
PAINS	16	Grid Leak Bracket	3/8x7/8	3/8 in.	6c
NORTH	17	Coil Z Bracket	1" high	3/8 in.	3c
QUILT	20	Corner Angle	2x2	3/8 in.	7c
RAVEN	23	Middle L. Bracket	1/2x1 1/2	3/8 in.	3c
SOUND	24	Small L Bracket	1/2x7/8	3/8 in.	5c
GRIDS	18	Transformer	3/4x3"	3/8 in.	2c
STAGE	25	Power Pack	3/4x4"	3/8 in.	8c
MONTH	26	Power Pack	3/4x5"	3/8 in.	10c

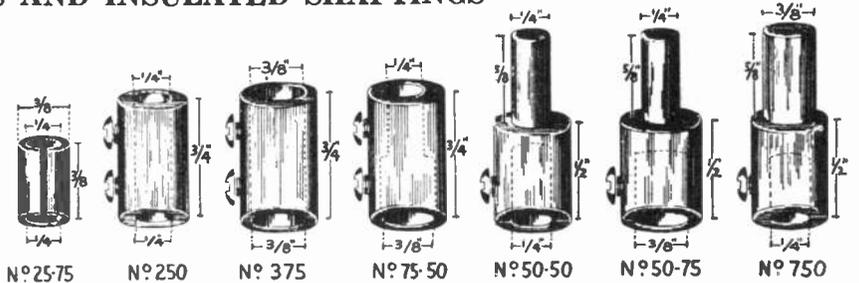
BRASS AND COPPER TINNED TERMINAL LUGS



Code:	No.	Type	Length	Size of Hole	Material	Standard Pkgs.	List Price, Price per 100
ARBOR	1	Cord	5/8 in.	No. 6 or 8	Copper Tinned	1000	\$0.50
BARON	2	Cord	5/8 in.	No. 8	Copper Tinned	1000	.50
COACH	3	Solderless	3/4 in.	No. 8	Copper Tinned	1000	.50
DARTS	4	Flat	5/8 in.	No. 6 or 8	Copper Tinned	1000	.50
EAGLE	5	Flat	7/8 in.	No. 6 or 8	Copper Tinned	1000	.50
FAVOR	6	Flat	1/2 in.	No. 6	Copper Tinned	1000	.50
GLASS	7	Flat	1 1/16 in.	No. 4 or 6	Copper Tinned	1000	.50
HARSH	8	Battery Cable	1 in.	No. 8	Brass Tinned	1000	1.00
INDEX	9	Double End	7/8 in.	No. 6 or 8	Copper Tinned	1000	1.00
KNOTS	10	Battery Cable	1 in.	No. 10	Brass Tinned	1000	1.40
LATIN	18	Mounting Bolts	1 in.	6-32 Screw	Cadmium	500	1.10
MANOR	19	Storage Battery	1 1/2 in.	5/8"	Brass Tinned	500	2.40
QUART	21	Small Double	1/2 in.	No. 6	Brass Tinned	1000	.60
REALM	22	Large Double	3/4 in.	No. 8	Brass Tinned	1000	.70

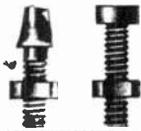
BRASS AND INSULATED SHAFTINGS

These shaft couplings are just the thing for connecting variable condensers, switches, and rheostats. These shaft extenders or reducers are ideal for extending the shafts on condensers, switches, and rheostats, or for reducing a larger shaft to a smaller shaft for dial fitting. All the dimensions of the bushings, couplings, shaft extenders and reducers are illustrated.



Code:	No.	Length	Hole I. D.	O. D.	Part Name	List Price
IDEAL	No. 25-75	3/8" Long	1/4"	3/8"	Dial Bushings	7c each
JEWEL	No. 250	3/4" Long	1/4"	1/2"	Brass Coupling	15c each
LABOR	No. 375	3/4" Long	3/8"	9/16"	Brass Coupling	15c each
NAVEL	No. 75-50	3/4" Long	3/8-1/4"	9/16"	Brass Coupling	15c each
OCEAN	No. 50-50	1 1/8" Long	1/4"	1/2"	Brass Reducer	15c each
PLATE	No. 50-75	1 1/8" Long	3/8"	9/16"	Brass Reducer	15c each
QUICK	No. 750	1 1/8" Long	1/4"	1/2"	Brass Reducer	15c each
MERGE	No. 250 C	3/4" Long	1/4"	1/2"	Insulated Coupling	15c each
LATCH	No. 375 C	3/4" Long	3/8"	9/16"	Insulated Coupling	15c each
INLAW	No. 75-50 C	3/4" Long	3/8-1/4"	9/16"	Insulated Coupling	15c each
DECKS	No. 50-50 C	1 1/8" Long	1/4"	1/2"	Insulated Reducer	15c each
CANOE	No. 50-75 C	1 1/8" Long	3/8"	9/16"	Insulated Reducer	15c each
BEZEL	No. 750 C	1 1/8" Long	1/4"	1/2"	Insulated Reducer	15c each

AMERICAN RADIO HARDWARE



CONTACT POINTS AND SWITCH STOPS

No. 116 Contact Point with hexagon nut unassembled	1000	per box	List
No. 117 Contact Point with hexagon nut assembled	1000	per box	\$1.80 per 100
No. 118 Switch Stops with hexagon nut unassembled	1000	per box	2.50 per 100
No. 119 Switch Stops with hexagon nut assembled	1000	per box	1.80 per 100
			2.50 per 100

PLAIN, KANT-LINK & SHAKE PROOF WASHERS

	List Per 100
No. 4-36 Screw Plain	\$0.40
No. 6-32 Screw Plain	.50
No. 8-32 Screw Plain	.50
No. 6-32 Screw Kant-Link	.50
No. 8-32 Screw Kant-Link	.50
No. 10-32 Screw Kant-Link	.50
No. 6-32 Screw Shakeproof	.80
No. 8-32 Screw Shakeproof	.80
No. 10-32 Screw Shakeproof	.90

Quick Antenna Connector

No. 221—1 1/4" Long 10c

BLACK RUBBER GROMMETS

No. 96—3/16" Hole Black	List
No. 97—1/4" Hole Black	\$3.00 per 100
No. 98—3/4" Hole Black	3.20 per 100
No. 99—7/16" Hole Black	3.00 per 100
	4.00 per 100

RADIO SPAGHETTI TUBING

This tubing is made of the highest quality insulation. It has a high gloss finish and is now available in just the proper lengths of 24". This spaghetti tubing is made to fit the standard type both round and square buss-bar. May be had in the following colors:

Code:	Red	Spaghetti Tubing 24" Long	\$12.00 per 100 Lengths
TRADE CLAMP	Black	Spaghetti Tubing 24" Long	12.00 per 100 Lengths
BLOCK	Blue	Spaghetti Tubing 24" Long	12.00 per 100 Lengths
SPARK	Green	Spaghetti Tubing 24" Long	12.00 per 100 Lengths

5000 VOLTS SPECIAL SIZE SPAGHETTI TUBING

BAWLS	1/4"	I.D. x 36" Long	35c per length
CLARK	3/16"	I.D. x 36" Long	45c per length
DRESS	1/4"	I.D. x 36" Long	55c per length
HAZLE	3/8"	I.D. x 36" Long	1.00 per length
ANGLO	1/2"	I.D. x 36" Long	1.25 per length

Fahnestock Spring Battery Clips

Code	No.	Size	List Price per Doz.
	SUPER	41 3/4" Long 1 clip	500 \$0.20
	PLANE	42 1" Long 1 clip	500 .40
	CADET	44 1 1/2" Long 2 clip	500 .50
	FAHNE	45 1 3/4" Long 2 clip	500 .60
	SOLAR	47 1" High 1 clip	500 .50

SINGLE AND DOUBLE FUSE MOUNTINGS

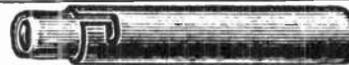
Code: FABLE No. 1M3—Standard Type 1/4" x 1-1/4" 15c each
Code: STRAW No. 1M7—Double Type 1/4" x 1-1/4" 25c each

INSULATING MOUNTING STRIPS

	List Price per Doz.
Code: WHIRL	510 1 Lug 1 Mounting Lug 50 \$0.25
STAFF	520 2 Lugs 1 Mounting Lug 50 .30
TRACK	530 3 Lugs 1 Mounting Lug 50 .35
PLACE	540 4 Lugs 2 Mounting Lugs 50 .45
CHAFE	550 5 Lugs 2 Mounting Lugs 50 .60
HEART	560 6 Lugs 2 Mounting Lugs 50 .80

BRASS AND STEEL NICKEL PLATED HEXAGON NUTS

	List per 100
6-32 x 1/4" Brass N. P.	\$0.75
8-32 x 1/4" Brass N. P.	.75
6-32 x 5/16" Brass N. P.	1.00
8-32 x 5/16" Brass N. P.	1.00
6-32 x 3/8" Brass N. P. Knurled	1.50
8-32 x 3/8" Brass N. P. Knurled	1.50

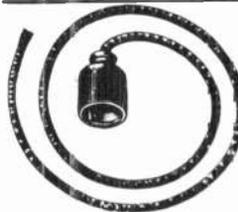


Fuse Connector

No. 222—3 1/2" Long 20c each List

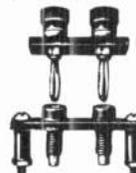
INSULATED SCREEN GRID CAPS

No. 139 12" Plain Wire 12 1/2c each
No. 140 12" Shielded Wire 15c each



NICKEL PLATED WING NUTS

6-32 or 8-32 Screw
Per Doz. 25c



BANANA PLUGS with BINDING POST TYPE HEADS

No. 402 Twin Type Binding
No. 403 Twin Type Binding
Post Plugs..... 40c each
Post Plug Jacks 40c each



STRIP TERMINALS

No. 23—
-Strip Terminal Lugs
List, Each 5c



BANANA TYPE PHONE JACKS

No. 120 1/2" Long 6-32 Screw Type
Each 8c



Standard Phone Tips

List No. 16.....
Each 3c



JR. SOLDERLESS PHONE TIPS

List Price Each
No. 9 6c



HEAVY DUTY PHONE TIPS

List Price No. 12.....
Each 10c



SR. SOLDERLESS PHONE TIPS

No. 10 List Each 8c



NEW TUBE ADAPTER LIST PRICE

No. 77 New Tube Adapter .12c each



SCREEN GRID CAPS

List Price, No. 102 Caps 3/8" Long Doz. 20c



Midjet Fuse Clips

List Price No. 54.....
Doz. 20c

Two Lug Type



No. 33—Sockets List Price Per Doz. 80c

Three Lug Type



No. 40—Sockets List Price Per Doz. 70c

ADJUSTABLE BRACKET DIAL LIGHT SOCKET

No. 36—
Oval Hole UP Style Bracket
List, Per Doz. 90c

MUELLER BATTERY CLIPS



No. 45 Pee-Wee



No. 48-B



No. 24-A



No. 21-A

MOST POPULAR SIZES OF CLIPS

Code No.	DESCRIPTION	Length of Clip	Spread of Jaws	PRICE EACH IN LOTS OF			Shipping Weight in Lbs. Per 100
				Retail Price	10	100	
45	PEE WEE CLIP, WITH SCREW. STEEL, CADMIUM-PLATED	1 1/2"	3/8"	\$.05	\$.03	\$.027	2
48-B	CLIP, WITH SCREW. STEEL, CADMIUM-PLATED	2"	1/2"	.05	.0325	.029	2
27	CLIP, WITH SCREW. STEEL, CADMIUM-PLATED	2 7/16"	5/8"	.10	.07	.06	4
24-A	CLIP, WITH SCREW. STEEL, CADMIUM-PLATED	2 7/8"	1"	.10	.06	.0525	7
21-A	CLIP, WITH SCREW. STEEL, LEAD-PLATED	4"	1 1/4"	.16	.11	.09	15
11-A	100-AMPERE CLIP, WITH LUG. STEEL, LEAD-PLATED	5 5/8"	1 1/8"	.60	.42	.36	34
85	ALLIGATOR CLIP, WITH SCREW AND BARREL. STEEL, CADMIUM-PLATED	2 3/8"	1 1/2"	.06	.04	.03 1/2	2

SOLID COPPER CLIPS

45-C	10-AMPERE CLIP, SOLID COPPER, PHOSPHOR BRONZE SPRING, BRASS SCREW	1 1/2"	1/4"	\$.08	\$.055	\$.0475	2
48-C	10-AMPERE CLIP, WITH SCREW. SOLID COPPER	2"	1/2"	.10	.07	.06	2
24	25-AMPERE CLIP, WITH SCREW. SOLID COPPER	2 7/8"	1"	.20	.14	.12	7
21	50-AMPERE CLIP, WITH LUG. SOLID COPPER	4 1/2"	1 1/4"	.50	.35	.30	18
11	100-AMPERE CLIP WITH LUG. SOLID COPPER	5 7/8"	1 1/8"	1.00	.70	.60	36
33	300-AMPERE CLIP WITH LUG. SOLID COPPER	7 3/4"	2"	1.08	1.25	1.80	95

RUBBER INSULATORS (Also listing clips each will fit.)

Insulator Code No.	FOR USE WITH CLIP NUMBER:	PRICE EACH IN LOTS OF			Shipping Weight in Lbs. Per 100
		Retail Price	10	100	
87	85 ALLIGATOR CLIP	\$.05	\$.03	\$.0275	1
47	45 PEE-WEE 45-C SOLID COPPER	.08	.057	.049	2
74	95 FOR 7MM IGNITION CABLE	.09	.063	.054	4
49	48-B 48-C SOLID COPPER 82 NEEDLE CLIP	.10	.065	.055	4
29	27 27-C SOLID COPPER	.12	.082	.07	5
90	SPECIAL 27 CLIP FOR 7MM IGNITION CABLE	.12	.082	.07	5
26	24-A 24 SOLID COPPER	.20	.14	.12	10
23	21-A 21 SOLID COPPER	.35	.24 1/2	.21	16
13	11-A 11 SOLID COPPER	.70	.49	.42	23
35	33 SOLID COPPER	.80	.56	.47	55

JUMPERS, CARRIER, GROUND CLAMP

Code No.	DESCRIPTION	PRICE EACH IN LOTS OF			Shipping Weight in Lbs. Per 100
		Retail Price	10	100	
89	CLIP JUMPER	\$.20	\$.15	\$.12	16
57	TAP-TITE CONNECTOR	.20	.15	.12	9
77	JUMPING JACK CONNECTOR	.14	.10	.085	9
73	COCK-EYED CARRIER	.35	.25	.19	19
58	CLAMPIPE GROUND CLAMP	.07 1/2	.05	.04 1/2	9

EBY BINDING POSTS

SINGLE, TWIN and TRIPLE TIP JACKS



Type 17, Moulded Twin Jacks

For making quick connections and for use with speakers and phonograph units.

The moulded units are furnished regularly in Black. They can also be supplied in Brown finish on special quantity orders. Laminated units furnished only in Brown finish.

Cat. No.	Type Material	Mtg. Cen.	List Price
Twin Jacks			
17 Speaker	Moulded	*	\$0.35
17 Phono	Moulded	*	.35
17 Plain	Moulded		.35



Type 21-S Moulded Twin Posts

TWIN and TRIPLE BINDING POSTS

These binding posts consist of standard Eby units mounted on moulded or laminated Bakelite Strips to form neat assemblies for making connections.

Cat. No.	Type Material	Markings	List Price
Twin Post Units			
21-R*	Mld'd Ant., Gnd.		\$0.45
21-S*	Mld'd Ant., Gnd.		.45
22-R	Lamin. Ant., Gnd.		.25
22-S†	Lamin. A. G.		.20
Triple Post Units			
21-T	Mld'd L. Ant., S. Ant., Gnd.		\$0.60
22-T	Lamin. . . Ant., S. Ant., Gnd.		\$0.35

NON-REMOVABLE HEAD BINDING POSTS



Junior or Ensign



Midget or Corporal or Sergeant or Captain



Buddy or Sergeant S.S.



Junior P-3 or Commander P-3

Binding Post General Characteristics

Trade Name	Height Closed	Cap. Dia.	Type of Finish	Material	List Price
Metal Binding Posts					
Midget	7/16"	5/16"	Note 2	Brass	\$0.15
Corporal	9/16"	3/8"	Note 2	Brass	.20
Buddy	9/16"	3/8"	Note 2	Brass	.20
Sergeant	3/4"	1/2"	Note 2	Brass	.30
Sergeant SS	3/4"	1/2"	Note 2	Brass	.35
Captain	1"	3/8"	Note 2	Brass	.45
Insulated Binding Posts					
Ace	29/32"	3/8"	Black	Composition	.15
Junior r*	11/16"	3/8"	Black	Composition	.16
Junior P-4†	11/16"	3/8"	Black	Note 1	.25
Junior P-3	11/16"	3/8"	Black	Note 1	.25
Ensign	11/16"	3/8"	Black	Composition	.20
Comm'der	3/4"	3/8"	Black	Composition	.35
Comm. P-4	3/4"	3/8"	Black	Note 1	.45
Comm. P-3	3/4"	3/8"	Black	Note 1	.45



Commander P-4

Note 1: Composition top and Bakelite base.
Note 2: List prices given are for tumbled nickel finish.

INSTRUMENT KNOBS



S-505

2" Rheostat Dial
List **\$0.25**
1/4" Plain Insert with set screw. Graduations 100 to 0. Black only.



E-127

1 1/4" Ornamental Top; Set Screw Type
1/4" Plain Hole with Set Screw. Walnut only List **\$0.10**



E-110

1 1/8" Two-tone Knob
1/4" Hole. No Insert. No Skirt. Set Screw Type. List **\$0.14**



E-292

1 1/4" Bar Knob
Black or Walnut List **\$0.12**



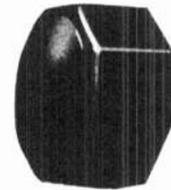
E-293

2 1/4" Bar Knob Black or Walnut List **\$0.18**



*No. S-280-7AA
Set Screw—No Insert

Price .15



*No. S-281-7AA

Price .20



E-18

3/4" Insert and Set Screw. Filled arrow. Black only. List **.15**



E-17

3/4" Insert and Set Screw. Filled arrow. Black only. List **.12**



E-280

Height 15/32", 1/4" Hole. Two-tone Walnut only. List **\$0.10**



No. S-312-3—1/4" Insert **\$0.65** ea.
No. S-312-1—No Insert **.60** ea.
Width 2 15/16"

No. S-311-3—1/2" Insert **\$0.30** ea.
No. S-311-1—No Insert **.45** ea.
Width 2 1/16"

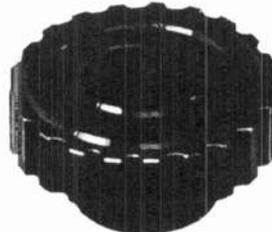
Above knobs have skirt base.

No. S-310-3—1/4" Insert **\$0.50** ea.
No. S-310-1—No Insert **.45** ea.
Width 2 3/8"

No. S-309-3—1/2" Insert **\$0.40** ea.
No. S-309-1—No Insert **.35** ea.
Width 1 3/4"

No. S-308-3—1/2" Insert **\$0.30** ea.
No. S-308-1—No Insert **.25** ea.
Width 1 3/16"

With Set Screw. Black only



No. S-81-3
1/4" Insert and Set Screw
Carton 200

Price .20



No. S-78-3
1/4" Insert and Set Screw
Carton 200

Price .15

CROWE DIALS

"FRONT-O-PANEL"



Diameter of scale 2 1/4". Beautiful metal scales, flood-lighted from bulb concealed behind upper part of escutcheon. Glass enclosed. No. 525—"Front-O-Panel" airplane dial with two-speed Crowe planetary drive. 165 to 1; and 30 to 1 in 360°. Complete with pilot light socket; black, bronze or chromium escutcheon and two Bakelite knobs.

List Price.....\$9.00
No. 526—"Front-O-Panel" airplane dial, single speed. Same as No. 525 above except does not have planetary feature. Ratio 30 to 1 in 360°. List Price.....\$7.00

Rotating Fan-Type Unit Pointer Style Escutcheon



No. 46—Rotating Fan-Type Unit. Outside diameter of scale 3 3/4". Calibrated 0-100. Ratio 12 to 1 in 360°. Complete with pointer style bronze escutcheon. List Price.....\$1.50

Midget Dial — 2 1/4-Inch Two or Four-Channel Friction Drive



No. 150 Crowe Friction-Drive Unit with Pilot Socket—Visible diameter of scale 2 1/4". Ratio about 7 to 1 in 360°. Two-channel 0-100 or 4-channel kilocycle scale, with convex glass crystal and bronze escutcheon. List Price.....\$1.80

Rectangular Dials



No. 154 Rectangular Crowe Wedge Drive Unit — Visible portion of scale 2 1/2"x3". Ratio about 14 to 1 in 360°. Peach 4-band-kilocycle scale; convex glass crystal and bronze escutcheon. List Price.....\$3.40

No. 166—Same as No. 154, except has double-end pointer covering 180° in both channels of an 0-100 scale. List Price.....\$2.50

MICROMETER TYPE



No. 371—Airplane Style Micrometer Control for Transmitters, Receivers, Precision Instruments, Oscillators, Frequency Meters, etc. Condenser setting can be read to one-tenth of one dial division with calibrated pointer. Open vision stamped pointer permits adding additional bands with India ink in center of scale. Has special brackets for mounting on metal panel if desired. Scale calibrated 0-100 in 268. Visible diameter of scale is 2 1/4". Ratio of 14 to 1 in 360°. Complete with chrome-plated or black escutcheon and black Bakelite knob.

List Price.....\$4.50

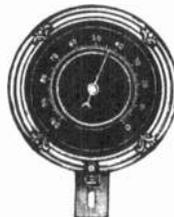
Two-Inch Midget



No. 125 Crowe Friction Drive Airplane Dial for Small Receivers—Diameter of scale 2". Ratio 3 1/2 to 1 in 360°. Double-end pointer, 4-channel kilocycle calibration. Black or peach. Convex glass and bronze escutcheon. List Price.....\$1.50

3 1/2-Inch — 0-100

No. 150 Crowe Wedge Drive Airplane Dial. Visible diameter of scale 3 1/2". Smooth serviceable unit with geared connection to pointer. Ratio about 14 to 1 in 360°. Has two pilot light sockets, and bronze escutcheon; black or peach 0-100 scale, or black 2-channel scale 0-100 and 1500-550.



List Price.....\$3.20



SEGMENT SWITCH PLATES

No. 274—"1-2." Size 1"x1 1/4".
No. 564—"1-2-3." Size 1x1 1/4".
No. 273—"On-Off." Size 1x1 1/4".
No. 279—"Broadcast-Short Wave."
List Price.....\$0.10

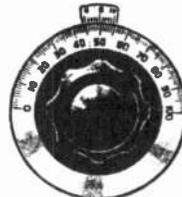


CIRCULAR SWITCH PLATES

No. 30—"Local-Distant." Dia. 1 1/4".
No. 272—"Off-On." Dia. 1 1/4".
No. 573—"Micro-Phono." Dia. 1 1/2".
List Price.....\$0.12

GENUINE VERNIER

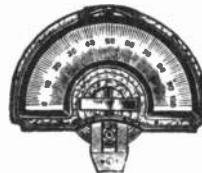
Have Reduced Speed Drives and Micrometer Indicators for Exact Instrument Adjustment



No. 296—"Plan-O-Vernier" Transmitter Type Reduced Speed Dial with Stationary Micrometer Marker. Has smooth Crowe planetary drive concealed in knob. Ratio about 5-1 in 360°. Dial is 4" diameter, calibrated 0-100, left to right, in 180° only. Die-stamped on heavy brass .040" thick; chromium plated, spun sun-ray finish. Identical size and appearance as Nos. 292 and 293 shown at right. Fits only 1/4" diameter shaft.

List Price.....\$6.50

Moving Shadow Semi-Circle Type



No. 132—Large Semi-circular Type with Moving Shadow Indicator. Visible width of scale 1 1/4". Calibrated 0-100. Ratio 12 to 1 in 360°. Complete with pilot light socket and bronze escutcheon. List Price.....\$2.60

BAKELITE KNOBS



These are genuine Bakelite knobs, accurately moulded and carefully finished. Hardened steel set screws included with all knobs.

No. 286—1 1/4" black Bakelite bar knob. List Price.....\$0.15
No. 285—2 1/4" black Bakelite bar knob. List Price.....\$0.20



No. 567—2 1/4" black Bakelite bar knob. List Price.....\$0.20
No. 588—1 1/4" black Bakelite bar knob. List Price.....\$0.15

INSTRUMENT DIALS
Best Quality Direct Drive Crowe Instrument Dials



Fine appearance, accurate workmanship and genuine spun chrome finish distinguish these precision dials. Instrument setting can be read to 1/10th of one dial division by using the micrometer marker plate supplied with each unit. All exposed metal parts are insulated from the instrument shaft.
No. 294—2 1/4" dia. 180° scale. List Price.....\$1.65
No. 282—4" dia. 180° scale. List Price.....\$2.50
No. 295—2 1/4" dia. 270° scale. List Price.....\$1.65
No. 293—4" dia. 270° scale. List Price.....\$2.50

All-Star Dial

No. 123 Popular Medium Size Crowe Wedge Drive Unit. Visible diameter of scale 2 1/4". Ratio about 14 to 1 in 360°. Peach or black scales calibrated as illustrated or 0-100. Has convex glass crystal and bronze escutcheon. List Price.....\$3.00



Two-Speed Planetary Drives



Large one of pair is 1 1/2" dia., drilled for standard 1/8". Smaller is 1" dia., drilled for 1/16". Combined overall height is 3/4".
No. 288—Walnut List Price, Fr., \$0.20
No. 289—Black List Price, Fr., \$0.20
No. 586—1 1/4" diameter, with 1/2" shoulder List Price.....\$0.20
No. 287—1 1/4" with finger grip. List Price.....\$0.15
No. 589—2 1/4" with pointer. List Price.....\$0.60
No. 290—2 1/4" lens pointer. List Price.....\$0.50
No. 591—1 1/4" with pointer. List Price.....\$0.40

Four Bands — Three Sizes

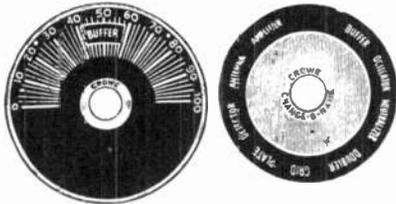


44 to 1, and 9 to 1. The secondary pointer magnifies each degree of condenser travel about sixteen times. Two walnut bakelite knobs and bronze escutcheon included.

No. 316 Crowe MICROMASTER Diameter of scale 3 3/8". List Price.....\$5.40
No. 317 Crowe MICROMASTER Diameter of scale 3 3/8". List Price.....\$5.80
No. 318 Crowe MICROMASTER Diameter of scale 2 3/8". List Price.....\$5.00

CROWE DIALS

CROWE ANODIZED "CHANGE-O-NAME" DIAL PLATE



No. 542-A—Calibrated 0-100 in 180°. 2 3/4" dia. with name disc reading: Amplifier, Antenna, Buffer, Detector, Doubler, Grid, Neutralizer, Oscillator, Plate. "Write-Your-Own" space.

No. 542-B—Same as No. 542-A except name disc reads: Buffer Grid, Buffer Plate, Crystal Oscillator, Crystal Osc. Plate, Doubler Grid, Power Amp. Plate, Power Amp. Grid, Tripler Grid, Tritet Oscillator. "Write-Your-Own" space.

List Price \$0.60

No. 541-A—"Change-O-Name" anodized dial. Calibrated 0-100 in 270°. 1 3/4" dia. Name disc reads: Fader, Gain, Selectivity, Tone, Volume. "Write-Your-Own" space.

List Price \$0.35

No. 541-B—"Change-O-Name" same as No. 541-A except name disc reads: Master Volume, Micro 1, Micro 2, Radio Volume, Record Volume. "Write-Your-Own" space.

List Price \$0.35

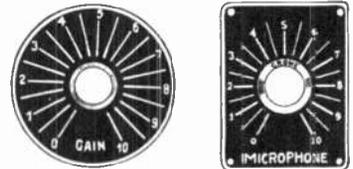
No. 540-A—"Change-O-Name" anodized dial. Calibrated 0-100 in 180°. 1 1/2" dia. with name disc reading: Amplifier, Antenna, Crystal, Detector, Oscillator, "Write-Your-Own" space.

List Price \$0.35

No. 543-A—"Change-O-Name" anodized dial. Calibrated 0-100 in 270°. 2 1/4" dia. with name disc reading: Fader, Gain, Master Volume, Micro 1, Micro 2, Radio Volume, Record Volume, Tone, Volume. "Write-Your-Own" space.

List Price \$0.60

ETCHED DIAL PLATES



Size 1 3/4"

No. 27—"Osc. Cond." calibrated 0-100.
No. 28—"Det. Cond." calibrated 0-100.
No. 569—"Plain dial" calibrated 0-100.
No. 25—"Volume" with arrow.
No. 29—"Beat Osc. Off-On."
No. 26—"Tone Control."
No. 561—"Increase Sensitivity."
No. 560—"A. V. C. Off-On."
 List, Each \$0.12

Size 2 1/4 x 1 1/4"

No. 565—"Record" dial plate. 0-10 in 300°.
No. 566—"Microphone." 0-10 in 300°.
No. 276—"Gain." 0-10 in 300°.
No. 277—"Tone." 0-10 in 300°.
No. 570—"Master Gain." 0-10 in 300°.
No. 571—"Plain dial" plate. 0-10 in 300°.
 List, Each \$0.20

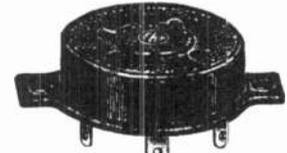
EBY SOCKETS



No. 12 Moulded Socket

Both the No. 8 and No. 12 Eby Moulded Sockets are made with Eby recess ring, moulded through contact holes. Furnished in Black Bakelite finish.

Cat. No.	No. of Prongs	List Price
Type 8 —1 1/16" Mtg. Centers		
8A	4	\$0.20
8B	5	.25
8C	6	.25
8DN	7 .750" dia. layout	.25
8DO	7 .855" dia. layout	.25
8E	8 octal	.30
Type 12 —1 1/16" Mtg. Centers		
12A	4	\$0.30
12B	5	.30
12C	6	.40
12BC	Com. 5 & 6 prong	.40
12DO	7 .855" dia. layout	.40
12DNO	Com. lg. & sm. 7 prong	.40
E	8 octal	.45



No. 8 Moulded Socket

No. 8 is very similar, but the base consists of separate, laminated Bakelite plate. Both sockets for use where severe service is likely to be encountered.

AMPHENOL SOCKETS

AMPHENOL Socket Sub-Panel Type



Cadmium-plated contacts, made of brass alloy with two ears for soldering; maintains firm, low resistance contact with tube prongs. Sockets held to chassis by tempered steel ring. No rivet is necessary. Fits any chassis from 0.80 to 0.65 inches thick.

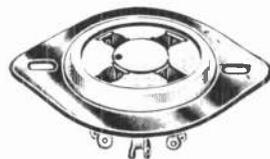
Type	Contacts	O.D.	List
S4	4	1 1/4"	\$11.00 C
S5	5	1 1/4"	11.00 C
S6	6	1 1/4"	11.00 C
S7S	7 small	1 1/4"	11.00 C
S7L	7 large	1 1/4"	11.00 C
S7C	7 comb.	1 1/4"	14.00 C
S8	8 octal	1 1/4"	14.00 C

Price includes retainer ring.

AMPHENOL STEATITE SOCKETS

High Mechanical Strength.—Breakage, a common fault in Ceramic sockets is practically eliminated in this AMPHENOL product. The metal adapter plate takes the full strain of riveting or mounting and the Ceramic portion itself is held with a heavy resilient spring that places no strain on the Steatite.

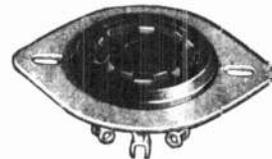
Ease of Mounting. The steel plate can be screwed or riveted to the panel, or using the spacers can be mounted above the panel. The best and neatest mounting is made by discarding the adapter plate and reassembling the socket into chassis.



amplifiers on wavelengths below 30 meters. Extremely low moisture absorption. Diameter 1 1/4" thickness 3/8". Cadmium plated steel plate mounting center 1 1/2" to 2".

Type	Contacts	List
RSS4	4	\$40.00 C
RSS5	5	40.00 C
RSS6	6	40.00 C
RSS7S	7 small	40.00 C
RSS7L	7 large	50.00 C
RSS8	8 octal base	50.00 C

AMPHENOL Socket Replacement Type

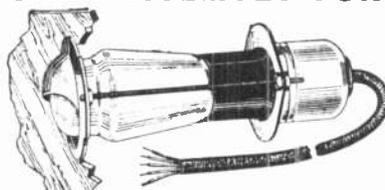


Same as our regular type S, listed above. Comes set in cadmium plated steel adapter plate. It fits any rivet hole spacing from 1 1/2" to 2". The adapter plate may be removed.

Type	Contacts	List
RS4	4	\$12.00 C
RS5	5	12.00 C
RS6	6	12.00 C
RS7S	7 small	12.00 C
RS7L	7 large	12.00 C
RS7C	7 combination	15.00 C
RS8	8 octal base	15.00 C

AMPHENOL SOCKET ASSEMBLY FOR MAGIC EYE

The AMPHENOL mounting assembly consists of the mounted tube socket, its protective shell, a 22" five-wire coded cable, and the one-megohm target to plate resistor already wired on the socket. (All necessary hardware for assembling with an attractive modernistically styled escutcheon included.) The AMPHENOL mounting assembly makes possible the application of the electron ray tube or Magic-Eye to sets employing automatic volume control, but lacking a tuning indicator.



Tuning by eye is made possible. The ear alone cannot determine the proper tuning point on automatic volume control sets. With this assembly and the electron ray tube, visual tuning can be put on such receivers. With the set in tune the electron eye illumination narrows; when out of tune it broadens.

MEA-6

Socket Assembly for MAGIC-EYE
 List Price \$1.25

BURGESS BATTERIES

RADIO "B" BATTERIES

When lives and records are at stake, explorers and scientists choose Burgess Batteries.

Dependable service is the result of years of patient research, the use of quality materials, and manufacture by skilled craftsmen under strict laboratory control.

Plug in taps at -, +22½ and 45 volts. Shelf life over one year. These are the exclusive features on which Burgess Batteries challenge service comparison:

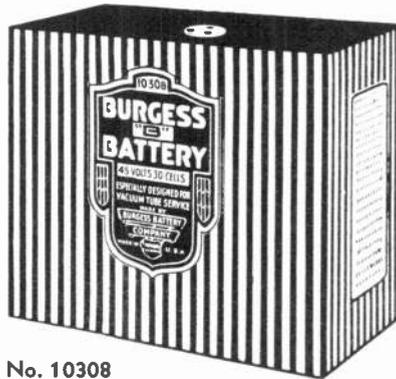
- ★ Chrome, a patented discovery assuring longer performance
 - ★ Heavy seamless drawn zinc cans—a distinguishing quality feature
 - ★ Insulating jacket enclosing each cell
 - ★ Paraffine impregnated nests and box
- NOTE:—Only uniformly high capacity cells are used in Burgess Batteries.



No. 2308

Standard size, favorite where space is limited and efficient operation desirable. Suggested for radio sets where plate current drains range from 5 to 10 milliamperes.

Retail Price.....\$1.98



No. 10308

Heavy duty size, popular for reliable service and economy. Best suited for radio receivers with plate current drains of 15 to 20 milliamperes.

Retail Price.....\$2.70



No. 22308

Super standard size, built to deliver maximum service for a medium size battery. Designed for receivers with plate current drains of 10 to 15 milliamperes.

Retail Price.....\$2.30

RADIO BATTERIES

CATALOG NUMBER	BATTERY VOLTAGE	DIMENSIONS IN INCHES	QUANTITY UNIT PKG.	WEIGHT UNIT PKG.	DESCRIPTION	RETAIL PRICE	DEALER PRICE EACH LESS UNIT PKG.	DEALER PRICE EACH IN UNIT PKG.
21308	45	8x8¼x4½	6	87	Super Heavy Duty "B"	\$3.40	\$2.52	\$2.30
F30-3	135	4x12x13¾	2	65	Plug-In "B" Pack Heavy Duty	8.45	6.49	5.90
10308	45	8x8¼x4¾	6	74	Heavy Duty "B"	2.70	2.00	1.82
22308	45	8x8¼x3⅝	6	56	Standard Super "B"	2.30	1.72	1.56
2308	45	8x8¼x3⅝	6	49½	Standard "B"	1.98	1.47	1.34
5308	45	6¾x4¼x2½	5	17	Portable "B"	1.50	1.12	1.02
5156	22½	2¾x4¼x2⅝	4	7¼	Medium "B or C"	.90	.67	.61
2370	- 4½	3x4x1¾	10	10	Standard "C"	.40	.30	.27
5360	- 4½	2⅞x1⅜x2⅝	4	1½	Small "C"	.40	.30	.27
5540	- 7½	2¾x4x⅞	4	2½	7½ Volt "C"	.65	.48	.44
4156	+22½	2⅞x3⅝x2⅝	4	4½	Small "B"	.75	.56	.51

GENERAL UTILITY, LITTLE-SIX BATTERIES

CATALOG NUMBER	BATTERY VOLTAGE	DIMENSIONS IN INCHES	QUANTITY UNIT PKG.	WEIGHT UNIT PKG.	DESCRIPTION	RETAIL PRICE	DEALER PRICE EACH LESS UNIT PKG.	DEALER PRICE EACH IN UNIT PKG.
4FH	1½	2⅝x2⅝x4⅝	20	28 lbs.	Ignition Type	\$.44	\$.33	\$.30
4F2H	3	2⅝x5⅞x3⅞	15	42	Ignition Type	.86	.65	.59
4F4H	6	6¼x8¼x2¾	6	40	Ignition Type	2.24	1.68	1.53

RADIO "A" BATTERIES

CATALOG NUMBER	VOLTAGE	DIMENSIONS IN INCHES	QUANTITY UNIT PKG.	WEIGHT UNIT PKG.	DESCRIPTION	RETAIL PRICE	DEALER PRICE EACH LESS UNIT PKG.	DEALER PRICE EACH IN UNIT PKG.
4FA	1½	2⅝x2⅝x4⅝	20	28	Little Six Radio "A" Type	\$.50	\$.37	\$.34
20F2	3	11⅝x4x6½	1	13½	Standard Radio "A" Type	4.05	2.80	2.80

BURGESS BATTERIES

**Special Portable "A"
No. 44**



A small dry cell primarily designed for requirements that call for light weight and dependable service. Ideal for microphones, portable radios, laboratory and surgical instruments. Size: Ht. 4 1/16", Diam. 1 1/8". Wt. 10 1/2 oz. Voltage Taps - 1 + 1 1/2. Brass Posts.

**Blasting Batteries
No. 533—No. 1023**



Burgess Blasting Batteries meet the requirements of men who handle high explosives. They feature seamless drawn zinc cans, paraffined wrappers, and paraffined

outer containers, making them thoroughly waterproof. The terminals are sunk into rubber tube sockets which prevent shorting and premature discharge.

No.	Voltage	No. Cells	Size Cells	Size	Weight
533	4 1/2	3	B	2 5/8" x 2 3/8" x 1 13/16"	1 1/2 oz.
1023	3	2	F	4 13/16" x 2 5/8" x 1 1/8"	13 oz.

**Meteorological Battery
No. X2X**



A special two-cell battery used by airlines and weather observers for tracing wind directions and velocities at night. The light is attached to balloons which are released and observed. Size: Battery Height 1 7/16", Height (including bulb) 2 3/16", Width 1 1/16", Depth 1 7/32", Weight 33 grams.

SPECIAL PURPOSE BATTERIES

CATALOG NUMBER	VOLTAGE	DESCRIPTION	RETAIL PRICE	DEALER NET PRICE EACH
B72BP	108	Designed for Portable Transmitters—Receivers and particularly Aircraft Radio	6.75	4.50
2338	49 1/2	Standard Size Battery built for Camera Motor and Sound Projector Service	3.15	2.35
10338	49 1/2	Heavy Duty Battery particularly suited for economical service on Camera Motors and Sound Projectors	3.60	2.68
21338	49 1/2	A Super Heavy Duty Battery for Camera Motor and Sound Projection Service	3.75	2.82
5966	135	Aircraft Battery for Beacon Receivers	6.80	4.63
A30BP	45	Portable, Light Weight "B" Battery	1.70	1.15
Z30BP	45	A Midget Portable "B" Battery	1.85	1.23
Z30X	45	A Midget Portable "B" Battery with High Capacity Cells	1.80	1.23
Z30P	45	A Midget Portable "B" Battery of Different Size	1.70	1.15
Z30PX	45	Same as Z30P except Special Heavy Duty Cells	2.20	1.50
B30BP	45	A Medium Size Portable 45 Volt Unit	2.40	1.61
X30BP	45	A Midget Portable 45 Volt Unit	2.35	1.60
X30FL	45	Small 45 Volt "B" Battery	2.40	1.64
W30FL	45	An Extremely Small 45 Volt "B" Battery	2.50	1.70
T2FL	3	A Small 3-Volt "A" or Filament Battery	.45	.29
F2BP	3	A Small 3-Volt "A" or Filament Battery	.50	.34
44	1 1/2	For Portable Filament Lighting or Instrument use	.50	.34
533	4 1/2	Portable Shot Firing Battery	.33	.23
1023	3	Economy Size Shot Firing Battery	.39	.265
X2X	3	Portable Battery for Meteorological Observation	.38	.26

EARPHONE BATTERIES

CATALOG NUMBER	VOLTAGE	QUANTITY UNIT PKG.	WEIGHT UNIT PKG.	DESCRIPTION	RETAIL PRICE	DEALER PRICE †	
						IN LOTS OF 6	IN LOTS OF 12
T2R	3	25	14 lbs.	Universal, standard size	\$.45	\$.40	\$.36
T3R	4 1/2	25	19 1/2	Universal, standard size	.55	.50	.44
B3R	4 1/2	25	8 1/2	Universal, small size	.45	.40	.36
F2R	3	1	3/4	Universal, large size	.50	.45	.40
F3R	4 1/2	1	1	Universal, large size	.60	.54	.48
3F2R	3	1	1 1/8	Universal, economy size	1.00	.80*	.80*
2F3R	4 1/2	1	2 1/16	Universal, economy size	1.00	.80*	.80*
T2QG	3	25	13	Special, standard size	.40	.36	.32
T3QG	4 1/2	25	19 1/2	Special, standard size	.50	.45	.40
T2RA	3	25	14	Special, standard size	.40	.36	.32
T3RA	4 1/2	25	19 1/2	Special, standard size	.55	.495	.44
T2RAD	3	25	14	Special, standard size	.40	.36	.32

R. C. A. RADIOTRON TUBES

STANDARD GLASS TYPES			SPECIAL TYPES		GLASS OCTAL BASE			
Type	List	List	Type	List	Type	List		
00-A	2.35	31	874	4.00	5V4G	2.45		
01-A	.90	32	876	6.50	5X4G	1.60		
1A4	1.85	33	886	8.00	5Y3G	1.10		
1A6	1.85	34	ALL - METAL TYPES				5Y4G	1.10
1B4	2.35	35	5T4	2.60	6A8G	1.60		
1B5/25S	1.35	36	5W4	1.10	6AC5G	1.20		
1C6	1.85	37	5Z4	2.10	6B8G	1.85		
1F4	1.60	38	6A8	1.60	6C5G	1.35		
1F6	2.35	39/44	6B8	1.85	6C8G	1.60		
1-V	1.20	40	6C5	1.35	6D8G	2.35		
2A3	2.60	41	6F5	1.35	6F5G	1.35		
2A5	1.35	42	6F6	1.45	6F6G	1.45		
2A6	1.35	43	6H6	1.35	6F8G	1.60		
2A7	1.60	44	6J5	1.45	6G6G	2.35		
2B7	1.70	45	6J7	1.60	6H6G	1.35		
5Z3	1.20	46	6K7	1.45	6J5G	1.45		
6A4/LA	1.60	47	6L6	2.35	6J7G	1.60		
6A6	1.70	48	6L7	1.85	6K5G	1.45		
6A7	1.60	49	6N7	1.85	6K6G	1.45		
6B7	1.60	50	6Q7	1.45	6K7G	1.45		
6C6	1.35	51	6R7	1.45	6L5G	2.35		
6D6	1.35	52	6V6	1.85	6L6G	2.60		
6E5	1.60	53	6X5	1.60	6L7G	1.85		
6F7	2.10	54	25A6	1.60	6N7G	1.85		
6G5	1.60	55	25L6	2.35	6Q7G	1.45		
6N5	1.85	56	25Z6	1.60	6R7G	1.45		
6U5	1.60	57	GLASS OCTAL BASE				6S7G	2.35
10	2.85	58	1C7G	2.35	6T7G	2.35		
11	2.35	59	1D5G	2.35	6U7G	1.45		
12	2.35	71-A	1D7G	1.85	6V6G	1.85		
12A7	2.35	75	1E5G	2.35	6X5G	1.70		
12Z3	1.45	76	1E7G	2.85	6Y6G	2.35		
15	2.35	77	1F5G	2.35	6Z7G	1.85		
19	1.45	78	1F7GV	2.35	6ZY5G	1.60		
20	2.35	79	1G5G	2.10	25A6G	1.60		
22	2.10	80	1H4G	1.10	25A7G	2.35		
24-A	1.20	81	1H6G	1.85	25B6G	1.85		
25Z5	1.35	82	1J6G	1.45	25L6G	2.35		
26	.90	83	5U4G	1.60	25Z6G	1.60		
27	.90	83-V						
30	1.10	84/6Z4						
		85						
		89						
		Y99						
		X99						
		112-A						

KEN-RAD RADIO TUBES

GLASS TUBES		GLASS TUBES	
24A	1.00	Screen Grid Amplifier	
27S	1.10	Detector Amplifier	
35S-51S	1.50	Super-Control Screen Grid Amplifier	
55S	1.75	Duplex Diode Triode	
56S	1.35	Detector Amplifier	
56AS	1.35	Detector Amplifier	
57S	1.75	R. F. Amplifier Pentode	
57AS	1.75	R. F. Amplifier Pentode	
58S	1.75	Super-Control R. F. Pentode	
58AS	1.75	Super-Control R. F. Pentode	
75S	1.75	Duplex Diode Triode	
85AS	1.75	Duplex Diode Triode	
182B	2.00	Power Amplifier	
183	2.00	Power Amplifier	
485	2.00	Detector Amplifier	
950	2.25	Power Amplifier Pentode	
2A7S	2.30	Pentagrid Converter	
2B7	1.60	Duplex Diode Pentode	
2B7S	2.30	Duplex Diode Pentode	
2S-4S	2.75	Twin Diode	
2Z2-G84	2.00	Half-Wave Rectifier	
6A3	2.00	Power Amplifier Triode	
6AB5	1.75	Electron Ray Indicator	
6A7S	2.30	Pentagrid Converter	
6B5	2.25	Duplex Triode Amplifier	
6B7S	2.30	Duplex Diode Pentode	
6E6	2.00	Twin Triode Power Amplifier	
6E7	2.00	Super-Control R. F. Pentode	
6F7S	2.00	Triode Pentode Converter	
6G5	1.50	Electron-Ray Indicator	
6N5	1.75	Electron-Ray Indicator	
6T5	1.50	Electron-Ray Indicator	
6U5	1.50	Electron-Ray Indicator	
6Y5	2.00	Full-Wave Rectifier	
6Z5	2.00	Full-Wave Rectifier	
12A5	\$ 2.25	Power Pentode	
METAL TUBES			
OZ4	\$1.50	Gaseous Full-Wave Rectifier	
"G" SERIES			
(Glass Tubes with Octal Bases)			
OZ4G	\$1.50	Gaseous Full-Wave Rectifier	
1J5G	2.25	Power Amplifier Pentode	
5W4G	1.00	Full-Wave Rectifier	
6S7G	2.25	Super-Control R. F. Pentode	
6T7G	2.25	Duplex Diode Hi-Mu Triode	
6U7G	1.35	Super-Control R. F. Pentode	
6V6G	1.75	Beam Power Amplifier	
6V7G	1.35	Duplex Diode Triode	
6W5G	1.50	Full-Wave Rectifier	
6X5G	1.60	Full-Wave Rectifier	
6Y7G	1.50	Twin Triode Amplifier	
6ZY5G	1.75	Full-Wave Rectifier	
6Z7G	1.75	Twin Triode Amplifier	

CHAMPION RESISTANCE TUBES

The Champion Radio Works, manufacturers of Radio Tubes since 1924, were the pioneers in the development of line resistor Ballast Tubes for AC-DC sets, and have maintained their leadership in this field by virtue of the quality of their product. Many outstanding set manufacturers have chosen Champion Resistance Tubes for initial set equipment—a further endorsement of Champion quality.



Resistance units enclosed in Radio Tube envelopes and with Radio Tube bases, are now standard for voltage reduction purposes and to supply proper voltage to pilot lamps in AC-DC receivers. With their use fire hazard is reduced to a minimum and the use of separate resistors for pilot lamps is eliminated.

Having the same general appearance of Radio Tubes, these resistance units add sales value to radio receivers and have the additional important feature of being easy to replace.

GLASS RESISTANCE TUBES (Regular Base)

Type	List Price						
185R	\$.80	185L44	\$.80	165L8	\$.80	140R44	\$.80
185R4	.80	165R	.80	165L44	.80	140L4	.80
185R8	.80	165R4	.80	340	.80	140L8	.80
185R44	.80	165R8	.80	140R	.80	140L44	.80
185L4	.80	165R44	.80	140R4	.80	60R30C	.80
185L8	.80	165L4	.80	140R8	.80	878R48	.80

METAL RESISTANCE TUBES (Octal Base)

PERFORATED METAL SHELL

Type	List Price	Type	List Price	Type	List Price	Type	List Price
55A	\$.80	K49D	\$.80	L42C	\$.80	55A1	\$1.00
K55B	.80	L49B	.80	L42D	.80	55A2	1.10
K55C	.80	L49C	.80	36A	.80	55B2	1.10
K55D	.80	L48D	.80	K36B	.80	49A1	1.00
L55B	.80	42A	.80	K36C	.80	49A2	1.10
L55C	.80	K42B	.80	K36D	.80	49B2	1.10
L55D	.80	K42C	.80	L36B	.80	42A1	1.00
49A	.80	K42D	.80	L36C	.80	42A2	1.10
K49B	.80	K42E	.80	L36D	.80	42B2	1.10
K49C	.80	L42B	.80				

SPECIAL METAL RESISTANCE TUBES (Octal Base)

Type	List Price	Type	List Price	Type	List Price	Type	List Price	Type	List Price
K95B	\$.80	K74C	\$.80	L49S ¹	\$.80	M55B	\$.80	2LR-212	\$.80
K92B	.80	K55H	.80	L40S ¹	.80	M55C	.80	3ER-248	.80
K90F	.80	K52H	.80	L40S ²	.80	M55HG	.80	3ER-249	1.10
K87B	.80	L55S ¹	.80	L40S ³	.80	M49B	.80	EL3634	.80
K80B	.80	L55S ²	.80	M80B	.80	M49C	.80	100-37	.80
K80C	.80	L55S ³	.80	M80C	.80	M49HG	.80	100-38	.80
K80F	.80	L49S ¹	.80	M74B	.80	M42HG	.80		
K74B	.80	L49S ²	.80	M74C	.80				

EQUIVALENTS

Other Mfgs. Type No.	(Metal) Interchangeable with	Use Champion Type No.	(Metal) Type No.
40A	"	42A	(Metal)
K40B	"	K42B	"
K40C	"	K42C	"
K40D	"	K42D	"
L40B	"	L42B	"

Other Mfgs. Type No.	(Metal) Interchangeable with	Use Champion Type No.	(Metal) Type No.
L40C	"	L42C	(Metal)
L40D	"	L42D	"
2VR-215	"	L55B	"
2UR-224	"	L49B	"
3CR-241	"	L49D	"

MILLER COILS

No. 5480 Duo-Lateral Oscillator Coils

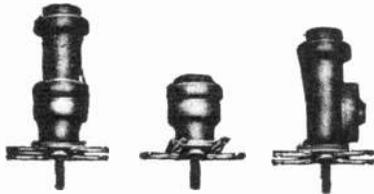
The following oscillator coils are designed for use with the 2A7, 6A7, 6A8, 6L7-6C5 type oscillator circuits and are available for use with any of the popular intermediate frequency amplifiers. They may be employed with any of our RF or antenna coils.



5480-C

The photograph is approximately one-third actual size. For use unshielded with .000365 mfd. variable condenser to cover the band from 540 to 1600 KC. Available for the following intermediate frequencies:

- No. 5480-K for 175 KC— List Price Requires .001 Mfd. Series Pad..... \$.60
- No. 5480-H for 262½ KC— Requires .0006 Mfd. Series Pad..... .60
- No. 5480-C for 465 KC— Requires .0004 Mfd. Series Pad..... .60



5480-ABP 5480-A 5480-RF
No. 5480-A, No. 5480-ABP,
No. 5480-RF Midget Duo-Lateral Coils

When the space for mounting coils is restricted yet efficiency must not be sacrificed, the No. 5480 type coil is recommended. Secondaries are duo-lateral wound with multi-strand Litzendraht wire upon a ½" diameter dowel, offering the most efficient type of winding of any coil of equal size. Supplied in all types including an antenna-band-pass consisting of an antenna primary and secondary and an additional secondary inductively coupled, providing a complete pre-selector stage in one unit. Photographs are approximately one-third the actual size. For use with a .000365 mfd. variable condenser to cover the band from 540 to 1600 KC.

- List Price No. 5480-A Antenna Coil..... \$.70
- No. 5480-ABP Antenna-Band-Pass Coil.. 1.00
- No. 5480-RF RF Coil..... .80

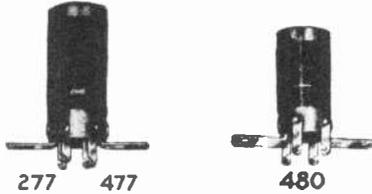


Replacement Primaries

A high impedance type duo-lateral antenna primary for replacing burnt-out primaries. Wound on specially treated impregnated cardboard tubing. Available in three sizes. Dimensions given are for outside diameter of antenna coil secondary winding.

- List Price No. 300—For 1¼" Coils..... \$.25
- No. 250—For 1" Coils..... .25
- No. 150—For ¾" Coils..... .25

OSCILLATOR COILS



277 477 480

Solenoid Oscillator Coils

The above oscillator coils are designed for use with pentagrid converter tubes or the 6L7 mixer. The 277 series are particularly designed for use with the No. 242 antenna and RF coils, while the 477 type are recommended for use with the 472 type coils. However, these units will track with any of our standard coils when the proper oscillator padding condenser is incorporated in the circuit. The 480 series shown above is recommended for use with the 5261 type coil or in any receiver in which space is at a minimum. All the above coils are available for use with any of the popular intermediate frequency amplifiers and may be obtained for use either shielded or unshielded. However, it is important that you specify whether the shielded or unshielded coil is desired upon ordering. If no specifications are given, the shielded type coil will be shipped. The shielded coils are supplied with the proper shields as listed below:

- 480 Type (1½" x 3" Shield)
- 277 Type (1⅞" x 3" Shield)
- 477 Type (2¼" x 3½" Shield)

For use with standard .000365 mfd. variable condenser to cover the band from 540 to 1600 KC. Available for use with the following intermediate frequency amplifiers:

480 SERIES

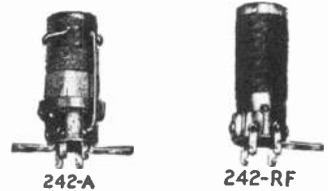
- | | List Price |
|----------------------------------|---------------------|
| | Shielded Unshielded |
| No. 480-M for 132½ KC..... | \$.70 \$.50 |
| —Requires .0016 Mfd. Series Pad. | |
| No. 480-K for 175 KC..... | .70 .50 |
| —Requires .001 Mfd. Series Pad. | |
| No. 480-H for 262½ KC..... | .70 .50 |
| —Requires .0006 Mfd. Series Pad. | |
| No. 480-C for 465 KC..... | .70 .50 |
| —Requires .0004 Mfd. Series Pad. | |

277 SERIES

- | | |
|----------------------------------|---------|
| No. 277-M for 132½ KC..... | .70 .50 |
| Requires .0016 Mfd. Series Pad. | |
| No. 277-K for 175 KC..... | .70 .50 |
| —Requires .001 Mfd. Series Pad. | |
| No. 277-H for 262½ KC..... | .70 .50 |
| —Requires .0006 Mfd. Series Pad. | |
| No. 277-C for 465 KC..... | .70 .50 |
| —Requires .0004 Mfd. Series Pad. | |

477 SERIES

- | | |
|----------------------------------|---------|
| No. 477-M for 132½ KC..... | .85 .50 |
| —Requires .0016 Mfd. Series Pad. | |
| No. 477-K for 175 KC..... | .85 .50 |
| —Requires .001 Mfd. Series Pad. | |
| No. 477-H for 262½ KC..... | .85 .50 |
| Requires .0006 Mfd. Series Pad. | |
| No. 477-C for 465 KC..... | .85 .50 |
| —Requires .0004 Mfd. Series Pad. | |



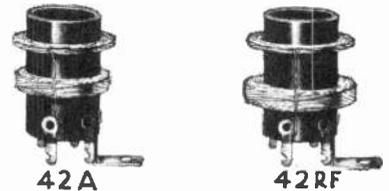
No. 242-A, No. 242-RF Litz Bank-Wound Coils

- | | List Price |
|--|------------|
| No. 242-A Antenna Coil..... | \$.90 |
| No. 242-BP Band-Pass Coil..... | .75 |
| No. 242-RF RF Coil..... | .90 |
| No. 277 Oscillator Coil (Available for all frequencies)..... | .75 |

Unshielded Bank-Wound Coils

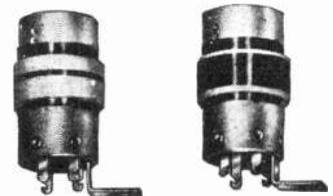
We can also supply these coils identical with those listed above except designed for use unshielded and being particularly desirable for use in 4 tube TRF receivers where it is necessary that the selectivity be of the highest order.

- | | List Price |
|---|------------|
| No. 241-A Antenna Coil..... | \$.70 |
| No. 241-BP Band-Pass Coil..... | .50 |
| No. 241-RF RF Coil..... | .70 |
| No. 277 Unshielded Oscillator Coil (Available for all frequencies)..... | .50 |



42 A 42 RF High-Gain Midget Coils

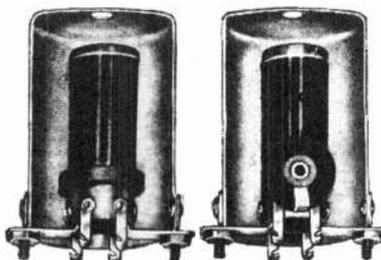
- | | List Price |
|----------------------------|------------|
| No. 42-A Antenna Coil..... | \$.70 |
| No. 42-RF RF Coil..... | .70 |



20-A 20-RF Midget Type Solenoid Coils On Cardboard Forms

Pictured above are our No. 20 Antenna and RF coils, which are universally accepted as the standard of comparison in 4-tube TRF receivers. Wound with enamelled wire on an especially impregnated Kraft tubing base, they offer a very inexpensive and efficient coil for use in receivers of this type where cost must be held to an absolute minimum. Both the antenna coupler and RF coil are of the transformer type, the primaries being wound on slip-over forms allowing easy adjustment of the coupling. The RF primaries have sufficient inductance to work efficiently with modern tubes. For use unshielded with .000365 mfd. variable condenser to cover the band from 540 to 1600 KC.

- | | List Price |
|----------------------------------|------------|
| No. 20-A Antenna Coil..... | \$.35 |
| No. 20-RF RF Coil..... | .35 |
| TAPPED FOR 2400 KC POLICE | |
| No. 20-T-A Antenna Coil..... | .40 |
| No. 20-T-RF RF Coil..... | .40 |

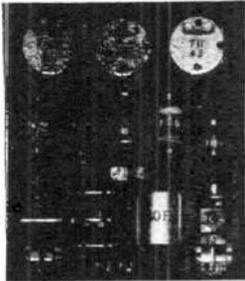


5261-A 5261-RF Solenoid Coils

- | | List Price |
|------------------------------|------------|
| No. 5261-A Antenna Coil..... | \$.90 |
| No. 5261-BP Band-Pass..... | .75 |
| No. 5261-RF RF Coil..... | .90 |

MILLER COILS

MILLER COIL KITS



No. 711 All-Wave Superheterodyne Coil Kit

(12 to 550 Meters.)

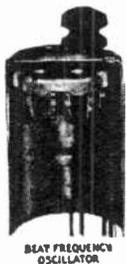
A kit of coils for constructing a highly sensitive and selective all-wave superheterodyne receiver.

Many new features are to be found in this design, including the use of high impedance coupled antenna coils on the short-wave and broadcast bands. True tracking on all bands is accomplished by individual padding condensers for each oscillator circuit. No manually operated trimmer is required. Anyone can build it, anyone can operate it.

Additional information will gladly be supplied upon request. The following items are supplied in the Miller No. 711 Coil Kit:

List Price

- 1 B.C. Antenna Coil No. 711 Ant. \$.80
- 1 B.C. Translater Coil No. 711A..... 1.75
- 1 75-200 Meter S.W. Coil No. 711B..... 1.25
- 1 35-75 Meter S.W. Coil No. 711C..... 1.50
- 1 12-35 Meter S.W. Coil No. 711D..... 1.25
- 1 Input I.F. Transformer No. 711-1..... 1.60
- 1 Interstage I.F. Trans. No. 711-2..... 1.60
- 1 Output Stage I.F. Trans. No. 711-3..... 1.60
- 2 Dual Detector Trimmers No. 35 (@ .50)..... 1.00
- 4 Accurate Oscillator Padding Condensers..... 1.35
- 1 Rectifier Plate Filter Choke No. 80-F 1.00
- 1 Oscillator Coupling Condenser No. C-14..... .20
- 1 Wave Band Selector Switch No. 404 1.60
- 1 Blue Print..... .25
- Complete Instructions and Data.
- Miller No. 711 All-Wave Coil Kit List Price.....\$16.00



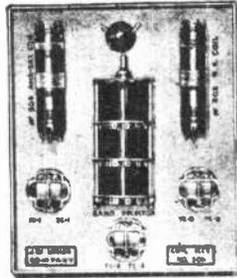
BEAT FREQUENCY OSCILLATOR

Beat Frequency Oscillators

For use in superheterodyne receivers allowing the reception of CW signals or for easily locating distant stations by tuning the receiver to the "zero beat" produced between the received signal and the local beat oscillator. Beat frequency tone is adjusted by the trimmer knob at top of shield. Specify intermediate frequency code letter when ordering.

List Price

- No. 212 Type.....\$1.75
- No. 312 Type..... 1.75
- No. 412 Type..... 1.75
- No. 512 Type..... 1.75



No. 302 Short Wave Pre-Selector Coil Kit

(12 to 200 Meters.)

The Miller No. 302 Pre-Selector Coil Kit enables you to construct a highly efficient unit using two stages of tuned radio frequency amplification to be used ahead of any short-wave or all-wave receiver. The Miller Pre-Selector will give a tremendous increase in sensitivity, and it will actually bring in stations which you are now unable to receive. The two additional stages of signal frequency tuning will prevent all image frequency interference. By increasing the signal voltage to the mixer tube of superheterodyne type receivers, the pre-selector will materially reduce background noise when receiving weak stations. Regardless of the number of tubes or the type of receiver you are now using, the Miller Pre-Selector will positively bring in more DX reception. Provision has been made for the incorporation of coils for the broadcast band. For this purpose our No. 5480 series coils are highly recommended. The coils have been designed for use with either a single wire or doublet type antenna.

The Miller Pre-Selector Coil Kit is especially recommended to the amateur and DX fan who realizes that additional signal frequency gain is the one sure way to bring in those weak and barely audible signals. A self-contained power supply and an extra position on the band switch for shunting the antenna around the pre-selector directly to the receiver are among the many conveniences offered by the new Miller Pre-Selector. Complete detailed data may be yours for the asking.

The Miller No. 302 Pre-Selector Coil Kit contains the following parts:

List Price

- 1 No. 302 S.W. Antenna (12 to 200 Meters) \$ 1.75
- 1 No. 302 S.W. RF Coil (12 to 200 Meters)..... 1.75
- 1 No. 302 Output Choke Coil..... .50
- 1 No. 605 Band Selector Switch..... 2.40
- 3 No. 35 Dual Trimmer Condensers (@ .50)..... 1.50
- 1 Blue Print and Complete Instruction Data..... .25
- Miller No. 302 Pre-Selector Coil Kit, List Price.....\$8.00
- If Broadcast Band Coils are desired, order:
- 1 No. 5480-A Antenna Coil.....\$.60
- 1 No. 5480-RF RF Coil......70

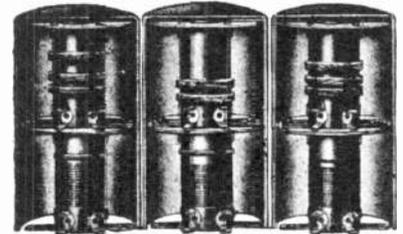


No 80F

Rectifier Plate RF Filter Choke

A unit consisting of two radio frequency chokes assembled in an aluminum shield 1 1/2" dia. x 2" long with spade bolts for mounting. Designed for use in the rectifier plate leads to suppress radio frequency interference generated in this circuit, particularly when mercury vapor type tubes are used, and is desirable in any sensitive receiver. Maximum current capacity 100 MA. No. 80-F Filter Choke—List Price.....\$.75

ALL WAVE COILS



Miller "Select-ur-Band" Coils

A new series and type of coil designed to meet the exacting demands of the experimenter and custom set builder for a high quality receiver covering one or more bands and using one or more RF stages or only a mixer stage. The Miller No. 727 "Select-ur-Band" Coils are truly flexible in their application and may be assembled to suit your individual requirements. For a superheterodyne they are for use with a 465 KC intermediate frequency amplifier. Each coil of each band is a separate unit and all are so designed that any pair may be assembled in a single shield. All coils are wound on 7/8" dia. x 1 3/4" long bakelite tubing and are of correct form factor and of proper wire size to give maximum efficiency. The primaries are of the high impedance type designed for use with pentode type RF tubes. With the Miller "Select-ur-Band" Coils it is possible to lay out an all-wave receiver and build it with only one or two bands to start—then add the other bands as desired.

Band	Cat. No.	KC	Meters	Series	Osc. Pad
X	X-727	140-425	2100-700	.00012	uf.
A	A-727	535-1500	560-200	.0004	uf.
B	B-727	1500-4500	200-67	.001	uf.
C	C-727	3750-1,000	80-27	.003	uf.
D	D-727	8500-23,000	35-13	.01	uf.
E	E-727	12,500-36,000	24-8		none

Any two coils may be assembled—easily, using only a screw driver—to provide the bands required in a single coil shield and, of course, groups of two bands each may be used. Coils are not furnished assembled in shields, as they may be purchased separately and easily assembled to meet your particular requirements.

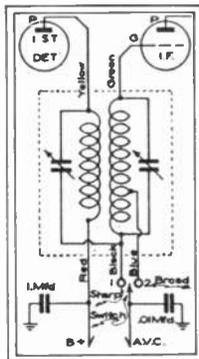
Cat No.	Purpose	List Price
BAND X		
X-727 A	—Antenna Coil	\$1.25
X-727 RF	—RF Coil	1.25
X-727 C	—Oscillator Coil—465 KC I.F.	1.25
BAND A		
A-727 A	—Antenna Coil	1.00
A-727 RF	—RF Coil	1.00
A-727 C	—Oscillator Coil—465 KC I.F.	1.00
BAND B		
B-727 A	—Antenna Coil	1.00
B-727 RF	—RF Coil	1.00
B-727 C	—Oscillator Coil—465 KC I.F.	1.00
BAND C		
C-727 A	—Antenna Coil	1.00
C-727 RF	—RF Coil	1.00
C-727 C	—Oscillator Coil—465 KC I.F.	1.00
BAND D		
D-727 A	—Antenna Coil	1.00
D-727 RF	—RF Coil	1.00
D-727 C	—Oscillator Coil—465 KC I.F.	1.00
BAND E		
E-727 A	—Antenna Coil	1.00
E-727 RF	—RF Coil	1.00
E-727 C	—Oscillator Coil—465 KC I.F.	1.00

COIL SHIELDS AND SWITCH

- L-727 2 1/2" Dia. x 4" Long Aluminum Coil Shield......40
- S-727 2 1/2" Dia. x 2 1/2" Long Aluminum Coil Shield......25
- No. 605 6 Pole, 5 Position Band Switch 2.40
- No. 805 8 Pole, 5 Position Band Switch 3.20

MILLER COILS

Variable Selectivity Type I.F. Transformers



Miller Variable Selectivity Intermediate Frequency Transformers have been designed to meet the combined demand for both the high degree of selectivity so necessary for good DX reception and for a band width great enough for the reception of high fidelity programs broadcast from nearby stations. This has been accomplished by a simple electrical method of changing coupling devised by Miller Engineers. It is the most simple and efficient method available and does not require any form or type of mechanical adjustment control. A single pole double throw switch is all that is required with a single stage I.F. amplifier. The two positions of the switch provide for sharp or broad tuning. See Circuit Diagram No. 215. Available in several sizes and in all the standard frequencies:

No. F#	Core	Size	Aluminum Shield	List Price
No. F#612	Iron Core	1 1/2" Sq. x 3 1/2"	.....	\$2.50
No. F#512	Air Core	1 1/2" Sq. x 3 1/2"	.....	2.00
No. F#412	Air Core	1 7/8" x 3"	.....	2.00
No. F#312	Air Core	1 5/8" x 3"	.....	2.00
No. F#212	Air Core	2 1/4" x 3 1/2"	.....	2.00

the Miller IRON CORE I.F. TRANSFORMER
WINS THE APPROVAL OF RADIO EXPERTS
 NO. 612 *Everywhere*

Iron Core I.F. Transformers

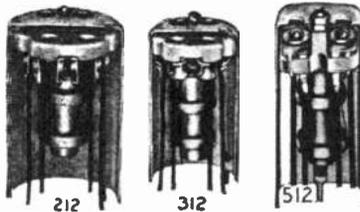
Radio engineers have long recognized that the use of an iron core would greatly increase the "Q" (figure of merit) of radio frequency transformers, providing the eddy current losses could be materially reduced below that encountered when a solid or laminated iron core is used.

Such a material is now available and consists of a finely divided magnesium alloy imbedded in a ceramic body. This core material is well known under the trade name of "Crolite Magicore" and differs from the older types of cores, using powdered iron in a bakelite binder, in that it lends itself readily to the extrusion process of manufacture and permits a high degree of uniformity in production. It neither rusts nor corrodes and does not alter its characteristics with age.

Miller No. 612 series of iron core intermediate frequency transformers are available for all standard frequencies:

No.	Core	Size	Aluminum Shield	List Price
No. 612	1 1/2" Sq.	x 3 1/2"	.....	\$2.00

Air Core I.F. Transformers



MILLER Intermediate Frequency Transformers are so carefully made and checked with such frequent manufacturing inspections and laboratory tests that they run uniform in characteristics and do not require matching. One of the features most desirable to the manufacturer or home constructor is the fact that every Miller Intermediate Transformer is peaked at the proper frequency before leaving the factory. This adjustment when made, allows for the normal stray capacities found in the average receiver and unless excessive lead capacity is introduced such a grid wire shielding, only a slight touch of the trimmer is necessary to properly align the I.F. amplifier.

Code Numbers for Use in Ordering

We supply these units in several popular intermediate frequencies and have adopted c code to facilitate easy cataloging of the various frequencies, as follows:

- 132 1/2 KC—Code Letter—M
- 175 KC—Code Letter—K
- 262 1/2 KC—Code Letter—H
- 465 KC—Code Letter—C
- 525 KC—Code Letter—Q

(Special frequencies to order at slight increase in price.)

No. 1 Input Stage—Consists of sharply tuned intermediate frequency transformer with copper ring shield between primary and secondary (except on the No. 612 iron core series). For use only as the input stage where two or more stages of intermediate frequency amplification are employed.

No. 2 Interstage—May be used as the interstage transformer in a two stage amplifier or as the input stage in a single stage amplifier. Coupling adjusted at slightly below optimum value to obtain proper selectivity and gain. May also be used as the output transformer in any amplifier in which the second detector is a non-current consuming load, such as a bias detector of any type.

No. 3 Diode Transformer—Output transformer designed to feed any full wave diode detector. Secondary center tapped to provide equal secondary voltage to either diode plate. Coupling adjusted for maximum input to low impedance loads.

No. 4 Output Transformer—Designed to use in output stage feeding any half-wave diode detector. Closely coupled for maximum energy transfer at such loads.

No. 5 Beat Frequency Oscillator—An efficient electron coupled type beat frequency oscillator transformer for CW use and to make DX station logging quicker and simpler. Has beat note adjustment knob on top of shield.

EXAMPLE OF THE USE OF PRECEDING CODE: Suppose it is desired to order a set of intermediate frequency transformers to operate at 175 KC with a diode second detector. Furthermore, the large standard units are desired. It will be noted that the unit number for this size is No. 212. As the frequency desired is 175 KC, referring to the letter code we find 175 KC to be designated by the letter "K." As we desire three units consisting of an input transformer, an interstage transformer, and an output transformer for a diode detector, we would order as follows:

- 1 Only No. 212-K-1. 1 Only No. 212-K-2.
- 1 Only No. 212-K-3.

Standard I.F. Transformers

No.	Core	Size	Aluminum Shield	List Price
No. 212	2 1/4" Sq.	x 3 1/2"	.....	\$1.85
No. 312	1 5/8" Sq.	x 3"	.....	1.55
No. 412	1 7/8" Sq.	x 3"	.....	1.60
No. 512	1 1/2" Sq.	x 3 1/2"	.....	1.25

REPLACEMENT COILS

Miller replacement coils and windings are carefully constructed to duplicate as nearly as possible the original coil which they are designed to replace. Every effort has been made to insure easy assembly and original performance.



Majestic Replacement I.F. Windings

Model	Winding Only for	Majestic No.	Miller No.	List Price
15-15B-55-150-200	1st I.F.	4428-6506	4570	\$.60
15-15B-150	2nd I.F.	8384-4429	4571	.70
25	1st I.F.	5326	4574	.70
25	2nd I.F.	5337	4575	.90
25B	1st I.F.	5601	4576	.70
25B	2nd I.F.	5602	4577	.90
66	1st I.F.	10589-10078	4579	.70
66	2nd I.F.	10591	4580	.70
116	2nd I.F.	9321	4581	.70
200	2nd I.F.	6254	4583	.90
210	1st I.F.	6119	4584	.70
210	2nd I.F.	6123	4585	.70
210	3rd I.F.	6127	4572	.70
310A-310B	1st I.F.	7821	4586	.70
330-340-360-390	2nd I.F.	7812	4587	.80
360	2nd I.F.	9094	4588	.70
460	1st I.F.	10149	4589	.70
500	1st I.F.	10843	4590	.70
500	2nd I.F.	11705	4591	.70
590	3rd I.F.	10852	4592	.70
86-460-490	2nd I.F.	10253	4573	.85
491-493-520-800	Coil	11014	660	.30
290-300-310-330-340-390-800	RF Choke	7187		



Radiola Replacement I.F. Windings

Model	Winding Only for	Radiola No.	Miller No.	List Price
R80-R82-R86-RAE68	1st I.F.	8567	8567	\$1.00
R80-R82-R86-RAE68	2nd I.F.	8565	8565	1.00
R80-R82-R86-RAE68	3rd I.F.	8566	8566	1.00
R7A-R9DC-RE16A-R10DC-R7-R4-R6-RE18A-R21-R11-R18-RAE26	1st I.F.	7266	7266	1.00
R7A-R9DC-RE16A-R10DC-R7-R4-R6-RE18A-R21-R11-R18-RAE26	2nd I.F.	7267	7267	1.00

MILLER COILS

RF CHOKES



No. 4537
2.5M.H. 125MA
D.C. Resistance 23. Ohms

Pi Wound High Frequency Chokes

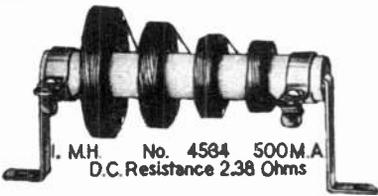
For Low Power Transmitters and Receivers

Duo-lateral pi wound construction on ceramic forms and provided with convenient terminals. These chokes are of the low-loss type and are ideally suited for ultra high frequency receivers and transmitters.

These resistor size chokes are available in two sizes and are rated at 125 MA continuous duty. Ideal for high frequency receivers and transmitter oscillator circuits. Liberal wire size prevents possibility of burn-out under rated current conditions.

List Price

No. 4537 2½ MH HF Choke—125 MA	
23 Ohms DC Res.....	\$.60
No. 4538 5 MH HF Choke—125 MA	
34 Ohms DC Res.....	.75



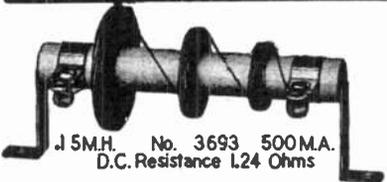
1. MH No. 4584 500MA
D.C. Resistance 2.38 Ohms

Heavy Duty Chokes For the High Power Transmitter

The following heavy duty high frequency chokes are recommended for use in the high power transmitter. They are pi wound on ceramic forms ½" in diameter x 3½" long and are provided with snap-in brackets. Both ends of the form are tapped for 6/32 machine screws and the brackets may be removed to provide single screw mounting. All hardware is of cadmium plated brass.

List Price

No. 4534 1 MH HF Choke—500 MA	
2.38 Ohms DC Res.....	\$1.60
No. 4535 1.5 MH HF Choke—500 MA	
3.15 Ohms DC Res.....	1.60
No. 4536 4 MH HF Choke—500 MA	
5.52 Ohms DC Res.....	2.00



1.5M.H. No. 3693 500MA.
D.C. Resistance 1.24 Ohms

High Frequency Chokes For Diathermy Equipment

An especially designed high frequency choke for use on high power oscillator circuits operating in the 2½ to 15 meter range, generally used in diathermy equipment oscillators. The No. 3693 choke consists of three narrow piec duo-lateral wound on a ceramic dowel ½" in diameter x 3½" long. The unit is supplied with snap-in brackets and both ends of the form are tapped with a 6/32 thread so that any special type of mounting may be used. All hardware is cadmium plated brass. Scientifically designed with the piec tapering in size to provide proper RF dissipation. Used as standard equipment by many of the leading diathermy equipment manufacturers. List Price

No. 3693 .15 MH HF Choke—500 MA	
1.24 Ohms DC Res.....	\$1.25
No. 3694 .54 MH HF Choke—500 MA	
1.84 Ohms DC Res.....	1.50



Line Filter Chokes

Duo-lateral wound line filter chokes developed by Miller Engineers to insure maximum filter efficiency. May be used with receivers, transmitters, rotating or vibrating equipment, motors, and in general wherever it is desired to eliminate high frequency disturbance pick-up from the power supply. A line filter will increase the selectivity of many receivers by preventing the power line from acting as an antenna. When used for transmitters Miller Line Filters will prevent feed-back through the power lines and eliminate carrier radiation through the wiring system. These units have been carefully tested and are conservatively rated. In each type the wire size has been chosen to insure minimum resistance and voltage loss. These filter chokes are especially recommended to radio servicemen and electricians for installation in sign flashers, diathermy and similar equipment which produces serious disturbances in neighboring radio receivers. Complete instructions and circuits are furnished with each choke. Miller Line Filter Chokes are available in two types—singles and doubles.

SINGLE DUO-LATERAL WOUND LINE FILTER CHOKES

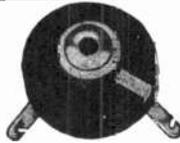
List Price

No. 7825 Max. Current 2 Amps.....	\$1.00
No. 7826 Max. Current 5 Amps.....	2.50
No. 7827 Max. Current 10 Amps.....	3.25
No. 7828 Max. Current 20 Amps.....	4.00
No. 7829 Max. Current 30 Amps.....	5.00

DOUBLE DUO-LATERAL WOUND LINE FILTER CHOKES

List Price

No. D7826 Max. Current 5 Amps.....	\$3.75
No. D7827 Max. Current 10 Amps.....	5.00
No. D7828 Max. Current 20 Amps.....	6.00
No. D7829 Max. Current 30 Amps.....	7.50



Radio Frequency Chokes

The following Miller Radio Frequency Chokes are wound on specially treated wooden dowels with bakelite terminal plates and tinned soldering lugs. They are for single hole mounting and are duo-lateral wound. The low distributed capacity of these units makes them very efficient in radio frequency circuits wherever these inductance values are satisfactory. They are quite small and compact, the bakelite terminal plate being only 1/8" in diameter.

List Price

No. 610 RF Choke—.166 MH.....	\$.25
No. 620 RF Choke—.675 MH.....	.25
No. 630 RF Choke—1.540 MH.....	.25
No. 640 RF Choke—2.742 MH.....	.30
No. 650 RF Choke—4.450 MH.....	.30
No. 660 RF Choke—6.500 MH.....	.35
No. 670 RF Choke—9.300 MH.....	.40
No. 680 RF Choke—12.200 MH.....	.40
No. 690 RF Choke—16.000 MH.....	.45
No. 1000 RF Choke—20.000 MH.....	.50



460

Fuse Mountings

One piece cadmium plated brass spring clips and lugs desirable for tapped power transformers on receivers or similar equipment. Made for radio type fuses. Available in two types—single fuse mounting type and three clip type for tapped transformers.

List Price

No. 460—3 Clip Type—1" x 3"	\$.20
No. 461—2 Clip Type—1" x 1½"	.15



No. 812

Amateur Band Wave Traps

These units are designed to eliminate interference from amateur phone and CW stations in broadcast and short-wave receivers. They consist of a completely shielded high "Q" parallel resonant circuit which is compact and simple to install. The wave trap connects in series with the antenna and several units may be connected in series to eliminate interference from more than one station. They do not interfere with the normal operation of the receiver at other frequencies. A screw driver adjustment tunes the unit to the frequency of the interfering station. Available for all amateur bands and may be made for special frequencies on order. Dimensions 1½" diameter x 3" long.

List Price

No. 812-A 160 Meter Band Wave Trap..	\$1.50
No. 812-B 80 Meter Band Wave Trap..	1.50
No. 812-C 40 Meter Band Wave Trap..	1.50
No. 812-D 20 Meter Band Wave Trap..	1.50
No. 812-E 10 Meter Band Wave Trap..	1.50



ELIMINATE Line Noise with the NEW MILLER ALL-WAVE LINE FILTER

The Miller Line Filter marks an outstanding achievement in the field of radio noise suppression. It is the most efficient noise filter yet devised—the result of extensive research and field testing, combined with entirely new manufacturing methods. It incorporates both inductive and capacitive filtering, which radio engineers agree is the only effective method of complete line filtering. Duo-lateral wound chokes and oil impregnated paper dielectric condensers result in an unparalleled lifetime efficiency.

Anyone can install the Miller Line Filter by simply plugging it in between the power supply and radio. No tools are needed and the unit requires no adjustment or attention. The connections are plainly marked in embossed letters on each end of the case. The filter is completely enclosed in a handsome metal case finished in Kem-Art satin black with polished chromium plated end plates. Shipping weight 16 ozs.

Max. Current 2 Amps. List Price

No. 7818 Line Filter.....	\$4.00
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Tie Points

One of the handiest items the radio manufacturer or constructor can find for the termination of pigtail resistors and midjet condensers and common leads in the receiver, amplifier, or transmitter. Extra heavy eyelet type terminal lugs are securely mounted in bakelite strips ¼" thick, and are hot-dip tinned. The figure preceding the "O" indicates the number of insulated terminals.



List Price

	Per 100	Each
No. 1510—¾" x 3/4"	\$1.98	\$.02 ½
No. 1520—¾" x 1 1/8"	2.64	.03
No. 1530—¾" x 1 1/4"	4.13	.05
No. 1540—¾" x 2 1/4"	5.28	.06
No. 1550—¾" x 2 5/8"	5.94	.07

I. R. C. INSULATED RESISTORS



1/2 Watt—Type BT-1/2

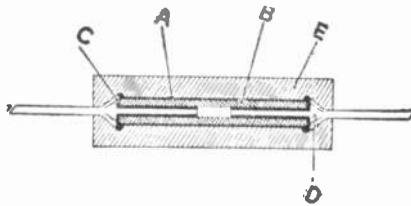


1 Watt—Type BT-1



2 Watt—Type BT-2

Insulated Metallized Resistors — developed by IRC — represent the outstanding resistance improvement in the history of radio. Millions are used annually for even the most critical applications in radio, sound and electrical equipment. Unexcelled for radio service and amateur uses, you will find them doubly attractive at today's new low prices. You can insure your reputation for good work by using the best on EVERY job.



- A—Famous Metallized Type Resistance Element. Completely Moisture-proof. Sealed Throughtout.
- B—Glass Tube.
- C—Enclosed positive contact cannot be broken or become "open."
- D—Highly tinned, flexible leads for quick, easy soldering.
- E—High voltage insulating compound moulded around Metallized Element, sealing it from moisture and protecting unit against short circuiting.

TYPE BT-1/2—1/2 WATT LIST PRICE 17c

5/8" x 3/8". Made in all practical ranges. Carried in stock in all ranges shown on the accompanying list from 0.5 ohm to 20.0 megohms. Below 250 ohms BW-1/2 are substituted. See below (*).

TYPE BT-1—1 WATT LIST PRICE 20c

1 1/4" x 1/4". Made in all practical ranges. Carried in stock in all ranges shown on accompanying list from 1 ohm to 20.0 megohms. Below 500 ohms BW-1 are substituted. See below (*).

TYPE BT-2—2 WATT LIST PRICE 30c

1 3/4" x 1/4". Made in all practical ranges. Carried in stock in all ranges shown on accompanying list from 1 ohm to 20.0 megohms. Below 750 ohms BW-2 are substituted. See below (*).

STANDARD STOCK RANGES

Subject to the minimum and maximum values listed above for each of the various types.

Ohms	Ohms	Ohms	Ohms	Meg.
0.5				
1	250	3,000	20,000	0.25
2	300	3,500	22,500	0.3
3	350	4,000	25,000	0.4
5	400	5,000	30,000	0.5
7.5	450	6,000	35,000	0.6
10	500	7,000	40,000	0.75
15	600	7,500	50,000	1.0
20	750	8,000	60,000	1.5
25	800	9,000	65,000	2.0
30	1,000	10,000	70,000	3.0
40	1,250	11,000	75,000	4.0
50	1,500	12,000		0.1 meg. 5.0
100	2,000	12,500	0.125 "	6.0
150	2,250	15,000	0.15 "	7.0
200	2,500	17,500	0.2 "	10.0
				20.0

(*) INSULATED WIRE WOUND RESISTORS



These are INSULATED wire wound resistors similar in appearance to the BT 1 Metallized units. Made in the low ranges, they offer new opportunities for stabilized inexpensive resistor applications in meters, as cathode bias resistors or for air cell battery use. They are most appropriate for use as center tap resistors, enabling many combinations of values to be obtained through parallel and series arrangements.

TYPE BW-1/2—1/2 WATT LIST PRICE 17c

5/8" x 3/8"—Wire Wound. Following ranges: 0.5, 1, 2, 3, 5, 7.5, 10, 15, 20, 25, 30, 40, 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 750 ohms.

TYPE BW-1—1 WATT LIST PRICE 20c

1 1/4" x 1/4"—Wire Wound. Following ranges: 1, 2, 3, 5, 7.5, 10, 15, 20, 25, 30, 40, 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 750, 800, 1,000, 1,250, 1,500, 2,000, 2,250, 2,500 ohms.

TYPE BW-2—2 WATT LIST PRICE 30c

1 3/4" x 1/4"—Wire Wound. Following ranges: 1, 2, 3, 5, 7.5, 10, 15, 20, 25, 30, 40, 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 750, 800, 1,000, 1,250, 1,500, 2,000, 2,250, 2,500, 3,000, 3,500, 4,000, 5,000, 6,000, 7,000 ohms.

HANDY NEW INSULATED RESISTOR KITS



I.R.C. KIT No. 10

I.R.C. KIT No. 11

Contains 10-1 Watt Type BT-1 IRC Insulated Resistors in quick moving ranges.

Contains 10-1/2 Watt Type BT-1/2 IRC Insulated Resistors.

LIST \$2.00

LIST \$1.70

RESIST-O-CHEST

This is the most popular, most useful kit ever offered. Supplies space for a complete stock of several hundred resistors and other small parts.

RESIST-O-CHEST is 8 1/4" high, 4 3/4" wide by 5 1/2" deep. Your own list of resistor ranges can be marked on gummed labels which are included. Handy formulas, computation chart permanently attached to Chest. Supplied complete with 50-1 Watt IRC Type "BT 1" Insulated Resistors—two each of the 28 most popular ranges which every radio man uses frequently. You pay only the new low cost of the resistors. The Resist-O-Chest is FREE. List price of resistors \$11.20.

(including FREE Chest).....NET \$6.72
(Chest sold separately for \$1.50 list, 90c net)

GET ONE FREE!



CARBON RESISTORS

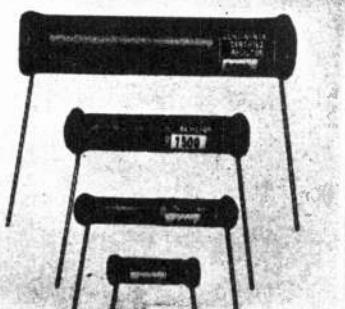
CERAMIC

H5 5 Watt
3" x 3/8" \$.50

E2 3 Watt
2" x 3/8" \$.30

D2 1 Watt
1 3/4" x 1/4" \$.20

G4 1/2 Watt
1" x 1/4" \$.17



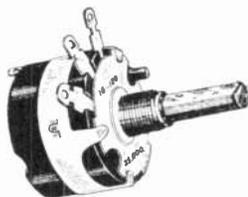
STANDARD STOCK RESISTOR VALUES

50	17,500	750	70,000	3,000	400,000
100	20,000		75,000	3,500	500,000
150	25,000	1,000	100,000	4,000	1,000,000
200	30,000	1,250	125,000	5,000	1,500,000
250	35,000	1,500	150,000	6,000	2,000,000
300	40,000	1,750	200,000	7,500	3,000,000
400	50,000	2,000	250,000	10,000	4,000,000
500	55,000	2,500	300,000	12,500	5,000,000
600	60,000			15,000	10,000,000

I. R. C. VOLUME CONTROLS

IRC Volume Controls are an advanced development of the same resistance engineering principles which have proved so successful in the famous IRC Metallized Type Resistors as well as in IRC Vol-

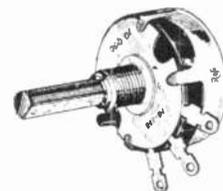
ume Controls which, for several years past, have been made exclusively for leading radio set and equipment manufacturers. To both servicemen and amateurs they now bring the 10 most important features ever offered in a Control.



(Type "C" Volume Control with Switch)

1. "KNEE ACTION" CONTACT
Made of 5 separate silver plated phosphor bronze springs.
2. SILENT SPIRAL CONNECTOR
Eliminates metal-to-metal wiping contact (a source of noise in all other controls) between center terminal and variable resistance contact. Made in all IRC Special Replacement Controls.
3. METALLIZED TYPE RESISTANCE ELEMENT
Permanently bonded to moisture-proof Bakelite base.

5. NO OBSTRUCTIONS
IRC contact method on tapped controls eliminates obstructions in path of contactor. Smoother adjustment—no noise.
6. DUST-PROOF CASE
7. CORROSION-PROOF
All electrical contacts are proofed against corrosion and oxidation.
8. SMALL—BUT NOT TOO SMALL
Minimum size for universal application and maximum performance.



(Type "C" Volume Control without Switch)

4. MOISTURE-PROOF

The Bakelite base of the resistance element cannot absorb moisture—nor will moisture damage the Metallized type resistance coating.

IRC METALLIZED TYPE VOLUME CONTROL

Without switch (plain cover) — LIST PRICE \$1.00
Except Tapped Controls No. 13-130X; 13-133X; 13-137X; 13-139X; VC539 — LIST PRICE \$1.50

9. PROTECTED TERMINALS

Deeply set in molded Bakelite casing.

10. AMAZINGLY SMOOTH

IRC DUAL VOLUME CONTROLS

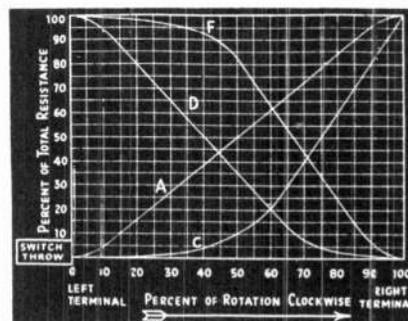
IRC Type No.	Resistance	List Price
35-1620	10,000 ohms } 25,000 ohms }	\$2.50
61-1623	10,000 ohms } 50,000 ohms }	2.50
33-2828	100,000 ohms } 100,000 ohms }	2.50
33-3030	250,000 ohms } 250,000 ohms }	2.50
33-3333	500,000 ohms } 500,000 ohms }	2.50
33-3930	1.0 Meg. } 2.0 Meg. }	2.50

SWITCH PRICES

- No. 21—Single Pole, Single Throw List Price .50
No. 22—Double Pole, Single Throw List Price .60
No. 23—Single Pole, Double Throw List Price .60

A TYPE FOR MOST EVERY NEED

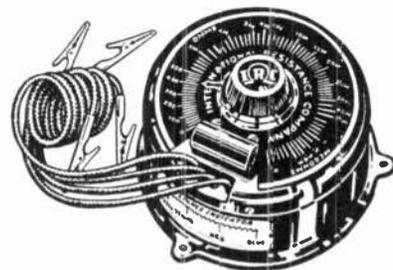
Resistance	Type No. Without Switch	Curve	Usual Application
500 Ohms	11-103	A	Potentiometer Voltage Divider
1,000 "	11-108	A	Potentiometer Voltage Divider
2,000 "	11-110	A	Potentiometer Voltage Divider
3,000 "	11-112	A	Potentiometer Voltage Divider
5,000 "	11-113	A	Potentiometer Voltage Divider
5,000 "	11-114	A	Potentiometer Voltage Divider
5,000 "	13-114	C	Antenna Control
10,000 "	16-116	F	*Antenna Grid Bias of 1 Tube
10,000 "	11-116	A	*Antenna Grid Bias Control
10,000 "	14-116	D	*Antenna Grid Bias of 2 Tubes
10,000 "	13-116	C	Antenna Control
15,000 "	14-118	D	*Antenna Grid Bias Control
15,000 "	16-118	F	*Antenna Grid Bias Control
20,000 "	16-119	F	*Antenna Grid Bias Control
25,000 "	14-120	D	*Grid Bias Control
25,000 "	11-120	A	Potentiometer Voltage Divider
25,000 "	16-120	F	Antenna Control
50,000 "	11-123	A	Potentiometer Voltage Divider
50,000 "	13-123	C	Tone Control
75,000 "	13-125	C	Tone Control
75,000 "	14-125	D	*Grid Bias Control
100,000 "	11-128	A	Potentiometer Voltage Divider
100,000 "	13-125	C	Tone or Audio Circuit Control
200,000 "	11-129	A	Potentiometer Voltage Divider
200,000 "	14-129	D	*Grid Bias Control
250,000 "	13-130	C	Tone or Audio Circuit Control
250,000 "	14-130	D	*Grid Bias Control
250,000 "	13-130X	C	Tapped Tone Compensation
500,000 "	13-133	C	Tone or Audio Circuit Control
500,000 "	11-133	A	Potentiometer Voltage Divider
500,000 "	13-133X	C	Tapped Tone Compensation
1.0 Meg	13-137	C	Tone or Audio Circuit Control
1.0 "	VC-539	—	Fader Control for fading out of one circuit into another
1.0 "	13-137X	C	Tapped Tone Compensation
2.0 "	13-139	C	Tone or Audio Circuit Control
2.0 "	13-139X	C	Tapped Tone Compensation
3.0 "	13-140	C	Tone or Audio Circuit Control
5.0 "	11-141	A	Potentiometer Voltage Divider
7.0 "	11-142	A	Potentiometer or Rheostat
10.0 "	11-143	A	Potentiometer or Rheostat



NEW AND UNUSUAL Volume Control Analyzer and Resistance Indicator

"First of Its Kind"

The first continuously variably calibrated Resistance Indicator. Covers range from 0 to 1 megohm. Direct reading on etched scale. Housed in attractive molded bakelite case. Fuse equipped.



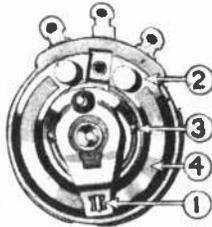
Reads from 0 to 30,000 ohms on heavy duty, wire wound rheostat type element and continues to 1 megohm using permanent metallized type resistance element. Has four leads, enabling this practical unit to be used for many different purposes for which this type Resistance Indicator is known; as a voltage divider, for determining correct resistance values by the substitution method or by voltage measurement; for checking either resistance units or potentiometers and volume controls. Will give long service, resistance forms being designed so that they will not warp or expand, thereby eliminating wire or resistance element breakage.

Dealer's Net Price (Including Fuse) \$4.95*
Extra 1/2 Amp. Fuse, Each .12*

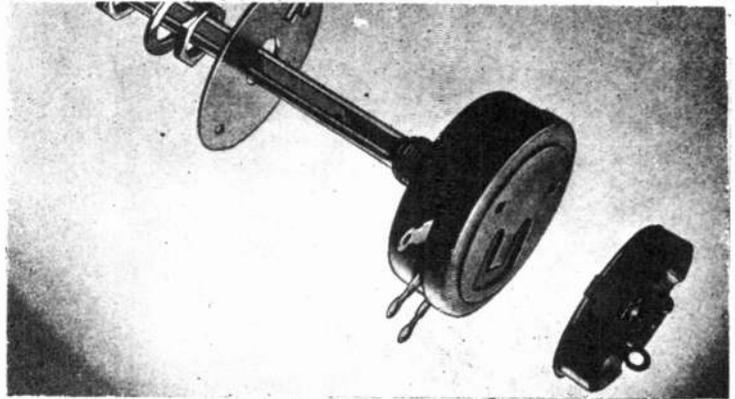
YAXLEY VOLUME CONTROLS



NEW SPRING WEDGE—Yaxley Wire Wound Controls embody a new spring wedge design, which definitely eliminates any possibility of loose terminals. Expansion and contraction due to temperature changes are taken up by this patented spring which holds the element and terminals firmly in place.



1. "The Roller That Does Not Roll"
2. Pure Silver Shortcuts.
3. Silver-to-Silver Contacts.
4. Perfect Contact.



Yaxley design incorporates exclusive mechanical features, which have added more to the convenience of the service man than any other replacement control on the market. These features are directly responsible for minimizing the time required for changing volume controls in receivers and in making additional profits for service men.

● Velvety smooth in their silent operation, Yaxley Universal Replacement Volume Controls have all the features that have made Yaxley famous—the three-inch long easily cut aluminum shaft, the attachable switch, rugged assembly with dust-proof case completely enclosing control, high-quality plated finish to protect metal parts, shaft and insert for providing universal mounting of knobs—and all controls are permanently identified as to type, taper and resistance value.

These controls represent the peak of scientific development and are the result of over three years' research. The photographs in the upper left hand corner show exclusive features that contribute to their silent performance.

Yaxley Universal Single Controls

Prices do not include Switch or Accessories.

Ohms Resistance	Taper	General Use	Type Element	Catalog Number	List Price
2	IV	Filament	W.W.	Q	\$1.00
6	IV	Filament	W.W.	R	1.00
10	IV	Filament	W.W.	S	1.00
20	IV	Filament	W.W.	T	1.00
30	IV	Filament	W.W.	U	1.00
60	IV	Filament	W.W.	V	1.00
100	IV	Misc.	W.W.	W	1.00
200	IV	Misc.	W.W.	X	1.00
400	IV	Misc.	W.W.	A 400P	1.00
500	I	Ant. Shunt	W.W.	A	1.00
550	IV	Bias	W.W.	A550P	1.00
1M	IV	Voltage Divider (Bias)	W.W.	A1MP	1.00
1M	I	Ant. or Pri. Shunt	W.W.	B	1.00
1M	II	Bias	W.W.	UC500	1.00
2M	IV	Voltage Divider (Bias)	W.W.	*A2MP	1.00
2M	I	Ant. or Pri. Shunt	W.W.	*C12	1.00
2M	II	Bias	W.W.	*C	1.00
3M	IV	Voltage Divider	W.W.	*A3MP	1.00
3M	I	Ant. or Pri. Shunt	W.W.	*D12	1.00
3M	II	Bias	W.W.	*D	1.00
3M	VII	Ant.-Bias	W.W.	*D7	1.00
5M	IV	Voltage Divider	W.W.	*A5MP	1.00
5M	IV	Voltage Divider (Bias, Screen)	Carbon	Y5MP	1.00
5M	I	Ant. Shunt or Ant.-Bias	Carbon	E12	1.00
5M	II	Bias	W.W.	*E	1.00
5M	VII	Ant.-Bias	W.W.	*E7	1.00
7500	I	Ant. Shunt or Ant. Bias	Carbon	F12	1.00
7500	II	Bias	W.W.	*F	1.00
7500	IV	Ant.-Bias	W.W.	*F7	1.00
10M	IV	Voltage Divider (Bias, Screen)	W.W.	*A10MP	1.00
10M	IV	Voltage Divider (Bias, Screen)	Carbon	Y10MP	1.00
10M	I	Ant. Shunt or Ant.-Bias, Tone	Carbon	G12	1.00
10M	II	Bias	W.W.	*G	1.00
10M	II	Bias	Carbon	UC501	1.00
10M	VII	Ant.-Bias	W.W.	*G7	1.00
15M	I	Ant. Shunt or Ant.-Bias, Tone	Carbon	H12	1.00

Ohms Resistance	Taper	General Use	Type Element	Catalog Number	List Price
15M	II	Bias	W.W.	*H	\$1.00
15M	VII	Ant.-Bias	W.W.	*H7	1.00
20M	IV	Voltage Divider (Bias)	W.W.	*A20MP	1.00
20M	I	Ant. Shunt, Ant.-Bias, Screen	Carbon	Y	1.00
25M	IV	Voltage Divider (Screen)	Carbon	Y25MP	1.00
25M	IV	Bias	Carbon	J	1.00
50M	IV	Batt. Bias, Screen	Carbon	Y50MP	1.00
50M	I	Screen Voltage, Tone	Carbon	K12	1.00
50M	II	Bias	Carbon	K	1.00
75M	I	Screen Voltage, Tone	Carbon	Z12	1.00
75M	II	Bias	Carbon	Z	1.00
100M	IV	Voltage Divider (Bias, Screen)	Carbon	Y100MP	1.00
100M	I	RF or AF Shunt, Screen, Tone	Carbon	L	1.00
100M	II	Bias or Ant.-Bias (AC-DC)	Carbon	UC510	1.00
150M	I	Tone, RF or AF Shunt	Carbon	UC502	1.00
200M	IV	Voltage Divider, Misc.	Carbon	Y200MP	1.00
250M	IV	Voltage Divider, Misc.	Carbon	Y250MP	1.00
250M	I	Audio Tone, RF or AF Shunt	Carbon	M	1.00
250M	II	Audio (Automobile)	Carbon	*UC511	1.00
250M	II	Bias, Ant.-Bias (AC-DC)	Carbon	UC509	1.00
500M	IV	Voltage Divider, Misc.	Carbon	Y500MP	1.00
500M	I	Audio, RF or AF Shunt	Carbon	N	1.00
500M	I	Audio (Automobile)	Carbon	*UC512	1.00
500M	II	Bias, Ant.-Bias, Bias-Audio	Carbon	*UC513	1.00
500M	I	Tone, Audio, Audio Shunt	Carbon	UC503	1.00
750M	I	Misc.	Carbon	Y1000MP	1.00
1 Meg	IV	Audio, Audio Shunt, Tone	Carbon	O	1.00
1 Meg	I	Audio (Automobile)	Carbon	*UC514	1.00
2 Meg	I	Audio, Audio Shunt, Tone	Carbon	P	1.00
3 Meg	I	Audio Shunt, Tone	Carbon	UC504	1.00
4 Meg	I	Tone	Carbon	UC505	1.00
5 Meg	I	Audio Shunt	Carbon	UC506	1.00
5 Meg	II	Series Screen Control	Carbon	UC507	1.00
9 Meg	I	Audio Shunt	Carbon	UC508	1.00

*Has exclusive Yaxley Adjustable Bias Feature. †Has Slotted Shaft for Automobile Receivers.
 ††Has long, adjustable Slotted Shaft for Automobile Receivers and Special Shaft Coupling. W.W.—Wire Wound Element.

Yaxley Universal Dual Controls

Prices do not include Switch or Accessories.

Ohms Resistance	Taper	Type Element	General Use	Cat. No.	List Price
Front 2M Rear 5M	Front I Rear IV	Front W.W. Rear W.W.	Ant. Shunt and Bias	CE	\$2.50
10M 5M	VII IV	W.W. W.W.	Ant. Shunt Bias or Screen	*GE	2.50
10M 10M	VII IV	W.W. W.W.	Ant. Shunt Bias or Screen	GG	2.50
10M 50M	I IV	Carbon Carbon	Ant. Shunt Bias or Screen	GK	2.50
50M 50M	IV IV	Carbon Carbon	Grid Shunt and Cathode Control	†KK	2.50

Ohms Resistance	Taper	Type Element	General Use	Cat. No.	List Price
100M 100M 100M 250M	I I I I	Carbon Carbon Carbon Carbon	Audio Shunt in Push Pull Audio Shunt, Tone, Screen or RF Shunt	LL	\$2.50
250M 250M 250M 500M	I I I I	Carbon Carbon Carbon Carbon	Audio Shunt and Tone Audio Shunt and Tone Compensation	LM MM MN NN	2.50 2.50 2.50
500M 500M	I I	Carbon Carbon	Audio Shunt in Push Pull		

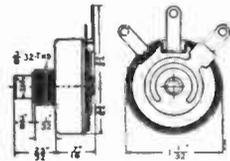
* Formerly DRP 192 †See DR P308

YAXLEY VOLUME CONTROLS

"C" Type Variable Resistor

Wattage 2 Watts—Grounded Contact Arm

The Yaxley "C" Type Variable Resistor is the smallest wire wound control manufactured, finding its greatest application where space is at a premium. The contact arm is grounded to the shaft.

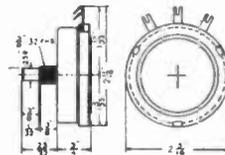


"C" TYPE POTENTIOMETERS
Prices do not include knobs.

Ohms Resistance	Carrying Capacity in Amperes	Catalog Number	List Price
6	.58	C10P	\$1.00
10	.45	C10V	1.00
15	.36	C15V	1.00
20	.3	C20V	1.00
30	.25	C30V	1.00
40	.22	C40V	1.00
50	.2	C50V	1.00
100	.14	C100V	1.00
200	.1	C200V	1.00
400	.07	C400V	1.00
1M	.045	C1M1P	1.25
3M	.025	C3M1P	1.25
5M	.02	C5M1P	1.50
10M	.014	C10M1P	1.50
15M	.011	C15M1P	1.50

"E" Type Potentiometers

Wattage 9 Watts—Contact Arm Grounded



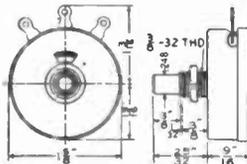
Ohms Resistance	Carrying Capacity in Amperes	Catalog Number	List Price
5M	.042	E5MP	\$2.50
10M	.03	E10MP	2.50
20M	.021	E20MP	2.50
25M	.019	E25MP	2.75
50M	.0135	E50MP	2.75
75M	.011	E75MP	2.75
100M	.0095	E100MP	2.75
125M	.0085	E125MP	2.75
150M	.008	E150MP	2.75

"C" TYPE RHEOSTATS
Prices do not include knobs.

Ohms Resistance	Carrying Capacity in Amperes	Catalog Number	List Price
6	.58	C6R	\$0.75
10	.45	C10R	.75
15	.36	C15R	.75
20	.3	C20R	.75
30	.25	C30R	.75
40	.22	C40R	.75
50	.2	C50R	.75
100	.14	C100R	.75

"M" Type Variable Resistor

Wattage 6 Watts—Insulated Contact Arm



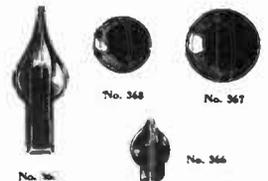
"M" TYPE POTENTIOMETERS
Prices do not include knobs.

Ohms Resistance	Carrying Capacity in Amperes	Catalog Number	List Price
15	.57	M15P	\$1.00
20	.50	M20P	1.00
25	.45	M25P	1.00
30	.4	M30P	1.00
40	.35	M40P	1.00
50	.32	M50P	1.00
60	.29	M60P	1.00
75	.25	M75P	1.00
100	.22	M100P	1.00
200	.15	M200P	1.00
400	.11	M400P	1.00
600	.09	M600P	1.00
1M	.07	M1M1P	1.25
3M	.05	M3M1P	1.25
4M	.04	M4M1P	1.25
5M	.03	M5M1P	1.25
10M	.02	M10M1P	1.50
15M	.017	M15M1P	1.50
20M	.015	M20M1P	1.50
25M	.014	M25M1P	1.50
50M	.01	M50M1P	2.00
76M	.0085	M76M1P	2.00

"M" TYPE RHEOSTATS
Prices do not include knobs.

Ohms Resistance	Carrying Capacity in Amperes	Catalog Number	List Price
15	2.78	M15R	\$0.75
2	2.2	M2R	.75
3	1.5	M3R	.75
4	1.1	M4R	.75
6	.9	M6R	.75
10	.7	M10R	.75
15	.6	M15R	.75
20	.5	M20R	.75
25	.45	M25R	.75
30	.40	M30R	.75
40	.35	M40R	.75
50	.32	M50R	.75
60	.29	M60R	.75
75	.25	M75R	.75

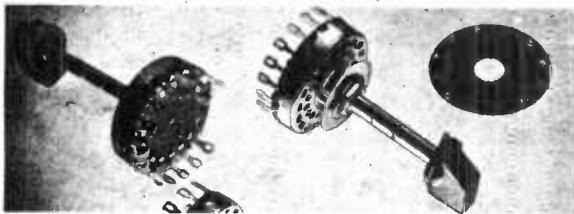
Bar Type and Round Bakelite Knobs



- List Price
- 2 3/8" Bar Type Knob, Black... No. 365 \$0.20
 - 2 1/4" Bar Type Knob, Brown... No. 365-B .20
 - 1 3/4" Bar Type Knob, Black... No. 366 .15
 - 1 3/4" Bar Type Knob, Brown... No. 366-B .15
 - 1 1/2" Dia. Round Knob, Black... No. 367 .20
 - 1 1/2" Dia. Round Knob, Brown... No. 367-B .20
 - 1 1/4" Dia. Round Knob, Black... No. 368 .15
 - 1 1/4" Dia. Round Knob, Brown... No. 368-B .15

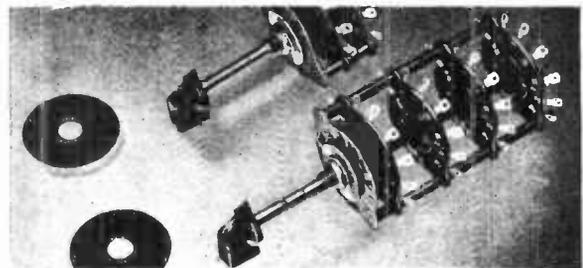
YAXLEY SWITCHES

Multi-Gang Circuit Selector and All-Wave Switches—TYPES 1200L SERIES and 1300L SERIES



Number of Circuits per Section or Gang	Total Number of Circuits per Switch	Number of Points or Contacts per Circuit	Number of Sections or Gangs per Switch	Shorting Type Catalog Number	Non-Shorting Type Catalog Number	List Price
One	One	6	One	1216L	1316L	\$1.00
One	One	11	One	1211L	1311L	1.15
Two	Two	5	One	1215L	1315L	1.25
Three	Three	3	One	1213L	1313L	1.35
Four	Four	2	One	1212L	1312L	1.45
One	Two	6	Two	1236L	1336L	1.60
One	Two	11	Two	1221L	1321L	1.75
Two	Four	5	Two	1225L	1325L	2.00
Three	Six	3	Two	1223L	1323L	2.10
Four	Eight	2	Two	1222L	1322L	2.25
One	Three	6	Three	1236L	1336L	2.20
One	Three	11	Three	1231L	1331L	2.35
Two	Six	5	Three	1235L	1335L	2.50
One	Four	6	Four	1246L	1346L	2.75
One	Four	11	Four	1241L	1341L	3.00
Two	Eight	5	Four	1245L	1345L	3.50

Single-Gang Circuit Selector Switches—TYPES 3100J SERIES and 3200J SERIES



Yaxley Type 3100J Switches are available in single gang and in two sizes—one with 1 1/4-inch diameter base, the other with 1 1/2-inch diameter base. The circuit combinations shown below indicate respective sizes. They are made in both shorting and non-shorting types. Adjustable stop feature is available only in the 1 1/4-inch base size.

Number of Circuits	Number of Contacts per Circuit	Diameter of Base	Adjustable Stop	Shorting Type Catalog No.	Non-Shorting Type Catalog No.	List Price
One	12	1 1/4"	No.	31112J	32112J	\$0.75
Two	6	1 1/4"	No.	3126J	3226J	.75
Three	4	1 1/4"	No.	3134J	3234J	.90
Four	3	1 1/4"	No.	3142J	3242J	.85
Four	3	1 1/2"	No.	3143J	3243J	.90
One	17	1 1/2"	Yes	31117J	32117J	1.35
Two	9	1 1/2"	Yes	3129J	3229J	1.35
Three	6	1 1/2"	Yes	3136J	3236J	1.50
Six	3	1 1/2"	Yes	3163J	3263J	1.50

Yaxley "Hamswitch" No. 151L

Designed similarly to famous Yaxley circuit selector switches, it is of two-gang construction with 2 1/4" spacing between sections. This space permits multiplying resistors to be soldered directly to switch terminals when wired into the circuit.

The five complete circuits may be used in many combinations such as oscillator plate current, buffer plate current, final grid current, final plate current and plate voltage.

High insulating qualities and low loss construction permit a conservative rating of 1000 volts RMS A/C or 1500 volts D/C. Employs efficient silver to silver wiping contacts, adjustable top, and permits the use of fewer positions. Has 2-inch notched shaft shakeproof washer.

Yaxley "Hamswitch," complete with Yaxley Bar Type Knob No. 366—No. 151L. List price, \$1.80

Circuit Opening Switch No. 1400L

Yaxley No. 1400L Switch will "open" any one of twelve "lines" for the insertion of a current reading meter and maintain a "Through" circuit on the other eleven lines. This switch has found wide application in the construction of test sets, tube checkers, analyzers, and other apparatus where it is desirable to use only one meter.

One particular advantage is that multiplying resistors for those circuits wherein a different range is needed for each line can be wired to the switch, so that the switch not only opens the line but also automatically cuts in the proper multiplying resistor for the range needed on that particular line.

Small size, 1 1/4" long, 2 1/2" wide, 3/4" bushing, 2" notched shaft "hill-and-valley" index and shakeproof washer.

Special Circuit Opening Switch complete with Yaxley Bar Type Knob No. 366 and Yaxley Etched Dial Plate No. 382—No. 1400L. List price, \$4.50

15-Point Tap Switch No. 150J

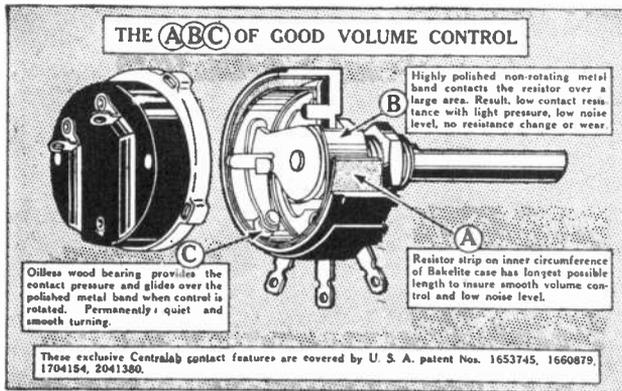
An improved special switch—shorting type, single-gang only. Has 2-inch notched shaft and shakeproof washer. Special 15-Point Tap Switch, complete with Yaxley Bar Type Knob No. 366 and Yaxley Dial Plate No. 465—No. 150J. List price, \$1.50

24-Point Tap Switch No. 13124

A special single circuit, 24-point non-shorting switch, with notched shaft and other quality features found in the 1300L Series. Particularly useful in test equipment applications.

Special 24-point Tap Switch, complete with Yaxley Bar Type Knob No. 366 and Yaxley Dial Plate No. 394—No. 13124. List price, \$3.25

CENTRALAB VOLUME CONTROLS



Case diameter 1 3/8". Depth 9/16". Soft aluminum shaft 2 1/2" long, milled flat. May be cut to exact length needed.

Standard Radiohm	No Tap	With Tap
With Switch	\$1.50	\$2.00
Less Switch	1.00	1.50

See New Midget Radiohm Listing, Page L-8

Catalog Number Without Switch	Catalog Number With Switch	Usual Circuit Location	Resistance Ohms	Curve
72-118	62-118	Voltage Divider	500	1
72-107	62-107	Voltage Divider	1,000	1
72-101	62-101	Voltage Divider	2,000	1
72-108	62-108	Voltage Divider	3,000	1
72-109	62-109	Voltage Divider	4,000	1
72-110	62-110	Voltage Divider	5,000	1
70-204	52-204	Antenna Shunt	5,000	6
72-139	62-139	Voltage Divider	7,500	1
72-114	62-114	Antenna, C-bias	10,000	1
72-113	62-113	Antenna, C-bias of One Tube	10,000	3
70-205	52-205	Antenna, C-bias of Two Tubes	10,000	4
72-100	62-100	Antenna Shunt	10,000	6
72-115	62-115	Antenna, C-bias	15,000	3
79-006	99-006	Antenna, C-bias	15,000	4
72-119	62-119	Antenna, C-bias	20,000	3
72-111	62-111	Voltage Divider	25,000	1
70-206	52-206	C-bias	25,000	4
72-102	62-102	Antenna Shunt	25,000	3
72-103	62-103	Voltage Divider	50,000	1
72-117	62-117	Tone Control	50,000	6
72-123	62-123	Tone Control	75,000	6
70-202	52-202	C-bias	75,000	4
72-104	62-104	Voltage Divider	100,000	1
72-122	62-122	Audio Grid or Tone	100,000	6
72-136	62-136	Audio Grid or Tone	150,000	6
72-120	62-120	Audio Grid or Tone	200,000	1
72-131	62-131	C-bias	200,000	4
72-121	62-121	Audio Grid or Tone	250,000	6
72-105	62-105	Audio Grid or Tone	500,000	6
72-106	62-106	Voltage Divider	500,000	1
70-203	52-203	Series in R. F. Plate	500,000	4
72-140	62-140	Audio Grid or Tone	750,000	6
72-116	62-116	Audio Grid or Tone	1 Meg.	6
72-137	62-137	Audio Grid or Tone	2 Megs.	6
72-132	62-132	Audio Grid or Tone	3 Megs.	6

TAPPED RADIOHMS

List Prices as Indicated Above

72-138	62-138	Tapped Audio Grid	250,000	10
72-134	62-134	Tapped Audio Grid	500,000	10
72-135	62-135	Tapped Audio Grid	1 Meg.	10
72-142	62-142	Tapped Audio Grid	2 Megs.	10

SEPARATE RADIOHM SWITCH COVERS

No. 10 Switch Cover, Single-pole—Single-throw	\$.50
No. 11 Switch Cover, Single-pole—Double-throw	.80
No. 12 Switch Cover, Double-pole—Single-throw	.80
No. 15 Switch Cover, Four Point	60

STANDARD MIDGET RADIOHM

Bakelite case 1 1/8" diameter. 1/4" diameter aluminum shaft 3 3/8" long milled for standard push-on knob. Knob insert supplied. Shaft easily cut to desired length.

Midget Radiohm	No Tap	With Tap
With Switch	\$1.50	\$2.00
Less Switch	1.00	1.50

Catalog Number Without Switch	Catalog Number With Switch	Usual Circuit Location	Resistance Ohms	Curve
N-106	P-106	Voltage Divider	5,000	1
N-107	P-107	Antenna, C-bias	10,000	1
N-100	P-100	Antenna, C-bias of 1 Tube	10,000	3
N-108	P-108	Antenna, C-bias of 2 Tubes	10,000	4
N-109	P-109	Antenna Shunt	10,000	6
N-110	P-110	Antenna, C-bias of 1 Tube	15,000	3
N-111	P-111	Antenna, C-bias of 2 Tubes	15,000	4
N-112	P-112	Antenna, C-bias	20,000	3
N-113	P-113	Voltage Divider	25,000	1
N-101	P-101	Antenna, C-bias	25,000	3
N-114	P-114	Voltage Divider	50,000	1
N-115	P-115	Tone Control	50,000	6
N-116	P-116	Voltage Divider	100,000	1
N-117	P-117	Audio Grid or Tone	100,000	6
N-102	P-102	Audio Grid or Tone	250,000	6
N-118	P-118	Voltage Divider	500,000	1
N-103	P-103	Audio Grid or Tone	500,000	6
N-104	P-104	Audio Grid or Tone	1 Meg.	6

MIDGET RADIOHM SWITCH COVER

Converts any plain Midget Radiohm except universal auto replacement to switch type.

K-155 Single Pole Single Throw	\$.50
K-156 Single Pole Double Throw	.60
K-157 Double Pole Single Throw	.60
K-158 Four Point	.60

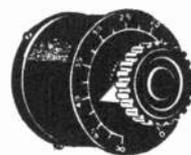
ECONOMY P. A. CONTROLS

Controls intermediate to Series II and older Series I type Sound Projection Controls. All types supplied with 1/4" aluminum Shaft 2 1/4" long. No mill. Resistance value listed for "Delta-T" Pads is constant line impedance. Resistances given for straight Fader are each side of center tap.

Catalog No.	Description	Resistance Ohms	Price Each
M-140	Gain Control	250M	\$1.75
M-141	Gain Control	500M	1.75
M-142	Gain Control	1 Meg.	1.75
M-143	Gain Control	2 Meg.	1.75
M-144	Straight Fader	500M	2.00
M-145	Straight Fader	1 Meg.	2.00
M-146	"Delta-T" Pad	50	3.50
M-147	"Delta-T" Pad	200	3.50
M-148	"Delta-T" Pad	500	3.50

See page L-9 for dials to use with these controls.

SERIES II ATTENUATORS



Highest quality controls available for input mixer and fader circuits. Dustproof Shield. Insulated Shaft and Bushing. Smooth attenuation.

Complete with handsome dial and knob. Ask for the Series II Sound Projection Control Booklet.

"T" Pads	Price	Gain Controls	Price
7-010-852 500 ohms	\$14.00	1-010-852 250M ohms	\$5.50
7-010-851 200 ohms	14.00	1-010-851 500M ohms	5.50
7-010-850 50 ohms	14.00	1-010-850 1 Megohm	5.50

VOLUME CONTROL GUIDE

I.R.C.

YAXLEY

CENTRALAB

Manufacturers' Name and Model	Stock No.	Price
A. C. DAYTON		
Navigator	R100	2.50
AIRLINE (See Montgomery Ward)		
4 Essex, 7, 7A, 7C, 20, 20J, 20K, 20L, 21, 22, 26, 37, 78, 74, 133, 135, 236, 237, 305A	R101	2.00
5A, 200, 201, 205, 206, 210, 211	R102	2.00
28, 29	R103	1.50
48AC, 49, 54DC (Dual 5M-12M ohms)	R104	2.50
48, 49 late (Dual 5M-65M ohms)	R105	2.50
56, 62AC, 62DC	R106	1.50
ATWATER KENT		
37, 37C, 37F, 38, 40, 40F, 41, 42, 42F, 43, 44, 44F, 45, 46, 47, 51, 52, 53, 55 early:		
500 ohm resistance strip	R107	.50
500 ohm special control	R108	1.50
Early 55C, 55FC, 56, 57, 60, 60C, 61, 61C, 66 6M ohm Res. strip	R109	.50
55, 55C, 55F, 55FC, 56, 57 later mod.	R110	2.50
70, 72, 74, 75, 76 chassis F, B, P, and L, 87D, 60C 3rd type	R111	2.50
70, 72, 74, 75, 76 chassis "H" (dual 250M-100M ohms)	R112	2.50
70, 72, 74, 75, 76 chassis "G"	R113	2.50
80, 80F, 83, 83F, 90, 90F, 89F, 89P, 92, 92F, 82D, 84D late, 89, 89F, 89P, 92, 92F, 96, 96F, 99, 99F, 165 late, 185, 185A, 188, 188F, 260, 260F, 469, 469D, 469F, 568, 568D, 612, 627, 812	R114	2.00
84, 84D, 84F, and 85 early models	R115	2.00
84Q, 112	R116	2.00
86, 86F	R117	2.00
125Z, 145, 806, 215Z, 325, 376, 145, 217, 217D, 246, 275, 310, 310J, 310T, 425, 427, 427D, 510, 465, 667, 667D, 708, 711, 711J, 711R, 711T, 788	R118	2.00
808A	R119	2.00
184, 854, 944	R120	2.00
236, 485, 545	R121	2.00
318, 559, 640, 649RP	R122	2.00
465Q, 655Q	R123	1.50
BRUNSWICK		
B1, 2KR, 2KRO, 3KR3, 3KRO, 3KR6, 3KR8, 5KR, 5KRO, 5KR6	R124	1.50
3NC8, 3NWS, 6NO, 5NC6	R125	1.50
10 midget	R126	2.00
11, 12, 16, (33 below No. 25,000)	R127	1.50
814, 821, 831, 881, 882	R128	2.00
B17, PR-17-8	R129	1.50
Panapro (75 ohm control)	R130	1.50
CLARION (See Transformer Corp.)		
COLONIAL RADIO CORP.		
32AC, 32DC	R131	2.50
314, 343, 358	R132	1.50
331, 331X, 331Z	R133	1.50
COLUMBIA PHONOGRAPH (Kolster)		
120B air-cell	R134	2.50
CROSLY RADIO CORP.		
4-1A auto	R135	2.00
5M3, 40, 141, 142, 159, 167, 184, Dupl	R136	2.00
Fiver	R137	2.00
5-V1 De Luxe Fiver	R138	1.50
6-B1, 7H2, 7H3, 714, 815, 935, 1055, R138	R139	1.50
6H3, 8B3, 61 late L.B., 61 late 6H3	R140	1.50
1014	R141	1.50
26, 52	R142	1.50
27, 28, 30, 31, 32, 34 (32M ohms)	R143	1.50
408, 418, 428, 458, (early models)	R144	1.50
(dual 20M-30M ohms)	R145	1.50
Later models (dual 10M-25M ohms)	R146	1.50
Later models (single 32M ohms)	R147	1.50
41, 41A, 42, 705, 706 show box (long shaft 350 ohms)	R148	1.50
41A, 42, 61 early models, 602, 608, 609, 610, 704, 705, 706 (female shaft 1500 ohms)	R149	1.50
53, 54, 55DC, 56, 57, 58 (25M ohm)	R150	1.50
55 part No. 20114B (100M ohms)	R151	1.50
89AC (4500 ohms)	R152	1.50
63 chassis, 82S, 315 3rd model (32M ohms)	R153	1.50
82S and 71A early (dual 20M-30M)	R154	1.50
82S and 71A later (dual 10M-25M)	R155	1.50
75, 76DC, 77 (300 ohms)	R156	1.50
124, 125 (5M ohms)	R157	1.50
128 (5M ohms)	R158	1.50
129-1 (1500 ohms)	R159	1.50
130, 130-1, 132-1, 136-1, 139-1, (3meg 8meg)	R160	1.50
143-1 (10M ohms)	R161	1.50
156, 178 (10M ohms)	R162	1.50
166A (1 megohm control)	R163	1.50

Manufacturers' Name and Model	Stock No.	Price
485' (4500 ohms)	R161	2.09
535 (18M ohms)	R162	2.00
545 (10M ohms)	R163	2.00
835, 655 (1 megohm)	R164	2.00
708 early (long shaft 10M ohms)	R165	1.50
725, 865 (1 megohm)	R166	1.50
804 Jewell Box (long shaft 10M ohms)	R167	1.50
EDISON, THOMAS A., INC.		
C-1, R-1, C-2, R-2, SCR-3, M5, M6, SC (front unit 3M ohms)	R168	1.50
C4, R4, R5, R6, R7 late, R12, Abbey	R169	3.00
Jr. midget (dual 15M-6M ohms)	R170	1.50
PAD-4, E-175 (3M ohms)	R171	1.50
Abbey (500M ohms)	R172	1.50
ELECTRICAL RESEARCH LAB. "ERLA"		
210, 225, 271A (dual 5M-10M)	R173	3.00
EMERSON RADIO & PHONO CORP.		
5H, 36AW, 26LW, 30, 30AW, 30LW, 33, 33AW, 33LW, 250-AW, -LW, 300, 321, 321AW, -LW, 350AW, -LW, 409, 410, 411, 415, 416, 420, Mickey Mouse	R173	2.00
25D, 39, 59, Twin AC and DC	R174	3.00
629C (7500 ohms)	R175	2.00
678 Auto	R176	2.00
EVEREADY (National Carbon Co.)		
1, 2, 3 (125M ohms)	R177	1.50
50, 52, 53, 54 (dual 10M-600M)	R178	2.50
FADA RADIO & ELECTRIC CORP.		
15M, 15Z, 20, 20Z, 25, 25Z, 75, 77	R179	1.50
15M, 15MZ, 25 (6M ohms)	R180	1.50
16, 16Z, 17, 18DC, 32, 32Z (6M)	R181	1.50
35B (dual 3M-12M ohms)	R182	2.50
35B, 35C, 40 (dual 3M-25M ohms)	R183	2.50
50, 70, 71, 72 (Inf. resistance)	R184	1.50
75, 77 (650 ohms)	R185	1.50
76Z, KF, KG (dual 10M-3M ohms)	R186	2.50
FREED EISMANN		
NR-55, -56 (dual 12M-250M ohms)	R187	2.50
NR-80, -85 (1300 ohm resist. strip)	R188	.50
GALVIN MFG. CO. (Motorola)		
S6, S10, 44, 77 (500M ohms)	R189	2.00
K-40 (300M ohms)	R190	1.50
GENERAL ELECTRIC CO.		
B1, B2 (50M ohms)	R191	1.50
T12, T12E (20M ohms)	R192	1.50
S2, S22X, H81, 51R, H51, 71R, H71, (4000 ohms)	R193	1.50
S22 (pentodes), S22D SH2, -D, -P	R194	1.50
J70, J75, J80D (4M ohms)	R195	1.50
H32, H72 (42M ohms)	R196	1.50
T41 (dual 50M-50M ohms)	R197	2.00
M42, K43 (4M ohms)	R198	2.00
M50, M51, M51A, M52, M55, M56	R199	2.00
C60, M62, A60 (250M ohms)	R200	2.00
K50 (3M ohms)	R201	1.50
M51, M56 (short notched shaft 250M)	R202	2.00
M61, M67, M69, M81, M86, M89 (250M)	R203	1.50
K62, KZ62P, J80, K82, J85, S13	R204	1.50
JZ835 (dual 3M-10M ohms)	R205	1.50
K93, M63, K65, K65P, C67, K78, K79 (5000 ohms)	R206	1.50
K64, M65 (250M ohms)	R207	1.50
K66, K66M (250M ohms)	R208	1.50
C70, C75 (250M ohms)	R209	1.50
K90, K80X, K35 (250M ohms)	R210	1.50
J-82 -86, -100, -105, -107, JZ82 (50M)	R211	1.50
J83, J87A (2 megohm)	R212	1.50
K105, K106, K106P, K107, K126 (44M)	R213	2.00
M106 (250M ohms)	R214	1.50
K-126 M128, M128R, M129 (44M ohms)	R215	1.50
GENERAL HOUSEHOLD UTILITIES (GRUNOW)		
6A and 6C chassis, 650, 651, 660, 661 (1 meg ohm)	R216	2.00
6A chassis, 601 (1 meg ohm)	R217	2.00
6C-6G-6J chassis models 680, 681, 640, 641, 680, 681 (270M ohms)	R218	2.00
GENERAL MOTORS		
S-1A, S-1B, S-5A, S-5B, 216, 217, 219	R219	2.00
250, (45M ohms)	R220	1.50
S-2A, S-2B, 251 (Tone 100M ohms)	R221	1.50
S-4A, S-4R, (109M ohms)	R222	2.00
S-9A, S-9B, 211, (45M ohms)	R223	2.00
110, 120, 130, 140, 150, Serial numbers 2200A to 62100A, Chassis "B" between 1700B and 1964B, 180, 190, (dual 12M-65M ohms)	R224	2.50

Manufacturers' Name and Model	Stock No.	Price
120, 130 and 140 chassis "A" below serial No. 29100A and chassis B below No. 1700B (20M-20M)	R221	2.50
170E chassis "E" (15 ohms)	R222	1.50
290A, 290B, 291A, 291B, (100M)	R223	2.00
1001 (dual 20M-20M ohms)	R224	2.50
Little General (dual 12M-65M ohms)	R225	2.50
120, 130, 140, 150 (tone 1 meg.)	R226	1.50
160, 1001 (tone 1 meg ohm)	R227	1.50
KOLSTER RADIO (Columbia Phono)		
43, 44, (dual 6M-25M ohms)	R228	2.50
930 phono-Comb. (dual 10M-1300 ohm)	R229	3.00
MAJESTIC (GRIGSBY GRUNOW)		
15, 15B, 55, 56, 57, 58, 150, 151, 153, 154, 155, 156, (11M ohms)	R230	2.00
15, 55, 56, 57, 58, 150 (Tone 50M)	R231	1.50
15B (Tone)	R232	1.50
20, 21, 22, 23 (10M ohms)	R233	2.00
25 early (6500M ohms)	R234	2.00
25, 25B, 251, 253, 254, 251B, 253B, 254B (Tone control 85M ohms)	R235	1.50
25B, 35, 251B, 253B, 254B, 351, 353, (6M ohms)	R236	2.00
30, 31, 230A (dual 500-10M ohms)	R237	3.00
45, (10M ohms)	R238	2.00
44, 49, 440, (7500 ohms)	R239	2.00
60, 51, 52 (dual 645-10M ohms)	R240	2.50
53, chassis 500 (43 output) (200M)	R241	2.00
66 auto radio (200M ohms)	R242	2.00
67, 68, 69, 195, 460, 686, 886	R243	1.50
70 and 70B chassis, 71, 72	R244	1.50
77, 290, 291, 293, 294, 300, 300A, 300B, 304, 307, 370A, 310B, 811, 214, 320, 304, 307, 370A, 310B, 811, 214, 320	R245	1.50
304, 307, 370A, 310B, 811, 214, 320	R246	1.50
304, 307, 370A, 310B, 811, 214, 320	R247	1.50
90, 90B, 91, 92, 93 (75M ohms)	R248	1.50
90, 90B, 91, 92, 100, 100B, 101, 102	R249	1.50
103, 180 (Equalizer)	R250	1.50
100, 100B, 102, 103 (dual 500M-80M)	R251	1.50
110 auto radio (100M ohms)	R252	1.50
111 auto radio (100M ohms)	R253	1.50
116 auto radio (250M ohms)	R254	1.50
118 Ford auto (200M ohms)	R255	1.50
120, 121 (dual 10M-12M ohms)	R256	2.50
120B, 123 (dual 10M-10M ohms)	R257	3.00
130, 130A, 131, 132 (1260 ohms)	R258	1.50
140 (dual 11M-2M ohms)	R259	2.50
155, 160 phono control	R260	1.50
160, 163 (900 ohms)	R261	1.50
180, 181 Comb. (dual 30M-75M ohm)	R262	1.50
200, 201, 203, 204 (500M ohms)	R263	1.50
200, 201, 203, 204 (Tone 50M ohms)	R264	2.00
210, 211, 214, 215 (200M ohms)	R265	1.50
928, 221, 223 (250M ohms)	R266	1.50
260 (200M ohms)	R267	2.00
290, 291, 293, 294 (tone 50M ohms)	R268	2.00
310A, 310B, 311, 314, 315 (tone)	R269	2.00
340, 344, 360, 363, 890, 898 (200M)	R270	1.50
370, 371, 373, 400, 400A, 411, 411A	R271	1.50
413, 413A, (20M ohms)	R272	2.00
460, 461, 463, (200M ohms)	R273	1.50
490, 491, 493, (200M ohms)	R274	1.50
570, (200M ohms)	R275	1.50
MONTGOMERY WARD		
AE-10 (dual 2500-2500 ohms)	R276	2.50
Chassis 26W and 27W, 62-060 challenger (5M ohms)	R277	1.50
62-070, Princess, Cavalier, Collegian, (5M ohms)	R278	1.50
29W Airline (5M ohms)	R279	2.00
62-140, 62-140X, 62-148, 62-148X, (75M ohms)	R280	2.00
62-169 (20M ohms)	R281	1.50
295F (dual 10M-15M ohms)	R282	2.50
77, 95, 110, 120, 123, 124, 128, 156, 160, 162 (63M ohms)	R283	2.00
197, (2 meg - 1 meg - 2500 ohms)	R284	3.00
327, 327, 427, 437, (1 meg. ohm)	R285	2.00
2655 (dual 2500-500,000 ohms)	R286	2.50
Monarch, (tone control 1500 ohms)	R287	1.50
PHILCO		
5, 82, 86, 500, 511, 521, 531, 541, 551, 561A, 561, 571, 581	R288	1.50
8, 12 (35,000 ohms)	R289	2.00
11, 800, (500M ohms)	R290	2.00
14, 9L (350M ohms)	R291	

VOLUME CONTROL GUIDE

I.R.C. YAXLEY CENTRALAB

Manufacturers Name and Model	Stock No.	Price	Manufacturers Name and Model	Stock No.	Price	Manufacturers Name and Model	Stock No.	Price
22L, 42DC, 71 (1 meg ohm)	R295	1.50	RE19, R21, RO-23, RAE26 (13M ohms)	R334	1.50	410, 420, 430, 600A, 610A, 620A, 750D, (dual 50M-30M ohms)	R372	3.00
28, 29, 45, (350M ohms)	R296	2.00	9-18, 9-54, 9-56, 64 (sensitivity control 2750 ohms)	R335	1.50	38A, 38B, 61, 62, Triolian Auto, (250M ohms)	R373	1.50
57, 59, (20,000 ohms)	R297	2.00	T-10-1, C-11-1, D-11-2, C-13-1 (2 meg ohm)	R336	1.50	STEWART WARNER		
60, 66, 261, 506 (350M ohms)	R298	2.00	R15, RE14, Radiola 42, Radiola 48, (dual 50M-60M)	R337	2.50	R100, R100-A, -B, -E, 935, series		
90 (2-45's) 470, 470A (225-5M ohms)	R299	2.50	R14, R35, R39, RE57, RE73, (dual 1,000-50,000 ohms)	R338	2.50	950AC, (32M ohms)	R374	1.50
70, 70A Ser. Nos. above B22,000, also 90 (2-47's) between 32,001 and B35,000 and above B53,100	R300	1.50	R32, RE45, R52, 145 (3800-3800 ohm)	R339	2.50	102A, 102B, 102E (8,500 ohms)	R375	1.50
80 (20M ohms)	R301	2.00	233, 330, 331 (500M ohms)	R340	1.50	900 Series (75M ohms)	R376	1.50
81, 81A (20M to 30M ohms)	R302	1.50	R90, R90P, 260, 261, 280, 380, 381, (44M ohms)	R341	2.00	STROMBERG CARLSON		
92, 95, (600M ohms)	R303	1.50	128, 128E, ACR136, 143, 224, 224E, M226, 242, 243, 322E, 341, (250M)	R342	1.50	12, 14 (250M ohms)	R377	1.50
300, 96, 96A, 111, 111A, 112, 112A, 112E, 211, 211A, 212, 212A, 212E, 296, 296A, (600M ohms)	R304	1.50	262, 263, (250M ohms)	R343	1.50	635, 636, Panel Control 10M ohms	R378	1.50
16, 97, 144, 506 (350M ohms)	R305	2.00	RE20, RE28, R50, R55, RAE59	R344	1.50	Rear Control (10M ohms)	R379	1.50
116X code 122, 660, (2 meg ohm)	R306	3.00	RAE-79 (Radiola) (42M ohms)	R345	2.00	641, 642, 652, 654, Rear Control	R380	1.50
38, 124 (500M ohms)	R307	1.50	R28, (3,000 ohms)	R346	2.00	Panel Control	R381	1.50
200, 201, 509, (500M ohms)	R308	2.00	R38P, RE40, 110, 111, 115 (3M ohms)	R347	2.00	846, 848, Rear Control (20M ohms)	R382	1.50
370 Lazy Boy (dual 225-5M ohms)	R309	3.00	55, 59, P51, RAE68, 80, 82, 86, (Radiola) Clock Model (4M ohms)	R348	1.50	Panel Control (250M ohm)	R383	1.50
610, (500M ohms)	R310	2.00	R35, 39, 57, (remote control dual 2500-60 ohms)	R348	2.50	TRANSFORMER CORP. (CLARION)		
611 (500M ohms)	R311	2.00	4, 46, 47, (Radiola) (2900 ohms)	R349	1.50	40, 100, G102, (4M ohms)	R384	2.00
620, 630, (1 meg. ohm)	R312	2.00	60, 62, (500 ohms)	R350	1.50	240, 260, (750M ohms)	R385	2.00
640, 641, 642, 645, 651 (1 meg.)	R313	2.00	64, 67 (Radiola) (1200 ohms)	R351	1.50	300, (500M ohms)	R386	1.50
643	R314	2.00	66 Radiola (650 ohms)	R352	1.50	G470 (750M ohm Tone Control)	R387	2.00
16 (code 125-126-127), 17 (code 122), 116B (code 121), 116X (code 122)	R315	2.00	R73A, R75A (2 meg ohm)	R353	1.50	U. S. RADIO & TELEVISION		
650, 655, 660, 665, (2 meg)	R316	1.50	135E, 235E, 236B, (250M ohms)	R354	1.50	26P Gloritone (8M ohms)	R388	1.50
680 (Bass Compensation) (1 meg.)	R317	1.50	M34, M105, AR-5006, (500M ohms)	R355	2.00	27 Late Gloritone (7500 ohms)	R389	2.00
680 volume (500M ohms)	R318	2.00	SEARS ROEBUCK			32 series (8M ohms)	R390	1.50
700, 800, AC236 Studebaker, "H" Hupmobile, "J" Nash, "P" Nash, "R" car radio, "R" Hupmobile (500M)	R319	1.50	1708, 1709, 1720, 1725, 7065, (dual 500M-1M)	R356	2.50	WESTINGHOUSE ELECTRIC & MFG. CO.		
800 (code 122) 802, "D" Nash (code 122), "H" (code 122), PHD, PHX	R320	1.50	1721, 1722, 1732, (500M-1M ohms)	R357	2.50	WR-2, (50M ohms)	R391	1.50
Packard, (350M ohms)	R321	1.50	1920, 1926, 1928, 1978, 1980, 1980A, (15M ohms)	R358	1.50	WR-4, (dual 50M-50M ohms)	R392	2.50
805 (500M ohms)	R322	2.00	1923, 1933, 1936, 1983, 1993, 1996, (3,000 ohm)	R359	1.50	WR15, WR15A, WR16, WR18 (13M ohms)	R393	1.50
806, 809, (350M ohms)	R323	1.50	1905, 1915, 1955, 1965 (500M ohms)	R360	1.50	WR28, WR36, (500M ohms)	R394	1.50
N Ford auto (250M ohms)	R324	1.50	4106, Mentor H, (2M-10M ohms)	R361	3.00	WR5, WR6, R6, R7, WRT, WR8 (4M ohms)	R395	1.50
BCA-RADIOLA-VICTOR			1711, 7090, (35 ohms)	R362	1.50	WR10, WR10A, WR12, WR13, WR1 (4M)	R396	1.50
AVR-1, RC-106, 140, 141, 141E, 240, All Wave, 121, 122, 127, 220, 221, 222, 320, 321, 327, 340, 340E (250M)	R325	1.50	SILVER MARSHALL			WR14, WR14CR, (20M ohms)	R397	1.50
SW3, R24, R71, R72, R74, R76, R77, R323	R326	2.00	Y39 (375M ohms)	R363	2.00	WR19, WR20 (50M ohms)	R398	1.50
R4, R6, R7A, R7DC, R8DC, R9, R9DC, R10DC, RE16, RE16A, Superett	R327	2.00	SIMPLEX RADIO CO.			WR29, WR35 (3M ohms)	R399	2.00
T-4-8, T-4-9, 100, 101, 103 (4M)	R328	1.50	"R" above 320,001 (8M ohms)	R364	2.00	WR30, WR31 (250M ohms)	R400	1.50
T-4-8A, T-4-9A (7500 ohms)	R329	2.00	SPARTON (Sparks Withington)			WR32 (4M ohms)	R401	2.00
R5, R5X Radiola (20M ohms)	R330	1.50	10, 20, (dual 50M-30M ohms)	R365	3.00	WR37 (250M ohms)	R402	1.50
T-6-2, M107, 117, 118, 119, 125, 217, 214, 225, (250M ohms)	R331	1.50	10 (2,200 ohms)	R366	2.00	WR45, -46, -49, -50 (250M ohms)	R403	1.50
RC-6-4, BC-6-6, BT-6-3, BT-6-5, BT-6-10, (250M ohms)	R332	1.50	15 (750 ohms)	R367	2.00	WR47 (250M ohms)	R404	1.50
5T, C6-8, C6-2, 6-T, 6K, 6T2, 6K2, T-6-1, T6-7, T-6-8, C-7-6, D-7-7, T-7-5, 7-T, 7-K, 7-U, 7-X, C-8-15, C-8-19, C-8-20, 8-K, 8-T, T-8-14, T-8-18, C-9-4, D-9-19, T-9-10, T-8-16, D-8-28, (2 meg ohm)	R333	1.50	18, 27A, 28, Noise suppressor (9 meg)	R368	1.50	WR48, (250M ohms)	R405	2.00
7-11, 7-26X, 18, 18DC, 33, 33DC, 51DC (Radiola) (2M ohms)	R334	1.50	AR-19 Auto (2 meg ohm)	R369	1.50	ZENITH RADIO CORP.		
7-25, 7-54, 17, 41, 41DC, 50 (Radiola) (2M ohms)	R335	1.50	69, 79A, 89, 101, 103, 109, 110AC, 301, 589, 591, 593, 980, 981 (50M)	R370	1.50	4-V-31, 4-V-59, 5405 (200M ohms)	R406	2.00
R8, R10, R11, R12, RE18, RE18A,	R336	1.50	71, 71B, 72, 78, (250M ohms)	R371	2.00	5-S-29, -56, 5513, 5513A (200M)	R407	2.00

SPEAKER REPAIR SERVICE

CONES

4 in. Speaker Cone—Installed and tested	\$.90 Net	10 in. Speaker Cone—Installed and tested	2.10 Net
5 in. Speaker Cone—Installed and tested	.95 Net	11 in. Speaker Cone—Installed and tested	2.25 Net
6 in. Speaker Cone—Installed and tested	1.05 Net	12 in. Speaker Cone—Installed and tested	2.45 Net
7 in. Speaker Cone—Installed and tested	1.25 Net	13 in. Speaker Cone—Installed and tested	2.95 Net
8 in. Speaker Cone—Installed and tested	1.50 Net	15 in. Speaker Cone—Installed and tested	4.00 Net
9 in. Speaker Cone—Installed and tested	1.65 Net		

FIELD COILS

Rewound for any Speaker at \$1.15 per lb. net.—Minimum Charge per Field Coil, \$1.15.
24-Hour Repair Service from Time of Receipt.—All Speaker Repairs F. O. B. Our Premises

YAXLEY PRODUCTS

LONG FRAME

JUNIOR

MIDGET

"X" TYPE

STANDARD JACK SWITCHES
(Made under Yaxley Patent No. 1,443,664)

JUNIOR JACK SWITCHES

MIDGET JACK SWITCHES

PUSH BUTTON SWITCHES

Long Frame, Junior, Midget, New "X" Type Jacks

Circuit Arrangement	Long Frame Types		Junior Jacks		Midget Jacks		"X" Type	
	No.	List Price	No.	List Price	No.	List Price	No.	List Price
Open Circuit	1	\$0.50	701	\$0.40	A-1	\$0.25	XPI	\$0.45
Circuit Cloning	2	.60	702	.55	A-3	.60		
Two Circuit	3A	.60	703A	.55	A-3A	.50		
Three Circuit								
Microphone	2B	.60	702B	.55			XP2B	.75
Single Circuit Filament Control	3	.70	703	.65				
Circuit Reversing	3A	.70	703A	.65	A-3A	.60		
Single Circuit Make Before Break								
Double Circuit	3C	.70	703C	.65				
Interstage Filament Control	0	.80	704	.75				
Two Circuit Filament Control	4A	.80	704A	.75				
Two Circuit Filament Locking	5	.90	705	.85				
Interstage Filament Control	6	1.00	706	.95				

Starting combinations of Midget, Junior and Long Frame Jacks are illustrated in "Circuit" column at left. "X" type circuits are at the right.

Phone Plugs, Microphone Plugs and Extension Jacks

Yaxley Phone Plugs, Microphone Plugs and Extension Jacks can be used in any way for connection with insulating or inferior products. Yaxley exclusive design insulation of Bakelite positively prevents current leakage. Patented feature—insulating tip from sleeve prevents shorting between these parts.

Two-Way Phone Plug (Bakelite Shell)—No. 75..... \$0.50
Two-Way Phone Plug (Bakelite Shell) (The Cord Type)—No. 75TC..... .60
Two-Way Phone Plug (Shielded Nickel Shell)—No. 75A..... 2.25
Three-Way Microphone Plug (Bakelite Shell)—No. 76..... 2.00
Three-Way Microphone Plug (Shielded Nickel Shell)—No. 76A..... 1.50
Two-Way Extension Jack (Fiber Shell) for No. 75, 75TC Phone Plug—No. 100..... .75
Two-Way Extension Jack (Shielded Nickel Shell) for No. 75A Phone Plug—No. 100A..... 2.50
Three-Way Extension Jack (Fiber Shell) for No. 76 Microphone Plug—No. 101..... 1.50
Three-Way Extension Jack (Shielded Nickel Shell) for No. 76A Microphone Plug—No. 101A..... 2.75

Standard and Junior Jack Switches
(Made under Yaxley Patent No. 1,443,664)

Circuit Arrangement	Two Position		Junior	
	No.	List Price	No.	List Price
Single Pole, Single Throw	30	\$0.75	320	\$0.70
Single Pole, Double Throw	30	.90	320	.85
Double Pole, Single Throw	40	1.00	400	.95
Five Springs, two make and one break	45	1.15	450	1.10
Double Pole, Double Throw	60	1.25	600	1.25
Three Pole, Single Throw	73	1.25	733	1.25
Four Pole, Single Throw	74	1.60	744	1.60

Circuit Arrangement	Three Position	
	No.	List Price
Single Pole, Double Throw Center off Position	32	.90
Double Pole, Double Throw Center off Position	62	1.25
Three Pole, Double Throw Center off Position	63	1.60
Four Pole, Double Throw Center off Position	64	2.00

Yaxley Jack Switches and Junior Jack Switches are furnished complete with Black Knob, Pointer and Off-On Name Plate. Mount in single hole, 1/4" diameter, on panels up to 1/4" thick.
 Yaxley Junior Jack Switches are especially desirable for mounting in a small space. The Switch fits parallel with the panel and has a depth of 1/4".

Midget Jack Switches

Yaxley Midget Jack Switches are of the same general construction as the Junior types but require less space.
 Furnished complete with Black Knob and Pointer. Mount in single hole, 1/8" diameter on panels up to 1/4" thick. List Price
 Single Pole, Single Throw, with "On-Off" Plate—No. 10..... \$0.50
 Single Pole, Double Throw, for long and short antenna switch. Furnished with "L and B" Plate—No. 11..... .65

Push Button Switches

Yaxley Push Button Switches are made in locking and non-locking types. Especially adapted for use in laboratories, test panels, motor circuits and where permanent or momentary contact is desired.
 The non-locking switch operates only when the button is pushed in and releases on removal of the pressure. The locking type maintains its position when the button is pushed in and is released when button is pulled out.
 Furnished with polished black Bakelite Knob. Mounts in single hole 1/4" diameter on panels up to 1/4" thick. List Price
 S. P. Make contact—Non-locking type—No. 2001..... \$0.90
 S. P. Make contact—Locking type—No. 2001-L..... .90
 S. P. Break contact—Non-locking type—No. 2002..... .90
 S. P. Break contact—Locking type—No. 2002-L..... .90
 S. P. Double Throw—Non-locking type—No. 2003..... 1.00
 S. P. Double Throw—Locking type—No. 2003-L..... 1.00
 2-Pole—Make two contacts—Non-locking type—No. 2004..... 1.20
 2-Pole—Make two contacts—Locking type—No. 2004-L..... 1.20
 2-Pole—Break two contacts—Non-locking type—No. 2005..... 1.20
 2-Pole—Break two contacts—Locking type—No. 2005-L..... 1.20
 2-Pole—Double Throw—Non-locking type—No. 2006..... 1.50
 2-Pole—Double Throw—Locking type—No. 2006-L..... 1.50
 2-Pole—Make two—Break one—Non-locking type—No. 2007..... 1.30
 2-Pole—Make two—Break one—Locking type—No. 2007-L..... 1.30
 Double Throw—Make before break—Non-locking type—No. 2008..... 1.65
 3-Pole—Double Throw—Make before break—Locking type—No. 2008-L..... 1.65

Hexagon Head Type Tip Jacks

(Supplied with insulating washers.) With Hexagon Bakelite Top for mounting in 1/4" hole. (U.S. Letters Patent No. 1,586,379—May 26, 1926).

Color	No.	List Price
Red	No. 420	\$0.15
Black	No. 421	.15
Pair (1 Black, 1 Red) in envelope	No. 422	.25
Dark Green	No. 423	.15
Brown	No. 424	.15
Light Blue	No. 425	.15
Orange	No. 426	.15
Yellow	No. 427	.15
Light Green	No. 428	.15
Dark Blue	No. 429	.15

When using insulating washers, mount in 1/4" hole.

Round Bakelite Head Type Tip Jacks

(Supplied with insulating washers.) Mounts in 1/4" hole in panel up to 1/4" thick.
 Pair (1 No. 419 Black, 1 No. 418 Red) in envelope—No. 407..... \$0.35
 Green—No. 413..... .30
 Red—No. 418..... .30
 Black—No. 419..... .20

When using insulating washers, mount in 1/4" hole.

Round Insulated Head Type Tip Jacks

(Supplied with insulating washers.) Mounts in 1/4" hole in panel up to 1/4" thick.
 Red—No. 520..... \$0.15
 Black—No. 521..... .15
 Green—No. 522..... .15
 Pair (1 Black—1 Red) in Envelope—No. 523..... .25
 Brown—No. 524..... .15
 Light Blue—No. 525..... .15
 Orange—No. 526..... .15
 Yellow—No. 527..... .15
 Light Green—No. 528..... .15
 Dark Blue—No. 529..... .15

When using insulating washers mount in 1/4" hole.

Metal Type Tip Jacks

Round and Hexagon Heads. (Supplied with insulating washers)

Round Head Type Tip Jack mounts in a 1/4" hole.

When using insulating washers, mount in 1/4" hole—No. 416..... \$0.10
 Envelope of two No. 416—No. 414..... .30
 Hexagon Head Type Tip Jack mounts in 1/4" hole. When using insulating washers, mount in 1/4" hole—No. 417..... .10
 Round Head Type Tip Jack mounts in 1/4" hole. When using insulating washers, mount in 1/4" hole—No. 16..... .20

Tip Plugs

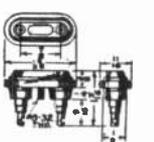
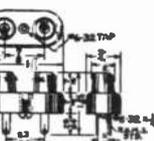
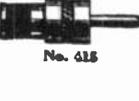
Designed especially for use with Tip Jacks and to serve as a Phone Tip without soldering.
 No. 415..... \$0.08
 For use with Yaxley Tip Jacks No. 416, 417, 413, 418, 419, 520 to 529 inclusive.

No. 15

Some construction as No. 415 except has longer tip. To be used with Yaxley Tip Jacks No. 16, 420, 421, 423, 424, 425, 426, 427, 428, 429, 432, and all 401 Types.

Moulded Twin Tip Jacks

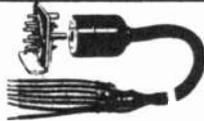
Mounting Holes—1/4"—Centers. No. 401 is a Twin Tip Jack. No. 432 is a circuit cloning twin tip jack which closes circuit automatically when tips are removed.
 Blank—No. 401B..... \$0.30
 Marked "Speaker"—No. 401S..... .30
 Marked "Phono"—No. 401P..... .30
 Marked "+"—No. 401PM..... .30
 Marked "AG"—No. 401AG..... .30
 Shorting Type (Black)—No. 432..... .30
 Shorting Type (Red)—No. 433..... .30



YAXLEY PRODUCTS

Cable

- List Price
 7 Conductor, 5-foot length \$1.00
 Extra Lengths, 7 Conductors over 5 feet,
 per foot15
 12 Conductor, 4-foot length 1.75
 Extra Lengths, 12 Conductor over 4 feet,
 per foot40



No. 660

Cable Connectors

- List Price
 7 Conductor Cable Connector Plug with
 5-foot cable, receptacle plug and mount-
 ing plate—No. 660 \$3.00
 12 Conductor Cable Connector Plug with
 4-foot cable, receptacle plug and mount-
 ing plate—No. 612 5.00
 Pin Plate, 7 conductor—No. 68075
 Pin Plate, 12 conductor—No. 682 1.00



No. 635

No. 631

Pin Plugs

- Pin Plug, with cover, 7 conductor—No.
 635 \$1.00
 Pin Plug, with cover, 12 conductor—
 No. 625 1.25
 Pin Plug, with mounting ring, 7 conductor
 —No. 631 1.00
 Pin Plug, with mounting ring, 12 conduc-
 tor—No. 617 1.25
 Note—For mounting on panels up to 1/8" thick.



No. 645

No. 644

Receptacle Plugs

- Receptacle Plug, with cover, 7 conductor
 —No. 645 \$1.00
 Receptacle Plug, with cover, 12 conductor
 —No. 615 1.25
 Receptacle Plug, with mounting ring, 7
 conductor—No. 644 1.00
 Receptacle Plug, with mounting ring, 12
 conductor—No. 614 1.25
 Note—For mounting on panels up to 1/8" thick.
 Receptacle Plug with Radio Convenience
 Outlet Mounting Bracket, 7 conductor
 —No. 139 1.50
 Receptacle Plug with Radio Convenience
 Outlet Mounting Bracket, 12 conductor
 —No. 141 2.00

Battery Chargers



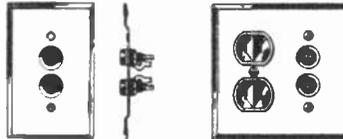
No. 5535

	No. 5535 Charger
Size	7 3/4" long, 3 1/2" wide, 3 1/4" deep
Weight	App. 7 lbs.
Length of Cord: A.C.	12 foot
D.C.	9 foot
Rectifier	Mallory Dry Disc Type 16CD3
Finish	Black Wrinkle
List Price	\$11.50

33 1/3

Radio Convenience Outlets

- No. 156—Single-Gang Radio Outlet for
 Antenna and Ground Connections**
 Receptacles are of polished Bakelite marked
 ANT. and GND. Complete with two plugs for
 antenna and ground wires. Suitable for homes,
 apartments, hotels or wherever a radio set is
 installed. List Price
 Brass—No. 156 \$1.00
 Bakelite—No. 156-B 1.00



No. 156

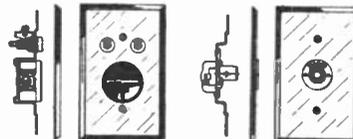
No. 256

**No. 256—Two-Gang Outlet for Antenna
 and Ground and Duplex
 Electrical Connections**

The serviceability and attractiveness of this
 reasonably priced outlet have made it especially
 popular for houses and apartments. It is also
 widely used in rewiring jobs. Furnished complete
 with two tip plugs. List Price
 Brass—No. 256 \$1.50
 Bakelite—No. 256-B 1.50

**No. A-256—Two-Gang Radio Outlet for
 Antenna and Ground and Duplex AC
 Connections with Outlet Box**

This unit is the same as No. 256 except for the
 addition of the special Yaxley Outlet Box.
 Brass—No. A-256 \$2.00
 Bakelite—No. A-256-B 2.00
 (Box listed as Standard by Underwriters' Laboratories)



No. 133

No. 135

**No. 133—Single-Gang Outlet for Antenna,
 Ground and AC Connections**

A very useful number and popular seller. Its
 compact assembly of antenna and ground with
 a single AC outlet, makes it desirable wherever
 ANT. and GND. are required. Used extensively
 in homes, apartments, hotels, in rewiring jobs
 and adaptable to any place where a radio set is in
 operation. Two tip plugs included. List Price
 Brass—No. 133 \$1.35
 Bakelite—No. 133-B 1.35

No. 135—Loud Speaker Connections

A well-designed, exceptionally popular number.
 Provides for loud speaker reception for any
 room in the house, apartment, hotels, and other
 installations. List Price
 Brass—No. 135 \$0.90
 Bakelite—No. 135-B90

**No. 116—Single-Gang Radio Outlet for
 Antenna and Ground Connections**

Receptacles are of Brass or Bakelite, marked
 ANT. and GND. Complete with two plugs, for
 antenna and ground wires. List Price
 Brass—No. 116 \$0.70
 Bakelite—No. 116-B70

**No. 216—Two-Gang Outlet for Antenna
 and Ground and Duplex AC Connections**

Receptacles are of Brass or Bakelite, marked
 ANT. and GND. Complete with two plugs,
 Brass—No. 216 \$1.10
 Bakelite—No. 216-B 1.10

Rectifiers



No. 16C3

No. 16C3B

Replacement Rectifiers

GENERAL REPLACEMENT REFERENCES

Make	Application	Model	Use Mallory Rectifier Cat. No.	List Price
Auco	Charger		4A1B	\$4.00*
Ampere	Speaker	100	16C3B	7.00
Arvin	Charger	500	8A3	3.00
Arvin	Charger	500	16C3	5.50
Arvin	Charger	600	16C3	5.50
Barnard	A. Eliminator		16C3B	7.00
Barnard	Charger	250H	4A1B	4.00*
Bosch	Charger	250H	16C3	5.50
Bosch	Charger	250H	16C3	5.50
Bosch	A. Eliminator		16C3B	7.00
Brace-Stratton	Charger		16C3B	7.00
Calliac	Rat. Booster	A1109	16CD3	6.00
Calliac	Charger	A1108	16CD3	6.00
Cherry	Charger	250H	16C3	5.50
Elihu	A. Eliminator		16C3B	7.00
Elihu	Charger	B	4A1B	4.00*
Elihu	Charger	T	15C1	4.00
Elihu	Charger		4A1B	4.00*
Elihu	Charger	3 Amp.	16C3B	7.00
Elihu	Charger	319	16C3	5.50
Elihu	Rectifier	M16	16C3B	7.00
Elihu	Rectifier	ME16	16C3	5.50
Elihu	Rectifier	X16	15C1	5.00
Elihu	Rectifier	179	12A1B	4.00
Elihu	Rectifier	S172	12A1B	4.00
Elihu	Rectifier	X16	16C3B	7.00
Fala	A. Eliminator		16C3B	7.00
Farnand	Speaker		16C3B	7.00
General Motors	Charger	350	16C3	5.50
General Motors	Charger	600540	16C3	5.50
General Motors	A. Eliminator		16C3B	7.00
Knapp	A. Eliminator		16C3B	7.00
Knapp	Charger	No. 3	8A3	3.00
Knapp	Charger	No. 3	16C3	5.50
Knapp	Charger	600	16C3B	6.00
Landy	Charger	250	16C3	5.50
Landy	Charger	600	16C3B	6.00
Magnolia	A. Eliminator		16C3B	7.00
Mallory	Rat. Booster	No. 3	8A3	3.00
Mallory-Elihu	Charger	350	16C3	5.50
Mallory-Elihu	Charger	555	16CD3	6.00
Mallory	Rectifier	X204	6A1B	4.00*
Mallory	Rectifier	X12	15C1	4.00
Mallory	Rectifier	X16	16C3	5.50
Mallory	Rectifier	X20	20A1	7.00
Mallory	Rectifier	X112	15C1	4.00
Mallory	Rectifier	X116	16C3	5.50
Mallory	A. Eliminator		16C3B	7.00
National	Charger		4A1B	4.00*
Norman	Charger		15C1	4.00
Orwell	Charger		16C3B	6.00
Packard	Charger	Safety-Super	16CD3	6.00
Public	A. Eliminator	(Elkon Equipped)	16C3B	7.00
Public	A. Eliminator		12A1B	4.00
Public	(Replaces Philcorps A and AA Sets)		12A1B	4.00
Public	Trickle Charger	B Eliminator	12A1B	4.00
Princeton	Charger		4A1B	4.00*
Princeton	A. Eliminator		16C3B	7.00
Sherrone	Charger		15C1	4.00
Sting Bird	Charger		15C1	4.00
Stinson	Speaker		16C3B	7.00
Tuba Magnolia	A. Eliminator		16C3B	7.00
Trueman	Charger		15C1	4.00
Trueman	Charger		8A3	3.00
Wagner	Rectifier		16C3B	7.00
Wagner	A. Eliminator		16C3B	7.00
WLS	Charger		15C1	4.00

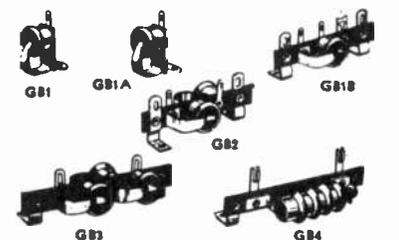
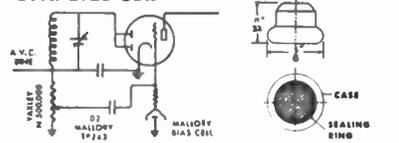
SPECIAL APPLICATIONS

Pin Game	Power Packs	W16A1	6.00
Pin Game	Power Packs	W20A1	7.00
Pin Game	Power Packs	W21A1	8.00

*Set of 3

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Grid Bias Cell



- Mallory Grid Bias Cell (packed 10 to the box) .. \$0.30 per cell
 Mallory Grid Bias Cell Holder, Cat. No. GB110
 Mallory Grid Bias Cell Holder, Cat. No. GB1A10
 Mallory Grid Bias Cell Holder, Cat. No. GB1B10
 Mallory Grid Bias Cell Holder, Cat. No. GB213
 Mallory Grid Bias Cell Holder, Cat. No. GB325
 Mallory Grid Bias Cell Holder, Cat. No. GB435

MALLORY VIBRATORS

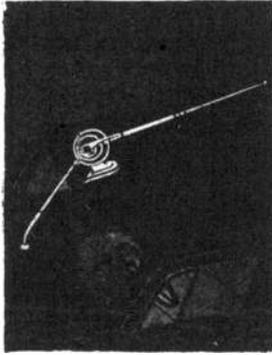


Name of Set	Model Number	Correct Mallory Replacement Vibrator Number	List Price
Arvin—See Noblitt-Sparks.			
Cadillac	06W Standard	210	\$7.50
	06W Master	237	7.50
	2121 (062)	306	8.75
	2122 (072A)	211	7.50
	6U2	253	3.95
	56V1	221	3.95
Canadian Radio Corp.			
	513C, 513DOR	223	5.95
Chevrolet—See United Motors Service.			
Crosley			
	98, 99, 102, 103, 5A1	223	5.95
	4A1, 6B1, 5A3, A155	247	4.95
	435, 546, 636, 6615	246	4.95
	A166, A255, A355, A366, A455, A555	273C	5.50
	119, 159	F223	5.95
	A156, A266	501P	2.95
Delco—See United Motors Service.			
Firestone			
	R-1322 (R-132)	289Y	4.95
	54, 64, R-1332 (R-133)	294	2.95
	Travler (1314)	294	2.95
	R-1431	294SW	2.95
Ford (Majestic)			
	40-18805	220B	4.50
	Glove Box Police	220B	4.50
(Philco)	All	500P	2.95
(Lincoln)		296	2.95
Galvin Mfg. Corp. (Motorola)			
	Motorola Police	282B	5.50
	34, 50, 60, 80, 90 (Golden Voice)	294	2.95
	88	302S	6.50
	61	303S	7.50
	77	230	7.50
	77A, 44A, 66, Super 6	270B	5.95
	55	231	7.25
	55A	234	7.25
	44	235	5.95
	57, 62, 75, 79, 100, 110	253T	3.95
	Dual 6 and Twin 8	253	3.95
General Electric (Also Canadian General Electric)			
	B40-C41	273*	6.00
	B52 Arm-Rest Model	273*	6.00
	C60	253	3.95
	C61	224	7.00
	D50, D51, D52	287M	5.50
	D72, N-60	294	2.95
	N51	248	4.95
Giffellan			
	All 1933-34-35-36	296	2.95
Grunow			
	4NB (410, 411)	245	4.95
	614-618	294	2.95
	625	273D	5.50
Hudson Terraplane, Majestic Hood			
	650HD, 651HE	292	3.45
	660TD, 661TE	292	3.45
	666, 668, 680, H-6	294	2.95
Mission Bell			
	10A, 11, 12, 14, 16, 25A	292	3.45
Motorola—See Galvin Mfg. Corp.			
Noblitt-Sparks (Arvin)			
	15, 25, 35, 45 (1st Series)	296	2.95
	15, 25, 35, 45 (2d Series)	292	3.45
	10A, 20A, 30A	292	3.45
	28B, 30B, 16	292	3.45
	7, 17, 17A, 27, 37, 38	294	2.95
	18, 28, 33	294	2.95
	61B, 62B, 517B, 527B, 617B, 627B	245	4.95
Packard Bell Co.			
	25, 6 tube Auto	294	2.95

Name of Set	Model Number	Correct Mallory Replacement Vibrator Number	List Price
RCA Victor (Also Canadian RCA)			
	5M, 6M, 6M2	219	54.95
	M34-M105	273*	6.00
	M116 (Arm-Rest Model)	273*	6.00
	M107	253	3.95
	M107 (12-volt)	6253	6.00
	AR 4229	273*	6.00
	H 6 (Hudson), RS 63-1	294	2.95
	M123	224	7.00
	M101, M104, M108	287M	5.50
	M101, M104, M108, 12-V. Automotive	G287M	7.50
	M109	294	2.95
	BC6-6, BT6-5	285	3.50
	*BK6, 6BT6, 8BK6, 8BT6, W285	285	5.50
Sears-Roebuck			
	4400, 10711A62	249	4.95
	3400	504	3.95
	7128 4-prong Socket, 566	294	2.95
	666	294	2.95
	6-prong Socket	271	6.00
	7117, 1859, 1859-A	271	3.50
	7157, 7167, 1869	294	2.95
Stewart Warner			
	1171, 1172, 1181, 1182, 1183	294	2.95
	R-117, R-118	294	2.95
	R-112, 1121, 1122, 1123	292	3.45
	1311, 1312, 1314, 1315	294	2.95
	R-1316, 1317, 1318, 1319	294	2.95
	R-131	294	2.95
	R-132, R-1322	289Y	4.95
	R-133, R-1332	294	2.95
	f601, 143	294SW	2.95
	R189	285XS	7.00
Tiffany Tone (Herbert Horn)			
	535, 536	296	2.95
United Motors Service			
Buick-Olds-Pontiac			
	393884-393885	273C	5.50
	405045-405046, 405047	273C	5.50
	405057	273C	5.50
	405062-405063	273C	5.50
	544245-544246	273C	5.50
	544267-544268-544289	273C	5.50
	544290-544291-544297-544298	273C	5.50
	364441, 980393	221	3.95
	980441	222	5.50
	980455-980459	222	5.50
	980507-980508	273D	5.50
	980509, 980525, 980526, 980529	273D	5.50
	982006-982007	273C	5.50
	982008	273C	5.50
	983506-983507	273C	5.50
	983526, 983527, 982044	273C	5.50
	983534, 985200	294	2.95
	1291344-1291345	273C	5.50
	980534-5	514	4.95
	982043	294	2.95
Chevrolet			
	364441	221	3.95
	600153-600566	222	5.50
	600249-600565	222	5.50
	601038	273C	5.50
	601176-601177	273C	5.50
	601525, 601574	273C	5.50
	601586	273C	5.50
	601662, 601814	273C	5.50
	985100-985200	294	2.95
	985300	273D	5.50
	985400	273C	5.50
Delco			
	626, 627, 628, 629, 634, 635	273C	15.50
	630, 631, 632, 633, 500, 631A	294	2.95
	2035, 4036	221	3.95
	4037, 4038	222	5.50
Western Auto (Trustone)			
	S-732 (Z6Z1)†	292	3.45
	S-733, (V6Z2)†, 06Z	292	3.45
	S-690, (06Z), S-691, (06Z-A), 206	292	6.75
	S-740 (6U)	253	3.95
	S-735 (25Y1)	286S	5.00
	S-743, 1312 (R-131)	294	2.95
	670 (68)	253	3.95
	06W	210	7.00
	670	296	2.95
	L7, Z4, Z5	245C	4.95
Zenith			
	4B106, 4B131, 4B132 (5406)	294	4.95
	4V31, 4V59 (5405), 6B107, 6B129, 6B164 (3635)	294	4.95
	6V27, 6V62 (Chassis 5621) 246	294	4.95
	5M90 (Chassis 5510), 663-4, 2948W	292	2.95
	460-462 (2057)	292	3.45
	650HD-651HE	292	3.45
	660TD-661TE	292	3.45
	Ford	296	2.95
	7	296	2.95
	666, 668, 680, 6M91D, 7M91S	294	2.95
	7M91D, 6M90S, 6M90D, 6M92	294	2.95

R. C. A. AUTO ANTENNAS

RCA MONOGRAM ANTENNA



A new top antenna of outstanding appearance and efficiency. Streamlined Bakelite Insulator with special rubber suction cup provides easy installation. Has high gloss satin finish, guaranteed rust proof. Extends from 21" to 35½" in length. Cowl bar also telescopic. Includes eight-inch rubber cable fitted with male connector.

LIST PRICE \$4.95
NO. 9823

Shielded cable for above—length 36", complete with male and female fittings. Stock No. 9828—List Price \$7.70

RCA COWL TENNA



RCA's latest vertical type auto antenna. Permanently installed to side of cowl. Streamlined insulator includes rubber pad to insure perfect seal. Extends from 28¾" to 49½" in length. Beautiful appearance, guaranteed rust and corrosion-proof, high gloss satin finish.

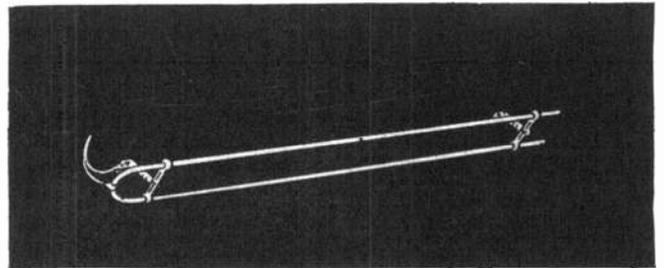
LIST PRICE \$3.65
NO. 9825

Shielded cable for use with above. Length 36". Fitted with metal shield can for antenna connection and male bayonet fitting for receiver connection. Stock No. 9829—List Price \$9.90

RCA DI-POLE ANTENNA

LIST PRICE \$2.60
STOCK NO. 9605

For efficient under-car installations the RCA Di-Pole Antenna will be found to be unexcelled. It is simple in design, efficient in operation and easily installed on any car. Because of its construction and the location of the antenna, ignition interference is reduced to a minimum. Adjustable brackets provide a wide variety of installation locations and adjustment for road clearance. Where the signal level is exceptionally low, two may be installed, one under each running-board. Such an installation gives greatly improved pickup. Complete with 50-inch shielded lead-in cable



having male bayonet connector, and all necessary fittings. Individually packed.

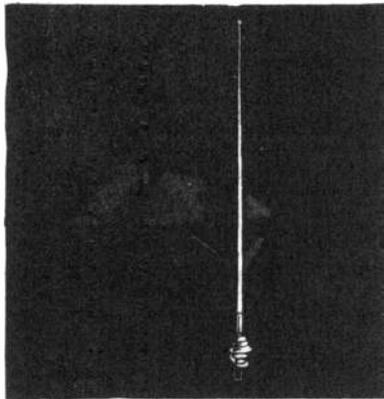
RCA ROD TENNA

STOCK NO. 9793

LIST PRICE \$3.50

Here's RCA's most easily installed auto antenna—just requires five minutes for a complete job. Remove either door hinge pin, attach the RCA Rodtenna and return the pin. That is all there is to it—no drilling, no soldering or cementing required. Made of high carbon vanadium steel, triple chromium plated. Weather-proof moulded rubber insulator and special 10½" flat connection lead complete with female bayonet connector. Has high signal pickup and eliminates wheel static.

Extension cable for above. 36" low capacity shielded cable with male bayonet fittings on each end. Stock No. 9830—List Price \$7.70



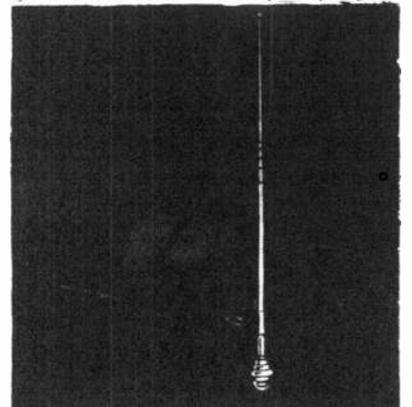
RCA TELESCOPIC ROD TENNA

STOCK NO. 9827

LIST PRICE \$2.75

A new hinge mounting type antenna that extends from 29½" to 50½" in height. Has excellent pickup qualities. Made of a new non-rusting metal having high gloss satin finish. Easily installed by removing hinge-pin. Uses heavy duty weather-proof insulator having attractive chromium band. Furnished with special 10½" flat moulded rubber covered lead, terminated with female bayonet fitting.

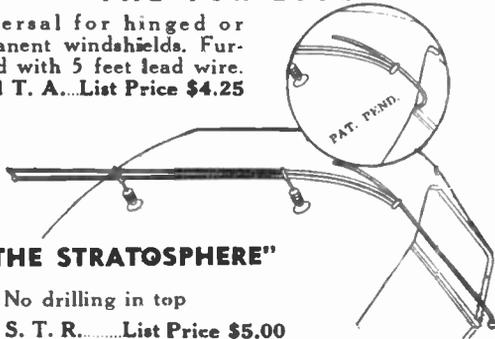
Cable for above. 36" low capacity shielded cable with male bayonet fittings on each end. Stock No. 9830—List Price \$7.70



WARD ANTENNAS

"THE TUR-ETTE"

Universal for hinged or permanent windshields. Furnished with 5 feet lead wire. Model T. A. List Price \$4.25



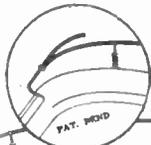
"THE STRATOSPHERE"

● No drilling in top
Model S. T. R. List Price \$5.00

"THE ALL RANGE"

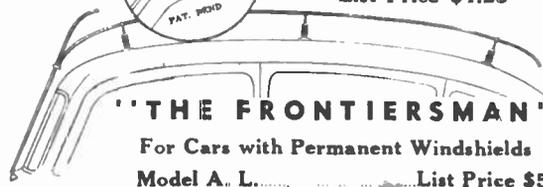
Universal for all cars. Permits windshields to open.

Model A. L. T.
List Price \$4.25

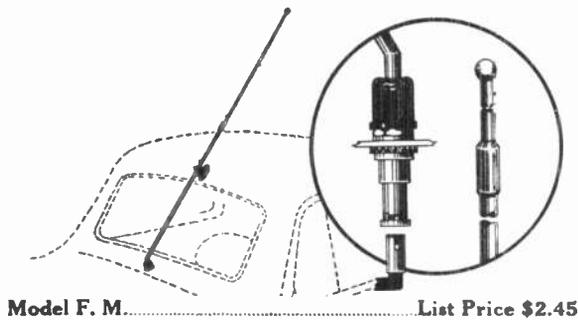


"THE FRONTIERSMAN"

For Cars with Permanent Windshields
Model A. L. List Price \$5.00



"THE CHIEFTAIN"

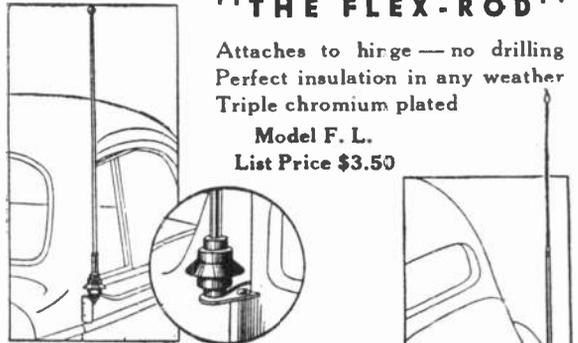


Model F. M. List Price \$2.45

"THE FLEX-ROD"

Attaches to hinge — no drilling
Perfect insulation in any weather
Triple chromium plated

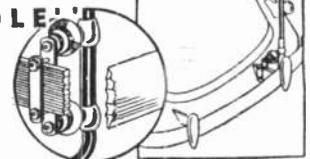
Model F. L.
List Price \$3.50



"THE FISH-POLE"

Complete with 12 foot lead wire

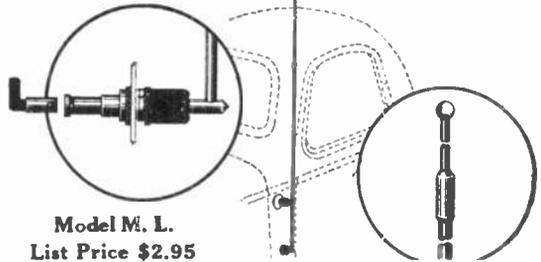
Model B. F.
List Price \$3.50



"THE MAINLINER"

- Fits all cars
- Mounts to side of cowl

- Telescopic
- Made of brass, chromium plated and stainless steel



Model M. L.
List Price \$2.95

"THE CORONATION"

- No drilling in car
- Simple installation
- Rust proof
- Flexible

Model C. O.
List Price \$2.45

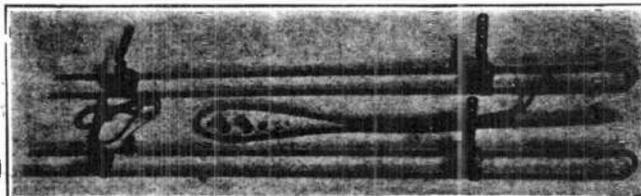


"THE LONG RANGE TWINS"

MODEL HPR

Complete with 66" Approved Low-Loss Lead Wire

List Price **\$4.00**



PERMANENT CONSTRUCTION

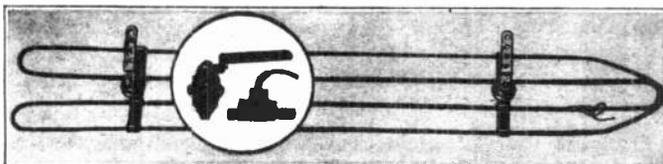
SIMPLE INSTALLATION

NO DRILLING

● THE "LONG-RANGE TWINS" produce pick-up power practically equivalent to that of any roof aerial.

Weight: 6 lbs. individually packed, 10 to a master carton, 62 lbs.

"THE STREAMLINER"



Model 4 R.C. without approved lead List \$2.95

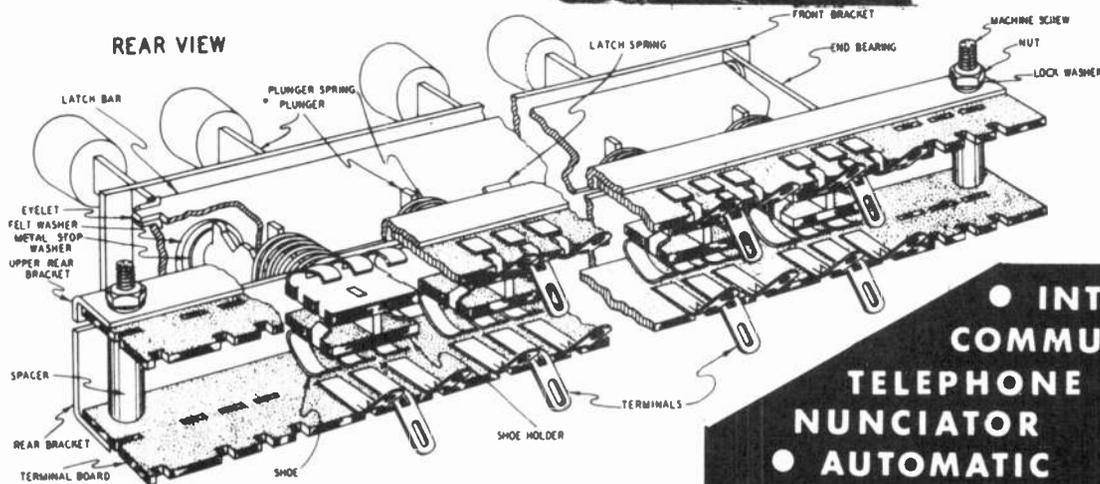
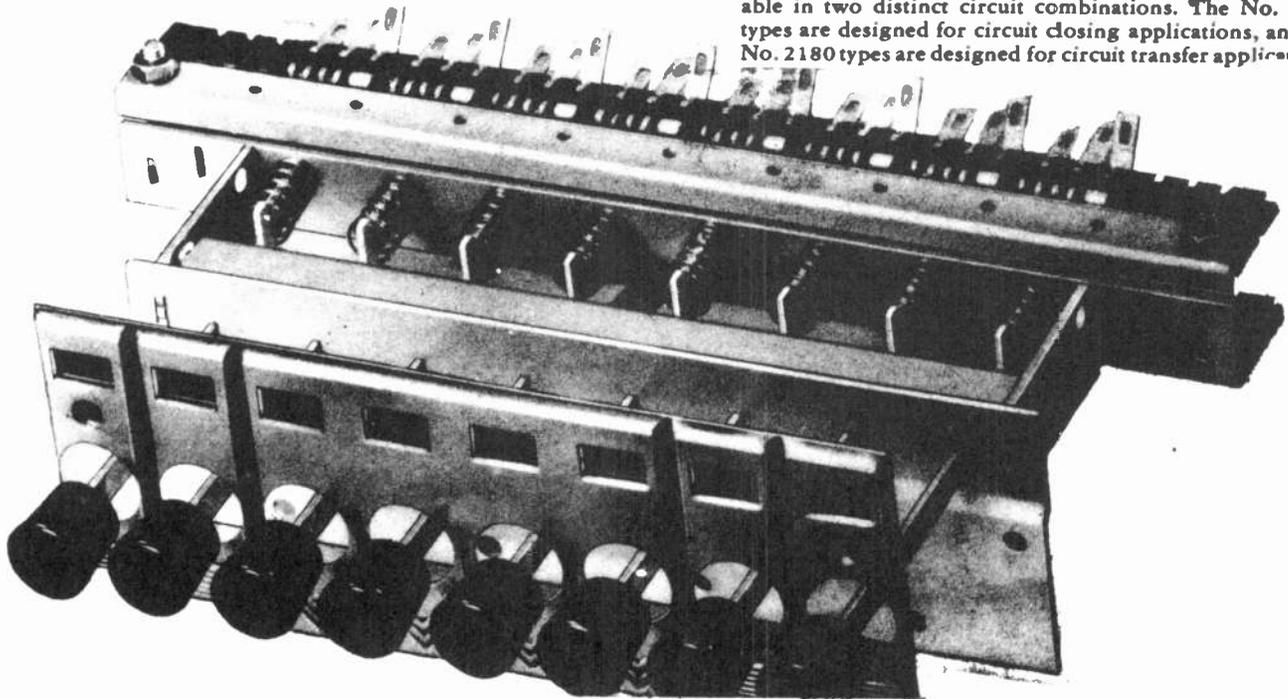
- Approved for all radio sets and all automobiles.
- No drilling — 10 minute installation.
- 100% rubber covered.
- Maximum efficiency and performance
- Permanent construction.
- Note the Ward Magic Bracket and the Molded Lead Wire Connection.

Model 4 R.C.W. with approved lead List \$3.70

MALLORY PUSH BUTTON SWITCHES

Automatic Station Selector Tuning, Inter-Office Communication Systems, Telephone and Annunciator Systems, Signal Generator Frequency Selection, Set Analyzers, Tube Checkers, Multimeters, Transmitter Meter Switching, or the many applications requiring a device for making, breaking, or transferring multiple circuits in any desired sequence.

Mallory-Yaxley Multiple Push Button Switches are available in two distinct circuit combinations. The No. 2160 types are designed for circuit closing applications, and the No. 2180 types are designed for circuit transfer applications.



Cat. No.	Type	Number of Buttons	*List Price
2164	Circuit Closing	4	\$4.00
2166	Circuit Closing	6	5.00
2168	Circuit Closing	8	6.00
2184	Circuit Transfer	4	4.00
2186	Circuit Transfer	6	5.00
2188	Circuit Transfer	8	6.00

*List price includes brown bakelite knobs, one attractive statuary bronze escutcheon plate supplied with blank designation inserts, and transparent strip for windows.

• INTER-OFFICE
 COMMUNICATION
 TELEPHONE AND AN-
 NUNCIATOR SYSTEMS
 • AUTOMATIC STATION
 TUNING • TRANSMITTER
 • MULTIMETERS • SIGNAL
 GENERATOR FREQUENCY
 SELECTION • TUBE CHECKERS
 • METER SWITCHING
 • SET ANALYZERS

MALLORY CONDENSERS

Dry Electrolytic Filter Units

CARDBOARD CARTON TYPES CS, CN and CM

CS—Single Section Type

Capacity	Wkg. V.	Max. Surge	Size C B A	Catalog Number	List Price
4	250	300	1/2 x 1/2 x 3/4	CS121	\$0.65
8	250	300	1/2 x 1/2 x 3/4	CS122	.80
10	250	300	1/2 x 1 x 3/4	CS124	.85
12	250	300	1/2 x 1 x 3/4	CS126	1.00
16	250	300	1/2 x 1 1/2 x 3/4	CS126	1.10
2	450	525	1/2 x 1/2 x 3/4	CS130	.65
4	450	525	1/2 x 1/2 x 3/4	CS131	.75
6	450	525	1/2 x 1 x 3/4	CS132	.90
8	450	525	1/2 x 1 x 3/4	CS133	.96
10	450	525	1/2 x 1 1/4 x 3/4	CS134	1.15
12	450	525	1/2 x 1 1/4 x 3/4	CS135	1.30
16	450	525	1 x 1 1/4 x 3/4	CS136	1.45

CN—Multiple Section Common Cathode Type (Common Negative)

Capacity	Wkg. V.	Max. Surge	Size C B A	Catalog Number	List Price
4-4	250	300	3/8 x 1 x 2 1/2	CN140	\$0.90
4-8	250	300	3/8 x 1 x 2 1/2	CN141	1.15
8-8	250	300	3/8 x 1 1/2 x 2 1/2	CN142	1.30
8-8-8	250	300	3/8 x 1 1/2 x 3	CN145	1.95
4-4	450	525	3/8 x 1 1/4 x 2 1/2	CN150	1.20
4-8	450	525	3/8 x 1 1/4 x 2 1/2	CN151	1.35
8-8	450	525	3/8 x 1 1/4 x 2 1/2	CN153	1.50
8-8-8	450	525	1 1/2 x 1 1/4 x 3	CN155	2.20

Dry Electrolytic Filter Units

ROUND ALUMINUM CAN TYPES RS, RN and RM

RS—Single Section Type

Capacity	Wkg. V.	Max. Surge	Size A B	Catalog Number	List Price*
4	250	300	2 1/4 x 1	RS201	\$0.75
8	250	300	2 1/4 x 1	RS203	.95
12	250	300	2 1/4 x 1	RS206	1.10
4	450	525	2 1/4 x 1	RS211	.85
8	450	525	2 1/4 x 1	RS213	1.05
12	450	525	2 1/4 x 1	RS215	1.40
16	450	525	3 1/2 x 1	RS216	1.55

RM—Multiple Separate Section Type

Capacity	Wkg. V.	Max. Surge	Size A B	Catalog Number	List Price*
4-8	250	300	3 x 1 1/2	RM251	\$1.20
8-8	250	300	3 x 1 1/2	RM252	1.45
8-8-8	250	300	3 1/2 x 1 1/2	RM255	2.10
8-8-16	250	300	3 1/2 x 1 1/2	RM257	2.25
8-16-16	250	300	3 1/2 x 1 1/2	RM259	2.60
4-8	450	525	3 x 1 1/2	RM261	1.45
8-8	450	525	3 x 1 1/2	RM262	1.60
8-8-8	450	525	4 x 1 1/2	RM265	2.30

RN—Multiple Section Common Cathode Type (Common Negative)

Capacity	Wkg. V.	Max. Surge	Size A B	Catalog Number	List Price*
4-8	250	300	3 x 1	RN231	\$1.20
8-8	250	300	3 x 1	RN232	1.45
8-8-8	250	300	3 x 1 1/2	RN235	2.10

*Prices include patent and list washer. Prices on other mounting washers and mounting brackets listed below.

4-8	450	525	3 x 1	RN241	1.45
8-8	450	525	3 x 1 1/2	RN242	1.60
8-8-8	450	525	3 1/2 x 1 1/2	RN245	2.20

Dry Electrolytic Units

HEAVY DUTY AND HIGH SURGE TYPES HD AND HS

HD—Single Section Type

Cap.	D.C. Wkg. V.	Container	Size	Cat. No.	List Price
4	500	Carton	1/2 x 1 x 2 1/2	HD680	\$1.20
4	500	Rd. Ca.	1 x 2 1/2	HD681	1.45
8	500	Carton	1 1/2 x 1 1/2 x 2 1/2	HD682	1.50
8	500	Rd. Ca.	1 x 2 1/2	HD683	1.75

HS—Single Section Type

Cap.	D.C. Wkg. V.	Container	Size	Cat. No.	List Price
4	600	Carton	1/2 x 1 1/2 x 3	HS600	\$1.75
4	600	Rd. Ca.	1 1/2 x 3 1/2	HS601	1.85
8	600	Carton	1 1/2 x 1 1/2 x 3	HS602	2.45
8	600	Rd. Ca.	1 1/2 x 4 1/2	HS603	2.60

UNIVERSAL AND SPECIAL TYPES UR AND SR

UR Special Universal Units

Capacity	Wkg. V.	Container	Size	Catalog Number	List Price
8-8	250-300	Carton	1 1/2 x 1 1/2 x 2 1/2	UR180	\$1.50
8-8-1-1	450	Round Can	1 1/2 x 2 1/2	UR181	2.10
8-25-10	150	Carton	1 1/2 x 1 1/2 x 2 1/2	UR182	1.95
4-4-A	150	Carton	1 1/2 x 1 1/2 x 2 1/2	UR183	1.35
8-8-8, 4-4	200, 25	Cardboard Tube	1 1/2 x 2 1/2	UR188	2.50
8-8-8, 5-5	200, 25	Carton	1 1/2 x 1 1/2 x 3	UR189	2.50
8-8-8-8	250	Carton	1 1/2 x 1 1/2 x 3	UR190	2.60
8-8-8-8	450	Carton	1 1/2 x 1 1/2 x 3	UR191	2.95
20-20	150	Carton	1 1/2 x 1 1/2 x 2 1/2	UR192	1.65

SR Special Universal Units

Capacity	Wkg. V.	Container	Size	Catalog Number	List Price
8-12	300	Carton	1 1/2 x 1 1/2 x 2 1/2	SR601	\$1.55
6-4-6	300-300-25	Round Can	1 1/2 x 2 1/2	SR602	1.70
8-30	300-30	Cardboard Tube	1 1/2 x 4 1/2	SR603	1.35
3-5-6	300-300-12	Carton	1 1/2 x 1 1/2 x 2	SR604	1.50
8-8	350	Round Can	1 1/2 x 3 1/2	SR605	1.55
6-6	350	Carton	1 1/2 x 1 1/2 x 2 1/2	SR606	1.35
6-4-6	300-300-12	Carton	1 1/2 x 1 1/2 x 2 1/2	SR607	1.55
6-5	30	Cardboard Tube	1 1/2 x 2 1/2	SR608	1.10
8-8-25	400-400-25	Round Can	1 1/2 x 2 1/2	SR609	2.10
8-8-25	400-400-25	Carton	1 1/2 x 1 1/2 x 2 1/2	SR610	1.90
8-8-25	350-300-25	Carton	2 x 2 x 2 1/2	SR611	1.85
8-8, 16-16	350, 100	Round Can	1 1/2 x 4 1/2	SR612	2.90
16-30-16	200	Carton	1 1/2 x 1 1/2 x 4	SR613	2.60
8, 8-8, 12-12	450, 250, 25	Carton	1 1/2 x 2 1/2 x 2 1/2	SR614	2.90

AEROVOX ELECTROLYTIC CONDENSERS

INVERTED MOUNTING CONDENSERS

TYPES G and I



These standard size, inverted units are furnished in either grounded or negative mounting or insulated mounting. The latter, Type I, have an integral insulating boss cover and can lug.

600v. Surge Pk.—475v. D.C. Work

Type G475—Single Section Grounded Mounting

Cap. Mfds.	Can Size-Ins. Dia. - High	List Price
4	1 3/8 x 2 3/4	\$1.25
6	1 3/8 x 2 3/4	1.45
8	1 3/8 x 4 1/4	1.50

525v. Surge Pk.—450v. D.C. Work

Type G450—Single Section Grounded Mounting

Cap. Mfds.	Can Size-Ins. Dia. - High	List Price
4	1 3/8 x 2 3/4	\$.85
6	1 3/8 x 2 3/4	1.00
8	1 3/8 x 4 1/4	1.05
10	1 3/8 x 4 1/4	1.25
12	1 3/8 x 4 1/4	1.40
16	1 3/8 x 5 1/4	1.55

600v. Surge Pk.—475v. D.C. Work

Type I-475—Single Section Insulated Mounting

Cap. Mfds.	Can Size-Ins. Dia. - High	List Price
2	1 3/8 x 1 3/4	\$1.05
4	1 3/8 x 2 3/4	1.25
6	1 3/8 x 2 3/4	1.45
8	1 3/8 x 4 1/4	1.50

525v. Surge Pk.—450v. D.C. Work

Type I-450—Single Section Insulated Mounting

Cap. Mfds.	Can Size-Ins. Dia. - High	List Price
2	1 3/8 x 1 3/4	\$.75
4	1 3/8 x 2 3/4	.85
6	1 3/8 x 2 3/4	1.00
8	1 3/8 x 4 1/4	1.05
10	1 3/8 x 4 1/4	1.25
12	1 3/8 x 4 1/4	1.40
16	1 3/8 x 5 1/4	1.55

COMPACT CAN-TYPE BYPASS CONDENSERS

TYPE MM



Especially suited as bypass or filter units. Provided with an aluminum mounting strap, riveted to side of can. Easily mounted beneath the chassis by means of two screw holes at ends of strap.

75v. Surge Pk.—50v. D.C. Work

Type MM50—Single Section

Cap. Mfds.	Can Size-Ins. Dia. - High	List Price
10	1 x 1 1/4	\$.75
25	1 x 2 1/4	.90

40v. Surge Pk.—25v. D.C. Work

Type MM25—Single Section

Cap. Mfds.	Can Size-Ins. Dia. - High	List Price
5	1 x 1 1/4	\$.60
10	1 x 1 1/4	.60
25	1 x 1 1/4	.75

MIDGET CAN-TYPE ELECTROLYTIC CONDENSERS

TYPE GLS



Ultra-compact metal can electrolytic condensers for general replacement purposes and assemblies where space is at a minimum. These units are one-half the size of other types of can-type electrolytics of the same capacities and voltage ratings. Inverted mounting. Two color-coded wire leads. Hermetically sealed, leakage and seepage proof.

525v. Surge Pk.—450v. D.C. Work

Type GLS450—Single Section With Two Leads

Cap. Mfds.	Can Size-Ins. Dia. - High	List Price
4	1 x 2 3/4	\$.85
8	1 x 2 3/4	1.05
12	1 x 3 3/4	1.40
16	1 x 4 3/4	1.55

525v. Surge Pk.—450v. D.C. Work

Type 2GLS450—Double Section With Four Leads

Cap. Mfds.	Can Size-Ins. Dia. - High	List Price
4-8	1 3/8 x 2 3/4	\$1.45
8-8	1 3/8 x 2 3/4	1.60

INVERTED MOUNTING WET ELECTROLYTIC CONDENSERS

TYPE PG

High capacity in minimum bulk, ability to take severe punishment. Costs less than other types of electrolytics for given capacity, voltage rating and operating life. Ingenious and exclusive Aerovox vent provides instant escape of any gas pressure, yet effectively double-seals the metal container against leakage of liquid electrolyte.



500 Volts Peak—Type PG500

Cap. Mfd.	Can Size-Ins. Dia. - High	List Price
4	1 3/8 x 4 3/4	\$.80
6	1 3/8 x 4 3/4	.85
8	1 3/8 x 4 3/4	.95
10	1 3/8 x 4 3/4	1.10
12	1 3/8 x 4 3/4	1.15
16	1 3/8 x 4 3/4	1.35
18	1 3/8 x 4 3/4	1.40
20	1 3/8 x 4 3/4	1.50
30	1 3/8 x 4 3/4	1.80

Oil-Filled Vibrator Condensers



Type 1130—One Lead

Cap. Mfd.	Cap. Mfd.	Cap. Mfd.
.007	.04	.04
.01	.05	.05
.02	.06	.06
.08	.07	.07

List Price, Each, Any Capacity \$0.45

Type 1131—Two Leads

Cap. Mfd.	Cap. Mfd.	Cap. Mfd.
.007	.01	.02

List Price Each, Any Capacity \$0.45

WIRE LEAD CONDENSERS

TYPE GL



These inverted mounting, aluminum can condensers are made in single, double and triple section units with separate color-coded leads. Multiple section units have two leads brought out from each section.

High Surge Pk.—600v. D.C. Work

Type GL600—Single Section With Two Leads

Cap. Mfds.	Can Size-Ins. Dia. - High	List Price
4	1 3/8 x 4 3/4	\$1.85
8	1 3/8 x 5 3/4	2.60

600v. Surge Pk.—475v. D.C. Work

Type GL475—Single Section With Two Leads

Cap. Mfds.	Can Size-Ins. Dia. - High	List Price
4	1 3/8 x 3 3/4	\$1.25
8	1 3/8 x 4 3/4	1.50

525v. Surge Pk.—450v. D.C. Work

Type GL450—Single Section With Two Leads

Cap. Mfds.	Can Size-Ins. Dia. - High	List Price
4	1 3/8 x 3 3/4	\$.85
8	1 3/8 x 4 3/4	1.05
12	1 3/8 x 4 3/4	1.40
16	1 3/8 x 5 3/4	1.55

Type 2GL450—Double Section With Four Leads

4-4	1 3/8 x 4 3/4	\$1.30
4-8	1 3/8 x 4 3/4	1.45
8-8	1 3/8 x 4 3/4	1.60

Type 3GL450—Triple Section With Six Leads

4-4-4	1 3/8 x 3 3/4	\$2.00
8-8-8	1 3/8 x 4 3/4	2.40

HIGH-CAPACITY LOW-VOLTAGE CONDENSERS



E12 & E25



A12

Designed for use in filter circuits of "A" eliminator units. Ideal for replacement use. Also suited for use across the field windings of low voltage dynamic speakers.

Type E12—12 V. D.C. Working

Cap. Mfd.	Size-Ins. Dia. - High	List Price
500	1 3/8 x 4 3/4	\$ 2.38
1000	2 3/8 x 4 3/4	3.56
1500	2 3/8 x 4 3/4	4.96
2000	2 3/8 x 4 3/4	6.32
4000	3 x 4 3/4	11.96

Type E25—25 V. D.C. Working

500	2 3/8 x 4 3/4	\$3.76
1000	2 3/8 x 4 3/4	6.56
1500	3 x 4 3/4	9.48

Type A-12—12 V. D.C. Working

Cap. Mfd.	D.—W.—L.	List Price
1000	5 x 4 x 1 3/4	\$3.56
2000	5 x 4 x 1 3/4	6.32

Oil-Impregnated



Vibrator Condensers

Type	Cap.	List Price
1135	.01	\$0.60
1135	.5	.65

MICA CONDENSERS

TYPE 1450



High voltage, 1,000 volts D.C. test. Size 1 3/4" x 1 3/4".

Cap. Mfd.	List Price	Cap. Mfd.	List Price
.0001	\$0.25	.008	\$0.40
.0002	.25	.004	.45
.00025	.25	.005	.45
.00037	.25	.006	.55
.0005	.25	.01	.70
.001	.30	.02	.95
.002	.35		

Type 1467



Compact, size 1/2" square, provided with wire leads. Test volts 500.

Cap. Mfd.	List Price	Cap. Mfd.	List Price
.00004	\$0.15	.0002	\$0.15
.00005	.15	.00025	.20
.00007	.15	.0005	.20
.000075	.15	.001	.25
.0001	.15	.002	.30
.00015	.15	.0025	.35

MIDGET MICA CONDENSERS

With Wire Leads

Type 1468



Midget size 7/8" x 1 1/8" provided with wire leads. Test volts 500.

Cap. Mfds.	List Price	Cap. Mfds.	List Price
.00004	\$0.15	.00015	\$0.15
.00005	.15	.0002	.15
.00007	.15	.00025	.20
.000075	.15	.0005	.20
.0001	.15		

STAMPED METAL CASE PAPER CONDENSERS



200 Volts D.C. Working

Type	Cap.	List Price
260	.1	\$.45
260	.25	.50
260	.5	.65
260	1-1	.60
260	.25-.25	.75
260	1-1-1	.80
261	1.0	.85
261	5-5	.90

400 Volts D.C. Working

Type	Cap.	List Price
460	.05	\$.45
460	.1	.50
460	.25	.60
460	.5	.75
460	1-1	.65
460	1-1-1	.85
461	1.0	1.00
461	5-5	1.00
461	25-25-25	1.05

AEROVOX CONDENSERS

SPACE-SAVER MIDGET CONDENSERS
TYPE PBS—Single, Double and Triple Section Units



Single Section

These Midget Electrolytics in voltages from 25 to 600 volts D.C. working, are made possible by a tried, tested, perfected process, whereby far greater capacity is attained from a given bulk, without impairing the working voltage or service life. All units are encased in heavy cardboard containers, thoroughly impregnated and fully sealed. Wire leads are color coded for polarity.

High Surge Pk.—600v. D.C. Work.
Type PBS600—Single Section
With Two Leads

Cap. Mfds.	Size - Ins. D.—W.—L.	List Price
4	1 1/8 x 1 1/2 x 2 1/8	\$1.75
8	1 1/8 x 1 1/2 x 3 1/8	2.45

25v. Surge Pk.—450v. D.C. Work.
Type PBS450—Single Section
With Two Leads

Cap. Mfds.	Size - Ins. D.—W.—L.	List Price
2	1/2 x 3/4 x 2 1/8	\$.65
4	5/8 x 1 x 2 1/8	.75
6	3/4 x 1 1/4 x 2 1/8	.90
8	7/8 x 1 1/2 x 2 1/8	.95
10	1 x 1 1/2 x 3 1/8	1.15
12	1 1/8 x 1 3/4 x 3 1/8	1.30
16	1 1/8 x 1 3/4 x 2 1/8	1.45

250v. Surge Pk.—200v. D.C. Work.
Type PBS200—Single Section
With Two Leads

Cap. Mfds.	Size - Ins. D.—W.—L.	List Price
2	1/2 x 3/4 x 2 1/8	\$.55
4	5/8 x 3/4 x 2 1/8	.65
6	3/4 x 1 x 2 1/8	.75
8	7/8 x 1 1/4 x 2 1/8	.80
10	1 x 1 1/4 x 2 1/8	.90
12	1 1/8 x 1 1/2 x 2 1/8	.95
16	1 1/8 x 1 1/2 x 2 1/8	1.05
20	1 1/8 x 1 1/2 x 2 1/8	1.20
25	1 1/8 x 1 1/2 x 3 1/8	1.25
30	1 1/8 x 1 1/2 x 3 1/8	1.40

150v. Surge Pk.—100v. D.C. Work.
Type PBS100—Single Section
With Two Leads

Cap. Mfds.	Size - Ins. D.—W.—L.	List Price
5	5/8 x 1 x 2 1/8	\$.55
10	1 1/8 x 1 1/2 x 2 1/8	.70

75v. Surge Pk.—50v. D.C. Work.
Type PBS50—Single Section
With Two Leads

Cap. Mfds.	Size - Ins. D.—W.—L.	List Price
5	1/2 x 3/4 x 2 1/8	\$.50
10	5/8 x 1 x 2 1/8	.65
25	1 1/8 x 1 1/2 x 3 1/8	.80

TUBULAR CARDBOARD REPLACEMENT CONDENSERS

Provided with spade lug mounting screws. Container insulated and sections have separate color-coded wire leads brought out at the bottom of unit. A universal replacement for midget sets.



Cap. Mfd.	D.C. Volt.	Size-Ins. D.—H.	List Price
8-8	450	1 1/2 x 4 1/4	1.50
12-16	200	1 1/2 x 4 1/4	1.55
14-8x10-10	150x25	1 1/2 x 4 1/4	2.05
16-8x10-10	200x25	1 1/2 x 4 1/4	2.05
16-12x10-10	200x25	1 1/2 x 4 1/4	2.15



Double Section

Aerovox "ADJUSTIMOUNT" Mounting Flanges

To the electrical features and compactness of AEROVOX PBS Cardboard Case Electrolytics, there is now added the mechanical convenience of a universal mounting flange.

The "Adjustimount" feature comprises a swivel mounting flange with slotted holes to fit any mounting hole spacings. The condenser may be mounted flat or upright, depending on space limitations. Also, two or three condensers may be stacked by overlapping the metal flanges.

40v. Surge Pk.—25v. D.C. Work.
Type PBS25—Single Section
With Two Leads

Cap. Mfds.	Size - Ins. D.—W.—L.	List Price
5	1/2 x 3/4 x 2 1/8	\$.50
10	5/8 x 1 x 2 1/8	.55
25	1 1/8 x 1 1/2 x 2 1/8	.60

25v. Surge Pk.—450v. D.C. Work.
Type PBS450—Double Section
With Four Leads

Cap. Mfds.	Size - Ins. D.—W.—L.	List Price
4-4	1 1/4 x 1 1/2 x 2 1/8	1.20
4-8	1 1/8 x 1 1/2 x 2 1/8	1.35
8-8	1 1/8 x 1 1/2 x 2 1/8	1.50

250v. Surge Pk.—200v. D.C. Work.
Type PBS200—Double Section
With Four Leads

Cap. Mfds.	Size - Ins. D.—W.—L.	List Price
4-4	1 1/8 x 3/4 x 2 1/8	\$.90
4-8	1 1/8 x 1 1/4 x 2 1/8	1.15
8-8	1 1/8 x 1 1/4 x 2 1/8	1.25
8-16	1 1/4 x 1 1/2 x 2 1/8	1.45
12-16	1 1/8 x 1 1/2 x 2 1/8	1.60
16-16	1 1/8 x 1 1/2 x 2 1/8	1.65

25v. Surge Pk.—450v. D.C. Work.
Type PBS450—Triple Section
With Six Leads

Cap. Mfds.	Size - Ins. D.—W.—L.	List Price
8-8-8	1 1/4 x 1 1/2 x 3	\$2.20

250v. Surge Pk.—200v. D.C. Work.
Type PBS200—Triple Section
With Six Leads

Cap. Mfds.	Size - Ins. D.—W.—L.	List Price
8-8-8	1 1/8 x 1 1/2 x 2 1/8	\$1.90

CARDBOARD CONTAINER CONDENSERS

TYPE PBM—Double Section Units

Provided with mounting flanges and four insulated wire leads 8 in. long. These units can easily be connected in circuits where either common negative or common positive condensers are used as each section has two color-coded leads.



25v. Surge Pk.—450v. D.C. Work.
Type PBM450—Double Section

Cap. Mfds.	Size - Ins. D.—W.—L.	List Price
4-4	1 1/2 x 1 1/2 x 4 1/2	\$1.20
4-8	1 1/8 x 1 1/2 x 4 1/2	1.35
8-8	1 1/8 x 1 1/2 x 4 1/2	1.50

CARDBOARD TUBE CONDENSERS

Single and Double Section Units

TYPE PR



525v. Surge Pk.—450v. D.C. Work.
Type PR450—Single Section

Cap. Mfd.	Size - Ins. D.—L.	List Price
2	3/4 x 2 1/4	\$.65
4	3/4 x 2 1/4	.75
8	1 1/8 x 2 1/4	.95

250v. Surge Pk.—200v. D.C. Work.
Type PR200—Single Section

Cap. Mfd.	Size - Ins. D.—L.	List Price
2	3/4 x 2 1/4	\$.55
4	3/4 x 2 1/4	.65
8	7/8 x 2 1/4	.80
10	7/8 x 2 1/4	.90

150v. Surge Pk.—100v. D.C. Work.
Type PR100—Single Section

Cap. Mfd.	Size - Ins. D.—L.	List Price
5	3/4 x 2 1/4	\$.55
10	7/8 x 2 1/4	.70
20	7/8 x 2 1/4	.90
25	1 1/8 x 2 1/4	.95

75v. Surge Pk.—50v. D.C. Work.
Type PR50—Single Section

Cap. Mfd.	Size - Ins. D.—L.	List Price
5	3/4 x 2 1/4	\$.50
10	3/4 x 2 1/4	.65
20	7/8 x 2 1/4	.75
25	7/8 x 2 1/4	.80
50	1 1/4 x 2 1/4	1.20

40v. Surge Pk.—25v. D.C. Work.
Type PR25—Single Section

Cap. Mfd.	Size - Ins. D.—L.	List Price
5	5/8 x 2 1/4	\$.50
10	3/4 x 2 1/4	.60
20	7/8 x 2 1/4	.50
25	7/8 x 2 1/4	.65
50	1 1/8 x 2 1/4	.95

150v. Surge Pk.—100v. D.C. Work.
Type PR100—Double Section

Cap. Mfd.	Size - Ins. D.—L.	List Price
6-5	1 x 2 1/4	.75

75v. Surge Pk.—50v. D.C. Work.
Type PR50—Double Section

Cap. Mfd.	Size - Ins. D.—L.	List Price
5-5	3/4 x 2 1/4	.75

40v. Surge Pk.—25v. D.C. Work.
Type PR25—Double Section

Cap. Mfd.	Size - Ins. D.—L.	List Price
5-5	3/4 x 2 1/4	.75
10-10	3/4 x 2 1/4	.75

CARDBOARD CONTAINER CONDENSERS

TYPE P—Single Section Units



600v. Surge Pk.—475v. D.C. Work.
Type P475—Single Section

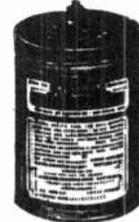
Cap. Mfds.	Size - Ins. D.—W.—L.	List Price
1	3/4 x 1 1/2 x 2 3/4	\$.85
2	3/4 x 1 1/2 x 2 3/4	.95
4	3/4 x 1 1/2 x 4 1/4	1.15
6	1 1/8 x 1 1/2 x 4 1/4	1.30
8	1 1/8 x 1 1/2 x 4 1/4	1.35

25v. Surge Pk.—450v. D.C. Work.
Type P450—Single Section

Cap. Mfd.	Size - Ins. D.—W.—L.	List Price
1	3/4 x 1 1/2 x 2 3/4	\$.55
2	3/4 x 1 1/2 x 2 3/4	.65
4	3/4 x 1 1/2 x 4 1/4	.75
6	1 1/8 x 1 1/2 x 4 1/4	.90
8	1 1/8 x 1 1/2 x 4 1/4	.95
10	1 1/4 x 1 1/2 x 4 1/4	1.15
12	1 1/4 x 1 1/2 x 4 1/4	1.30
16	1 1/8 x 1 1/2 x 4 1/4	1.45

UNIVERSAL MOUNTING CONDENSERS

TYPE E



Furnished with mounting rings for universal mounting. A wide selection of capacities in single, double, triple and quadruple section units for general service. Multiple section units contain individual sections with common negative grounded to the can.

600v. Surge Pk.—475v. D.C. Work.
Type E475—Single Section

Cap. Mfds.	Can Size - Ins. Dia. - High	List Price
4	1 1/2 x 2 3/4	\$1.25
8	1 1/2 x 4 1/4	1.50

25v. Surge Pk.—450v. D.C. Work.
Type E450—Single Section

Cap. Mfds.	Can Size - Ins. Dia. - High	List Price
4	1 1/2 x 2 3/4	\$.85
8	1 1/2 x 4 1/4	1.05

Type E450—Double Section

Cap. Mfds.	Can Size - Ins. Dia. - High	List Price
8-16	2 1/2 x 4 1/4	\$2.30
8-8	2 1/2 x 4 1/4	1.80
8-16	2 1/2 x 4 1/4	2.35

Type E450—Triple Section

Cap. Mfds.	Can Size - Ins. Dia. - High	List Price
8-8-8	3 x 4 1/4	\$2.70
9-9-18	3 x 4 1/4	3.75

Type E450—Quadruple Section

Cap. Mfds.	Can Size - Ins. Dia. - High	List Price
8-8-8-8	3 x 4 1/4	\$3.60
9-9-18-18	3 x 4 1/4	5.25

COMPACT UNIVERSAL MOUNTING CONDENSERS

TYPE 2E



Double section units designed for use in compact receivers. Hermetically sealed to prevent evaporation of moisture from electrolyte or absorption of moisture from air. Provided with two positive terminal lugs, common negative grounded to can.

25v. Surge Pk.—450v. D.C. Work.

Cap. Mfds.	Size - Ins. Dia. - High	List Price
4-4	1 1/2 x 3 1/4	\$1.30
8-8	1 1/2 x 4 1/4	1.60

COMPACT INVERTED MOUNTING CONDENSERS

TYPE 2G



Double section units designed for inverted mounting in compact sets. Hermetically sealed. May be used for grounded (negative) can mounting or insulated mounting with special insulating washer and can contact lug. Provided with two positive terminal lugs.

25v. Surge Pk.—450v. D.C. Work.

Cap. Mfds.	Size - Ins. Dia. - High	List Price
4-4	1 1/2 x 3 1/4	\$1.30
8-8	1 1/2 x 4 1/4	1.60

Type LW8 can contact lug and insulating washer—10c extra.

AEROVOX DUPLICATE REPLACEMENTS

INSIST UPON GETTING GENUINE AEROVOX EXACT DUPLICATE ELECTROLYTIC REPLACEMENT CONDENSERS

When you **MUST** use identical replacements, simply remember to ask for **AEROVOX EXACT DUPLICATE REPLACEMENTS**. Designed specifically for most all standard sets . . . finest replacement units obtainable . . . embodying **AEROVOX** high-quality construction throughout.



Model of Set ATWATER KENT	Part No.	List Price
155 (1 and 2)	24602	1.65
155 (3)	24955	1.65
275, 825	26158	1.95
376	27592	1.90
CROSLLEY		
124, 125	W23801	1.45
95, 163	W25857B	1.00
129-1, 130, 131-1, 132-1	W26119	1.10
132-1, 146	W26194B	2.05
96, 150, 155, 163	W26870	.50
146	W26896	1.55
148, 147	W27488A	.95
147	W27677A	.75
163, 400, 402	W28068	.95
160	W28468	2.25
164, 170, 171	W29097B	2.15
169	W29150B	1.80
166, 172	W29264A	2.00
174	W29804A	2.10
182-108	W29808	1.20
129, 134, 135, 137, 141		
150, 158	B30017	1.54
129-1, 130-1, 132, 136-1, 157	B30018	1.60
175	W30059A	2.20
173, 173-5	W30124	2.15
103	W30419	1.10
182	W30962	1.45
175	W32374	2.20
555, 915, 1055, 1155		
6615, 6625	W36057	2.00
555, 715, 725, 855, 865, 915		
955, 1055, 6625	W36055	1.80
EMERSON		
20A, 25, 25A	HC-31	.90
20A, 25, 25A	HC-32	.75
250	KC-56	1.25
250W	KC-68	1.80
32	GQC-137	2.05
19	KKC-143	1.25
31BS	UUC-179	1.95
	ZZC-192A	1.90
	2CC-194	1.45
108, 110	2DC-203	1.35
106	2CC-222	1.75
38	GCC-125C	2.35
109, 410, 411 (Mickey Mouse)	2WC-239	1.45
Model 45 (Chassis 6PD)	EEC-129	1.65
107 (Chassis U6F)	2CC-224	1.85

Model of Set	Part No.	List Price
B. E. and RCA-VICTOR		
G.E. Models RCA Models		
K40, K40A	R27, R17M, R18W, M105, 330, 331	3536 (new) .75 66140-2 (old)
K40A	R27, R17, R18W	3538 (new) 1.00 66140 (old)
K60, K65, K63	R37, R38, R37P, R38P, 120	6487 (new) 2.05 66155 (old)
B52	M34, M105	6492 (new) .80 66140-4 (old)
L50	R22	6511 (new) 1.35 66160-2 (old)
L50	R22	6518 (new) 1.25 66160 (old)
K40A	R18W	6535 .90
K78, K79	330-331	6555 (new) 1.25 66143-2 (old)
C-34 K43	100-101-103 T-48, T49	6661 (new) 2.20 66185-2 (old)
K66, K66N	220-222	6691 (new) 2.05 66189-2 (old)
K64, M65 M68	121-122-321	6703 (new) 1.65 66189-1 (old)
L53	114	6783 (new) 66171-1 (old) 3.60
K52, K53, K58	R28, R28P, R28BW, RE40, RE40P, T5-2, 110, 111, 115, 117, 118, 119, 128, 128E, 210, 211, 224E, 226, 310	7589 (new) 1.05 66143 (old)
A-63, A-65 RC-507		T18J58-7 1.15
C6-2, C7-6, C8-15, C8-17, C9-4, C9-6, C11-1, C13-2, C15-3, D7-7, D9-19, D11-2, D22-1, T6-1, T6-9, T7-5, T8-14, T8-16, T9-9		5512 1.35 68597-3
C6-2, C8-15, C8-17, C9-4, C9-6, D7-7, D9-19, T6-1, T6-9, T7-5, T8-14, T8-16, T9-9		11240 1.15 68597-5
C11-1, C13-2, C15-3, D11-2, D22-1		11203 1.15 68597-6

Model of Set GENERAL MOTORS	Part No.	List Price
1203346		1.70
INTERNATIONAL		
A-407		.85
Kadette (Standard)	A-408	.75
ES19, ES20, ES25, ES30 60, 65, 80, 85	A-412	1.55
40, 41, 42, 46	A-421	1.30
Kadette A and B (A430) (A428)	A-424	1.65
	A-426	1.00
	A-427	1.20
A and B	A-425	1.65
66	A-422 (old)	
66X	A-433 (new)	1.15
Kadette A and B (A-424) (A-428)	A-430	1.65
MOTOROLA (Galvin)		
100	1388	2.00
75 (Early)	1465	1.20
75 (Later)	1468	1.40
34	34	1.40
44	8123	1.35
44, 66, 77A	4-8200	1.10
57 (Early)	1424	1.10
57 (Later)	1540	1.35
Dual 6 & Dual 8	8825	1.85
STEWART WARNER		
10-30	81698	.75
R-115, R-116	81959	1.65
R-112	83111	1.95
	83394	.80
	85430	1.20
	85431	1.35
	85792	1.35
	85793	1.35
ZENITH		
22-125		1.05
22-217		1.60
22-230		1.60
22-236		1.90
22-125		.95
22-331		.95
7D126	22-484F	2.70
Chassis 5401, 4P26-4T26, 4P51-4T51	22-407B	1.95
7S-28, 7S-30, 7S-53 Chassis 5704	22-416F	2.00

AEROVOX CONDENSERS

TUBULAR PAPER CONDENSERS



Aerovox cartridge condensers are especially desirable for use where high grade units are required at low cost. They are compact, non-inductively wound and sealed in wax impregnated paper tubes with wax filled ends for longer life and protection against moisture.

Types and D.C.W. Voltages

Cap. Mfd.	284-	484-	684-	1084-	1684
	200	400	600	1000	1600
	List Price				
.001	\$.14	\$.15	\$.15	\$.20	...
.002	.14	.15	.15	.20	...
.003	.14	.15	.15	.20	...
.004	.14	.15	.15	.20	...
.005	.14	.15	.15	.20	...
.006	.14	.15	.15	.20	...
.007	.14	.15	.15	.20	\$.30
.008	.14	.15	.15	.20	...
.01	.14	.15	.15	.20	\$.30
.015	.14	.15	.15	.20	\$.30
.02	.14	.15	.15	.25	...
.03	.14	.15	.20	.30	.40
.04	.14	.15	.20	.35	.50
.05	.14	.15	.20	.35	.55
.06	.17	.20	.20	.35	.55
.075	.18	.20	.25	.40	...
.1	.18	.20	.25	.40	...
.15	.21	.25	.30	...	...
.2	.22	.25	.35	...	...
.25	.23	.25	.35	...	...
.3	.27	.30	.45	...	...
.4	.30	.35	.50	...	...
.5	.30	.35	.50	...	...
1.0	.45	.50	...	...	...

EXACT DUPLICATE PAPER REPLACEMENTS



Part No.	Cap Mfda.	List Price
ATWATER-KENT		
37 Filter	.5	\$0.90
37 Bypass	.25-.25-.25	1.35
CDLONIAL		
1728-SA	.1-.1-.25-.1	1.25
1748-SA	.1-.5-.1	.90
SPARTON		
5032	1.	.90
5033	.25	.90

For complete list of paper replacement units, see Aerovox Catalog.

Ammeter Condensers



Type	Cap	List Price
1160	.5	\$0.45
1170	1.0	.65

Tubular Paper Vibrator Condensers



Type 1684—1600 W.V.D.C.

Cap. Mfd.	List Price	Cap. Mfd.	List Price
.007	\$0.35	.03	\$0.30
.01	.35	.04	.30
.02	.35	.05	.40

Oil-Impregnated Tubular Vibrator Condensers

Heretically sealed oil condenser in metal tubes, with an outer cardboard tube as an insulating cover.

Type 1686—1600 W.V.D.C.

Cap. Mfd.	List Price	Cap. Mfd.	List Price
.01	\$0.40	.02	\$0.50



Suppressor Condensers

Type 1120—1.0 Mfd. List Price \$0.75

Type 1140—.05 Mfd. List Price \$0.50

Dual Section Suppressor Condenser

Type 1141—.5-.5 mfd. List Price.....\$0.75



Gas-Gauge Filter Condenser

Type 1143-G .05 mfd.

List Price\$0.50



Dome Light Filter Condenser

Type 1180

List Price.....\$0.80



Oil-Gauge Filter Condenser

Type 1142-O .25 mfd.

List Price.....\$0.50



Suppressor Condenser for FORDS

Type 1150-Cap. 5 Mfd. List Price.....\$0.50



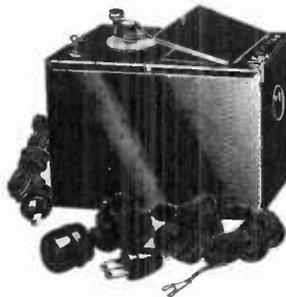
AEROVOX INTERFERENCE FILTER

Type IN-27

Inserted between radio set and electric outlet in cases where radio interference is relatively small. May be similarly used with small appliances which are sources of low intensity interference, thereby keeping troublesome noises out of the power line and house wiring. Measures 1 3/4" x 1 3/4".

TYPE IN-27 List Price \$0.50

AEROVOX INTERFERENCE ANALYZER TYPE ANL-37



The Aerovox Interference Analyzer is housed in a sturdy metal cabinet, finished in cracked black enamel. Compartment contains necessary test leads and attachments. Measures 5 1/2 x 5 1/2 x 8".

INTERFERENCE ANALYZER
TYPE ANL-37 Dealers' Net Price \$7.50

AEROVOX INTERFERENCE FILTER



Type IN-24

Designed for use in the most serious cases of radio interference from power lines and appliances. Provided with inductance as well as capacitance for thorough filtering action. Plugs into electric outlet. Radio set or interference device plugs into receptacle of the filter. Especially desirable between device and line. Measures 4 x 2 1/4" x 3 1/4".

TYPE IN-24..... List Price \$4.75

TOBE FILTERETTES

FILTERETTE JUNIOR



For use on vacuum cleaners, hair dryers, cash registers, sewing machines, drink mixers, dictating machines, sewing machines, floor polishers. Approved by Underwriters' Laboratories. 110 volts A.C. or D.C. Ship. wt. 6 oz.

List Price.....\$2.25

ELECTRIC RAZOR FILTERETTE



A special unit for application to electric razors that spoil early morning radio programs. Installed at the end of cord where it is completely out of the way; reduces interference to a negligible value under practically all conditions.

List Price.....\$1.00

FILTERETTE JA

For use on same appliances as Junior Filterette; for permanent connection where attachment cord is brought out of motor frame. Screw terminals for connections. Maximum noise reduction as installation is at noise source. Ship. wt. 6 oz. List Price.....\$2.75



G. H. CONDENSERS

ELECTROLYTIC REPLACEMENTS



1500 VOLT TEST
These dry paper units are unaffected by age or weather. Better filtration over long periods of service.

PAPER WOUND
With no current leakage they provide



500 W-V. 740 V. PEAK.

ALL CAPACITIES.

STANDARD SHAPES

Type	To Replace	Cardboard Container	List Price
P1	1 Mfd.	1 1/2 x 3/4 x 2	\$0.75
P2	2 Mfd.	1 3/4 x 1 x 2	.85
P4	4 Mfd.	1 3/4 x 1 1/4 x 4 1/2	.95
P8	8 Mfd.	1 3/4 x 1 1/2 x 4 1/2	1.15
P4-4	4-4 Mfd.	1 3/4 x 1 1/2 x 4 1/2	1.90
P4-8	4-8 Mfd.	1 3/4 x 1 1/2 x 4 1/2	2.10
P8-8	8-8 Mfd.	1 3/4 x 1 1/2 x 4 1/2	2.28

Type	To Replace	Round Can	List Price
C8	8-Mfd.	1 1/2 Dia.	\$1.45
C8-8	8-8 Mfd.	2 1/2 Dia.	2.55
C8-8-8	8-8-8 Mfd.	3 Dia.	3.90
C8-8-8-8	8-8-8-8 Mfd.	3 Dia.	5.25
C8-9-18	9-9-18 Mfd.	3 Dia.	4.95
C8-15	5-15 Mfd.	2 1/2 Dia.	3.25

MORRILL CONDENSERS

UNCASED CONDENSERS—SERIES U
SERIES U 700 PEAK VOLTS—500 WORK VOLTS



U881	.1	1 1/2	1 1/2	3/4	\$.40
U882	.25	1 1/2	1 3/4	3/4	.50
U883	.5	1 1/2	1 3/4	3/4	.60
U884	1.	1 1/2	1 3/4	3/4	.85
U885	2.	2	1 1/2	7/8	1.30
U886	4.	2	1 3/4	1 3/4	2.35

1000 PEAK VOLTS—800 WORK VOLTS

U983	.5	3 1/4	1 3/4	3/4	.85
U984	1.	3 1/4	1 3/4	1	1.25
U985	2.	3 1/4	1 3/4	2	1.95

METAL CASED PAPER CONDENSERS



SERIES V
VERTICAL MOUNTING
CASED CONDENSER

Type No.	Cap. Mfd.	Work Volts	Can Size—Inches	List Price
			H W D	
V111	.1	600	2 1 3/4 3/4	.90
V112	.25	600	2 1 3/4 3/4	1.05
V113	.5	600	2 1 3/4 3/4	1.15
V114	1.	600	2 1 3/4 3/4	1.25
V115	2.	600	2 1 3/4 1	2.00
V117	4.	600	2 1 3/4 1 3/4	3.50

FLECHTHEIM CONDENSERS

Compact Filter Condensers
600 Volts D. C.
(400 Volts rms-rac)
Type N. C.



The ultra-compact, shielded long-life condenser for all conditions where space is at a premium and where performance counts. Servicemen for a long time have spent time and money looking for a real small condenser. Flechtheim now presents for the first time a new type filter condenser to meet the servicemen's desires.

Capacity	Size, In.	List Price
.05 mfd.	1 1/2 x 3/4 x 2	\$1.00
.1 mfd.	1 3/4 x 1 x 2	1.10
.25 mfd.	1 3/4 x 1 x 2	1.20
.5 mfd.	1 3/4 x 1 x 2	1.30
1 mfd.	1 3/4 x 1 x 2	1.75
2 mfd.	1 3/4 x 1 1/2 x 2	2.35
4 mfd.	1 3/4 x 2 1/4 x 2	3.65

SUPERIOR CONDENSERS

High Voltage Condensers
1000 Volts D. C.

Modern, scientific methods of production have substantially reduced the manufacturing costs and have at the same time improved the quality of the finished product. Type E3M represents the highest perfection in the art of making high-voltage filter condensers of this class. These condensers are rated at 1000 volts D. C.



Capacity	Size, In.	List Price
.05 mfd.	2 1/2 x 1 1/2 x 3/4	\$1.25
.1 mfd.	2 1/2 x 1 1/2 x 3/4	1.35
.25 mfd.	2 1/2 x 1 1/2 x 3/4	1.50
.5 mfd.	2 1/2 x 1 1/2 x 3/4	1.65
1 mfd.	2 1/2 x 1 1/2 x 3/4	2.25
2 mfd.	4 1/2 x 2 3/4 x 1 3/4	3.50
2 mfd.	2 1/2 x 1 1/2 x 3/4	3.50
4 mfd.	4 1/2 x 2 3/4 x 1 3/4	5.60
4 mfd.	2 1/2 x 1 1/2 x 3/4	5.60

Uncased Filter Condensers
Type NU—Non-Inductive

For Continuous Operating Voltage Up to 600 Volts
(400 rms-rac.)

Without doubt the neatest uncased condenser made, Type NU is also electrically perfect. The condenser windings are impregnated in a non-hygroscopic compound and the whole unit is wrapped in a waxed paper wrapper, thus making the condenser absolutely moisture-proof. Equipped with rubber-covered wire leads that won't pull-out. Used in all types of radio circuits, for filter or by-pass work.



Capacity	Size, In.	List Price
.1 mfd.	2 x 1 1/2 x 3/4	\$0.40
.25 mfd.	2 x 1 1/2 x 3/4	.50
.5 mfd.	2 x 1 1/2 x 3/4	.60
1.0 mfd.	2 x 1 1/2 x 3/4	.90
2.0 mfd.	2 1/4 x 1 3/4 x 3/4	1.35
4.0 mfd.	2 1/4 x 2 3/4 x 3/4	2.60

SOLAR ELIM-O-STAT

MEANS INTERFERENCE ELIMINATION



To help eliminate disturbances, the Solar Manufacturing Corporation has developed a complete line of Elim-O-Stats to be used in connection with practically all types of electrical equipment. Some of these Elim-O-Stats are also excellent suppressors of noise when used at the radio receiver power-outlet. It is particularly important to note that Solar Elim-O-Stats have been designed to cope with radio interference encountered in the operation of sensitive radio receivers, including short-wave and all-wave types.

RADIO RECEIVER ELIM-O-STATS

- RA—For radio sets, 110 A.C.-D.C., 5 amps. List Price \$0.40
- RB—Particularly effective in certain circuits. More effective than RA, 110 A.C.-D.C., 5 amps. List Price \$0.75
- RM—Especially effective for all-wave sets. Easy to connect, 110 A.C.-D.C., 3 amps. List Price \$5.00

APPLIANCE ELIM-O-STATS

- AD—For small appliances, 110 A.C.-D.C., 5 amps. List Price \$1.25
- AE—For Electric Razors, 110 A.C.-D.C., 1 amp. List Price \$2.50
- AF—More effective than AD. Can filter a number of appliances Capacitive-Inductive, 110 A.C.-D.C., 5 amps. List Price \$4.00
- AG—Special for all-wave, 110 A.C.-D.C., 3 amps. List Price \$5.00
- AH—Similar to AG. Larger current rating, 5 amps. List Price \$6.50

BELDEN WIRE AND CABLE



A special feature of Belden Magnet Wire for the radio trade is its special put-up on small size metal spools, which are encased in attractive protective sleeves—an excellent package for the serviceman or amateur set builder. Belden Magnet Wire is uniform in gauge throughout its entire length, carefully inspected, and wound in one continuous length on full weight spools.

BELDENAMEL

Size	Turns per Linear Inch	Turns per Square Inch	Approx. Length 1/2 Lb. Spool	List Price 1/2 Lb. Spool	Approx. Length 1/2 Lb. Spool	List Price 1/2 Lb. Spool
14	14.7	217	19'	\$.36	39'	\$.59
16	18.6	345	30'	\$.36	39'	\$.59
18	23.2	540	50'	\$.36	100'	\$.59
20	29.2	851	80'	\$.36	160'	\$.59
22	36.5	1330	125'	\$.39	250'	\$.89
24	45.7	2090	200'	\$.39	400'	\$.81
26	57.8	3340	315'	\$.45	635'	\$.70
28	71.9	5170	505'	\$.48	1010'	\$.75
30	89.0	7920	805'	\$.50	1610'	\$.84
32	110.7	12260	1275'	\$.59	2550'	\$.92
34	140.2	19650	2030'	\$.70	4065'	1.09
36	175.6	30840	3220'	\$.84	6440'	1.34
38	219.0	47970	5120'	1.11	10245'	1.84
40	282.5	79810	8140'	1.83	16285'	2.34

DOUBLE COTTON COVERED

Size	Length	Turns per Linear Inch	Turns per Square Inch	Approx. Length 1/2 Lb. Spool	List Price 1/2 Lb. Spool	
14	13.3	176	19'	.40	39'	.64
16	16.2	262	30'	.40	60'	.64
18	19.6	386	50'	.42	95'	.70
20	23.6	556	75'	.45	150'	.75
22	29.0	840	115'	.50	235'	.81
24	34.3	1175	180'	.53	360'	.95
26	40.2	1620	280'	.67	560'	1.12
28	46.6	2170	430'	.78	860'	1.34
30	53.2	2835	645'	.84	1295'	1.59
32	59.7	3570	965'	1.09	1930'	1.92
34	67.2	4510	1350'	1.31	2700'	2.40
36	76.1	5790	1675'	1.67	3355'	3.08

DOUBLE SILK COVERED

Size	Length	Turns per Linear Inch	Turns per Square Inch	Approx. Length 1/2 Lb. Spool	List Price 1/2 Lb. Spool	
18	22.1	490	50'	.53	100'	.96
20	27.3	745	80'	.56	160'	1.03
22	34.0	1153	125'	.59	250'	1.14
24	41.5	1719	195'	.70	395'	1.31
26	50.8	2576	310'	.84	620'	1.53
28	62.1	3853	490'	.98	980'	1.73
30	75.0	5620	765'	1.12	1535'	2.03
32	87.8	7710	1190'	1.42	2380'	2.62
34	100.5	10095	1785'	1.98	3570'	3.56
36	113.3	12842	2685'	2.85	5370'	5.18

All-Rubber Lead-in Wire

All-rubber lead-in wire consists of 7 strands of tinned copper insulated with special durable rubber compound. It is easily stripped from the wires, leaving the conductor clean and ready for quick splicing and easy soldering. Furnished on spools.



Length in Ft.	Size	Rubber Wall	List Price
8850*	50	1/4"	\$.025 ft.
8851*	250	1/4"	\$.025 ft.
8852	50	1/32"	.015 ft.
817	100	1/32"	.015 ft.
8853	250	1/32"	.015 ft.
616	500	1/32"	.015 ft.
812	1000	1/32"	.015 ft.
819	100	1/32"	.01 ft.
818	500	1/32"	.01 ft.
814	1000	1/32"	.01 ft.
809	100	1/32" solid	.01 ft.
808	500	1/32" tinned	.01 ft.

Shielded Lead-in Wire



All-rubber lead-in wire equipped with over-all shield of fine mesh tinned copper. Use with line matching transformers or auto-

transformers between antenna and receiver. Furnished on spools.

Length in Ft.	Size	Rubber Wall	Capacity per Ft. in mmf.	List Price
8856*	50	1/4"	72	\$.05 ft.
8854*	250	1/4"	72	\$.05 ft.
8894	50	1/32"	91	.035 ft.
8895	250	1/32"	91	.035 ft.
8858	250	1/4"	62	.035 ft.

* Length may vary 10%.
† Wrap of "Cellophane" on Conductor.

AERIAL WIRE

Belden engineering and experience make Belden wire the finest obtainable for all radio service. Beldenamel, solid or stranded, retains its efficiency without oxidizing, regardless of weather conditions. Solid tinned copper, Sizes 10, 12, 14, and 16, is specially suited for use as bus wires in transmitter circuits. Solid Beldenamel, Sizes 10, 12, and 14, is recommended for winding inductances for high frequency circuits because of its low high frequency resistance, its ductility, and extremely flexible enamel insulation.



STRANDED BELDENAMEL

Size	Length	Construction	List Price
8820	75 ft.	7x22 in carton	\$.79
8821	100 ft.	7x22 in carton	1.04
8822	150 ft.	7x22 in carton	1.55
8823	1000 ft.	7x22 on spool	10.25
8824	1000 ft.	7x20 on spool	28.00
8825	100 ft.	7x20 in carton	2.90

SOLID BELDENAMEL

Size	Length	Construction	List Price
8826	1000 ft.	10 on spool	\$17.85
8827	1000 ft.	12 on spool	12.50
8828	100 ft.	12 in carton	1.26
8829	100 ft.	14 in carton	.81
8832	1900 ft.	14 on spool	8.10

STRANDED TINNED COPPER

Size	Length	Construction	List Price
835	100 ft.	7x22	\$.90
838	1000 ft.	7x22 on spool	8.85
844	100 ft.	7x24	.62
845	1000 ft.	7x24 on spool	6.10

SOLID TINNED COPPER

Size	Length	Construction	List Price
880	1000 ft.	10 on spool	\$19.40
882	1000 ft.	12 on spool	12.61
884	1000 ft.	14 on spool	8.33
886	1000 ft.	16 on spool	8.19

STRANDED BARE COPPER

Size	Length	Construction	List Price
820	1000 ft.	7x20 on spool	\$13.15
828	50 ft.	7x22	.41
830	75 ft.	7x22	.90
831	100 ft.	7x22	.78
832	1000 ft.	7x22 on spool	7.85
873	50 ft.	7x23	.34
870	75 ft.	7x23	.50
871	100 ft.	7x23	.65
872	1000 ft.	7x23 on spool	6.45
843	50 ft.	7x24	.28
840	75 ft.	7x24	.40
841	100 ft.	7x24	.53
842	1000 ft.	7x24 on spool	5.24
859	50 ft.	7x26	.20
860	75 ft.	7x26	.29
862	1000 ft.	7x26 on spool	3.76

FLEXIBLE INDOOR AERIAL WIRE

Specially designed for midget receivers.

- 8840—100-Ft. Spool, Size 20, Extra Flexible Indoor Aerial Wire made up of 65 strands 38 Soft Drawn Bare Copper Wire twisted, Cellophane wrap and brown rayon braid. List Price.....\$.015 Ft.
- 8819—25-Ft. Spool, Same construction as 8840. List Price.....\$.45
- 8830—1000-Ft. Spool, Same construction as 8840. List Price.....\$.015 Ft.
- 8842—60-Ft. Spool, Size 20, Extra Flexible Indoor Aerial Wire made of 65 strands 38 Soft Drawn Bare Copper Wire with a double wrap of brown soft cotton. List Price, \$.50
- 8843—1000-Ft. Spool, Otherwise same as 8842. List Price.....\$.006 Ft.



LEAD-IN WIRE

Matched Impedance Twisted Pair

Designed for a surge impedance of 72 ohms to match the impedance of the majority of all-wave receivers and of any half-wave di-pole antenna. Consists of size 19 stranded, rubber covered, color coded twisted pair; over-all cotton braid weatherproofed.

Size	Length	List Price
8771	75-ft. coil	\$.61
8772†	500-ft. spool	.02 ft.

Neoprene Sheathed Lead-in Wire



Long life lead-in designed to withstand the effects of sunlight, rain, or other severe weather conditions. Consists of 7 strands tinned copper (Size 16) with a moisture-proof "Cellophane" wrap and 1/4" Neoprene sheath. Neoprene is a new heat, oil, and age resisting synthetic rubber. Recommended for use where permanency is desired and for marine applications.

Size	Length	List Price
887	100-ft. spool	\$.02 ft.
888	500-ft. spool	.02 ft.

BELDEN WIRE AND CABLE

HOOK-UP WIRE



Belden engineers have expended a tremendous amount of time and research in developing this extensive line of hook-up wire. Not only have they produced items that are superior electrically, but they have designed them with an appearance of striking beauty and color. A distinct Belden development is the abrasion-proof "Basket-Weave" braid.

There is a specific purpose for each type of Belden Hook-up Wire. As a general rule, for replacement use wire that duplicates original factory equipment in size and insulation, except where the wire has failed; in such cases the replacement should naturally be better than that originally used. Belden 8940 and 8942, because of their construction and quality, will safely handle most of the ordinary jobs.

Stranded Colorrubber



For radio service and experimental work in circuits where leakage must be cut to a minimum, such as in a.v.c. circuits and in wiring radios with automatic frequency control. 18 (16x30 tinned), $\frac{1}{16}$ " rubber. Colors: black, green, blue, red, brown, or yellow—8881 in black, brown, and red only.

Number	Length Spool	Puncturing Voltage— D-C Insulation Resistance*	List Price
8880	25 ft.	6300 v	.38
8882	100 ft.	1000 meg.*	.01 ft.
8881	1000 ft.		.01 ft.

Rubber Push-Back—Solid—"Basket-Weave" Rayon Braid

For high voltage circuits in power packs and public address amplifiers. 20 Solid tinned, cotton wrap, .010" rubber "Basket-Weave" rayon braid, heavy lacquer. Colors: green, blue, red, yellow, or black.



Number	Length Spool	Puncturing Voltage— D-C Insulation Resistance*	List Price
8884	25 ft.	6900 v	.40
8886	100 ft.	1000 meg.*	.015 ft.
8883	1000 ft.		.015 ft.

GLAZED COTTON MULTIPLE CONDUCTOR CABLE

For permanent installation of speakers, remote control equipment, and multiple circuit, 500-ohm transmission lines. Cables with two Size 16 are provided for use where high current must be carried with a low potential drop. Modern metal tube analyzer cables may be assembled with the 8 or 9-conductor cable.



No. Condrs.	Length in ft. on Spool	Specifications Individual Wires	Cable Specifications	O.D. per ft.	List Price
8953	3 100	20 (10x30 tinned) paper wrap, $\frac{1}{16}$ " rubber wall with color coded glazed cotton braid lacquered	Brown glazed cotton braid over-all	.225"	.06
8801½	3 500	Otherwise as 8953	Otherwise as 8953	.225"	.06
8889	4 100	Otherwise as 8953	Otherwise as 8953	.275"	.07
8802½	4 500	Otherwise as 8953	Otherwise as 8953	.275"	.07
8984	4 100	2, 16-26x30 tinned, 2, 20-10x30 tinned	Otherwise as 8953	.300"	.085
8804½	4 500	Otherwise as 8984	Otherwise as 8953	.300"	.085
8855	5 100	5, 20-10x30 tinned paper wrap, $\frac{1}{16}$ " rubber, color coded, glazed cotton braid lacquered	Cabled with fillers — brown glazed cotton braid	.300"	.085
8803½	5 500	Otherwise as 8855	Otherwise as 8855	.300"	.085
8985	5 100	2, 16-26x30 tinned, 3, 20-10x30 tinned	Otherwise as 8855	.325"	.10
8805½	5 500	Otherwise as 8985	Otherwise as 8855	.325"	.10
8956	6 100	2, 16-26x30 tinned, 4, 20-10x30 tinned	Otherwise as 8855	.350"	.11
8806½	6 500	Otherwise as 8956	Otherwise as 8855	.350"	.11
8857	7 100	2, 16-26x30 tinned, 5, 20-10x30 tinned	Otherwise as 8855	.380"	.14
8807½	7 500	Otherwise as 8857	Otherwise as 8855	.380"	.14
8958	8 100	2, 16-26x30 tinned, 6, 20-10x30 tinned	Otherwise as 8855	.400"	.15
8859	9 100	2, 16-26x30 tinned, 7, 20-10x30 tinned	Otherwise as 8855	.430"	.18

Solid Push-back "Basket-Weave" Rayon Braid



For all general wiring of circuits under 300 volts in amplifiers and home radio receivers, this fabric covered hook-up wire is recommended. 20 Solid tinned, heavy Celanese, "Basket-Weave" rayon braid, heavy lacquer. Colors: green, blue, red, yellow, or black.

Number	Length Spool	Puncturing Voltage— D-C Insulation Resistance*	List Price
8940	25 ft.	1550 v	.42
8987	100 ft.	325 meg.*	.015 ft.
8941	1000 ft.		.015 ft.

For use in wiring cathode heater or filament circuits where currents in the order of 3 to 8 amperes must be carried with negligible voltage drop. 18 Solid tinned. Insulation and colors same as 8940.



Number	Length Spool	Puncturing Voltage— D-C Insulation Resistance*	List Price
8944	25 ft.	1550 v	.45
8978	100 ft.	325 meg.*	.015 ft.
8945	1000 ft.		.015 ft.

*D-C insulation resistance after 24 hours at 100° F.—90% relative humidity on 6" twisted pair.

STRANDED PUSH-BACK "BASKET-WEAVE" RAYON BRAID



For auto radio receiver wiring and the wiring of radio test instruments which are subject to vibration. 20 (10x30 tinned). Insulation and colors same as 8940.

Number	Length Spool	Puncturing Voltage— D-C Insulation Resistance*	List Price
8942	25 ft.	1550 v	.45
8988	100 ft.	325 meg.*	.015 ft.
8943	1000 ft.		.015 ft.
8946	25 ft.	1550 v	.47
8979	100 ft.	325 meg.*	.015 ft.
8947	1000 ft.		.015 ft.

For portable and auto-radio filament circuit wiring. 18 (16x30 tinned). Insulation and colors same as 8940.

For use in filament circuits of transmitters, large amplifiers, or multi-tube receivers. An extra flexible heavy duty push-back wire. 14 (41x30 tinned). Insulation and colors same as 8940.

Shielded Multiple Conductor Cable

For temporary indoor installations of low impedance or carbon microphone transmission circuits. 20 (10x30 tinned), paper wrap, $\frac{1}{16}$ " rubber wall, glazed cotton braid lacquered, color coded, cabled with tinned copper shield over-all.



No.	Length in ft. on Spool	Max. Capacity per ft. Bet. Condrs. & Shield	O.D.	List Price per ft.	
8962	2 100	33 mmf	61 mmf	.215"	.06
8960½	2 500	33 mmf	61 mmf	.215"	.06
8963	3 100	30 mmf	55 mmf	.230"	.08
8961½	3 500	30 mmf	55 mmf	.230"	.08
8964	4 100	25 mmf	48 mmf	.260"	.095
8954	4 500	25 mmf	48 mmf	.260"	.095

Length may vary plus or minus 10 percent.

BELDEN WIRE AND CABLE

MICROPHONE CABLE

Rubber Sheathed—Shielded

Designed specially for the rough use accorded microphone cables used with portable public address and broadcast pick-up systems outdoors or on stages. In the descriptions which follow, each type of cable has specific applications, although it may be used for other purposes. Has been engineered to the lowest capacity attainable with the diameter limitations required by public address equipment.

Single Conductor, Extra Flexible



For ribbon or crystal microphones. May also be used for single-button carbon microphones and low impedance transmission lines. Durable cables with Belden-developed low capacity rubber core. Because

of its size, 8849 is recommended for use with lapel microphones or phonograph pick-ups.

Maximum Capacity per Ft.

No.	Length in Ft. on Spool	Between Condr. & Shield	Between Condrs.	Outside Dimension of Cable	List Price
8816	100	28 mmf		.218"	.065 ft.
8815‡	500	28 mmf		.218"	.065 ft.
8924	100	26 mmf		.250"	.08 ft.
8951‡	1000	26 mmf		.250"	.08 ft.
8849	100	40 mmf		.185"	.045 ft.

2-Conductor, Extra Flexible

For single or multiple cell crystal microphones, photo-electric cells, and dual carbon microphone circuits wherein the shield is employed as a common conductor, usually at ground potential. This wire has



exceptionally low capacity.

8948 100 36 mmf 16 mmf .350" .13 ft.
8949‡ 500 36 mmf 16 mmf .350" .13 ft.
8952‡ 1000 36 mmf 16 mmf .350" .13 ft.

2-Conductor, Size 20, Extra Flexible



For double-button carbon microphone circuits, using the shield as the grounded or diaphragm connection, and for low impedance, 50 to 500-ohm transmission lines. Excellent for coupling a

pre-amplifier to a power amplifier, employing the shield as a ground to prevent pick-up of transient interference.

8877	100	70 mmf	37 mmf	.280"	.08 ft.
8878‡	500	70 mmf	37 mmf	.280"	.08 ft.
8879‡	1000	70 mmf	37 mmf	.280"	.08 ft.

3-Conductor, Size 20, Extra Flexible

For double-button carbon microphones feeding a mixer panel or circuits in which the diaphragm of the carbon microphone must be above ground potential, yet shielded from transient fields.

8874	100	65 mmf	37 mmf	.280"	.09 ft.
8925‡	500	65 mmf	37 mmf	.280"	.09 ft.
8926‡	1000	65 mmf	37 mmf	.280"	.09 ft.

4-Conductor, Size 20, Extra Flexible

For double-button carbon microphone circuits in which an attenuation control is located at the microphone and employs two of the four conductors of the cable.

8846	100	67 mmf	35 mmf	.335"	.115 ft.
8845‡	500	67 mmf	35 mmf	.335"	.115 ft.

5-Conductor, Size 20, Extra Flexible

For condenser microphone transmission line and power supply to microphone head amplifier.

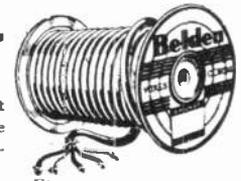
8928	100	54 mmf	30 mmf	.380"	.15 ft.
8934‡	500	54 mmf	30 mmf	.380"	.15 ft.

BELDEN SHIELDED IGNITION CABLE

For use on radio equipped automobiles.

7778	—7 mm. Belden Aircraft Standard Ignition Cable with tinned copper shield.	Per Ft. List \$.12
781	—7 mm. commercial automotive grade ignition cable with tinned copper shield	Per Ft. List \$.075

6-Conductor, Size 20, Extra Flexible



For condenser microphone circuit with remote control switch at the microphone or pilot light at microphone.

No.	Length in Ft. on Spool	Maximum Capacity per Ft.		Outside Dimension of Cable	List Price
		Between Condr. & Shield	Between Condrs.		
8847	100	60 mmf	27 mmf	.410"	.16 ft.
8848‡	500	60 mmf	27 mmf	.410"	.16 ft.

7-Conductor, Size 20, Extra Flexible

For auto-radio test instruments, an acid resisting analyzer cable.

8927	100	56 mmf	26 mmf	.430"	.18 ft.
8933‡	250	56 mmf	26 mmf	.430"	.18 ft.

GLAZED COTTON MULTIPLE CONDUCTOR CABLE

For permanent installation of speakers, remote control equipment, and multiple circuit, 500-ohm transmission lines. Cables with two Size 16 are provided for use where high current must be carried with a low potential drop. Modern metal tube analyzer cables may be assembled with the 8 or 9 conductor cable.



No. Condrs.	Length in Ft. on Spool	Specifications Individual Wires	Cable Specifications	List Price O.D. per ft.
8953	3 100	20 (10x30 tinned) paper wrap— $\frac{1}{16}$ " rubber wall with color coded glazed cotton braid lacquered	Brown glazed cotton braid over-all	.225" .06

ALL-RUBBER CORD

Parallel Brown All-Rubber Lamped Cord used to replace frayed receiver cords and for test equipment requiring power line connection.



No. on Spool	Length in Ft.	Specifications Individual Wires	Cable Specifications	List Price O.D. per ft.
8860	100 2	18 (41x34 bare) cotton wrap, $\frac{1}{2}$ " wall	Parallel All-Rubber	.125"x.230" .03

Length may vary plus or minus 10 percent.

COMMUNICATING SYSTEM CABLES



Individual conductors are gauge 20 (10x30 tinned) heavy wrap of celanese—cellulose acetate yarn—color coded cotton braid, waxed. Furnished in the following combinations on 500-ft. spools. Over-all cotton braid.

Twisted Pair Type

For two wire connections to each station, over-all cotton braid.

Number	No. of Condrs.	O.D.	List Price
8792‡	2 (1 pr.)	.146"	.03 ft.
8794‡	4 (2 pr.)	.225"	.07 ft.
8796‡	6 (3 pr.)	.260"	.10 ft.
8767‡	2 (1 plain, 1 shielded)	.150"	.045 ft.
8798‡	8 (4 pr.)	.295"	.12 ft.
8769‡	12 (6 pr.)	.355"	.175 ft.
8770‡	20 (10 pr.)	.460"	.28 ft.
8766‡	2 (shield over tw. pr.)	.170"	.04 ft.

Single Line Type

For systems employing a single wire to each station with a common return. Over-all cotton braid.

8793‡	3 (1 shielded, 2 plain)	.170"	.06 ft.
8795‡	5 (all plain)	.205"	.07 ft.
8797‡	7 (all plain)	.230"	.10 ft.
8768‡	11 (all plain)	.300"	.14 ft.

BELDEN WIRE AND CABLE

Commercial Type Twisted Pair



Surge impedance of 93 ohms; 22 gauge (7 x 30 tinned), paper wrap, .022" wall of rubber, twisted pair, color coded with overall braid black bottom, weatherproofed.

8836‡ 500-ft. spool List Price \$.02 ft.

Transmitting Line Cable

The official amateur transmitting cable has a surge impedance of 72 ohms with ample carrying capacity for output as high as 2000 watts. Size 12, twisted pair, rubber insulated, 72-ohm transmission line; over-all weatherproof cotton braid.



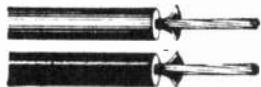
8800 100-ft. coil List Price \$.065 ft.
8808‡ 500-ft. coil065 ft.

HEAD PHONE CORDS

Made with special extra flexible tinsel conductors, over-all durable mercerized cotton braid. "Y" arm sections 15" coupled in series.

8872—5-Ft. Head Phone Set—pin tips all ends..... List Price \$.86
8873—5-Ft. Head Phone Set—spade tips on four phone ends, pin tips plug end..... .86
8870—5-Ft. Magnetic Speaker Cord—pin tips both ends..... .53
8871—5-Ft. Magnetic Speaker Cord—pin tips one end, spade tips opposite end53

REPLACEMENT WIRES for TEST PROD LEADS



Extra flexible lead wire Size 18 (65x 36 tinned copper with wrap of easy-strip colored "Cellophane"), 3/64" wall of special durable rubber insulation. Furnished in red or black. An ideal replacement for the serviceman. Used not only for repairing worn wires,

but in providing longer leads where original equipment is found to be too short.

8809—Seven feet each color, red and black, (total 14 feet) wound parallel on sleeve spool. Ideal for replacing short lengths furnished with present test equipment; length permits reaching into chassis when tester is on floor List Price \$.45
8898—100 Feet, red or black, on spool..... \$.02 ft.

*D-C Insulation resistance after 24 hours at 100° F.—90% relative humidity on 6" twisted pair.

BELDEN Corditis-free* ELECTRICAL CORDS



A modern power supply cord for replacement on radios, lamps, fans, etc. Consists of the new small Belden Soft Rubber Plug and 7½ - ft. Belden No-Fray Cord in green, grey, ivory, black, or brown—stripped, tinned, easy to attach.



1725—Belden All-Rubber Lamp Cords in carton (specify color). List Price \$.36
1737—7 Ft. Soldering Iron Replacement Cord. Special cord with "Long-Wear" twine braid. Belden Unbreakable Soft Rubber Plug .50
See Belden Electrical Cord Bulletin for information about the Belden complete line of Corditis-free* cords for vacuum cleaners, washing machines, tools, lamps, and all other types of electrical appliances.

*CORDITIS—a dangerous disease of electrical cords; the symptoms are frayed wire and broken plugs. It causes severe mental irritation and violent nervous disorders among electrical appliance users. As advertised in the Saturday Evening Post, Good Housekeeping, and Time.

ARRESTERS, LEAD-IN STRIPS, GROUND CLAMPS



8950



8811



8813



8892



8897



8896

8950—Large Belden Porcelain Air Gap Type Doublet Arrester... List Price \$.36
8896—Belden Standard Size Bakelite Resistor Type Arrestor designed to effectively dissipate destructive charges induced in the aerial system. Listed as standard by Underwriters. Furnished with \$100.00 guarantee. Complete with wood screws in carton..... .25
8891—Belden Large Size Arrestor; otherwise like 8896..... .40
8811—15" Single Lead-in Strip, tough rubber weatherproof insulation. Clips both ends..... .17
8890—12" Single Lead-in Strip with tough rubber weatherproof

STRANDED VARNISHED CAMBRIC HEAVY DUTY



For power transformers and compact sets where high heat may be encountered. It is also recommended for condenser leads. 20 (16x30 tinned), double wrap varnished cambric tape. "Basket-wrap" rayon braid, heavy lacquer. Colors: green, blue, red, yellow, or black.

8980 25 ft. 4650 v List Price \$.53
8981 100 ft. .02 ft.
8982 1000 ft. 1.8 meg.* .02 ft.

SHIELDED PLATE OR GRID WIRE



For use in many compact receivers and amplifiers where the shielding is required to reduce stray coupling and shield.

Level-bak. 18 (16x30 tinned), 1/64" rubber, over-all tinned copper shield. List Price \$.025 ft.
8885 100 ft. \$.025 ft.

LITZ WIRE

In using Litz Wire, care should be taken to see that all enamel is cleaned off ends where connections are made. Clean these wires with a fine emery paper.

8817—100-Ft. Spool (7x41) Stranded Beldenamel with double Celanese wrap Price \$.67
8818—100-Ft. Spool (10x41) Stranded Beldenamel with double Celanese wrap. Suitable for rewinding antenna primaries which have opened, due to lightning or mechanical failure. Also used for hand-wound amateur r-f coils up to 30 megacycles..... .70

AC-DC RESISTANCE CORDS



To determine the proper a-c—d-c line cord, add the filament voltages of the individual tubes in the receiver. From the chart below select the nearest figure under the heading SUM OF TUBE VOLTAGES in the column headed by the line voltage of the available power supply.

Number (in Outer Braid)	Color Marker	Resist- ance of Cord	Voltage Drop of Cord at			List Price	
			110 v	115 v	120 v		
8920	Olive	135	40.5	69.5	74.5	79.5	\$.65
8921	Maroon	165	49.5	60.5	65.5	70.5	.65
8976	Orange	180	54	56	61	66	.65
8929	Blue	220	66	44	49	54	.65
8977	Grey	250	75	35	40	45	.65
8922	Black	290	87	23	28	33	.65
8923	Light Brown	330	99	11	16	21	.65

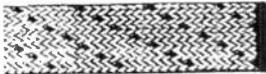
NOTE: Where other line voltages than those shown above must be used, subtract SUM OF TUBE VOLTAGES from available power supply. The nearest figure in VOLTAGE DROP column will indicate proper a-c—d-c cord to use.

Insulation. Clips both ends..... .11
8812—12" Single Lead-in Strip, Lacquered braid, weatherproof insulation, and clips both ends..... .11
8813—12" Double Lead-in Strip, Lacquered braid, weatherproof insulation, and clips both ends..... .31
8814—Belden Glass Insulators. Sturdy 3" over-all length, self-cleaning, constructed with fins to extend path of discharge, as well as to provide added strength. Two in carton..... .19 pr.
8892—Belden Biter Type Ground Clamp, 8½" long..... .125
8897—Belden "C" Type Ground Clamp. Fits pipe up to 1½"..... .125

BELDEN WIRE AND CABLE

AUTO RADIO WIRES - CABLES

AUTO-RADIO SHIELDED



For use in shielding automotive wires in making automobile radio installation. Tinned copper shielding furnished on spools. 8931 fits over 7 mm spark plug wires.

		List Price
8930	50 ft. 13/64" inside diameter.....	\$.035 ft.
8935	250 ft. 13/64" inside diameter.....	.035 ft.
8931	50 ft. 3/8" inside diameter.....	.08 ft.
8937	250 ft. 3/8" inside diameter.....	.17 ft.
8932	50 ft. 25/32" inside diameter.....	.17 ft.
8936	250 ft. 25/32" inside diameter.....	.17 ft.

BONDING CABLE

8970—Special 14" extra flexible tinned copper strap. Punched both ends. Used in many installations; particularly suitable for grounding motors that "float" in rubber. List Price.....\$3.33



AUTO-RADIO SHIELDED Low-Capacitance Lead-in Wire



8888	100 Ft. 20 (10x30 tinned) special low capacity rubber and shielding over-all—O.D. .225". Maximum capacity per foot between conductor and shield 27 mmf. List Price.....	\$.055 ft.
8971	100 Ft. 20 (10x30 tinned) same as 8888 with rubber sheath over-all—O. D. .290". (See Belden 8924 and 8816 for similar characteristics and smaller O. D.) List Price.....	\$.075 Ft.
8835	100-Ft. sp.-ol—same as 8888 with cotton braid weatherproofed. List Price.....	\$.075 Ft.

SHIELDED SPARK PLUG WIRE



8778—7 mm Belden Pyro-Glaze Aircraft Standard Spark Plug Wire with tinned copper shield. List Price.....\$3.14 Ft.
881—7 mm commercial automotive grade spark plug wire with tinned copper shield. List Price.....\$7.85 Ct.

SHIELDED PRIMARY WIRES

For use on battery leads and other auto-radio installations which must be shielded from the high tension system radiations.



8782	12 Shielded Primary (19x25 tinned), wrap colored "Cellophane," .031" wall of rubber, glazed cotton braid lacquered, and an over-all tinned copper shield. List Price.....	\$.07 Ft.
8784	14 Shielded Primary (19x27 tinned), wrap colored "Cellophane," .027" wall of rubber, glazed cotton braid lacquered, and an over-all tinned copper shield. List Price.....	\$.08 Ft.
8786	16 Shielded Primary (19x29 tinned), wrap colored "Cellophane," .022" wall of rubber, glazed cotton braid lacquered, and an over-all tinned copper shield. List Price.....	\$.045 Ft.

FABRIC LOOM



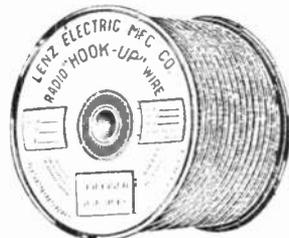
Shielded with tinned copper wire, used on any automobile wire or cable. Inner surface is smooth, making it easy to slip over all wires.

8787	3/16" I.D. Shielded Fabric Loom, 50-ft. coil, in carton. List Price.....	\$.09 Ft.
8788	5/16" I.D. Shielded Fabric Loom, 50-ft. coil, in carton. List Price.....	\$.11 Ft.

LENZ WIRE AND CABLE

RADIO HOOK-UP WIRE

(PUSH-BACK TYPE)



Consists of push-back non-fraying insulation, thoroughly saturated in MOISTURE-PROOF compound effective in reducing leakage. Has high insulation resistance and other essential dielectric properties. Can be furnished in SOLID or STRANDED, WAXED or LACQUERED. Neatly packed in attractive cartons or supplied on spools. Colors: Blue, Orange, Green, Brown, Slate, Red, Yellow, White and Black. If color is not specified, BLACK will be furnished.



WAXED HOOK-UP WIRE (LENZITE)

TWO WRAPS CELLULOSE ACETATE TEXTILE PLUS ONE COTTON BRAID WAXED

No. 20 SOLID TINNED COPPER				
Cat. No.	Put-up	Std. Pkg.	Wt. Ea. in lbs.	List Price Each
1322	25' carton	20	.17	\$0.30
1323	50' carton	15	.31	.54
1324	100' spool	10	.58	1.04
1325	1000' spool	1	6.1	9.04

No. 20 STRANDED TINNED COPPER				
Cat. No.	Put-up	Std. Pkg.	Wt. Ea. in lbs.	List Price Each
1328	25' carton	20	.17	\$0.34
1329	50' carton	15	.31	.61
1330	100' spool	10	.58	1.20
1331	1000' spool	1	6.1	10.58

No. 18 SOLID TINNED COPPER				
Cat. No.	Put-up	Std. Pkg.	Wt. Ea. in lbs.	List Price Each
1335	25' carton	20	.17	\$0.36
1336	50' carton	15	.35	.65
1337	100' spool	10	.7	1.28
1338	1000' spool	1	7.7	11.50

No. 18 STRANDED TINNED COPPER				
Cat. No.	Put-up	Std. Pkg.	Wt. Ea. in lbs.	List Price Each
1341	25' carton	20	.17	\$0.41
1342	50' carton	15	.35	.75
1343	100' spool	10	.7	1.48
1344	1000' spool	1	7.7	13.45

LACQUERED HI - VOLTAGE PLATE CIRCUIT TRANSMITTER HOOK - UP WIRE (DULAC)

Insulation Consists of Varnished Cambric Plus Lacquered Outer Braid

No. 18 STRANDED TINNED COPPER				
Cat. No.	Put-up	Standard Package	Wt. Ea. in lbs.	List Price Each
2013	25-ft. carton	15	.2	\$0.61
2014	50-ft. spool	10	.4	1.20
2015	100-ft. spool	5	.8	2.30
2016	1000-ft. spool	1	8.0	21.75

No. 16 STRANDED TINNED COPPER				
Cat. No.	Put-up	Standard Package	Wt. Ea. in lbs.	List Price Each
2020	25-ft. carton	15	1.0	\$0.72
2021	50-ft. spool	10	2.0	1.42
2022	100-ft. spool	5	5.5	2.75
2023	1000-ft. spool	1	11.0	26.20

COLORS: Blue, Orange, Green, Brown, Slate, Red, Yellow, White or Black
Coils furnished without cartons—deduct two cents each from list price

LENZ WIRE AND CABLE

SHIELDED LEAD-IN AND GROUND WIRE
FREE STRIPPING RUBBER

No. 18 FLEXIBLE 1/32' R.C.				No. 16 FLEXIBLE 1/32' R.C.				No. 14 FLEXIBLE 1/32' R.C.			
Cat. No.	Put-up	Std. Wt. Pkg. in lbs.	List Price Each	Cat. No.	Put-up	Std. Wt. Pkg. in lbs.	List Price Each	Cat. No.	Put-up	Std. Wt. Pkg. in lbs.	List Price Each
1100	50-ft. carton	5 1 1	\$1.30	1102	50-ft. carton	5 1 1	\$1.55	1104	50-ft. carton	5 1 8	\$1.85
1101	250-ft. spool	1 5 9	6.30	1103	250-ft. spool	1 7 2	7.75	1105	250-ft. spool	1 9 0	9.25
1101A	500-ft. spool	1 11 8	12.45	1103A	500-ft. spool	1 11 4	15.25	1105A	500-ft. spool	1 18 0	18.20

SHIELDED LEAD-IN AND GROUND WIRE
WITH WAXED COTTON BRAID UNDER-SHIELD

Consists of FLEXIBLE tinned copper conductors, heavy wall of FREE STRIP rubber, plus WAXED COTTON BRAID and CLOSELY WOVEN tinned copper shield.

No. 18 FLEXIBLE 1/32' R.C.				No. 16 FLEXIBLE 1/32' R.C.				No. 14 FLEXIBLE 1/32' R.C.			
Cat. No.	Put-up	Std. Wt. Pkg. in lbs.	List Price Each	Cat. No.	Put-up	Std. Wt. Pkg. in lbs.	List Price Each	Cat. No.	Put-up	Std. Wt. Pkg. in lbs.	List Price Each
118	50-ft. carton	5 1	\$1.65	116	50-ft. carton	5 1 3	\$1.85	114	50-ft. carton	5 1 6	\$2.10
118A	250-ft. spool	1 5 5	7.90	116A	250-ft. spool	1 7	9.10	114A	250-ft. spool	1 8 5	10.00
118B	500-ft. spool	1 11 0	15.60	116B	500-ft. spool	1 11 0	18.00	114B	500-ft. spool	1 17 0	19.80

BLACK POLISHED RUBBER COVERED LEAD-IN
AND GROUND WIRE

Conductor consists of stranded clean tinned copper wire. Insulation—high quality live rubber, easily stripped. Put up in attractive CARTONS and on SPOOLS.

No. 18 FLEXIBLE 1/32' R.C.				No. 16 FLEXIBLE 1/32' R.C.				No. 14 FLEXIBLE 1/32' R.C.			
Cat. No.	Put-up	Std. Wt. Pkg. in lbs.	List Price Each	Cat. No.	Put-up	Std. Wt. Pkg. in lbs.	List Price Each	Cat. No.	Put-up	Std. Wt. Pkg. in lbs.	List Price Each
1094	50-ft. carton	15 45	\$0.55	1097	50-ft. carton	15 90	\$0.68	1510	50-ft. carton	15 1 0	\$1.00
1095	100-ft. spool	10 95	.97	1098	100-ft. spool	10 1 75	1.26	1511	100-ft. spool	10 2 0	1.95
1095B	500-ft. spool	2 2 5	4.25	1098B	500-ft. spool	2 9 0	5.75	1511B	500-ft. spool	2 11 0	9.20
1096	1000-ft. spool	1 5 0	8.40	1099	1000-ft. spool	1 17 8	11.40	1512	1000-ft. spool	1 21 0	18.30

TINNED COPPER SHIELDING AND BONDING BRAIDS



Conveniently furnished on spools in complete range of various widths. Used for general shielding purposes, especially auto radio. Wider widths used for bonding purposes, especially where automotive floating power exists.

1/8" Wide—Opens to 7/32"				1/4" Wide—Opens to 3/8"				9/16" Wide—Opens to 15/16"			
Cat. No.	Put-up	Std. Wt. Pkg. in lbs.	List Price Each	Cat. No.	Put-up	Std. Wt. Pkg. in lbs.	List Price Each	Cat. No.	Put-up	Std. Wt. Pkg. in lbs.	List Price Each
1208	50-ft. spool	5 4	\$1.50	1212	50-ft. spool	5 1 4	\$2.35	1216	50-ft. spool	5 2 4	\$4.45
1208A	100-ft. spool	3 1 0	2.50	1212A	100-ft. spool	3 2 8	4.35	1216A	100-ft. spool	3 4 8	8.70
1209	250-ft. spool	1 2 5	5.55	1213	250-ft. spool	1 4 7	9.40	1217	250-ft. spool	1 9 6	19.50
1209B	500-ft. spool	1 5 0	10.20	1213B	500-ft. spool	1 9 4	18.45	1217B	500-ft. spool	1 19 2	38.80
3/16" Wide—Opens to 1/4"				3/8" Wide—Opens to 7/16"				11/16" Wide—Opens to 1 1/4"			
Cat. No.	Put-up	Std. Wt. Pkg. in lbs.	List Price Each	Cat. No.	Put-up	Std. Wt. Pkg. in lbs.	List Price Each	Cat. No.	Put-up	Std. Wt. Pkg. in lbs.	List Price Each
1210	50-ft. spool	5 1 1	\$1.95	1214	50-ft. spool	5 1 7	\$2.80	1218	50-ft. spool	5 3 2	\$7.10
1210A	100-ft. spool	3 2 2	3.25	1214A	100-ft. spool	3 3 4	5.40	1218A	100-ft. spool	3 6 4	14.00
1211	250-ft. spool	1 3 7	7.55	1215	250-ft. spool	1 6 7	12.50	1219	250-ft. spool	1 13 3	28.70
1211B	500-ft. spool	1 7 4	14.90	1215B	500-ft. spool	1 13 4	24.90	1219B	500-ft. spool	1 26 6	57.25



Shielded Rubber Jacketed
Microphone Cables

Cat. No.	Put-up	Approx. O.D.	Std. Wt. Pkg. in lbs.	List Price Each
1185	100-ft. spool, 2-conductor	3/8"	1 7.5	\$8.65
1186	250-ft. spool, 2-conductor	3/8"	1 20.7	21.50
1186A	500-ft. spool, 2-conductor	3/8"	1 39.4	42.70
1187	100-ft. spool, 3-conductor	3/8"	1 9.5	9.90
1188	250-ft. spool, 3-conductor	3/8"	1 25.7	24.90
1188A	500-ft. spool, 3-conductor	3/8"	1 49.4	49.05
1180	100-ft. spool, 4-conductor	3/8"	1 10.0	11.50
1181	250-ft. spool, 4-conductor	3/8"	1 27.0	28.90
1181A	500-ft. spool, 4-conductor	3/8"	1 52.0	56.95
1182	100-ft. spool, 5-conductor	3/8"	1 10.5	13.60
1183	250-ft. spool, 5-conductor	3/8"	1 28.0	33.95
1183A	500-ft. spool, 5-conductor	3/8"	1 54.0	67.15
1189	100-ft. spool, 6-conductor	3/8"	1 15.0	15.50
1190	250-ft. spool, 6-conductor	3/8"	1 39.0	38.55
1190A	500-ft. spool, 6-conductor	3/8"	1 76.0	76.30

Crystal Microphone Cable
Shielded—Rubber Jacketed



The conductor is of stranded copper, extremely flexible. Insulation consists of Cellulose Acetate treated textile. Saturated in high Dielectric Lacquer. A closely-woven tinned copper shield is applied, over which is placed a durable, high-quality rubber jacket.

SINGLE CONDUCTOR				
Cat. No.	Put-up	Approx. O.D.	Std. Wt. Pkg. in lbs.	List Price Each
1252	100-ft. spool	3/8"	3 3.0	\$7.30
1253	250-ft. spool	3/8"	1 6.75	17.65
1253A	500-ft. spool	3/8"	1 13.5	34.50
TWO-CONDUCTOR				
Cat. No.	Put-up	Approx. O.D.	Std. Wt. Pkg. in lbs.	List Price Each
1254	100-ft. spool	3/4"	1 3.55	\$10.00
1255	250-ft. spool	3/4"	1 8.0	24.00
1255A	500-ft. spool	3/4"	1 17.0	47.80

LENZ WIRE AND CABLE

Shielded Cables



Flexible tinned copper conductors plus good grade of rubber insulation. Each conductor braided with color-coded cotton braid, thoroughly saturated in MOISTURE-PROOF compound, CLOSELY WOVEN tinned copper shield overall. Especially adaptable to AUTO RADIO, PUBLIC ADDRESS SYSTEMS and SOUND RECORDING EQUIPMENT.

NO. 20 FLEXIBLE R.C. COTTON BRAID CONDS.

Cat. No.	Put-up	Std. Pkg.	Wt. Ea. in lbs.	List Price Each
1110	100-ft. spool, 2-conductor No. 20	3	3.3	\$5.45
1111	250-ft. spool, 2-conductor No. 20	1	7.4	12.65
1111A	500-ft. spool, 2-conductor No. 20	1	16.8	24.45
1112	100-ft. spool, 3-conductor No. 20	3	4.7	7.20
1113	250-ft. spool, 3-conductor No. 20	1	10.7	16.75
1113A	500-ft. spool, 3-conductor No. 20	1	23.4	33.00
1114	100-ft. spool, 4-conductor No. 20	3	5.6	8.95
1115	250-ft. spool, 4-conductor No. 20	1	15.1	21.55
1115A	500-ft. spool, 4-conductor No. 20	1	28.2	40.20
1116	100-ft. spool, 5-conductor No. 20	3	6.5	10.90
1117	250-ft. spool, 5-conductor No. 20	1	16.8	26.25
1117A	500-ft. spool, 5-conductor No. 20	1	31.6	49.20
1118	100-ft. spool, 6-conductor No. 20	3	7.5	12.80
1119	250-ft. spool, 6-conductor No. 20	1	18.0	30.70
1119A	500-ft. spool, 6-conductor No. 20	1	35.2	57.70

Shielded Cables



Cotton Braid Overall

NO. 20 FLEXIBLE R.C. COTTON BRAID CONDS.

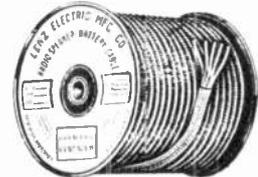
Cat. No.	Put-up	Std. Pkg.	Wt. Ea. in lbs.	List Price Each
1160	100-ft. spool, 2-conductor No. 20	3	3.5	\$6.52
1161	250-ft. spool, 2-conductor No. 20	1	8.0	15.20
1161A	500-ft. spool, 2-conductor No. 20	1	18.0	29.20
1162	100-ft. spool, 3-conductor No. 20	3	4.9	8.20
1163	250-ft. spool, 3-conductor No. 20	1	11.1	19.60
1163A	500-ft. spool, 3-conductor No. 20	1	24.2	36.80
1164	100-ft. spool, 4-conductor No. 20	3	6.0	10.20
1165	250-ft. spool, 4-conductor No. 20	1	16.0	24.55
1165A	500-ft. spool, 4-conductor No. 20	1	30.0	45.95
1166	100-ft. spool, 5-conductor No. 20	3	7.3	12.35
1167	250-ft. spool, 5-conductor No. 20	1	12.5	29.65
1167A	500-ft. spool, 5-conductor No. 20	1	33.0	55.70
1168	100-ft. spool, 6-conductor No. 20	3	8.0	14.40
1169	250-ft. spool, 6-conductor No. 20	1	20.0	34.50
1169A	500-ft. spool, 6-conductor No. 20	1	38.0	64.90

TEST PROD LEAD WIRE

Cat. No.	Put-up	Standard Package	Wt. Ea. in lbs.	List Price Each
1158	100-ft. spool	5	1.1	\$2.35
1159	1000-ft. spool	1	6.1	21.10

DYNAMIC SPEAKER EXTENSION CABLE

Individual conductors consist of flexible tinned copper, rubber insulation and color-coded cotton braid. Brown cotton braid applied overall. Suitable for either permanent or portable PUBLIC ADDRESS systems.



NO. 20 STRANDED CONDUCTORS

Cat. No.	Put-up	Std. Pkg.	Wt. Ea. in lbs.	List Price Each
1139	100-ft. spool, 2 conductor, No. 20	3	2.0	\$3.35
1139	500-ft. spool, 2 conductor, No. 20	1	12.0	16.15
1140	100-ft. spool, 3 conductor, No. 20	3	2.7	4.45
1140	500-ft. spool, 3 conductor, No. 20	1	15.5	21.50

1141	100-ft. spool, 4 conductor, No. 20	3	3.5	5.50
1141	500-ft. spool, 4 conductor, No. 20	1	19.5	26.90
1142	100-ft. spool, 5 conductor, No. 20	3	4.0	6.40
1142	500-ft. spool, 5 conductor, No. 20	1	22.0	11.40
1143	100-ft. spool, 6 conductor, No. 20	3	5.0	7.40
1143	500-ft. spool, 6 conductor, No. 20	1	27.0	36.50
1144	100-ft. spool, 7 conductor, No. 20	3	6.0	8.60
1144	500-ft. spool, 7 conductor, No. 20	1	32.0	42.40

RUBBER JACKETED DYNAMIC SPEAKER EXTENSION CABLE

Heavy Tough Rubber Jacket Applied Overall—Suitable for Portable Public Address Systems

(Not Shielded)

NO. 20 STRANDED CONDUCTORS

Cat. No.	Put-up	Approx. O.D.	Std. Pkg.	Wt. Ea. in lbs.	List Price Each
1700	100-ft. spool, 4 conductor	5/16"	1	6.5	\$8.80
1701	500-ft. spool, 4 conductor	5/16"	1	31.5	43.60

NO. 16 & NO. 20 STRANDED CONDUCTORS

Cat. No.	Put-up	Approx. O.D.	Std. Pkg.	Wt. Ea. in lbs.	List Price Each
1700A	100-ft. spool, 4 conductor	13/32"	1	8.0	10.40
1700B	500-ft. spool, 4 conductor	13/32"	1	42.0	51.60

EO 1 AMATEUR TRANSMISSION CABLE

SURGE IMPEDANCE 72 OHMS FOR AMATEUR TRANSMITTERS AND RECEIVERS. USED IN LENGTHS UP TO 1000 FEET WITH LOW LOSS

Cat. No.	Put-up	Standard Package	Weight Ea. in lbs.	List Price Each
2010	100' coil	1	6.7	\$10.50
2011	250' coil	1	16.7	26.25
2012	500' coil	1	33.5	52.50
2013	1000' coil	1	67.0	105.00

TWISTED PAIR BRAID OVERALL DOUBLET TRANSMISSION CABLE

BLACK weatherproof braid overall suitable as transmission line for DOUBLET ANTENNA SYSTEM required on "ALL WAVE" RADIO RECEIVERS.



Cat. No.	Put-up	Standard Package	Weight Ea. in lbs.	List Price Each
1264	100' spool	5	2.45	\$2.75
1265	500' spool	1	11.90	12.65

THORDARSON TRANSFORMERS

UNIVERSAL DUPLICATE POWER TRANSFORMERS

R.M.A. Color Coded Leads—Electrostatic Shields

New design and universal mounting features permit mounting in either of the three positions shown. Electrical characteristics are the result of careful research to determine values most often needed. They are truly the last word in universally adaptable transformers for service use.

Type No.	List Price	Pri. V.A.	Secondary Volts	M.A.	Filament Windings			Mtg. Fig.	Dimensions			Wt. Lbs.
					Rect.	Fil. No. 1	Fil. No. 2		W	D	H	
T-13R01	\$2.35	60	650 Ct.	40	5V-3A	2.5V-4A Ct.		3A	2 1/2	2 1/8	3	3 1/4
T-13R02	3.00	60	700 Ct.	50	5V-3A	2.5V-7.25A Ct.		3A	2 1/2	2 1/8	3	3 1/4
T-13R03	3.25	75	700 Ct.	70	5V-3A	2.5V-9A Ct.		3A	2 1/2	3 1/8	3 3/8	3 3/4
T-13R04	4.00	115	700 Ct.	90	5V-3A	2.5V-12.5A Ct.		3A	3 1/4	3 1/4	3 3/4	5 1/4
T-13R05	4.00	110	700 Ct.	70	5V-3A	2.5V-9A Ct.	2.5V-3.5A Ct.	3A	3 1/8	3 1/2	3 3/4	5 1/4
T-13R06	5.00	130	700 Ct.	120	5V-3A	2.5V-12.5A Ct.	2.5V-3.5A Ct.	3A	3 3/4	3 3/8	4 1/2	5 3/4
T-13R07	5.00	140	800 Ct.	110	5V-3A	2.5V-15A Ct.	2.5V-3.5A Ct.	3A	3 3/4	3 3/4	4 1/2	6 1/4
T-13R08	4.25	105	700 Ct.	90	5V-3A	6.3V-3.3A Ct.	2.5V-6A Ct.	3A	3 1/8	3 1/2	3 3/4	5 1/4
T-13R09	6.00	160	750 Ct.	180	5V-3A	6.3V-3.3A Ct.	2.5V-6A Ct.	3A	3 3/4	3 1/8	4 1/2	6 3/4
T-13R10	3.50	70	550 Ct.	70	5V-3A	5V-.5A Ct.	2.5V-10.5A Ct.	3A	2 1/8	3 1/8	3 3/8	3 3/4
T-13R11	2.50	60	650 Ct.	40	5V-3A	6.3V-2A Ct.		3A	2 1/2	2 1/8	3	3 1/4
T-13R12	3.00	65	700 Ct.	70	5V-3A	6.3V-2.5A Ct.		3A	2 1/2	3	3	3 3/4
T-13R13	3.75	90	700 Ct.	90	5V-3A	6.3V-3.5A Ct.		3A	3 1/4	3 3/8	3 3/4	5 1/4
T-13R14	4.25	115	700 Ct.	120	5V-3A	6.3V-4.7A Ct.		3A	3 1/8	3 1/2	3 3/4	5 1/4
T-13R15	5.75	140	750 Ct.	150	5V-3A	6.3V-5A Ct.		3A	3 3/4	3 3/8	4 1/2	5 3/4
T-13R16	6.50	180	800 Ct.	200	5V-3A	6.3V-5.14A Ct.		3A	3 3/4	3 3/8	4 1/2	6 1/4
T-13R17	3.50	85	600 Ct.	60	5V-3A	6.3V-2.5A Ct.	2.5V-7.5A Ct.	3A	2 1/8	3 1/8	3 3/8	4
T-13R18	4.50	115	700 Ct.	90	5V-3A	6.3 & 2.5V-3.5A Ct.	2.5V-9A Ct.	3A	3 1/2	3 1/2	3 3/4	5 1/4

Filter Chokes

Inductance ratings are ACTUAL at rated current

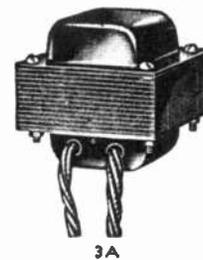
Type No.	List Price	Current Rating M.A.	Inductance Henries	D.C. Res. Ohms	Volts Ins.	Mtg. Fig.	Dimensions			Wt. Lbs.
							W	D	H	
T-13C26	\$0.90	40	7	530	1600	3B	1 3/4	1 3/8	1 3/8	1 1/2
T-13C27	1.05	40	10	475	1600	3B	2	1 3/8	1 3/8	3/4
T-13C28	1.20	65	10	460	1600	3B	2 3/8	1 3/4	2	1
T-43C92	1.75	75	10	266	1600	2C	1 7/8	2 1/8	2 1/2	1 1/4
T-47C07	1.75	75	12	290	1600	3B	2	2 5/8	2 1/4	1 1/4
T-44C02	1.50	80	12	405	1600	3B	1 1/2	2 3/8	2	1 1/2
T-57C51	1.50	80	5	138	1600	2B	2	2	2 3/8	1 1/4
T-57C52	1.75	80	5	138	1600	2F	2	2	2 3/8	1 1/2
T-13C29	1.60	85	9	250	1600	3B	2 3/8	2	2	1 1/4
T-68C07	2.00	85	15	375	1600	2B	2	2 1/2	3	2
T-16C07	2.25					2F	3 3/8	2 1/2	3	2 1/4
T-14C31	2.50					2A	2 1/2	2 1/2	3	2 1/4
T-57C53	2.00	110	9.5	200	1600	2B	2	2 1/2	3	2 1/4
T-57C54	2.25					2F	2 1/2	2 1/2	3	2 1/4
T-49C91	1.50	120	4.2	160	1600	2F	2	2	2 1/2	1
T-75C49	1.50	120	7.2	290	1600	3B	2	2 3/8	2	1 1/2
T-53C19	1.50					2B	2	2	2 3/8	1 1/4
T-17C00-B	2.75	130	12	231	1600	2F	2 7/8	3	3 1/2	3 1/2
T-17C00	3.00					2D	3	3 5/8	3 7/8	3 1/2
T-13C30	2.00	150	8	200	1600	2B	2 1/2	2	2 1/8	1 3/8
T-74C29	3.75	150	10	200	2000	2G	3 1/2	3 3/8	4 5/8	5 1/4
T-67C49	2.75	200	5	80	1600	2F	3	2 1/4	3 1/2	3
T-23C53-A	3.00					2D	3	2 1/4	3 1/2	3
T-54C50	5.00	250	12.9	121	1600	2B	3	3 3/4	4 5/8	7 1/4
T-75C51	5.50					2G	3 1/4	3 3/4	5	7 3/4

GENERAL PURPOSE POWER TRANSFORMERS

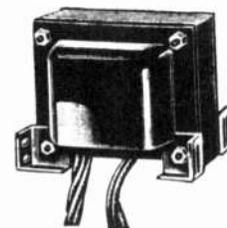
High quality transformers constructed to give trouble-free, continuous service in receivers and amplifiers.

Type No.	List Price	Pri. V.A.	A.C. Volts	D.C. M.A.	Rect. Fil.	Filament			Mtg. Fig.	Dimensions			Wt. Lbs.
						Fil. No. 1	Fil. No. 2	Fil. No. 3		W	D	H	
T-60R49	\$2.00	30	560 Ct.	30	5V-2A	2.5V-3.5A Ct.			2H	3	2 1/2	2 1/2	2
T-50R62	2.75	40	620 Ct.	40	5V-2A	2.5V-5A Ct.			2H	3 3/4	3	3	3 3/4
T-49R60	3.25	65	700 Ct.	70	5V-2A	2.5V-8.5A Ct.			2H	3 3/4	3 3/4	3 3/4	4 3/8
T-63R62	3.50	65	700 Ct.	70	5V-2A	2.5V-7A Ct.	2.5V-1.5A Ct.		2H	3 3/4	3 1/4	3 3/8	4 3/8
T-50R03	3.75	75	700 Ct.	80	5V-2A	2.5V-12A Ct.			2H	3 3/4	3 3/4	3 3/8	5 3/8
T-63R63	4.00	75	700 Ct.	80	5V-2A	2.5V-9A Ct.	2.5V-3A Ct.		2H	3 3/4	3 3/4	3 3/8	5 3/8
T-70R21	3.50	70	700 Ct.	70	5V-2A	2.5V-4A Ct.	6.3V-3A Ct.		2H	3 3/4	3 3/4	3 3/8	4 3/8
T-70R20	2.75	45	600 Ct.	50	5V-2A	6.3V-2A Ct.			2H	3 3/4	2 3/8	3	3
T-70R70	3.00	50	680 Ct.	55	5V-2A	6.3V-1.5A Ct.			2G	3 3/4	3 3/4	4 1/4	4
T-70R61	4.00	60	770 Ct.	70	5V-2A	6.3V-2.5A Ct.			2G	3 3/4	3 3/4	4 3/4	4 3/4
T-56R02	4.25	70	700 Ct.	70	5V-2A	2.5V-9A Ct.	2.5V-1.5A Ct.		2G	3 3/4	3 3/4	4 3/4	6
T-56R01*	4.50	60	650 Ct.	70	5V-2A	2.5V-3A Ct.	1.5V-1A Ct.	5V-.5A Ct.	2G	3 3/4	3 3/4	4 3/4	5 3/4
T-56R03	5.50	85	700 Ct.	105	5V-3A	2.5V-3A Ct.	2.5V-1.75A Ct.	1.5V-5A Ct.	2G	3 3/4	3 3/4	5	7 3/4
T-56R04*	5.25	90	700 Ct.	105	5V-3A	2.5V-12A Ct.			2G	3 3/4	3 3/4	5	7 3/4
T-70R62	5.50	110	745 Ct.	145	5V-3A	6.3V-4.5A Ct.			2G	3 3/4	3 3/8	5	8 3/4
T-56R05	5.75	115	700 Ct.	110	5V-3A	2.5V-9A Ct.	2.5V-3A Ct.	2.5V-3A Ct.	2G	3 3/4	3 3/4	5	7 3/4
T-37R70-C	6.00	95	700 Ct.	80	5V-2A Ct.	3V-10A Ct.	5V-2.5A Ct.		2G	4	3 3/4	4 3/4	6 3/4
T-92R21	7.50	150	800 Ct.	200	5V-3A	6.3V-5A Ct.			2G	4 1/4	3 3/4	4 3/4	9

*Primary 110 volts—all others 115 volts.



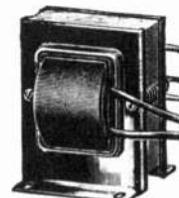
3A



3A



3A



3C



2G

THORDARSON TRANSFORMERS

PUSH-PULL INTERSTAGE TRANSFORMERS

T-58A70 and T-67A91 may be used for Class AB where some grid current is likely to flow on extreme peaks.

T-13A36	\$1.75	P.P. 10,000 ohm plates to P.P. power tube grids	1:1	20,000	20,000	8*	3B	2	2 1/2	1 1/4	1
T-67A91	3.00	P.P. 10,000 ohm plates to P.P. or P.P. par. power tube grids	1.5:1	20,000	45,000	10*	2B	2 1/2	2 1/2	3	2
T-58A70	3.25	P.P. 10,000 ohm plates to P.P. or P.P. par. power tube grids					2F	2 1/2	2 1/2	3	2
T-75D57	5.00	P.P. 45's to 845's P.P.	2.35:1	16,000	117,000	40*	2D	2 3/4	3	3 1/2	3 1/2

*Per side

LOW IMPEDANCE SOURCE (MICROPHONE, LINE, MIXER) TO GRID TRANSFORMERS

A complete line of low level input, microphone, line, and mixer transformers to fit all applications. Special winding methods result in low leakage reactance so essential to good frequency response. Several styles of mountings are offered for the most popular types.

T-65A73	\$2.75	DB mike to grid	1:22.2	200 Ct.	100,000		2F	2 1/2	2 1/2	3	2 1/4
T-68A22	2.50						2B	2 1/2	2 1/2	3	2 1/4
T-30A20	3.00						2A	2 1/2	2 1/2	3	2 1/4
T-58A37	2.25						2F	2 1/2	2 1/2	2 3/4	1 1/2
T-83A78	2.00	Single button mike to grid	1:64	100	400,000		2F	2	1 1/2	2 1/4	1 1/4
T-86A02	1.75						2B	2	1 1/2	2 1/2	1
T-23A57	2.25						2A	2	1 1/2	2 1/2	1 1/4
T-55A16	2.75	Dyn. mike, line or mixer to single or P.P. grids	1:22.3	200/50	100,000 Ct.		2F	2	2 1/2	2 3/8	1 3/8
T-63A72	3.50	1, 2, 3 or 4 circuit mixer to grid	1:22.2	50, 100, 150, 200	100,000		2F	2 1/2	2 1/2	3	2 1/4
T-63A71	3.50	1, 2, 3 or 4 circuit mixer to grid	1:11	200, 400, 600, 800	100,000		2F	2 1/2	2 1/2	3	2 3/8
T-61A94	3.25	Line to single or P.P. grids, Class A	1:14.1	500/125	100,000 Ct.		2F	2 1/2	2 1/2	3	2 3/4
T-62D65	6.00	Line to P.P. grids of 800, 830B, RK18, RK31, 203A, Class B, or 845 tubes Class AB	1:3.8	500	7,220		2D	3 3/4	3 3/8	4	3
T-93A12	6.00	Line to P.P. Class A grids	1:9.85	500	50,000 Ct.		2D	3 3/4	3 3/8	4	4 3/4
T-83D21	3.75	Line to P.P. grids of 46, 210, Class B, etc., 6L6 AB	1:3.2	500	5,100, 12,500		2F	2 1/2	2 1/2	3	2 3/4
T-67D34	7.50	Line to P.P. Par. 203A 838, 211 grids, Class B	1:1.34	500	900		2D	3 3/4	3 3/8	4	3
T-64D29	18.00	Line to P.P. 204A, 849 grids, Class B	1:2	500	2,000		2L	4 1/2	4 3/8	6 1/2	11 3/4

MICROPHONE OR PICKUP TO LINE OR MIXER TRANSFORMERS

T-63A73	\$3.25	DB or dynamic mike to line or mixer	200 Ct.	200/50			2F	2 1/2	2 1/2	3	2 1/4
T-67A45	3.50						2A	2 1/2	2 1/2	3	2 1/4
T-70A82	3.50	DB mike to line	200 Ct.	500/125			2F	2 1/2	2 1/2	3	2 1/4
T-70A83	3.50	Crystal mike to line or mixer	100,000	200/50			2F	2 1/2	2 1/2	3	2 1/4
T-61A94	3.50	Pickup or line to line or mixer	500/125	200/50			2F	2 1/2	2 1/2	3	2 1/4
T-63A74	2.50	Pickup to line or mixer	5000/2000	200/50			2F	2	2 1/2	2 3/8	1 3/4

TUBE TO LINE OR MIXER TRANSFORMERS (LOW LEVEL)

T-55A15	\$2.25	Plate to line or mixer	15,000/10,000	200/50	8	2F	2	2 1/2	2 1/2	1 1/2
T-62A25	2.25	Plate to line or mixer	15,000/10,000	500/125	8	2F	2	2 1/2	2 1/2	1 1/2
T-72A14	2.50	P.P. plates to line	20,000	500/125	8**	2F	2	2 1/2	2 1/2	1 1/2
T-75A73	2.50	P.P. plates to line or mixer	20,000	200/50	8**	2F	2	2 1/2	2 1/2	1 1/2

**Per side

UNIVERSAL OUTPUT TRANSFORMERS

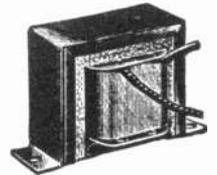
Type No.	List Price	Tube Type	Class	Ohms Impedance		Pri. Sec.	M.A. Per Side	Max. Wtg. Watts	Mtg. Flg.	Dimensions			Wt. Lbs.
				Pri.	Sec.					W	D	H	
T-13S38	\$1.50	Univ. Single or P-P	A	4,000/7,000	Adjustable	36	8	3E	2	1 1/2	1 1/2	1 1/2	3/4
T-57S01	2.00		A	8,000/10,000	.1 to .29	2E	20	2E	2	2 1/2	2 1/2	2 1/2	1 1/2
T-17S57	2.25		B	14,000 Ct.		2C	2 1/2	2C	2 1/2	1 1/2	2 1/2	1 1/2	
T-61S25	3.50	Univ. Single	A	2,500/4,000	500	60	10	2E	2 1/2	2	3	2 1/2	
			B	5,000/6,000/7,000									
T-61S26	3.50	Univ. P-P	A	8,000/10,000	500	55	10	2E	2 1/2	2	3	2	
			B	12,000/14,000 Ct.									

OUTPUT TRANSFORMERS TO LINE OR SPEAKER (HIGH LEVEL)

T-13S37	\$1.15	1-6F6, 42, 2A5	A	7,000	1-2-4	36	5	3E	1 1/2	1 1/2	1 1/2	3/4
T-33S99	1.50	P-P 45, 43, 25A6 1-6N7, 6A6, 53	A B	8,000	6 to 12	36	10	2B	2	2	2 1/2	1 1/4
T-81S01	1.65	1-19, 1J6G P-P 30, 49	B B	10,000	2-4-8	15	8	2B	1 1/2	1 1/2	2	3/4
T-68S06	2.50	1-6F6, 42, 2A5	A	7,000	10 or 2,000	36	5	2F	2	1 1/2	2 1/2	1
T-67S51	3.50	P-P 6F6, 42, 2A5 1-79	A B	14,000	4-8-15-500	40	20	2F	2 1/2	2 1/2	3	2 1/4
T-67S48	3.50	P-P 45, 43, 25A6 1-6N7, 6A6, 53	A B	8,000	4-8-15-500	36	25	2F	2 1/2	2 1/2	3	2 1/4
T-67S60	2.50	1-19, 1J6G P-P 30, 49	B B	10,000	4-8-15-2000	15	10	2F	2	2 1/2	2 1/2	1 1/2
T-67S52	4.00	P-P 46, 50 P-P Par. 6N7, 6A6, 53 P-P 42, 6F6, 2A5	H B AB2	5,800	4-8-15-500	60	30	2F	2 1/2	3	3 1/2	3 1/2
T-58S72	4.00	P-P 2A3, 6B4G P-P 48, 25L6	AB A	3,000	4-8-15-500	60	30	2F	2 1/2	3	3 1/2	3 1/2
T-67S54	4.00	P-P 6L6 P-P 2A3, 6B4G P-P Par. 19's	A AB B	5,000	4-8-15-500	60	30	2F	2 1/2	3	3 1/2	3 1/2
T-67S92	4.00	P-P Par. 2A3, 6B4G, 45 P-P Par. 48, 25L6	AB A	1,500	4-8-15-500	80	40	2F	2 1/2	3	3 1/2	3 1/2
T-65S94	4.00	P-P 50 P-P 6F6, 42, 2A5 P-P 79	A AB2 B	8,000	4-8-15-500	55	40	2F	2 1/2	3	3 1/2	3 1/2
T-75S75	4.00	P-P 6F6, 42, 2A5 1-6N7, 6A6, 53 P-P 6N6G, 6B5, 2B6	AB2 B A	10,000	4-8-15-500	45	40	2F	2 1/2	3	3 1/2	3 1/2
T-84S58	6.00	P-P 6L6	AB2	3,800	4-8-15-500	115	60	2C	3 3/4	3 1/4	4 3/4	6
T-89S75	4.00	P-P 6L6	AB1	6,600	4-8-15-500	80	40	2F	2 1/2	3	3 1/2	3 1/2
T-89S74	3.75	1-6L6	A	4,000	4-8-15-500	70	15	2F	2 1/2	2 1/2	3	2 1/2
T-89S68	6.00	P-P Par. 6L6	AB1	3,300	50-125-200 250-333-500	150	75	2C	3 3/4	3 3/4	4 3/4	5 3/4



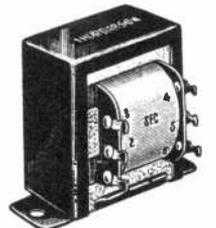
2D



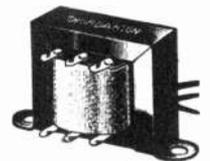
3B



2W



2E



3E

THORDARSON TRANSFORMERS

PLATE SUPPLY TRANSFORMERS

These ratings are for CONTINUOUS SERVICE and may be safely exceeded by as much as 20% in amateur installations where the service is intermittent. All plate transformers rated at 1000 volts D. C. or higher have electrostatic shield between primary and secondary. All transformers for 50-60 cycle supply.

Type No.	List Price	Sec. A.C. Load Volts	D.C. Volts	D.C. M.A.	Pri. Volt.	Pri. V.A.	Mtg. Flg.	Dimensions			Wt. Lbs.
								W	D	H	
T-62P80	\$7.75	725-0-725	525	150	110	125	2L	4 1/2	4 1/2	6 1/4	11 1/4
T-70P41	9.00	725-0-725	525	250	110	210	2L	4 1/2	5	6 1/4	15 1/4
T-53P03	5.50	465-0-465	400	150	115	90	2G	3 1/2	4 1/4	5	7 3/4
T-84P60	7.75	515-0-515	400S	250	115	190	2G	4 1/2	5	3 3/4	11 1/4
T-62P57	9.00	750-0-750	625	200	115	180	2E	4 1/2	3 3/4	6 1/4	12 1/4
T-54P48	6.75	800-0-800	680	150	115	130	2E	4 1/2	3 3/4	6 1/4	10 3/4
T-71P27	10.00	800-0-800	600	250	110	240	2L	4 1/2	4 1/2	6 1/4	14 1/4
T-64P12	16.50	980-0-980	750	350	110	400	2M	6 1/2	6 1/2	8	32 1/2
T-64P11*	21.00	600-0-1600 1290-0-1290	1250 1000	280	110	520	2M	6 1/2	7 1/2	8	36 1/2
T-70P33*	30.00	1820-0-1820 1330-0-1330	1250 1000	500	110	900	2S	6 1/2	6 1/2	11	43
T-54P89	18.50	270-0-1270	1000	40*	115	600	2M	6 1/2	6 1/2	8	33
T-62P82	32.00	330-0-1335	1000	50*	110	750	2S	6 1/2	6 1/2	11	42 1/2
T-73P51*	45.00	2270-0-2275 1950-0-1950	1750 1500	500	110	1300	2S	6 1/2	7 1/2	11	61 1/4
T-62P83	32.00	2350-0-2350	2000	250	110-220*	740	2S	6 1/2	6 1/2	11	42 1/4
T-62P84	50.00	2420-0-2420	2000	500	110-220*	1500	2S	6 1/2	8 1/4	11	84
T-62P85	68.00	3630-0-3630	3000	380	110-220*	1750	2S	6 1/2	10	11	87

\$Has tap at 30 volts.

*Variation in secondary voltages obtained by changing primary taps.

†Primary for 110 or 220 volts, or 220 volt tap may be used on 110 volts to reduce sec. voltage 50%

‡D. C. Volts measured out of filter with choke input. If transformer is used with bridge rectifier (choke input) current should be reduced to 50% of this rating.

FILTER CHOKES

All Thordarson filter chokes are listed at measured inductances at rated currents. All are adequately insulated for recommended service. Input chokes indicated by two inductance ratings.

Type No.	List Price	Cap. D.C. M.A.	Inductance Henries	D.C. Res. Ohms	Volts Insulation	Mtg. Flg.	Dimensions			Wt. Lbs.
							W	D	H	
T-64C05	\$4.25	150	10-30	200	2000	2D	3 1/2	3 1/2	4 3/4	5
T-63C15	8.50	280	12-38	156	5000	2J	4	4 1/2	6 1/4	11 1/2
T-64C06	12.00	380	10-19	93	5000	2J	4 3/4	5	6 7/8	18 1/4
T-63C16	14.00	500	8-17	70	5000	2J	5	5 1/2	6 3/8	22 3/4
T-72C16	16.00	650	8-22	55	5000	2K	6 1/4	6 3/4	7 5/8	27 3/4
T-64C09	5.50	150	19.7	275	2000	2D	3 1/4	4	4 1/2	7
T-64C08	10.00	280	23.6	190	5000	2J	4 1/2	4 1/2	6 3/4	14
T-64C07	16.00	380	20	160	5000	2K	6	6 1/4	7 3/4	25
T-64C10	17.00	500	16.5	110	5000	2K	6 1/2	6 3/4	7 3/8	27 1/2
T-72C15	24.00	650	17	70	5000	2K	6 3/4	8 1/2	7 5/8	40 1/4

FILAMENT TRANSFORMERS

Many types are furnished with primary taps to compensate for low line voltage or voltage drop in filament leads. This feature also permits the use of primary rheostat for voltage control. All units are rated for continuous operation at full load.

All primaries 115 volts 50-60 cycles. Those marked with * have primary taps for 105, 110 and 115 volts.

One Secondary

Type No.	List Price	Sec. Volts	Sec. Amps.	Mtg. Flg.	Dimensions			Volts Insulation	Wt. Lbs.
					W	D	H		
T-50F61	\$1.50	2.5 Ct.	3.5	2B	2	1 7/8	2 3/8	1600	1
T-54F69	1.75	2.5 Ct.	5.0	2E	2	2	2 3/8	1600	1 1/2
T-54F55	2.50	2.5 Ct.	10	2B	3	2 3/4	3 3/4	1600	3
T-64F33*	4.50	2.5 Ct.	10	2D	3 1/4	3 3/8	4	7500	4 1/2
T-63F99	3.25	5 Ct.	4	2D	3	2 1/2	3 1/4	1600	2 1/2
T-74F23*	5.00	5.25 Ct.	12	2D	3 1/2	3 3/8	4	1600	4 1/2
T-74F24*	7.00	5.25 Ct.	20	2D	3 3/8	3 7/8	4 3/8	1600	6 1/2
T-61F85	2.00	6.3, 5, 2.5	2.5	2E	2 5/8	2	2 1/4	1600	1 1/2
T-73F60*	3.75	6.3 Ct.	5	2D	3	2 1/2	3 3/4	1600	3 1/2
T-64F13*	3.25	7.5 Ct.	2.5	2D	3	2 1/2	3 3/4	1600	2 1/2
T-75F25	6.00	7.5 Ct.	2.5	2D	3 3/8	2 3/8	4	5000	4 1/2
T-64F35	4.50	7.5 Ct.	6.5	2D	3 3/4	3 3/8	4	1600	4 1/2
T-92F20	5.50	7.5 Ct.	8	2D	3 5/8	3 3/8	4	1600	5
T-64F14*	5.00	10 Ct.	8	2D	3 3/4	3 3/8	4	1600	5
T-64F15*	7.50	11 Ct.	11	2D	4 1/2	3 3/8	4 3/8	1600	8
T-64F19	9.00	11 Ct.	15.5	2L	4 1/2	4 1/2	6 1/2	1600	13

Two Secondaries

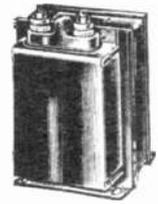
T-64F21	5.50	2.5, 5 Ct.	10, 3	2N	3 1/4	3 3/8	4	3000	4 1/2
T-75F85	5.50	5, 5 Ct.	3, 3	2D	3	2 1/2	3 1/4	3000	3 1/2
T-54F66	3.25	7.5, 7.5 Ct.	2.5, 2.5	2E	3	2 1/2	3 3/8	1600	3 1/2

Three Secondaries

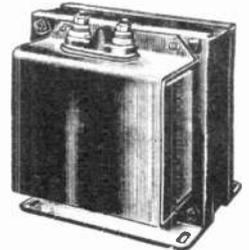
T-79F84	4.75	2.5, 5, 6.3 Ct.	3.5, 3, 3	2G	3 3/8	3 1/4	4 3/8	1600	4 1/2
T-60F94	6.00	2.5, 2.5, 5 Ct.	3.5, 14, 6	2G	3 1/2	3 3/8	4 3/8	1600	5 1/2
T-85F14*	17.5J	2.5, 2.5, 2.5 Ct.	5.5, 10	2Q	7 1/2	5 1/2	5 1/2	10,000	17
T-70F46	7.75	5, 5, 5 Ct.	3, 3, 6	2N	4	3 3/8	4	5000	5 1/2
T-64F17*	9.00	2.5, 7.5, 7.5 Ct.	4, 4.5, 6.5	2N	4 1/2	3 3/8	4 3/8	1600	8

Four Secondaries

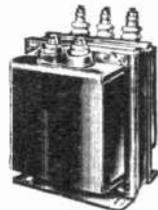
T-64F16*	11.50	2.5, 7.5, 10, 10 Ct.	5, 1.25, 3.25, 6.5	2N	4 1/2	4 1/2	6 1/4	1600	13 1/2
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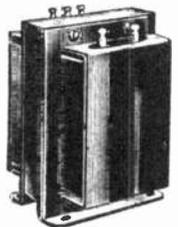
2J



2K



2M



2L



2S

THORDARSON TRANSFORMERS

TRANSCEIVER TRANSFORMERS

Smallest practical size. Lightweight. Easy to mount. Efficient.

Type No.	List Price		Ohms Impedance		Max. D.C. Pri.	Max. Power Watts	Mtg. Fig.	Dimensions			Wt. Lbs.
			Pri.	Sec.				W	D	H	
T-72A59	\$1.65	Plate and single button microphone to grid.	5,000 200	100,000	10	5	2B	1 3/8	1 3/8	2	3/4
T-72558	1.65	Pentode plate to low or high impedance phones or oscillator	10,000	2,000 50	30	5	2B	1 3/8	1 3/8	2	3/4

PLATE TRANSFORMERS

Type No.	List Price	Sec. A.C. Load Volts	D.C. Volts	D.C. M.A.	Mtg. Fig.	Wt. Lbs.	Dimensions		
							W	D	H
T-16P00	\$ 6.60	830/830 660/660	650 500	200	3F	7 1/2	3 3/4	4	5
T-16P01	13.00	1560/1560 1250/1250	1250 1000	300	3D	25.5	5 1/8	7	7 1/2
T-16P02	21.00	1565/1565 1265/1265	1250 1000	500	3D	36	6 3/4	7 1/4	8
T-16P03	19.00	2180/2180 1760/1760	1800 1450	300	3D	31 1/4	6 3/4	6 5/8	8
T-16P04	23.25	2920/2920 2420/2420	2500 2000	300	3D	41	6 3/4	8	8

FILTER CHOKES

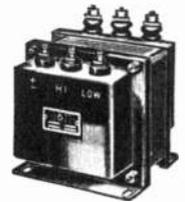
Input chokes indicated by two inductance ratings.

Type No.	List Price	D.C. M.A.	Inductance Henries	D.C. Res. Ohms	Volts Ins.	Mtg. Fig.	Wt. Lbs.	Dimensions		
								W	D	H
T-16C20	\$3.75	200	5-20	130	2000	3C	5	3 3/4	2 5/8	4
T-16C21	5.00	300	5-20	105	3000	3C	7	3 7/8	3 1/4	4 3/4
T-16C22	9.00	500	5-20	70	3000	2J	25	5 1/8	6	7 1/2
T-16C25	3.75	200	12	130	2000	3C	5	3 3/4	2 5/8	4
T-16C26	5.00	300	12	105	3000	3C	7	3 7/8	3 1/4	4 3/4
T-16C27	9.00	500	12	70	3000	2J	25	5 1/8	6	7 1/2

FILAMENT TRANSFORMERS

Type No.	List Price	Sec. Voltage	Sec. Amps.	Volts Insulation	Mtg. Fig.	Wt. Lbs.	Dimensions		
							W	D	H
T-16F08	\$1.50	2.5 Ct.	5.25	2000	3C	1 1/4	2	2	2 1/2
T-16F09	1.75	2.5 Ct.	10	2000	3C	3	2 1/2	2	3
T-16F10	2.75	2.5 Ct.	10	7500	3C	2 1/2	2 1/2	2 3/4	3 1/4
T-16F11	2.00	5.25 Ct.	4	2000	3C	2 1/4	2 1/2	2 3/8	3 1/4
T-16F12	3.50	5.25 Ct.	13	2000	3C	4	3 3/8	2 1/2	4
T-16F17	1.75	6.3 Ct.	3	2000	3C	1 1/2	2	2	2 3/8
T-16F13	2.00	7.5 Ct.	4	2000	3C	2 1/4	2 1/2	2 1/4	3 1/4
T-16F14	3.25	7.5 Ct.	8	2000	3C	4	3	2 7/8	3 3/4
T-16F15	3.00	10 Ct.	4	2000	3C	3	2 9/8	2 3/4	3 1/4
T-16F16	4.00	10 Ct.	8	2000	3C	4	3	2 7/8	3 3/4

All Primaries 115 V. 60 Cycles.



3D



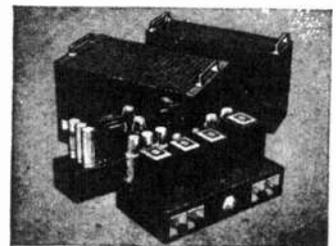
3F

TRU-FIDELITY 2A3 AMPLIFIER

Conservatively rated, this unit delivers 10 watts of truly undistorted audio power. The over-all frequency response is superior to High Fidelity standards, being ± 1 1/2 db from 20 to 15,000 c. p. s. It is especially designed for broadcasting, recording, and high quality public address. High gain for low level microphones, with mixer and fader incorporated.

Tubes used: 3-6C6, 2-76, 2-2A3, 1-5Z3, 1-80.

FACTORY WIRED AND TESTED (less tubes and covers)	T-10W11	List \$160.00
Amplifier metal screen cover (less handles).....	T-10K20	5.50
Power supply metal screen cover (less handles).....	T-10K21	4.75
Chromium plated handles (One pair required for each cover)..... Per Pair.....	T-10K50	1.90



"BUILD-IT-YOURSELF"

The above amplifiers are available in "Build-it-Yourself" Foundation Units. Includes punched chassis with sockets mounted, photos, diagrams, instructions and list of nationally distributed component parts.

6 Watt push-pull 6F6 amplifier Foundation Unit.....	T-75K06-M	List \$ 4.50
18 Watt push-pull 6F6 amplifier Foundation Unit.....	T-75K18-M	6.00
30 Watt push-pull parallel 2A3 amplifier Foundation Unit.....	T-75K30	8.00
60 Watt push-pull parallel 6L6 amplifier Foundation Unit.....	T-10K60	12.00
Tru-Fidelity 2A3 amplifier Foundation Unit.....	T-10K10	10.00

NOTE: Accessories for 60 watt (T-10K60) and Tru-Fidelity (T-10K10) Foundation Units are the same as listed with equivalent factory wired amplifiers.

THORDARSON TRANSFORMERS

MULTI-MATCH MODULATION TRANSFORMERS

Plug-in Jack-Terminal Board, the only Modulation Transformer built with this unique feature.

Type No.	List Price	Cap. Watts	Pri. M.A. Per Side	Sec. M.A. Series Par.	Mtg. Fig.	Dimensions		
						W	D	H
T-11M74	\$ 8.00	40	100	80 160	3G	4 1/4	4 1/2	4 1/2
T-11M75	12.50	75	145	145 290	3G	4 1/4	4 1/2	4 1/2
T-11M76	19.50	125	210	160 320	3G	5 1/2	5 1/2	6
T-11M77	30.00	300	250	250 500	3G	6 3/4	6 3/4	7 1/4
T-11M78	60.00	500	320	320 640	3G	7 1/4	7 3/4	8 1/4

MULTI-MATCH DRIVER TRANSFORMERS

Plug-in Connectors and recessed sub-base lugs permit single hole sub-panel wiring.

Type No.	List Price	Cap. Watts	Max. Pri. M.A. Per Side	Ratio Pri. to 1/2 Sec.	Mtg. Fig.	Dimensions		
						W	D	H
T-15D76	\$ 8.25	15	60	1:1, 1.2:1, 1.4:1, 1.6:1, 1.8:1	3H	4 1/4	4 1/2	4 1/2
T-15D77	8.25	15	60	2:1, 2.2:1, 2.4:1, 2.6:1, 2.8:1	3H	4 1/4	4 1/2	4 1/2
T-15D78	8.25	15	60	3:1, 3.2:1, 3.4:1, 3.6:1, 3.8:1	3H	4 1/4	4 1/2	4 1/2
T-15D79	8.25	15	60	4:1, 4.5:1, 5:1, 5.5:1, 6:1	3H	4 1/4	4 1/2	4 1/2
T-15D80	11.50	30	120	1:1, 1.25:1, 1.5:1, 1.75:1, 2:1	3H	4 1/4	4 1/2	0
T-15D81	11.50	30	120	2.25:1, 2.5:1, 2.75:1, 3:1, 3.25:1	3H	4 1/4	4 1/2	0

MULTI-VOLT PLATE TRANSFORMERS

These units, engineered for continuous operation, provide extreme flexibility, excellent regulation and quiet operation.

Type No.	List Price	Pri. Volts	D.C. Volts	M.A. Current	Mtg. Fig.
T-15P11	\$12.50	115 - 230	500 or 400	200	3K
T-15P12	15.00	115 - 230	650 or 500	200	3K
T-15P13	18.00	115 - 230	750 or 600	300	3J
T-15P14	22.50	115 - 230	1000 or 750	300	3J
T-15P15	26.00	115 - 230	1250 or 1000	300	3J
T-15P16	35.00	115 - 230	1250 or 1000	500	3J
T-15P17	30.00	115 - 230	1500 or 1250	300	3J
T-15P18	48.00	115 - 230	1750 or 1500	500	3J
T-15P19	40.00	115 - 230	2500 or 2000	300	3J
T-15P20	70.00	115 - 230	2500 or 2000	650	3J
T-15P21	62.50	115 - 230	3000 or 2500 2000 or 1500	500	3J
T-15P22	38.00	115 - 230	1750 or 1500 1250 or 1000	300	3J

MULTI-VOLT POWER TRANSFORMERS

Combination plate and filament transformers for tubes of medium power. (6L6, 807, T-20, RK-23, RK-39, etc.)

Type No.	List Price	Pri. Volts	Secondary A.C. Volts	Current	Mtg. Fig.
T-15R00	\$10.50	115	1000 Ct. 7.5 tap - 6.3 Ct. 5	150 M.A. 5 A. 3 A.	3K
T-15R01	15.00	115	1000 Ct. 6.3 Ct. 5	400 M.A. 6 A. 6 A.	3K
T-15R02	13.25	115	1500 Ct. 2.5 Ct. 7.5 tap - 6.3 Ct.	200 M.A. 10 A. 3 A.	3K
T-15R03	13.75	115	800 Ct. 2.5 Ct. 6.3 Ct. 5	200 M.A. 4 A. 5 A. 3 A.	3K

MULTI-VOLT BIAS TRANSFORMERS

Rectifier plate and filament terminals on recessed base. Six secondary taps are brought out to plug-in jacks for convenient change of voltage.

Type No.	List Price	Pri. Volts	D. C. Volts	M. A.	Filament		Mtg. Fig.
					Volts	Amps.	
T-15R60	\$ 9.50	115	150; 135; 120; 110; 100; 90	200	5	3	3N
T-15R61	10.50	115	275; 250; 225; 200; 175; 150	200	5	3	3N
T-15R62	12.50	115	500; 450; 400; 350; 300; 275	200	5	3	3N

INPUT AND SMOOTHING CHOKES

Companion units to the C. H. T. Multi-Volt Plate Transformers, these chokes are accurately rated and the inductance shown is obtained with full rated D. C. applied. Most commercial choke ratings are obtained by tests not comparable to operating values. Thordarson test methods give the ACTUAL inductance as obtained in filter circuits. Inputs are indicated by two inductance ratings.

Type No.	List Price	Inductance Henries	Current M.A.	Volts Insulation	D. C. Res.	Mtg. Fig.
T-15C16	\$ 6.00	5 - 25	200-20	4,000	105	3L
T-15C17	9.00	5 - 25	300-30	4,000	90	3L
T-15C18	12.00	5 - 25	400-30	4,000	100	3L
T-15C19	17.00	5 - 25	500-30	10,000	90	3L
T-15C41	20.00	5 - 25	650-50	10,000	70	3L
T-15C45	6.00	12	200	4,000	105	3L
T-15C46	9.00	12	300	4,000	90	3L
T-15C47	12.00	12	400	4,000	100	3L
T-15C48	17.00	12	500	10,000	90	3L
T-15C50	20.00	15	650	10,000	70	3L



3G



3H



3J



3N

THORDARSON TRANSFORMERS

MULTI-VOLT FILAMENT TRANSFORMERS

Thordarson Multi-Volt Filament Transformers represent a decided departure from generally accepted transformer construction practice. They incorporate a number of new and novel ideas that result in a saving of space and cost. The terminals are brought out to rugged solder lugs on a recessed base. This permits of mounting on chassis with one hole for lead wiring. Side knock-out holes for bread board wiring.

Type No.	List Price	Primary Volts	Secondary Volts	Amps.	Volts Insulation	Mtg. Fig.
T-11F50	\$ 6.00	105-115	7.5 tap at 6.3, 5* & 2.5 Ct	6.5	1600	3K
T-11F51	6.50	105-115	10 tap at 7.5 & 6.3 Ct	8	1600	3K
T-11F52	7.50	105-115	11 tap at 10 & 7.5 Ct	10	1600	3K

*Not center tapped.

Multiple Secondary Transformers						
Type No.	List Price	Primary Volts	Secondary Volts	Amps.	Volts Insulation	Mtg. Fig.
T-11F56	\$ 5.50	105-115	6.3, 2.5, 5 Ct.	3, 3.5, 3	1600	3K
T-11F57	11.75	105-115	10, 10, 6.3, 5 Ct	8, 4, 3, 3	1600	3K
T-11F58	9.50	105-115	7.5, 7.5, 6.3, 5 Ct.	6.5, 3.25, 3, 3	1600	3K

Single Secondary Transformers						
Type No.	List Price	Primary Volts	Secondary Volts	Amps.	Volts Insulation	Mtg. Fig.
T-11F53	\$ 5.25	105-115	2.5 Ct.	1	7,500	3K
T-11F54	10.60	105-115	5 Ct.	2	12,000	3K
T-11F55	8.75	105-115	5.25 Ct	2.2	1600	3K

AUDIO COUPLING TRANSFORMERS

Ultra modern design, balanced windings, hum bucking coil construction and moisture-proof compound-filled cases. Frequency response variation $\pm 1\frac{1}{2}$ db 60 to 8,000 C. P. S.

Low Impedance Source to Grid							
Type No.	List Price	Primary Ohms	Secondary Ohms	Mtg. Fig.	W	D	H
T-15A66	\$7.25	500, 333, 250 200, 125, 50	60,000/15,000 Single Grid	3M	3 1/4	2 1/4	3 1/2
T-15A67	8.00	500, 333, 250 200, 125, 50	120,000/30,000 P. P. Grids	3M	3 1/4	2 1/4	3 1/2
T-15A68	7.25	60, 38, 30, 22 15, 10, 5.5, 2.5	60,000/15,000 Single Grid	3M	3 1/4	2 1/4	3 1/2

Low Impedance Source to Line or Mixer							
Type No.	List Price	Primary Ohms	Secondary Ohms	Mtg. Fig.	W	D	H
T-15A69	\$6.25	500, 333, 250 200, 125, 50	500, 333, 250 200, 125, 50	3M	3 1/4	2 1/4	3 1/2
T-15A70	6.25	60, 38, 30, 22 15, 10, 5.5, 2.5	500, 333, 250 200, 125, 50	3M	3 1/4	2 1/4	3 1/2

Tube to Line (Low Level)							
Type No.	List Price	Primary Ohms	Secondary Ohms	Mtg. Fig.	W	D	H
T-15A71	\$7.25	20,000/5,000 Single Plate	500, 333, 250 200, 125, 50	3M	3 1/4	2 1/4	3 1/2
T-15A72	7.25	20,000/5,000 P. P. Plates	500, 333, 250 200, 125, 50	3M	3 1/4	2 1/4	3 1/2

Interstage Coupling Transformers (Class A)							
Type No.	List Price	Primary Ohms	Secondary Ohms	Mtg. Fig.	W	D	H
T-15A73	\$5.00	10,000/2,500 Single Plate	40,000/10,000 Single Grid	3M	3 1/4	2 1/4	3 3/8
T-15A74	5.75	10,000/2,500 Single Plate	40,000/10,000 P. P. Grids	3M	3 1/4	2 1/4	3 3/8
T-15A75	6.25	20,000/5,000 P. P. Plates	45,000/11,250 P. P. Grids	3M	3 1/4	2 1/4	3 1/4

TRU-FIDELITY AUDIO TRANSFORMERS

Crystal Microphone or Photo Cell to Line

Type No.	List	Pri. Ohms	Sec. Ohms	Max. D.C. per Side (M.A.)	Max. D.C. Unbalance (M.A.)	Max. Sigt. Level (db)	Mtg. Fig.
T-90A06	\$15.50	250,000/62,500	500*/333/250 200*/125/50	0	0	+10	3T

Plate to Line (Low Level)							
Type No.	List	Primary	Secondary	Max. D.C. per Side (M.A.)	Max. D.C. Unbalance (M.A.)	Max. Sigt. Level (db)	Mtg. Fig.
T-90A02	14.50	20,000/5000 Single or P-P Plates	500*/333/250 200*/125/50	8	8	+15	3T
T-90A01	14.50	20,000/5000 Single or P-P Plates	500*/333/250 200*/125/50	10	0	+20	3T

Mixer							
Type No.	List	Primary	Secondary	Max. D.C. per Side (M.A.)	Max. D.C. Unbalance (M.A.)	Max. Sigt. Level (db)	Mtg. Fig.
T-90A10	12.50	500*/333/250 200*/125/50	500*/333/250 200*/125/50	100	.5	+10	3T

Line to Grid							
Type No.	List	Primary	Secondary	Max. D.C. per Side (M.A.)	Max. D.C. Unbalance (M.A.)	Max. Sigt. Level (db)	Mtg. Fig.
T-90A00	14.50	500*/333/250 200*/125/50	75,000/18,750 Single Grid	100	.5	+10	3T
T-90A11	18.50	500*/333/250 200*/125/50	150,000/37,500 P-P Grids	100	.5	+20	3T

Interstage							
Type No.	List	Primary	Secondary	Max. D.C. per Side (M.A.)	Max. D.C. Unbalance (M.A.)	Max. Sigt. Level (db)	Mtg. Fig.
T-90A03	10.00	10,000/2500 Single Plate	Ratio-overall 1 to 2 40,000/10,000 Single Grid	0	0	+15	3T
T-90A04	11.50	10,000/2500 Single Plate	Ratio-overall 1 to 2 40,000/10,000 P-P Grids	0	0	+15	3T
T-90A05	12.50	20,000/5000 P-P Plates	Ratio-overall 1 to 1 1/2 45,000/11,250 P-P Grids	10	0	+20	3T

Output							
Type No.	List	Primary	Secondary	Max. D.C. per Side (M.A.)	Max. D.C. Unbalance (M.A.)	Max. Sigt. Level (db)	Mtg. Fig.
T-90S07	14.50	5000/3000/1250/750 P-P 2A3, etc	500*/333/250 200*/125/50	60	5	+32	3T
T-90S08	14.50	500J/3000/1250/750 P-P 2A3, etc.	15/10/7.5 5/3.75/1.25	60	5	+32	3T
T-90S13	20.00	5000/3000/1250/750 P-P 2A3, etc.	500*/333/250 or 200*/125/50	60	5	+34	38†

†High permeability cast case same as style 3T except without single hole swivel mounting.

Line to Voice Coil							
Type No.	List	Primary	Secondary	Max. D.C. per Side (M.A.)	Max. D.C. Unbalance (M.A.)	Max. Sigt. Level (db)	Mtg. Fig.
T-90S12	14.50	500*/333/250 200*/125/50	15/10/7.5 5/3.75/1.25	0	0	+32	3T

Plate Reactor							
Type No.	List	Connection	Henries	M.A.	D.C. Ohms	Fig.	
T-90C09	10.00	Series	300	8	4,000	3T	
		Parallel	75	16	1,000	3T	

*Indicates inductive and capacitive balance to center tap for use on balanced transmission lines.



3K



3L



3M



3T

THORDARSON TRANSFORMERS

LINE TO SPEAKER TRANSFORMERS

Type No.	List Price	Application	Pri.	Sec.	Mtg. Flg.	W.	D.	H.	Wt. Lbs.
T-53581	54.90	Line to Voice Coil	500/250	4-8-15	2D	2 1/8	3	3 1/4	3 1/2
T-60548	3.00	Line to Voice Coil 1 to 6 may be con. in par. to 500 ohm line	500/1000 1500/2000 2500/3000	Pri. as 500 ohm-05 to 8; pri. as 1000 ohm-12 to 16 etc.	2E	2 1/2	2	3	2
T-76574	3.00	Line to multiple spkr. (auto transformer)	500	500/250/168/125 100/84	2E	2 1/2	2	3	2 1/2

DRIVER TRANSFORMERS

The driver transformer is an important link in a Class AB or Class B amplifier system. The flow of current in the power tube grid circuit requires exceedingly good regulation of the driver tubes and coupling transformer. Thordarson driver transformers have the correct primary to secondary ratio for the tubes specified, insuring minimum driver distortion on the positive grid peaks. Full specifications are given in the table to facilitate selecting the proper driver transformer for other tube combinations.

Type No.	List Price	Driver Tubes	Output Tubes	Class	Ratio Pri. to 1/2 Sec.	Ohms Impedance		Pri. M.A.	Mtg. Fig.	Dimensions			Wt. Lbs.
						Pri.	1/2 Sec.			W.	D.	H.	
T-78D46	51.50	1-30	1-1J6G, 19 2-30	B	2.4:1	20,000	3,500	7	2B	1 1/2	1 1/2	2	1/2
T-54D63	2.50	1-30 1-49 1-6C5	1-1J6G, 19 H 2-6V6	B H AB2	2.4:1	20,000	3,500	7	2F	2	1 1/2	2 1/2	1 1/2
T-67D50	2.75	1-89 Triode	1-79	B	2:1	12,000	3,000	32	2F	2	2 1/2	2 1/2	1 1/2
T-67D89	3.25	1-89 Triode	2-79	B	3:1	12,000	1,330	32	2F	2 1/2	2 1/2	3	2 1/2
T-67D47	2.75	1-6N7, 6A6, 53	1-6N7, 6A6, 53	B	5.25:1	27,000	1,000	10	2F	2	2 1/2	2 1/2	1 1/2
T-81D52	3.50	1-6C5, 76 1-56	2-6F6 Triode 2-42, 2A5 Triode	AB AB	1.82:1 1.67:1	35,000 38,000	11,500 13,500	8	2F	2 1/2	2 1/2	3	2 1/2
T-84D59	3.50	2-6C5, 6N7 2-6A6, 53	2-6L6, 6V6 2-6N7, 6A6, 53	AB2 B	5:1	70,000	2,800	10	2F	2 1/2	2 1/2	3	2 1/2
T-72D61	3.75	2-6C5, 76, 36	2-45	AB	2.7:1	70,000	9,500	10	2F	2 1/2	2 1/2	3	2 1/2
T-74D32	3.50	2-6C5, 76, 36	2-6F6, 42, 2A5 4-2A3, 6B4G	AB2 AB	3:1	70,000	7,700	10	2F	2 1/2	2 1/2	3	2 1/2
T-65D78	4.00	1-6F6 Triode 1-42 Triode 1-2A5 Triode	2-6F6 Triode 2-42 Triode 2-2A5 Triode	AB2 AB2 AB2	2:1	25,000	6,250	40	2F	2 1/2	3	3 1/2	3 1/2
T-81D42	3.50	1-6F6 Triode 1-42 Triode 1-2A5 Triode	2-6F6 Triode 2-42 or 2-2A5 Pentode	AB2 AB2 AB2	1.7:1 1.5:1 1.3:1	10,000 10,000 10,000	3,300 4,500 5,800	31	2F	2 1/2	2 1/2	3	2 1/2
T-67D78	3.50	1-46, 59	2-46, 59	B	2.2:1	13,000	2,700	32	2F	2 1/2	2 1/2	3	2 1/2
T-52D88	3.75	2-59 P-P	4-46 4-59	B B	4:1	21,600	1,350	32	2A	2 1/2	2 1/2	3	2 1/2
T-66D98	5.25	2-46 P-P 2-59 P-P Triodes	4-46 4-59	B B	4:1	21,600	1,350	32	2R	2 1/2	4 1/2	3 1/2	4 1/2
T-83D83	3.75	2-45 P-P	2-250	AB2	1.6:1	8,000	3,140	40	2F	2 1/2	2 1/2	3	2 1/2
T-51D88	4.50	2-45 P-P	2-210, 801, 35T	B	2:1	25,000	6,250	40	2A	2 1/2	3	3 1/2	3 1/2
T-64D22	5.00	2-45, 2A3	2-800, 830B, etc.	B	1.55:1	8,000	3,300	40	2T	2 1/2	3 1/2	4 1/2	4 1/2
T-80D54	5.50	2-6F6 F-P Triodes 2-42 P-P Triodes	2-838 2-830 B, 800	B B	4:1	8,000	500	40	2G	3 1/2	3 1/2	4 1/2	5 1/2
T-83D86	3.75	2-2A3 P-P	4-250	AB2	1.47:1	5,000	2,300	40	2F	2 1/2	2 1/2	3	3 1/2
T-61D40	5.50	2-6L6 P-P 2-2A3 P-P	2-80T, 150T 2-203-A, 801	B B	1.67:1	5,000	1,785	130	2D	3 1/2	3 1/2	4	5
T-75D10	5.50	2-6L6 P-P 2-2A3 P-P	2-838 2-805, etc.	B B	3.2:1	5,000	500	130	2D	3 1/2	3 1/2	4	5

MODULATION TRANSFORMERS

This series of modulation transformers meets the need for efficient, quiet, long life units at reasonable costs. Engineered and constructed for specific tube types, their efficiency is high and the frequency characteristics are good.

Type No.	List Price	Tube Type	Class	Ohms Pri.	Impedance Sec.	Max. D.C. Sec. M.A.	Max. Audio Pwr. Watts	Mtg. Flg.	Dimensions			Wt. Lbs.
									W.	D.	H.	
T-67M69	52.75	1-19	B	10,000	2,700	50	10	2F	2	2	2 1/2	1 1/2
T-67M69	3.00	1-53	B	10,000	3,000	100	20	2F	2 1/2	2 1/2	3	2
T-64M70	10.00	2-6L6 2-35T 4-210	AB B B	3,800	2,500 5,000 7,500	250 200 150	75	2D	4 1/2	5 1/2	6 1/2	14 1/2
T-72M82	6.00	2-2A3	AB	5,000	3,000, 5,000	125	50	2D	4 1/2	4 1/2	5	5
T-64M26	6.00	2-46 or 59 2-250	B AB	5,800	5,000 10,000	100	40	2D	3 1/2	3 1/2	4	5
T-64M25	7.50	2-210	B	8,000	5,000, 10,000	200	40	2D	3 1/2	4 1/2	4 1/2	8
T-64M24	22.00	2-203-A 2-T-55	B B	8,000	2,500 10,000	400 200	300	2Q	5	8 1/2	7 1/2	30 1/2
T-76M84	15.00	2-801 2-210 2-35-T	B B B	10,000	4,500 6,250 12,500	200	150	2Q	5 1/2	8	6 1/2	20 1/2
T-75M11	22.00	2-838 2-T-55	B B	10,000	2,500 10,000	400 200	300	2Q	5 1/2	8 1/2	7 1/2	30
T-82M88	15.00	2-50-T	B	6,000	5,000 20,000	200 100	150	2Q	5 1/2	8	6 1/2	20 1/2
T-82M89	24.00	2-50-T	B	20,000	2,500 10,000	400 200	300	2Q	5 1/2	9 1/2	7 1/2	20 1/2
T-82M10	40.00	2-150-T	B	11,000	4,000 9,000	500 330	650	2Q	7 1/2	7 1/2	9 1/2	45
T-82M25	40.00	2-805-A 2-H1203-A 2-522	B B B	8,000	4,000 6,000 8,000	500	650	2K	8	6 1/2	8	48 1/2

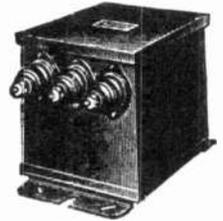
GRID MODULATION TRANSFORMERS

T-67M73	52.50	1-46 or 59	A	6,300	5,400	32	10	2D	2 1/2	2 1/2	3	2 1/2
T-67M74	4.50	P.P. 45-2A3	AB	5,000	5,000	60	20	2D	2 1/2	3	3 1/2	3 1/2

MODULATION TRANSFORMERS FOR MATCHING LINES TO R. F. LOADS

Primaries of these transformers may be connected directly to the 500 ohm output terminals of any amplifier or receiver. Type T-83M22 is equipped with a tap at 200 ohms for use with "Bretting 14" receivers.

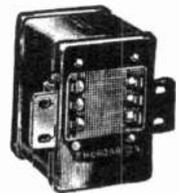
Type No.	List Price	Pri. Ohms	Secondary Ohms Load	Max. D.C. Sec. M.A.	Max. Watts	Mtg. Flg.	Dimensions			Wt. Lbs.
							W.	D.	H.	
T-73M82	54.00	800	5000-6000-7000-8000-9000-10000	215	80	2Q	5 1/2	8	8 1/2	21
T-83M22	6.00	500-200	5000-6000-7000-8000-9000-10000	150	30	2N	3 1/2	4 1/2	4 1/2	8



8Q



2N



2R



2T

U. T. C. TRANSFORMERS

LINEAR STANDARD

- High Permeability Cast Shield . . . maximum shielding from inductive pickup.
- True Hum Balancing Coil 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 subchassis wiring.
- Full Electrostatic Shielding Between Windings . . . brought out to separate terminal.

LOW IMPEDANCE TO GRID TRANSFORMERS

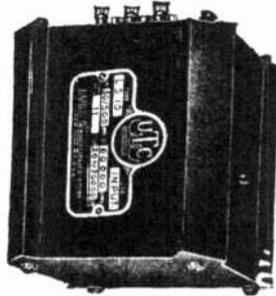
Type No.	Application	Primary Impedance	Secondary Impedance	Shielding and hum reduction	Case No. List Price	Your Cost
LS-10	Low impedance mike, pick-up, or multiple line to grid	50, 125, 200, 250, 333, 500 ohms	60,000 ohms in two sections	Dual Alloy shield—74DB	LS-1 15.00	\$9.00
LS-10X	As above	As above	50,000 ohms	Quadruple alloy shield—92DB	LS-1 20.00	\$12.00
LS-12	Low impedance mike, pick-up, or multiple line to push pull grids	50, 125, 200, 250, 333, 500 ohms	120,000 ohms overall, in two sections	Dual alloy shield—74DB	LS-1 20.00	\$12.00
LS-12X	As above	As above	80,000 ohms overall, in two sections	Quadruple alloy shield—92DB	LS-1 25.00	\$15.00
LS-14	Low impedance mike, pick-up, or parallel mixer to grid	2.5, 5.5, 10, 15, 22, 30, 38, 60 ohms	60,000 ohms in 2 sections	Dual alloy shield—74DB	LS-1 20.00	\$12.00
LS-14X	As above	As above	50,000 ohms	Quadruple alloy shield—92DB	LS-1 25.00	\$15.00
LS-15	Three isolated lines or pads to one or two grids	30, 50, 200, 250 ohms each primary	60,000 ohms overall, in two sections	Dual Alloy shield—74DB	LS-1 20.00	\$12.00
LS-15X	As above	As above	As above	Quadruple alloy shield—92DB	LS-1 25.00	\$15.00
LS-18	High level multiple line to push pull grids	50, 125, 200, 250, 333, 500 ohms	50,000 ohms overall, in two sections	Alloy casting—50DB	LS-2 22.00	\$13.20

MIXING TRANSFORMERS

Type No.	Application	Primary Impedance	Secondary Impedance	Shielding and hum reduction	Case No. List Price	Your Cost
LS-30	Mixing, low impedance mike, pick-up, or multiple line to multiple line	50, 125, 200, 250, 333, 500 ohms	50, 125, 200, 250, 333, 500 ohms	Dual alloy shield—74DB	LS-1 15.00	\$9.00
LS-30X	As above	As above	As above	Quadruple alloy shield—92DB	LS-1 20.00	\$12.00
LS-31	Three isolated lines or pads to multiple line	30, 50, 200, 250 ohms each primary	50, 125, 200, 250, 333, 500 ohms	Dual alloy shield—74DB	LS-1 20.00	\$12.00
LS-31X	As above	As above	As above	Quadruple alloy shield—92DB	LS-1 25.00	\$15.00
LS-32	Mixing, low impedance mike, pick-up, or parallel mixer to multiple line	2.5, 5.5, 10, 15, 22, 30, 38, 60 ohms	50, 125, 200, 250, 333, 500 ohms	Dual alloy shield—74DB	LS-1 20.00	\$12.00

INTERSTAGE AUDIO TRANSFORMERS

Type No.	Application	Primary Impedance	Secondary Impedance	Shielding and hum reduction	Case No. List Price	Your Cost
LS-20	Single plate to single grid	8,000 to 15,000 ohms	60,000 ohms; 2:1 turn ratio	Dual alloy shield—74DB	LS-1 10.00	\$6.00
LS-21	Single plate to push pull grids	8,000 to 15,000 ohms. Also for bridging 50 500 ohm line	135,000 ohms; turn ratio 1.5:1 each side. Primary and secondary each in two sections	Dual alloy shield—74DB	LS-1 13.00	\$7.80
LS-22	Push pull plates to push pull grids	8,000 to 15,000 ohms	38,000 ohms each secondary, turn ratio 1.8:1 each side of center. Primary and secondary each in two sections	Alloy casting—74DB	LS-2 22.00	\$13.20
LS-24	Single plate or multiple line to one or two grids	High impedance primary 8,000 to 15,000 ohms. Low impedance primary 50, 125, 200, 250, 333, 500 ohms	60,000 ohms; 2:1 turn ratio. Secondary impedance 60,000 ohms overall	Dual alloy shield—74DB	LS-1 20.00	\$12.00



TRANSFORMERS

- Multiple Coil, Semi-Toroidal Coil Structure . . . minimum distributed capacity and leakage reactance.
- Precision Winding . . . accuracy of windings .1%, perfect balance of inductance and capacity; exact impedance reflection.
- Hiperm-Alloy . . . a Stable high permeability nickel-iron core material.
- High Fidelity . . . UTC Linear Standard transformers are the only audio units with a guaranteed uniform response, from 30 to 30,000 cycles \pm 1 db.

OVERALL DIMENSIONS

- LS-1 1-15/16x2-7/16
- LS-2 2-11/16x3-11/16
- LS-3 4-3/16x5-1/32
- LS-4 5-3/4x5-3/4
- LS-5 7-1/4x7-1/4

Mtg. Dimensions

- | L | W | H |
|-------------|--------|---------|
| LS-1 2-9/16 | 3-3/16 | 3-11/16 |
| LS-2 3-1/2 | 4-3/8 | 4-5/8 |
| LS-3 5 | 5-3/4 | 5-3/16 |
| LS-4 6-7/16 | 6-7/16 | 5-3/8 |
| LS-5 8 | 8 | 6-1/2 |

PLATE, CRYSTAL, PHOTOCELL AND BRIDGING TO LINE TRANSFORMERS

Type No.	Application	Primary Impedance	Secondary Impedance	Shielding and hum reduction	Case No. List Price	Your Cost
LS-50	Single plate to multiple line	8,000 to 15,000 ohms	50, 125, 200, 250, 333, 500 ohms	Dual alloy shield—74DB	LS-1 15.00	\$9.00
LS-51	Push pull low level plates to multiple line	8,000 to 15,000 ohms each side	50, 125, 200, 250, 333, 500 ohms	Dual alloy shield—74DB	LS-1 15.00	\$9.00
LS-37	Crystal microphone or pick-up to multiple line	100,000 ohms	50, 125, 200, 250, 333, 500 ohms	Dual alloy shield—74DB	LS-1 15.00	\$9.00
LS-38	Crystal microphone or pick-up to multiple line, with internal equalizer	100,000 ohms	50, 125, 200, 250, 333, 500 ohms	Dual alloy shield—74DB	LS-1 20.00	\$12.00
LS-39	Photocell, high mu triode, diode or over-based detector to multiple line	100,000 ohms	50, 125, 200, 250, 333, 500 ohms	Dual alloy shield—74DB	LS-1 15.00	\$9.00
LS-150	Bridging transformer from 50 to 500 ohm line to multiple line	4,000 ohms, bridging	50, 125, 200, 250, 333, 500 ohms	Dual alloy shield—74DB	LS-1 15.00	\$9.00
LS-151	Bridging transformer from 50 to 500 ohm line in multiple line	16,000 ohms, bridging	50, 125, 200, 250, 333, 500 ohms	Dual alloy shield—74DB	LS-1 15.00	\$9.00

OUTPUT TRANSFORMERS TO HIGH IMPEDANCE (RF) LOAD

Type No.	Primary will match the following tubes	Primary Impedance	Secondary Impedance	Case No. List Price	Your Cost
LS-56	Push pull 2A3's, 6AS6's, 300A's, 275A's, 6A3's. +36DB	5,000 ohms plate to plate and 3,000 ohms plate to plate	6000, 5000, 4000, 1800, 1500, 1000, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-2 20.00	\$12.00
LS-845M	845 tubes Class AB +42DB	8,800 ohms plate to plate	5000, 3500, 2500, 2100, 1250, 600	LS-5 50.00	\$30.00
LS-66	Class B 203A, 838, ZB120, 805 +46DB	9,000 ohms plate to plate	5000, 3500, 2500, 2100, 1250, 600	LS-5 70.00	\$42.00
LS-67	Class B 203A, 838, ZB 120, 805 +46DB	9,000 ohms plate to plate	10000, 2500	LS-5 70.00	\$42.00
LS-69	Class B 849, 204A +52DB	10,500 ohms plate to plate	8000, 5000, 4000, 1800, 1500, 1000, 300.00	LS-6 200.00	\$120.00
LS-169	Push pull parallel 849's Class B or six push pull parallel 204A's +55DB	3,250 ohms plate to plate	5000, 4200, 3500, 1500, 1250, 830	LS-7 400.00	\$240.00

*Special oil filled casting

PLATE TRANSFORMERS

Type No.	Primary Voltage 50/60 Cycles	High Voltage	DC Current	List Price	Your Cost
LS-181	100, 110, 120, 220, 230, 240	1500-1250-0-1250-1900	200 MA	45.00	\$27.00
LS-182	100, 110, 120, 220, 230, 240	1500-1250-0-1250-1900	350 MA	60.00	\$36.00
LS-183	100, 110, 120, 220, 230, 240	1750-1500-0-1500-1750	400 MA	75.00	\$45.00
LS-184	100, 110, 120, 220, 230, 240	3300-3000-2500-0-2300-3000-3500	500 MA	110.00	\$66.00
LS-185	100, 110, 120, 220, 230, 240	3500-3000-2500-0-2500-3000-3500	1.2 amp.	250.00	\$150.00

U. T. C. TRANSFORMERS

COMBINED PLATE AND FILAMENT TRANSFORMERS

Type No.	Primary Voltage 50/60 cycles	High Voltage	Filament Windings	Case No. List Price	Your Cost
LS-180	110	225-0-225 15 MA	6.3 V.C.T.-2A 6.3 V.C.T.-5A	LS-1 10.00	\$6.00
LS-190	100, 105, 110, 115, 120, 125	350-300-0-300-350 125 MA	5 V.C.T.-3A 2.5 V.C.T.-6A 6.3 V.C.T.-4A	LS-3 18.00	\$10.80
LS-191	100, 105, 110, 115, 120, 125	325-250-0-250-325 35 MA	5 V.C.T.-3A 2.5 V.C.T.-2A 6.3 V.C.T.-2A	LS-2 15.00	\$9.00
LS-70	100, 105, 110, 115, 120, 125	425-375-0-375-425 200 MA	5 V.C.T.-3A 2.5 V.C.T.-3A 2.5 V.C.T.-10A 6.3 V.C.T.-1A 6.3 V.C.T.-3A	LS-4 25.00	\$15.00
LS-72	100, 105, 110, 115, 120, 125	525-450-0-450-525 250 MA 70-0-70 50 MA	5 V.C.T.-3A 2.5 V.C.T.-3A 2.5 V.C.T.-3A 6.3 V.C.T.-1A 6.3 V.C.T.-3A tapped at 5 V.C.T.-6A	LS-4 25.00	\$15.00
LS-73	100, 105, 110, 115, 120, 125	500-400-0-400-500 500 MA 70-0-70 50 MA	5 V.C.T.-6A 2.5 V.C.T.-10A 2.5 V.C.T.-3A 6.3 V.C.T.-4A 6.3 V.C.T.-6A tapped at 5 V.C.T.-6A	LS-5 35.00	\$21.00

HIGH LEVEL MATCHING TRANSFORMERS

Type No.	Application	Primary Impedance	Secondary	Case No. List Price	Your Cost
LS-33	High level line matching, 15 watts	50, 125, 200, 250, 333, 500 ohms	1.2, 2.5, 5, 7.5, 10, 15, 20, 30, 50, 125, 200, 250, 333, 500 ohms	LS-2 15.00	\$9.00
LS-34	High level line matching, 30 watts	50, 125, 200, 250, 333, 500 ohms	1.2, 2.5, 5, 7.5, 10, 15, 20, 30, 50, 125, 200, 250, 333, 500 ohms	LS-3 20.00	\$12.00

DRIVER TRANSFORMERS

Type No.	Application	Primary Impedance	Reflected Secondary Impedance	Case No. List Price	Your Cost
LS-5	Driver, multiple line no class B 8B's, 805's, ZB-120's, 203A's and similar tubes	50, 125, 200, 250, 333, 500 ohms	2,000 ohms, 1:2 overall turns ratio	LS-4 30.00	\$13.00
LS-6	Driver, push pull 45's, 59's, 2A3's, 6A5's, etc. to push pull 845 or 211D grids	800 to 2,000 ohms	1:1 primary impedance turns ratio 1:3 overall	LS-4 22.00	\$13.20
LS-7	Push pull 56, 6C5 or similar plates to A prime 45's, 42's, 6F6's, 2A's	8,000 to 15,000 ohms	45 primary impedance turn ratio 1:5 overall	LS-2 22.00	\$13.20
LS-47X	Driver from push pull: 2A3's, 6A5G's, or 300A's to Class B 8B's, 263A's, 805's, or ZB120's	800 to 1,000 ohms	1 pri. imped- ance turns ratio, Pri 1/4 Sec. 3:1	LS-2 22.00	\$13.20
LS-48	Driver transformer push pull 845's to 204 or 849 grids in class B	1,000 to 2,000 ohms	0.38 pri. imped- ance turns ratio, Pri 1/4 Sec. 5:1	LS-2 35.00	\$21.00
LS-49	Push pull parallel 2A3 6A5G, or 300A tubes to four 834, 203A, 805, or ZB120 tube.	800 to 2,000 ohms	0.28 pri. imped- ance turns ratio, Pri 1/4 Sec. 6:0	LS-2 30.00	\$18.00

FILAMENT TRANSFORMERS

Type No.	Application	Primary Voltage 50/60 Cycles	Secondary Voltage	Insulation Voltage	Case No. List Price	Your Cost
LS-80	866A rectifiers	100, 110, 120, 220, 230, 240	2.5 V.C.T.-10A	12,000	LS-3 15.00	\$9.00
LS-82	872 rectifiers	100, 110, 120, 220, 230, 240	5 V.C.T.-20A	12,000	LS-3 15.00	\$12.00
LS-84	203A, 845, etc. HF200, HF300	100, 110, 120, 220, 230, 240	10 V.C.T.-8A	12,000	LS-3 15.00	\$9.00
LS-85	Combined filament transformer for 866 rectifier, and 845 or 203A audio tubes	100, 110, 120, 220, 230, 240	2.5 V.C.T.-10A 10 V.C.T.-8A	10,000	LS-3 25.00	\$15.00
LS-88	6.3 volt tubes	105, 115, 125	6.3 V.C.T.-2A	2,500	LS-1 7.50	\$4.50
LS-87A	7.5 volt tubes	105, 115, 125	7.5 V.C.T.-2A	2,500	LS-1 7.50	\$4.50
LS-118	849, 204A, HF300	100, 110, 120, 220, 230, 240	11 V.C.T.-10A	2,500	LS-3 20.00	\$12.00
LS-120	866 bridge rectifier	100, 110, 120, 220, 230, 240	2.5 V.C.F.-10A 2.5 V.C.T.-5A 2.5 V.C.T.-5A	12,000	LS-3 25.00	\$15.00
LS-121	872 bridge rectifier	100, 110, 120, 220, 230, 240	5 V.C.T.-20A 5 V.C.T.-10A 5 V.C.T.-10A	12,000	LS-4 35.00	\$21.00
LS-83	872A, 575 or 869 rectifiers	100, 110, 120, 220, 230, 240	5 V.C.T.-20A	35,000	Spec. 40.00	\$24.00
LS-89A	Three 809 rectifiers	100, 110, 120, 220, 230, 240	5 V.C.T.-60A	35,000	Spec. 50.00	\$30.00

OUTPUT TRANSFORMERS TO LINE AND VOICE COIL

Type No.	Primary will match fol- lowing tubes	Primary Impedance	Secondary Impedance	Case No. List Price	Your Cost
LS-52	Push pull 2A5, 250, 6V6, 42 or 2A5 A prime	8,000 ohms	500, 333, 250, 200, 125, 50, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-1 20.00	\$12.00
LS-54	Same as above	8,000 ohms	30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-1 14.00	\$8.40
LS-55	Push pull 2A3's, 6A5G's, 300A's, 275A's, 6A3's	5,000 ohms plate to plate and 3,000 ohms plate to plate	500, 333, 250, 200, 125, 50, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-2 20.00	\$12.00
LS-57	Same as above	5,000 ohms plate to plate and 3,000 ohms plate to plate	30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-2 14.00	\$8.40
LS-58	Push pull parallel 2A3's, 6A5G's, 300A's, 6A3's	2,800 ohms plate to plate and 1,500 ohms plate to plate	500, 333, 250, 200, 125, 50, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-4 30.00	\$18.00
LS-61	Push pull 6B5, 6A6, 33, 6P6, 71A, 59, 79, 89, Class B66, 59's	10,000 ohms plate to plate and 6,000 ohms plate to plate	500, 333, 250, 200, 125, 50, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-2 20.00	\$12.00
LS-63	Same as above	10,000 ohms plate to plate and 6,000 ohms plate to plate	30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-2 14.00	\$8.40
LS-64	Push pull 845's Class A	18,000 ohms plate to plate	500, 333, 250, 200, 125, 50, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-4 35.00	\$21.00
LS-2451	Push pull 45's A prime, class B 46's, 59's, 48's, 25L6's	6,000 ohms plate to plate and 3,500 ohms plate to plate	500, 333, 250, 200, 125, 50, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-2 20.00	\$12.00
LS-6L1	Push pull 6L6's self bias, incorporates tertiary winding for stabilized feedback	6,600 ohms plate to plate	500, 333, 250, 200, 125, 50, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-3 30.00	\$18.00
LS-6L3	Same as above	6,600 ohms plate to plate	30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-3 20.00	\$12.00
LS-6L4	Push pull 6L6's fixed bias or push pull parallel 6L6's self bias with tertiary winding for stabilized feedback	3,800 ohms plate to plate and 3,300 ohms plate to plate	500, 333, 250, 200, 125, 50, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-4 35.00	\$21.00
LS-845	845 tubes class AB	6,800 ohms plate to plate	500, 333, 250, 200, 125, 50, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-5 50.00	\$30.00



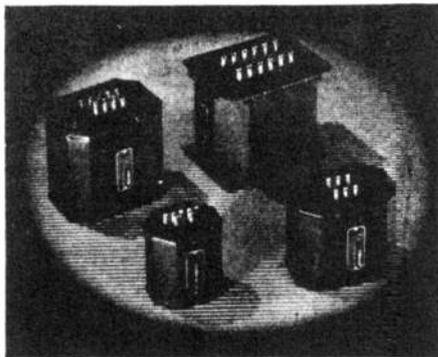
ULTRA COMPACT AUDIO UNITS

Ultra compact audio units weigh only 5 1/2 ounces and have overall dimensions of 1 7/16" x 1 7/16" x 1 15/16". Mounting dimensions are 1 1/8" between centers.

Type No.	Application	Primary Impedance	Secondary Impedance	List Price	Your Cost
A-20	Mixing, low impedance mike, pickup, or multiple line to multiple line	50, 125, 200, 250, 333, 500 ohms	50, 125, 200, 250, 333, 500 ohms	10.00	\$6.00
A-24	Single plate to multiple line	8,000 to 15,000 ohms	50, 125, 200, 250, 333, 500 ohms	10.00	\$6.00
A-26	Push pull low level plates to multiple line	8,000 to 15,000 ohms each side	50, 125, 200, 250, 333, 500 ohms	10.00	\$6.00
A-27	Crystal microphone to multiple line	100,000 ohms	50, 125, 200, 250, 333, 500 ohms	10.00	\$6.00
A-30	Audio choke, 300 henrys @ 2 MA 6000 ohms D.C., 75 henrys @ 4 MA 1500 ohms D.C., inductance with no D.C.			7.00	\$4.20

Type No.	Application	Primary Impedance	Secondary Impedance	List Price	Your Cost
A-10	Low impedance mike, pickup, or multiple line to grid	50, 125, 200, 250, 333, 500 ohms	50,000 ohms	10.00	\$6.00
A-12	Low impedance mike, pickup, or multiple line to push pull grids	50, 125, 2500, 250, 333, 500 ohms	80,000 ohms overall, in two sections	10.00	\$6.00
A-14	Dynamic microphone to one or two grids	30 ohms	50,000 ohms overall, in two sections	9.00	\$5.40
A-16	Single plate to single grid	8,000 to 15,000 ohms	60,000 ohms, 2:1 turn ratio	8.00	\$4.80
A-18	Single plate to two grids	8,000 to 15,000 ohms	80,000 ohms overall, 2.3:1 turn ratio over- all	9.00	\$5.40

U. T. C. TRANSFORMERS



MOUNTING DIMENSIONS

	(With Flange)	(Without Flange)
PA-1	1-15/16 x 2-7/16	PA-1 1-13/16
PA-2	2-7/16 x 3-7/16	PA-2 1-5/8 x 3-1/16
PA-3	3-1/16 x 4-5/16	PA-3 1-13/16 x 3-7/8

OVERALL DIMENSIONS

	L	W	H
PA-1	2 1/2	3	3
PA-2	3-1/6	4 1/2	4 1/2
PA-3	3 5/8	4 7/8	4 3/4

CLASS A OUTPUT TRANSFORMERS

PA-140 From a triode plate like 864, 27, 112A, 55, 30 to 500, 200 or 50 ohms. List Price \$6.50.

Your Cost \$3.90

PA-141 From push pull triode plates like 864's, 27's, 112A's, 30's to 500, 200 or 50 ohms. List Price \$7.50.

Your Cost \$4.50

POWER AND FILAMENT TRANSFORMERS

PA-21 Plate transformer for single 45, 47, 59 or class B 79 tubes. Primary 115 V. A.C. 60 cycles. Secondaries: 300-0-300 at 75 M.A.; 2 1/2 V.C.T. 3 A., 6.3 V.C.T. 2.5 A., 2 1/2 V.C.T. 6A. PA-3. List Price \$8.00.

Your Cost \$4.80

PA-22 Plate transformer for push pull 45, 59, 47, 2A3 tubes, or class B 53's. Pri. 115 V. A.C. 60 cycles. Secondaries: 400-0-400 at 125 MA.; 2 1/2 V.C.T. 5 A., 2 1/2 V.C.T. 10 A., 5 V.C.T. 3 A. PA-3. List Price \$10.00.

Your Cost \$6.00

PA-425 Plate transformer for parallel push pull 45A prime tubes. Pri. 115 V. A.C. 60 cycles. Secondaries 400-0-400 at 200 M.A.; 2 1/2 V.C.T. 6A.; 2 1/2 V. C. T. 10A, 5V.C.T. 3A., 6.3 V.C.T. 3A. PA-3. List Price \$12.50.

Your Cost \$7.50

PA-426 Plate transformer for class B 6A6 and A prime 42 tubes. Pri. 115 V.A.C. 60 cycles. Secondaries 400-0-400 at 125 MA.; 2 1/2 V.C.T. 6 A. 6.3 V.C.T. 4 A. 5 V.C.T. 3 A. PA-3. List Price \$10.00.

Your Cost \$6.00

PA-428 Power transformer for push pull 6L6 tubes self or fixed bias primary 115 V. A.C., 60 cycles. Secondaries 450-0-450 at 250 MA.; 6.3 V.C.T.-4A, 6.3 V.C.T.-3A also tapped for 2 1/2 V.-3A; 2 1/2 V.C.T.-3A; 5 V.C.T.-3A. Taps on high voltage winding for bias supply rectifier. PA-4 List Price \$14.00.

Your Cost \$8.40

PA-431 Plate and filament supply for 4-6L6's in fixed bias. Pri. 115, 50/60 cy. Secondaries: 500-425-0-425-500 at 500 MA. fixed bias winding for 6L6's, 5V.-6A; 5V.-3A; 6.3 V.C.T.-5A; 6.3 V.C.T.-3A; PA-5. List Price \$22.50. **Your Cost** \$13.50

CLASS A AND CLASS B OUTPUTS

PA-14 For 4-25L6's in push pull parallel 10-0 ohms plate to plate. Secondary 500, 200, 16, 8, 5, 3, 1 1/2 ohms. PA-2. List Price \$7.00. **Your Cost** \$4.20

PA-15 8000 ohms plate to plate for class A, in push pull: 250's, 245's, 43's, single: 211, 843, 842, 205D, 47, to 500, 200, 16, 8, 5, 3, 1.5 ohms. PA-2 case. List Price \$7.00.

Your Cost \$4.20

PA-16 5000 ohms plate to plate or 3000 ohms plate to plate, for 5000 ohms in push pull; self bias 2A3's, W.E. 275A's; single: 59 triode or 71A; for 3000 ohms in push pull: fixed bias 2A3's, single W.E. 52A, to 500, 200, 16, 8, 5, 3, 1.5 ohms. PA-2 case. List Price \$7.00. **Your Cost** \$4.20

PA-19 10,000 ohms plate to plate or 6000 ohms plate to plate, for 10,000 ohms, class A push pull 59 triodes, 71A's, 61B5's, single 210, 41, 208A, 2A3. Class B push pull 49's, 53's, 79's, 89's; for 6000 ohms, class A push pull 52A's, single 31, 46, 59 pentode. Class B push pull 46's, 59's, to 500, 200, 16, 8, 5, 3, 1.5 ohms. PA-2 case. List Price \$7.00.

Your Cost \$4.20

PA-710 20,000 ohms plate to plate or 14,000 ohms plate to plate, for 20,000 ohms, push pull 210's; for 14,000 ohms, push pull 47's, 2A5's, 42's used as pentodes, to 500, 200, 16, 8, 5, 3, 1.5 ohms. PA-2 case. List Price \$7.00. **Your Cost** \$4.20

PA-245 6000 ohms plate to plate and 3500 ohms plate to plate, for 6000 ohms, class A prime 45's self bias. Class B 46's and 59's, Class A W.E. 252A's; for 3500 ohms, class A prime 45's fixed bias, to 500, 200, 16, 8, 5, 3, 1.5 ohms. PA-2 case. List Price \$7.00.

Your Cost \$4.20

PA-445 3000 ohms plate to plate and 1750 ohms plate to plate, for 3000 ohms four 45's in push pull parallel A prime self bias. Four W.E. 252A's in push pull parallel class A. Four 46's or 59's in push pull parallel class B; for 1750 ohms, four 45's in push pull parallel A prime fixed bias, to 500, 200, 16, 8, 5, 3, 1.5 ohms. PA-3 case. List Price \$12.50. **Your Cost** \$7.50

***PA-2L6** 6600 ohms plate to plate for push pull 6L6's self bias, 35-40 watts output, to 500, 200, 16, 8, 5, 3, 1.5 ohms. PA-3 case. List Price \$10.00. **Your Cost** \$6.00

***PA-4L6** 3800 and 3300 ohms plate to plate, for 3800 ohms, two 6L6's fixed bias, 60 watts output; for 3300 ohms, four 6L6's self bias, 60-80 watts output, to 500, 200, 16, 8, 5, 3, 1.5 ohms. PA-4 case. List Price \$15.00. **Your Cost** \$9.00

*These transformers incorporate the new UTS Feedback Winding, which reduces harmonic distortion, increases available power and reduces resistance tremendously. No resistors or condensers are necessary.

PLATE TRANSFORMERS

Primary 105, 115, 220, 230 Volts A. C. 50-60 Cycles

PA-110 515 or 625 each side of center at 300 M.A. 400 V.D.C. or 500 V.D.C. PA 3, List Price \$10.00. **Your Cost** \$6.00

PA-111 750 or 950 each side of center at 350 M.A., D.C. voltage 600 or 750. PA-4. List Price \$17.00. **Your Cost** \$10.20

PA-112 1250 or 1500 each side of center at 500 M.A.; D.C. voltage 1050 or 1250. PA-6. List Price \$32.00.

Your Cost \$19.20

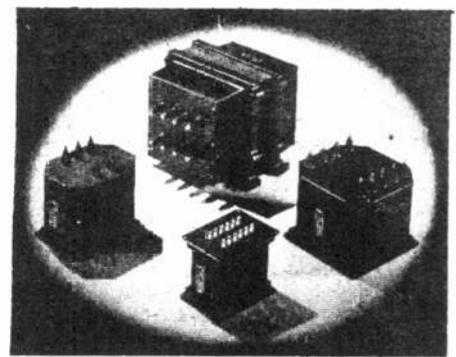
PA-113 1750 or 2100 each side of center at 500 M.A.; D.C. voltage 1500 or 1750. PA-6. List Price \$43.50.

Your Cost \$26.10

PA-114 1750, 2350, 3000 or 3500 each side of center at 500 M.A.; D.C. voltage 1500, 2000, 2500 or 3000, UTS mtg. List Price \$76.00. **Your Cost** \$45.60

PA-154 3500, 4000 each side of center at 500 M.A.; 3050 V.D.C. or 3500 V.D.C. UTS Case. List Price \$100.00.

Your Cost \$60.00



Mounting Dimensions

PA-1	1-15/16x2-7/16
PA-2	2-7/16x3-7/8
PA-3	3-1/16x4-5/16
PA-4	3 1/2 x 5-7/32
PA-5	4 1/2 x 5 1/8
PA-6	7x7

Overall Dimensions

	L	W	H
PA-1	2 1/2	3	3
PA-2	3-1/16	4 1/2	3
PA-3	3 5/8	4 7/8	4 1/2
PA-4	6	4 1/2	4 3/4
PA-5	7	5 1/8	5 1/2
PA-6	7 1/4	7 1/4	7 1/2

PA-155 1250 or 1500 each side of center at 750 M.A.; D.C. voltage 1050 or 1250 U.T.S. case. List Price \$50.00.

Your Cost \$30.00

PA-115 C bias plate transformer for class B 203A's, 830 B's, 800's, or 210's using one or two 82 rectifiers. PA-3, List Price \$10.00.

Your Cost \$6.00

PA-116 1250 or 1500 each side of center at 300 M.A.; D.C. voltage 1050 or 1250. PA-5, List Price \$23.00.

Your Cost \$13.80

PA-117 500 or 3000 each side of center at 1 amp. 200 V.D.C. or 3050 V.D.C. UTS case, List Price \$115.00.

Your Cost \$69.00

PA-118 1750 or 2400 each side of center at 325 M.A.; D.C. voltage 1500 or 2000, PA 6 mtg. List Price \$35.00 **Your Cost** \$21.00

PA-119 1500 or 1750 each side of center at 1 amp. D.C. voltage 1250 or 1500. UTS case, List Price \$76.00. **Your Cost** \$45.60

Note: Operating the above transformers on 115 volt line the D.C. output voltage can be reduced to half of normal value, for reduced power operation, by switching to the 220 volt tap.

CLASS B INPUT SWINGING CHOKES

PA-101 Swinging action 5 to 25 henrys, current range 15 to 150 M.A., ohmic resistance 115. PA-2 case. List Price \$5.00.

Your Cost \$3.00

PA-103 Swinging action 5 to 25 henrys, current range 20 to 200 M.A., ohmic resistance 110. PA-3 case. List Price \$8.00.

Your Cost \$4.80

PA-105 Swinging action 6 to 30 henrys, current range 25 to 250 M.A., ohmic resistance 90. PA-4 case. List Price \$12.00.

Your Cost \$7.20

PA-109 Swinging action 5 to 25 henrys, current range 75 to 500 M.A., ohmic resistance 60. PA-5 case. List Price \$20.00.

Your Cost \$12.00

PA-1C Swinging action 5 to 25 henrys, current range 100 to 1000 M.A. ohmic resistance 50 UTS case. List Price \$35.00.

Your Cost \$21.00

U. T. C. TRANSFORMERS

TRAP RESONANT SMOOTHING CHOKES

Smoothing Chokes Have an Off Center Tap for Hum Bucking Arrangements

- PA-100 Inductance 8 henrys, D.C. output 150 M.A., ohmic resistance 115. PA-2 case. List Price \$5.00 **Your Cost**\$3.00
- PA-102 Inductance 10 henrys, D.C. output 200 M.A., ohmic resistance 110. PA-3 case. List Price \$8.00 **Your Cost**\$4.80
- PA-104 Inductance 12 henrys, D.C. output 250 M.A., ohmic resistance 90. PA 4 case. List Price \$12.00 **Your Cost**\$7.20
- PA-108 Inductance 10 henrys, D.C. output 500 M.A., ohmic resistance 60. PA 5 case. List Price \$20.00 **Your Cost**\$12.00
- PA-15 Inductance 10 henrys, D.C. output 1000 M.A., ohmic resistance 50. UTS case. List Price \$35.00. **Your Cost**\$21.00

FILAMENT TRANSFORMERS

Types PA-34 to PA-127 Tapped at 105-115, 220, 230 Volts A.C., 50-60 Cycles

- PA-34 2 1/2 V.C.T. 10 amps, for 2 800's-5000 V. insulation. PA-2. List Price \$7.50. **Your Cost**\$4.50
- PA-120 2 1/2 V.C.T. 10 amps, for 2 800's-10,000 V. insulation. PA-3. List price \$9.00. **Your Cost**\$5.40
- PA-121 5 V.C.T. 10 amps, for 2-872's-10,000 V. insulation PA-3. List Price \$14.00. **Your Cost**\$8.40
- PA-122 7 1/2 V.C.T. at 6.5 amps, for 2-800's, RK-18's, 825's, 10's, 5000 Volt insulation. PA-3. List Price \$11.00. **Your Cost**\$6.60
- PA-124 10 V.C.T. 7 amps, for 2-203 A's, 242 A's, 211's, 845's, 852's, 860's, 217 C's, 10,000 V. insulation. PA 3. List Price \$12.00. **Your Cost**\$7.20
- PA-126 2-14 V.C.T. 12.5 amp. windings tapped at 11 or 10 volts, 5000 V. insulation for 04 A's, 49's, HF-200's, HF-300's or F100 A's. PA-4. List Price \$20.00. **Your Cost**\$12.00
- PA-128 5 V.C.T. 12 amps, for 3-35T's, 2-50T's or 1-150 T. 7000 V. insulation PA-3. List Price \$10.00. **Your Cost**\$6.00
- PA-29 Secondaries, 2 1/2 V.C.T. 5 A., 2 1/2 V.C.T. 5 A., 5 V. C. T. 3 A. PA-2. List Price \$6.25. **Your Cost**\$3.75
- PA-30 Secondaries, 2 1/2 V.C.T. 5 A., 7 1/2 V.C.T. 2.5 A., 7 1/2 V.C.T. 2.5 A., PA-2. List Price \$6.75. **Your Cost**\$4.05
- PA-31 Secondaries, 2 1/2 V.C.T. 5 A., 5 V.C.T. 3 A., 7 1/2 V.C.T. 2 1/2 A. PA-2. List Price \$6.75. **Your Cost**\$4.05
- PA-32 Secondaries, 5 V.C.T. 3 A., 5 V.C.T. 3 A., 5 V.C.T. 3 A. PA-2. List Price \$6.75. **Your Cost**\$4.05
- PA-33X Secondaries, 5 V.C.T. 3 A., C.T. 2 1/2 A., 6.3 V.C.T. 3 A., 6.3 V.C.T. 3 A. PA-2. List Price \$6.75. **Your Cost**\$4.05

Note: Types PA-29, 30, 31, 32, 33 are insulated for 2000 volts. Primaries designed only for 115 volts A.C., 50-60 cycles.

VARIPOWER AUTOFORMERS

These units are designed to serve three functions, namely, to effect reduced power for transmitter operation, to take care of line voltage variations from 95 to 130 volts, and to permit minor voltage variation from other transformers.

- VA-1 150 watt output rating. List Price \$6.00. **Your Cost**\$3.60
- VA-2 250 watt output rating. List Price \$7.50. **Your Cost**\$4.50
- VA-3 500 watt output rating. List Price \$10.00. **Your Cost**\$6.00
- VA-4 1000 watt output rating. List Price \$15.00. **Your Cost**\$9.00
- VA-5 2000 watt output rating. List Price \$20.00. **Your Cost**\$12.00



Flaming chromium plate Welded cases! Vacuum treated and humidity proof. Transformers fully clamped internally. All outputs with a variety of impedances! Trim professional units all physically symmetrical and with uniform mounting arrangements.

Seven Chromshield Cases

Type	L	W	H	Mounting Dimen.
C-1	3	1 1/2	1-11/16	2-7/16
C-2	3 1/4	1 3/4	2-1/16	2-7/8
C-3	3 1/4	2	2 1/4	2-3/4
C-4	4 1/2	2 1/8	2 3/4	3-1/8
C-5	5	2 3/4	3 3/8	3-15/16x4 1/2
C-6	6	3 1/4	4 1/4	1 1/2x5 3/4
C-7	4 1/2	4 5/8	4 1/2	3-7/16x4-3/16

CLASS A INPUT TRANSFORMERS

- CS-1 1 plate to 1 grid, 3 1/2:1 ratio, C-2 mtg. List Price \$2.35. **Your Cost**\$1.41
 - CS-2 1 plate to 2 grids, spl1 secondary, 2:1 ratio, C-2 mtg List Price \$2.50. **Your Cost**\$1.50
 - CS-3 Push pull plates to push pull grids 1.8:1 ratio, C-3 mtg. List Price \$2.75. **Your Cost**\$1.65
 - CS-4 Low or high impedance pickup to grid. Pri. 500, 1000, 2000 ohms. C-2 mtg. List Price \$3.00. **Your Cost**\$1.80
 - CS-5 Single or double button mike to 1 grid, C-2 mtg. List Price \$2.50. **Your Cost**\$1.50
 - CS-6 Single or double button mike to 2 grids, C-2 mtg. List Price \$3.00. **Your Cost**\$1.80
 - CS-10 Single plate and carbon mike to one or two grids, C-2 mtg. List Price \$3.50. **Your Cost**\$2.10
 - CS-2W Single plate to push pull grids. Wide range response, 1:1 ratio, C-3 mtg. List Price \$3.50. **Your Cost**\$2.10
- The new chromshield VARI-MATCH modulation transformer incorporates a modified VARI-MATCH coil structure making possible universal matching from all the popular modulator tubes to a 5,000 or 3,500 ohm rf load. It will handle 20 watts of audio
- CS-R designed for class A, AB and B tubes like the 45, 50, 2A3, 42, 59, 4b, 47, 2A5, 6F6, 6V6, 6B5, 6A6, 53, 79 and similar tubes to an rf load of 5000 and 3500 ohms. C-4 case. List Price \$3.50. **Your Cost**\$2.10
 - CS-L will match same tubes as above but to a 500, 15, 8, 4 or 2 ohm line. C-4 case. List Price \$3.75. **Your Cost**\$2.25
 - CS-V will match same tubes as CS-R but to a 15, 8, 4 and 2 ohm line. C-4 Case. List Price \$3.25. **Your Cost**\$1.95

MATCHING TRANSFORMERS

- CS-9 Mixing carbon mike, 500 or 200 ohm line. C-3 mtg. List Price \$3.50. **Your Cost**\$2.10
- CS-26 Single 26, 56, 27, 55, 77, 6C5 triode or 864 plate to 500 or 200 ohms. C-2 mtg. List Price \$3.00. **Your Cost**\$1.80
- CS-27 Push pull 26, 56, 27, 55, 77, 6C5 triodes or 864 plates to 500 to 200 ohms. C-3 mtg. List Price \$3.50. **Your Cost**\$2.10
- CS-28 Line to speaker matching transformer. input 4000 ohms and 500 ohms. Output 15, 8, 4, and 2 ohms. Will handle up to 15 watts. C-4 mtg. List Price \$4.50. **Your Cost**\$2.70

A PRIME AND CLASS B INPUT TRANSFORMERS

- CS-29 Driver plate to 53, 6A6, 49, 79 or 89 grids, C-4 mtg. List Price \$2.75. **Your Cost**\$1.65
- CS-30 Driver 46 or 59 plate to 46 or 59 grids. C-4 mtg. List Price \$2.75. **Your Cost**\$1.65
- CS-291 Single 2A3, 45, 42, 2A5, 6F6, 6D5 triode plate to push pull A prime 2A3, 45, 42, 2A5, 6F6, 6D5 grids. C-3 mtg. List Price \$3.75. **Your Cost**\$2.25
- CS-292 Push pull 53 or 6A6 triode plates to two or four class B 53 or 6A6 grids. C-3 mtg. List Price \$3.25. **Your Cost**\$1.95
- CS-293 Push pull triode 50, 37, 57, 77, 6C6, 6C5 plates to two or four A prime 45, 2A3, 42, 2A5, 6F6, 6D5, 6L6 grids. C-3 mtg. List Price \$3.50. **Your Cost**\$2.10
- CS-456 Push pull self bias 6L6's AB to 500, 15, 8, 4, 2 ohms. C-5 mtg. List Price \$7.50. **Your Cost**\$4.50
- CS-457 Push pull fixed bias or four self biased 6L6's, AB to 500, 15, 8, 4, 2 ohms. List Price \$10.00. **Your Cost**\$6.00

HUMIDITY PROOF CHROMSHIELD TRANSCEIVER AUDIO UNITS

All Chromshield Transceiver Units Fit in the C-1 Case

- CS-101 Interstage audio 4:1 ratio. List Price \$1.95. **Your Cost**\$1.17
- CS-102 Single plate to 2 grids, 2 1/2:1 ratio. List Price \$2.00. **Your Cost**\$1.20
- CS-103 Single or double button mike to 1 grid. List Price \$2.00. **Your Cost**\$1.20
- CS-104 Single plate and carbon mike to 1 grid. List Price \$2.25. **Your Cost**\$1.35
- CS-105 Velocity mike to 50 to 200 ohms. List Price \$2.25. **Your Cost**\$1.35
- CS-106 Single 56, 6C6, 6C5, 864 plate to 500 or 200 ohms. List Price \$2.25. **Your Cost**\$1.35
- CS-107 Driver plate to 19, 49, 79, 89 grids List Price \$2.25. **Your Cost**\$1.35
- CS-108 Class B 9, 49, 79, 89 plates to 5000 or 3500 ohms. List Price \$2.75. **Your Cost**\$1.65

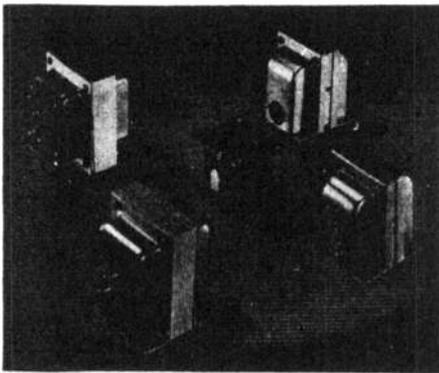
FILTER AND AUDIO CHOKES, FILAMENT TRANSFORMERS

- CS-37 Filter choke, 25 henrys 30 M.A., resistance 900 ohms, C-2 mtg. List Price \$2.00. **Your Cost**\$1.20
- CS-38 Filter choke, 15 henrys 60 M.A., resistance 240 ohms, C-2 mtg. List Price \$2.00. **Your Cost**\$1.20
- CS-39 Filter choke, 20 henrys 90 M.A., resistance 400 ohms, C-4 mtg. List Price \$2.50. **Your Cost**\$1.50
- CS-40 Filter choke, 30 henrys 75 M.A., resistance 350 ohms, C-4 mtg. List Price \$3.00. **Your Cost**\$1.80
- CS-41 Filter choke, 10 henrys 75 M.A., 95 ohms, C-4 mtg. List Price \$3.00. **Your Cost**\$1.80
- CS-42 Class B input choke, Max. D.C. 175 M.A.; C-4 mtg. List Price \$3.00. **Your Cost**\$1.80
- CS-43 Center tapped audio choke for push pull triode plates. Resistance 12,000 ohms. C-3 mtg. List Price \$3.50. **Your Cost**\$2.10
- CS-44 Detector plate shunt choke, Max. D.C. 3 M.A.; C-2 n.tg. List Price \$2.25. **Your Cost**\$1.35
- CS-45 Pri. 115 A.C. Sec. 2 1/2 V.C.T. 6 A. C-2 mtg. List Price \$1.75. **Your Cost**\$1.05
- CS-46 Pri. 115 A.C. Sec. 6.3 V.C.T. 3A. C-2 mtg. List Price \$2.25. **Your Cost**\$1.35
- CS-47 Pri. 115 A.C. Sec. 2 1/2 V.C.T. 12 A. C-3 mtg. List Price \$2.25. **Your Cost**\$1.35
- CS-48 Pri. 115 A.C. Sec. 5 V. 4 A. C-3 mtg. List Price \$2.25. **Your Cost**\$1.35
- CS-49 Pri. 115 A.C. Sec. 7 1/2 V.C.T. 3 A. C-3 mtg. List Price \$2.25. **Your Cost**\$1.35

U. T. C. TRANSFORMERS

PLATE TRANSFORMERS

- CS-200 450 each side of center at 150 MA.; 5V-3A; 2½ V-10A. CV mtg. L 5½ x W 3¼ x H 4½. Mtg. Dim. 3½ x 2½. List Price \$6.50. **Your Cost**\$3.90
- CS-201 500 each side of center at 200 MA.; 2½ V.C.T. 14 A; 5 V.C.T. 3 A; CD mtg. L 5 x W 3¼ x H 4½. Mtg. Dim. 2½ x 3. List Price \$8.00. **Your Cost**\$4.80
- CS-202 600 each side of center at 200 MA.; 2½ V-10A; 7½ V-3A; 5V-3A. CD mtg. L 6 x W 3¼ x H 4½. Mtg. Dim. 2½ x 3. List Price \$10.00. **Your Cost**\$6.00
- CS-203 800 each side of center at 150 MA.; 600 V. D.C. CD mtg. L 4½ x W 3¼ x H 4½. Mtg. Dim. 2½ x 2½. List Price \$7.50. **Your Cost**\$4.50
- CS-204 800 each side of center at 250 MA.; 650 V. D.C. CD mtg. L 6 x W 3¼ x H 4½. Mtg. Dim. 3¼ x 2½. List Price \$11.00. **Your Cost**\$6.60



FILAMENT TRANSFORMERS

- CS-401 2½ V.C.T. 20 A; 5 V.C.T. 3 A; 7½ V.C.T. 6½ A. 2500 V. insulation. L 5 x W 3¼ x H 4½. Mtg. Dim. 2½ x 2½. List Price \$8.50. **Your Cost**\$5.10
- CS-402 10 V.C.T. 6½ A; 10 V.C.T. 6½ A; 7½ V.C.T. 2½ A; 2½ V.C.T. 5A; 2500 V. insulation. CD mtg. L 6 x W 3¼ x H 4½. Mtg. Dim. 3¼ x 2½. List Price \$11.50. **Your Cost**\$6.90
- CS-403 11 V.C.T. tapped at 12 and 14 volts at 10 A. 5000 V. insulation. CD mtg. L 5½ x W 3¼ x H 4½. Mtg. Dim. 2½ x 3. List Price \$8.50. **Your Cost**\$5.10
- CS-404 2½ V.C.T. 12 A; 5000 V. insulation; 10 V.C.T. 6½ A. CD mtg. L 4½ x W 3¼ x H 4½. Mtg. Dim. 2½ x 2½. List Price \$8.00. **Your Cost**\$4.80
- CS-405 5-5¼ V.C.T. 20-22 A; 7000 V. insulation. CD mtg. L 5½ x W 3¼ x H 4½. Mtg. Dim. 2½ x 3. List Price \$7.50. **Your Cost**\$4.50

- CS-406 5 V.C.T. 20 A; 10,000 V. insulation. CD mtg. L 5½ x W 3¼ x H 4½. Mtg. Dim. 2½ x 3. List Price \$10.00. **Your Cost**\$6.00
- CS-407 2½ V.C.T. 12 A; 7000 V. insulation. CV mtg. L 4½ x W 3¼ x H 4½. Mtg. Dim. 2½ x 2½. List Price \$4.50. **Your Cost**\$2.70
- CS-408 7½ V.C.T. 6½ A.; 5000 V. insulation. CV mtg. L 4 x W 3¼ x H 4½. Mtg. Dim. 2½ x 2½. List Price \$4.50. **Your Cost**\$2.70
- CS-409 10 V.C.T. 6½ A.; 5000 V. insulation. CV mtg. L 4 x W 3¼ x H 4½. Mtg. Dim. 2½ x 2½. List Price \$5.00. **Your Cost**\$3.00
- CS-410 5 V.C.T. 3 A; 5 V.C.T. 3 A; 5 V.C.T. 6 A; 5000 V. insulation. CV mtg. L 4 x W 3¼ x H 4½. Mtg. Dim. 2½ x 2½. List Price \$5.00. **Your Cost**\$3.00
- CS-411 2½ V.C.T. 6 A; 2½ V.C.T. 6 A; 2½ V.C.T. 12 A; 10,000 V. insulation. CD mtg. L 6 x W 3¼ x H 4½. Mtg. Dim. 3¼ x 2½. List Price \$10.00. **Your Cost**\$6.00
- CS-412 6.3 V.C.T. 5 A; 5 V.C.T. 8 A. CV mtg. L 4½ x W 3¼ x H 4½. Mtg. Dim. 2½ x 2½. List Price \$5.00. **Your Cost**\$3.00
- CS-413 5-5¼ V.C.T. 12 Amps. for 3-35 T's, 2-50 T's or 1-150 T. CV mtg. L 4 x W 3¼ x H 4½. Mtg. Dim. 2½ x 2½. List Price \$5.00. **Your Cost**\$3.00
- CS-414 7½ V.C.T. 23 Amps. for 2-300 T's. CD mtg. L 6½ x W 3¼ x H 4½. Mtg. Dim. 3¼ x 3. List Price \$8.50. **Your Cost**\$5.10
- CS-415 11 V.C.T. tapped at 10 volts at 8 A. 7000 V. insulation. CV mtg. L 4½ x W 3¼ x H 4½. Mtg. Dim. 2½ x 2½. List Price \$6.50. **Your Cost**\$3.90
- CS-130 Chromshield Exciter lamp transformer primary tapped for 105, 115, 125 volts, 50-60 cycles. Secondary 8½ and 10 volts at from 4 to 8 amps. L 5 x W 3¼ x H 4½. Mtg. Dim. 2½ x 2½. List Price \$5.00. **Your Cost**\$3.00

SMOOTHING CHOKES

- CS-301 12 henry, 200 MA.; D.C. resistance 140 ohms. CV mtg. L 4 x W 3¼ x H 4½. Mtg. Dim. 2½ x 2½. List Price \$5.00. **Your Cost**\$3.00
- CS-302 12 henry, 300 MA.; D.C. resistance 105 ohms. CD mtg. L 4½ x W 3¼ x H 4½. Mtg. Dim. 2½ x 3. List Price \$7.50. **Your Cost**\$4.50
- CS-303 12 henry, 500 MA.; D.C. resistance 70 ohms. CD mtg. L 6 x W 3¼ x H 4½. Mtg. Dim. 4½ x 3. List Price \$13.00. **Your Cost**\$7.80

INPUT SWINGING CHOKES

- CS-304 5/25 henry, 200 MA; D.C. resistance 140 ohms. CV mtg. L 4 x W 3¼ x H 4½. Mtg. Dim. 2½ x 2½. List Price \$5.00. **Your Cost**\$3.00
- CS-305 5/25 henry, 300 MA; D.C. resistance 105 ohms. CD mtg. L 4½ x W 3¼ x H 4½. Mtg. Dim. 2½ x 3. List Price \$7.50. **Your Cost**\$4.50
- CS-306 5/25 henry, 500 MA.; D.C. resistance 70 ohms. CD mtg. L 6 x W 3¼ x H 4½. Mtg. Dim. 4½ x 3. List Price \$13.00. **Your Cost**\$7.80

VARITONE

The UTC Varitone is a revolutionary audio device which permits full control of the frequency response of any audio amplifier or receiver. Using this device, tone correction can be effected for defects in acoustic conditions or overall audio response. It is also possible to produce new tonal effects from phonograph recordings or radio reception and to bring back notes which would otherwise be lost completely. Due to the high equalization obtainable with the Varitone, some loss in gain is effected.

VT-1 This Varitone is incorporated with a universal audio transformer. Two primaries are provided. One is suitable for working from a single or double button microphone a low impedance pickup, or a line; the other primary is designed to work out of the plate of a tube or from a high impedance pickup. The secondary winding is center-tapped and is equally suitable for working into one or two grids, List Price \$8.50.

VT-2 This VT-2 is a varitone control unit, incorporated with an impedance matching device so that it can be connected directly across a 200 or 500 ohm line, or low impedance pickup or mike, or in shunt with the plate circuit of any triode or a high impedance pickup. The circuit is not changed in any other way. The VT-2 is solely an addition for tone correction. The original audio circuits are not disturbed. List Price \$6.00.

VT-3 The VT-3 is a complete self-contained unit which does not use external control. The components are adjusted so that 10 db. equalization is effected at 80 and 7000 cycles. This unit is connected directly from plate to B plus of first audio triode. No other alteration is made. List Price \$5.00.

VT-4 The VT4 is a complete self-contained wired unit including a variable control so arranged that with the control at one end high fidelity performance is effected by the increase of low and high frequencies, and with the control at the other end the high response is reduced to diminish static, line noises, and heterodyne whistles. The unit is connected directly from plate to B plus of first audio triode. This unit is designed to work in the plate circuit of low impedance tubes such as 01A, 12A, 30, 31, 26, 27, 37, 55, 56, 85, 262A, 864, 57 triode, 6C6 triode, 77 triode, etc. List Price \$6.00. **Your Cost**\$3.60

VT-5 The VT-5 is similar to the VT-4 except that it is designed to work out of high impedance tubes such as all screen grid tubes, all pentodes, 2A6, 40, 75, other hi mu triodes, etc. List Price \$6.00. **Your Cost**\$3.60

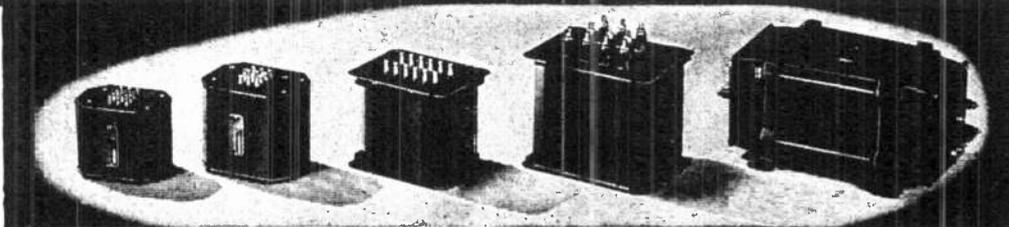
The standard VARITRAN units are designed for 115 volts, 50 to 60 cycle primary, and have a continuously variable output voltage from zero to 110 volts. The secondary rating is at 115 volts. The current at lower voltages cannot be increased. In other words, the 570 watt VARITRAN is designed to control the voltage to any load which draws a maximum of 5 amps at 115 volts.

VARITRAN CONTROL UNITS

- Model V-1, 570 Watts—5 amp. maximum rating, complete with cord, plug and switch, net\$10.00
- Model V-2, same as V-1, but uncased, with terminal strip for rack or panel mounting, net\$9.00
- Model V-3, 850 watts maximum rating, 7.5 amps, uncased, with terminal board and provisions for mounting, net\$14.00
- Model V-4, 1250 watts—11 amps. maximum rating, uncased, net\$20.00
- Model V-5, 2000 watts maximum rating, 17.5 amps, uncased, net\$32.00



U. T. C. TRANSFORMERS



VARIMATCH MODULATION TRANSFORMERS

VM-0 Will handle any power tubes to modulate a 10 to 25 watt Class C stage. PA-1. List Price \$3.00. **Your Cost \$3.00**

VM-1 Will handle any power tubes to modulate a 20 to 60 watt Class C stage. Maximum audio output 30 watts. List Price \$8.00. **Your Cost \$4.80**

VM-2 Will handle any power tubes to modulate a 40 to 120 watt Class C stage. Maximum audio output 60 watts. List Price \$12.50. **Your Cost \$7.50**

VM-3 Will handle any power tubes to modulate a 100 to 250 watt Class C stage. Maximum audio output 125 watts. List Price \$30.00. **Your Cost \$12.00**

VM-4 Will handle any power tubes to modulate a 200 to 600 watt Class C stage. Maximum audio output 300 watts. List Price \$32.50. **Your Cost \$19.50**

VM-5 Will handle any power tubes to modulate a 450 watt to 1 KW plus. Class C. Maximum audio output 600 watts. List Price \$70.00. **Your Cost \$42.00**

The secondaries of all Varimatch transformers are designed to carry the Class C plate current.

VARIMATCH INPUT TRANSFORMERS

PA-50AX Single 53, 56, 6C5, 6C6 triode, 6A6 to Class B 53, 6A6 or 6E6 grids or single 89 to Class B 89 grids. PA-1. List Price \$5.50. **Your Cost \$3.30**

PA-51AX Single 46 or 6L6 to Class B 46 or 59 grids. Single 45, 59, 2A3 or 6L6 to Class B 46 or 59 grids. Single 49 to Class B 49 grids. Single 37, 76, 6C6 or 6C5 triode to Class B 19 or 79 grids. Single 30 to Class B 19 or 79 grids. Single 89 to Class B 19 or 79 grids. Single 2A5, 42, 45 triode plate to A prime 45's, 2A5's or 42's. PA-1. List Price \$5.50. **Your Cost \$3.30**

PA-52AX Push pull, 45, 59, 2A3 or 6L6 plates to 2-46 Class B grids. Push pull 43, 59, 2A3 or 6L6 plates to 4-46 or 59 Class B grids. Push pull 2A3's to 2-841 Class B grids. PA-2. List Price \$6.50. **Your Cost \$3.90**

PA-53AX Push pull 42, 45, 50, 59, 2A3 or 6L6 plates to two 210, 801, RK-18, 35T or 800 Class B grids. Push pull 2A3 plates to two R38, 203A, 50T, 35T, 211A, 3A2A, 830B, 800, RK-18, 801 or 210 Class B grids. PA-2. List Price \$7.50. **Your Cost \$4.50**

PA-59AX 500, 200 or 50 ohm line to two 805, R38, 203A, 830 B, 800, RK-18, 801 or 210 Class B grids. PA-2. List Price \$7.50. **Your Cost \$4.50**

PA-238AX Push pull parallel 2A3, 45, 50, 59 or 6L6 to four 805, R38, or 203A Class B grids. Push pull parallel 2A3, 45, 50, 59, 6L6 or two 211A, 845 plates to Class B 204A, HF-300 or 849 grids. Push pull parallel 2A3, 45, 50 or two 50T, 211A, 845 plates to Class B 150T or HF-200 Class B grids. PA-3. List Price \$17.50. **Your Cost \$10.50**

PA-512 500, 200 or 50 ohm line to two 150T, HF-300, HF-200, 204A or 849 Class B grids. PA-3. List Price \$20.00. **Your Cost \$12.00**

PA VARIMATCH TRANSFORMERS

PVM-1 For all audio tubes up to 12 watts audio. Output 500, 200, 16, 8, 5, 3, 1½ ohms. Some typical tubes single or push pull: 29, 31, 33, 41, 42, 43, 45, 47, 48, 49, 53, 59, 71A,

79, 89, 2A3, 2A5, 6A6, 6F6, 6V6, 25A6, 25L6, PA-1. List price \$5.00.

Your Cost \$3.00

PVM-2 For all audio tubes up to 30 watts audio. Output 500, 200, 16, 8, 5, 3, 1½ ohms. Some typical tubes for single, push pull, or push pull parallel: 19, 31, 33, 41, 42, 43, 45, 46, 47, 48, 49, 50, 52A, 300A, 53, 59, 71A, 79, 89, 841, 843, 1602, 2A3, 2A5, 6A6, 6F6, 6L6, 6V6, 25A6, 25L6. PA-2. List Price \$8.00. **Your Cost \$4.80**

PVM-3 For all audio tubes up to 60 watts audio. Output 500, 200, 16, 8, 5, 3, 1½ ohms. Some typical tubes in push pull parallel: 42's, 45's, 46's, 50's, 52's, 300A's, 59's, 2A3's, 2A5's, 6F6's. In push pull self or fixed bias: 6L6's, 10's, 807's, 801's. PA-3. List Price \$12.50. **Your Cost \$7.50**

PVM-4 For all audio tubes up to 125 watts audio. Output 500, 200, 16, 8, 5, 3, 1½ ohms. Some typical tubes push pull parallel: 6L6's, 10's, 807's, 801's, push pull 845's, 800's. etc. PA-4. List Price \$20.00. **Your Cost \$12.00**

PVM-5 For all audio tubes up to 300 watts audio. Output 500, 200, 16, 8, 5, 3, 1½ ohms. Typical tubes: 211, 3A2A, 203A, 830B, 852, 838, 4-800's, 4-845's, ZB 120, etc. PA6. List Price \$32.50. **Your Cost \$19.50**

LINE VARIMATCH TRANSFORMERS

The UTC Line Varimatch Units will match any voice coil or group of voice coils to a 500 ohm line. Impedance range is from .2 to 75 ohms in 20 combinations. UTC Line Varimatch Autoformers will match one to ten 500 ohm lines or LVNC 500 ohm windings to the 500 ohm output of an audio amplifier.

LVM-1 15 Watt Line Varimatch unit. 500 ohms to a variable voice coil winding .2 to 75 ohms. PA-1 case. List Price \$4.50. **Your Cost \$2.70**

LVM-2 40 Watt Line Varimatch unit. 500 ohms to voice coil winding of .2 to 75 ohms. PA-2 case. List Price \$7.00. **Your Cost \$4.20**

LVM-3 75 Watt Line Varimatch unit. 500 ohms to voice coil winding of .2 to 25 ohms. PA-3 case. List Price \$10.00. **Your Cost \$6.00**

LVM-10 Line Varimatch Autoformer. 500, 250, 167, 125, 100, 83, 71, 62, 50 ohms. 15 Watts. PA-1 case. List Price \$4.50. **Your Cost \$2.70**

LVM-11 Line Varimatch Autoformer. 500, 250, 167, 125, 100, 83, 71, 62, 50 ohms. 30 Watts. PA-2 case. List Price \$7.00. **Your Cost \$4.20**

LVM-12 Line Varimatch Autoformer. 500, 250, 167, 125, 100, 83, 71, 62, 50 ohms. 60 Watts. PA-3 case. List Price \$10.00. **Your Cost \$6.00**

LVM-13 Line Varimatch Autoformer. 500, 250, 167, 125, 100, 83, 71, 62, 50 ohms. 125 Watts. PA-4 case. List Price \$18.00. **Your Cost \$10.80**

LVM-14 Line Varimatch Autoformer. 500, 250, 167, 125, 100, 83, 71, 62, 50 ohms. 300 Watts. PA-5 case. List Price \$25.00. **Your Cost \$15.00**

INPUT TRANSFORMERS CLASS A

PA-131 Transformer from 1 plate to grid. 3:1 ratio. PA-1. List Price \$4.50. **Your Cost \$2.70**

PA-132 From 1 plate to 2 grids. 2:1 ratio each side. Split sec. PA-1. List Price \$5.00. **Your Cost \$3.00**

PA-133 From 2 plates to 2 grids. 1:75 ratio each side. Primary and secondary each in two sections. PA-1. List Price \$6.00. **Your Cost \$3.60**

PA-233 From two 56, 6C6 triode, 6C5, or similar tubes to push pull 45's, 2A3's or 6L6's self or fixed bias. PA-1. List Price \$6.00. **Your Cost \$3.60**

PA-333 This input transformer is designed to operate from 6C5's, or similar driver tubes to two 6L6's fixed bias. PA-1. List Price \$5.00. **Your Cost \$3.60**

PA-433 From 45 or 2A3 plates to two or four fixed bias 6L6 grids. PA-2. List Price \$6.50. **Your Cost \$3.90**

PA-134 500, 200, or 50 ohm line to single grid. PA-1. List Price \$6.50. **Your Cost \$3.90**

PA-135 500, 200, or 50 ohm line to push pull grids. PA-1. List Price \$7.50. **Your Cost \$4.50**

PA-136 Single plate or pickup and carbon mike or low impedance pickup to one or two grids. PA-1. List Price \$7.50. **Your Cost \$4.50**

MIXING, MATCHING TRANSFORMERS

PA-137 Mixing 500, 200, or 50 ohm line to 500, 200 or 50 ohm line. PA-1. List Price \$5.50. **Your Cost \$3.30**

PA-138 Audio line matching. Will handle 20 watts audio power. Input 500 or 200 ohm line. Output 16, 8, 5, 3 and 1.5 ohms. PA-2. List Price \$7.50. **Your Cost \$4.50**

PA-139 Audio line matching. Will handle 50 watts audio power. Input 500 or 200 ohm line. Output 16, 8, 5, 3, 1.5 ohms. PA-3. List Price \$12.50. **Your Cost \$7.50**

REACTORS

PA-40 Filter choke. 12 henrys. Max. D.C. 200 MA. Resistance 110 ohms. PA-2. List Price \$4.50. **Your Cost \$2.70**

PA-41 Class B input filter choke for 46, 53, and 59 tubes. Max. D.C. 200 MA. Resistance 100 ohms. PA-2. List Price \$4.50. **Your Cost \$2.70**

PA-43 Filter choke. 15 henrys. Max. D.C. 165 MA. Resistance 375 ohms. PA-2. List Price \$4.50. **Your Cost \$2.70**

PA-44 Filter choke. 30 henrys. Max. D.C. 100 MA. Resistance 375 ohms. PA-2. List Price \$4.00. **Your Cost \$2.40**

PA-45 Parallel feed audio choke, 250 henrys. Max D.C. 15 MA. Resistance 4500 ohms. PA-1. List Price \$4.50. **Your Cost \$2.70**

PA-48C High inductance filter choke 100 hys, maximum D.C. 50 MA., resistance 2500 ohms. PA-1. List Price \$4.50. **Your Cost \$2.70**

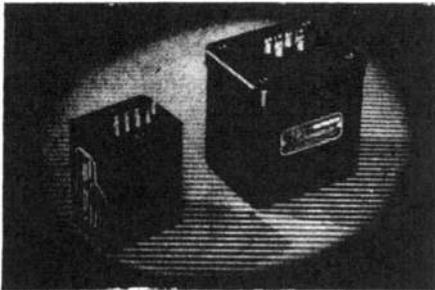
PA-35 Cathode ray transformer for 906 tube. Pri. 115-50/60 cy. Sec. 1000 volts A.C. at 15 MA.; 80 volts A. C. at 20 MA. for sweep circuit. 2½ V.C.T. at 3A. 5V-3A. PA-2. List Price \$8.00. **Your Cost \$4.80**

PA-913 Cathode ray transformer for 913 tube. Pri. 115-50/60 cy. Sec. 950 V.C.T. at 10 MA. 63 volts at 1.2 A. 2½ volts at 1.5 A. 3 volts at 3 A. PA-2. List Price \$4.00. **Your Cost \$2.40**

PA-430 Low voltage high current power transformer. Pri. 115 V.-50/60 cy. Secondaries 165-100-0-100-165 at 250 MA. 5 V.-3A. 6.3 V.C.T. at 2A. PA-2. List Price \$6.00. **Your Cost \$3.60**

U. T. C. TRANSFORMERS

HIPERM ALLOY TRANSFORMERS

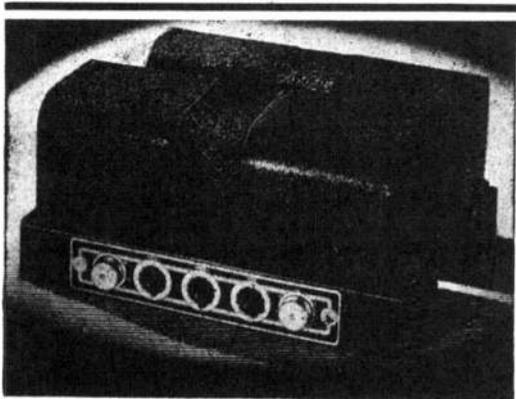


MOUNTING DIMENSIONS H1 1 3/8
H2 1-11/16 x 2 3/4

OVERALL DIMENSIONS H1 Case 1 7/8 x 2 3/8 x 3
H2 Case 2 3/8 x 3 x 3 3/4

LOW IMPEDANCE TO GRID AND MIXING TRANSFORMERS

Type No.	Application	Primary Impedance	Secondary Impedance	Case No. List Price	Your Cost
HA-100	Low impedance mike, pickup, or multiple line to grid	50, 125, 200, 250, 333, 500 ohms	60,000 ohms in two sections	H-1 12.50	\$7.50
HA-100X	Same as above but with tri-alloy internal shield to effect very low hum pickup.			H-1 17.50	\$10.50
HA-101	Low impedance mike, pickup, or multiple line to push-pull grids	50, 125, 200, 250, 333, 500 ohms	120,000 ohms overall, in two sections	H-1 15.00	\$9.00
HA-101X	Same as above but with tri-alloy internal shield to effect very low hum pickup.			H-1 20.00	\$12.00
HA-103A	Low impedance mike, pickup, or parallel mixer to grid	2.5, 5.5, 10, 15, 22, 30, 38, 60 ohms	60,000 ohms in two sections	H-1 15.00	\$9.00
HA-108	Mixing, low impedance mike, pickup, or multiple line	50, 125, 200, 250, 333, 500 ohms	50, 125, 200, 250, 333, 500 ohms	H-1 12.50	\$7.50
HA-108X	Same as above but with tri-alloy internal shield to effect very low hum pickup.			H-1 17.50	\$10.50
HA-130X	Three isolated lines or pads to one or two grids with tri-alloy internal shield	30, 50, 200, 250 ohms each primary	60,000 ohms overall, in two sections	H-1 20.00	\$12.00



PAK-1M



PAK-5M

INTERSTAGE AUDIO TRANSFORMERS

Type No.	Application	Primary Impedance	Secondary Impedance	Case No. List Price	Your Cost
HA-105	Single plate to single grid	8,000 to 15,000 ohms	60,000 ohms 2:1 turn ratio	H-1 9.00	\$5.40
HA-106	Single plate to push pull grids	8,000 to 15,000 ohms	135,000 ohms 1.5:1 ratio, each side	H-1 11.00	\$6.60
HA-107	Push pull plates to push pull grids	8,000 to 15,000 ohms	35,000 ohms each secondary 1.5:1 turn ratio overall	H-2 15.00	\$9.00

POWER TRANSFORMERS

Type No.	Primary Voltage 50/60 cycles	High Voltage	Filament Windings	Case No. List Price	Your Cost
HP-122	115	220-0-220 15 MA	6.3 V.C.T.-5A 6.3 V.C.T.-1.2A	H-2 10.00	\$6.00
HP-123	115	275-0-275 35 MA	6.3 V.C.T.-5A 6.3 V.C.T.-2A	H-3 15.00	\$9.00

PLATE, CRYSTAL AND PHOTOCELL TO LINE TRANSFORMERS

Type No.	Application	Primary Impedance	Secondary Impedance	Case No. List Price	Your Cost
HA-III	Crystal microphone or pickup, to multiple line	100,000 ohms	50, 125, 200, 250, 333, 500 ohms	H-1 12.50	\$7.50
HA-III-E	Crystal microphone or pickup, to multiple line, with internal equalizer	100,000 ohms	50, 125, 200, 250, 333, 500 ohms	H-4 17.50	\$10.50
HA-II-2	Photocell, high- μ triode, diode or overbiased detector to multiple line	100,000 ohms	50, 125, 200, 250, 333, 500 ohms	H-1 12.50	\$7.50
HA-II-3	Single plate to multiple line	8,000 to 15,000 ohms	50, 125, 200, 250, 333, 500 ohms	H-1 12.50	\$7.50
HA-II-4	Push pull low level plates to multiple line	8,000 to 15,000 ohms	50, 125, 200, 250, 333, 500 ohms	H-1 12.50	\$7.50

FILTER AND AUDIO CHOKES

Type No.	Inductance	DC Current	DC Resistance	Case No. List Price	Your Cost
HC-115	Series-400 hy Parallel-100 hy	2.5 MA 5 MA	7000 ohms 1750 ohms	H-1 8.50	\$5.10
HC-116	Series-600 hy Parallel-150 hy	8 MA 16 MA	4000 ohms 1000 ohms	H-2 15.00	\$9.00
HC-117	60 hy	15 MA	3000 ohms	H-1 8.50	\$5.10
HC-127	60 hy	40 MA	1000 ohms	H-2 15.00	\$9.00

BEAM POWER AMPLIFIERS

PAK-1M Self bias 35 watt output. Audio and power on separate chassis for rack or cabinet mounting. High impedance input 110 to 120 DB gain. Provision for immediate switchover to 95 DB gain with connections either for triode plate or 500-200 ohm input line. Output transformer impedances 500, 200, 16, 8, 5, 3, 1.5 ohms. Includes all components and accessories such as resistors, condensers, sockets, calibration plates, etched mixer panel, controls and accessories for a dual gain, two position high impedance mixer, chassis, dust covers with handles, hardware—except tubes—all fully mounted. List Price \$80.00.

Your Cost \$48.00

PAK-2XM Same as PAK-2M but has VARI-MATCH modulation output. Impedances on 3800 ohms plate to plate 380, 660, 2050, 3740, 4100, 7000, 7500, 8200, 12,000, 15,000, 16400, 21500, 29800. On 4000 ohm plate to plate 237, 1300, 1750, 2700, 3270, 5200. List Price \$85.00 **Your Cost** \$51.00
Tubes required for PAK-1M and PAK-2M kits are 1-6J7, 3-6C5's, 2-6L6's, 1-83.

PAK-3M Uses 4-6L6's—70 watts self bias—100 watts fixed bias, total gain 110 DB. High impedance input. Separate chassis for power and audio for rack or cabinet mounting. Tubes are 1-6J7, 1-6C5, 2-6AS6's, 4-6L6's, 3-83's, 1-80. Output transformer impedances 500, 200, 16, 8, 5, 3, 1.5 ohms. Includes all accessories such as resistors, condensers, sockets, calibration plates, etched mixer panel, controls and accessories for a dual gain, two position high impedance mixer, chassis, dust covers, handles, hardware—except tubes—all fully mounted. List Price \$130.00. **Your Cost** \$78.00

PAK-5M 15 watt compact power amplifier. Uses two 6V6 Beam Power tubes. Power supply and audio amplifier on one chassis 6 x 9 x 17 inches. Tubes are 6J7, 6C5, 2-6V6's—120 DB gain. High impedance input, 500, 200, 16, 8, 5, 3, 1 1/2 ohms output. Kit includes all accessories and pre-wired resistor-condenser strip, mixer panel, controls and accessories for a dual gain, two position mixer and VARI-TONE equalizer control, less tubes. List Price \$55.00. **Your Cost** \$33.00

AMERTRAN TRANSFORMERS

STANDARD DE LUXE TRANSFORMERS

Identified as Types D and DA, these transformers are designed to meet all usual requirements in the construction of high fidelity amplifiers. With a frequency range of 30 to 12,000 cycles and response uniform within ± 1 dB, they are of distinctly higher quality than any standard transformer previously available.



De Luxe Mixing Audio Transformers

Type	Application	Prim. Imped.	Sec. Imped.	List Price
D-51B	Carbon mike, low-imped. pick-up or line to adj. line	500/125 200/50	500/125 200/50	\$14.00
D-66CB	Dynamic mike or 200-ohm mixer to adj. line	67/17 30/7½	500/125 200/50	18.00
D-67CB	Velocity ribbon mike to adj. line	0.2/0.05	500/125 200/50	18.00

De Luxe Line-to-Grid Audio Transformers

Type	Application	Prim. Imped.	Sec. Imped.	List Price
D-31B	Carbon mike, low-imped. pick-up or line to single grid	500/125 200/50	100000/25000	\$12.00
D-43B	Adj. line to P.P. 30 or 50-watt power-stage	500/125 200/50	100000/25000	17.00
D-144CD	Dynamoin mike or 200-ohm mixer to single grid	67/17 30/7½	50000/12500	18.00

De Luxe Interstage Audio Transformers

Type	Prim. Matches Det. or single 10000-ohm amp. tube plate	Sec. Matches Single amp. or power-tube grid	Turns Ratio 1:3	List Price \$10.00
D-21B	Single 10000-ohm amp. tube plate	Push-Pull a.m.p. or power-tube grids	1:2½ e.s.c.	10.00
D-22B	Single 10000-ohm amp. tube plate	A.m.p. or power grids	Single or Push-Pull 1:2 1:1 e.s.c.	17.00
D-51B	Push-Pull 10000-ohm amp. plates	Push-Pull a.m.p. or power-tube grids	1:1½	12.00

De Luxe Interstage Driver Audio Trans.

Type	Works out Class "A" Driver	Feeds into Class "B" Grids	Prim. Ohms Impedance	Turns Ratio	Sec. Ohms Impedance	List Price \$17.00
DA-121B	P.P. 45 to 10, 46, 59	46 to 10, 46, 59	8000/2000—2.24/2.13	1:1	16000/400	
	59 to 10, 46, 59	4000/1000—1.58/1.5	1:1	1440/360		

De Luxe Plate-to-Line Audio Transformers

Type	Application	Prim. Imped.	Sec. Imped.	List Price
D-31B	Biased detector to adj. line	50000/12500	570/125 200/50	\$12.00
D-61B	Single or P.P. to adj. line	20000/5000	500/125 200/50	12.00

De Luxe Line-to-Speaker Audio Trans.

Type	Application	Prim. Imped.	Sec. Imped.	List Price
D-136B	4½-watt audio-line	500/125	15/7½/5/3¼	\$14.00
D-135B	15-watt audio-line	500/125	15/7½/5/3¼	20.00

De Luxe Output Audio Transformers

Type	Application	Prim. Imped.	Sec. Imped.	List Price
DA-101CB	Triodes 10, 12A, 46, 49, 89; pentodes 33, 38; Class "B" 49	20000/5000 12000/3000 20000/5000 12000/3000	5000/125	\$16.00
DA-65CB	Class "B" 49	20000/5000 12000/3000	15/7½/5/3¼/1¼	16.00
DA-105CB	Pentodes 2A5, 6A4, 33, 41, 42, 47, 89; Class "B" 79	16000/4000 14000/3500 16000/4000 14000/3500	500/125	16.00
D-68CB	Class "B" 79	16000/4000 14000/3500	15/7½/5/3¼/1¼	16.00
DA-142B	Class "B" 19, 46, 53, 59, 89	10000/2500 8000/1500	500/125 15/7½/5/3¼/1¼	20.00
DA-102B	31, 45, 50, 71, 43	8000/2000	500/125 15/7½/5/3¼/1¼	20.00
D-43B	31, 45, 71, 43	8000/2000	10½	12.00
DA-103B	2A3 fixed bias, 2A3 self-bias	5000/1250 3000/750	500/125 15/7½/5/3¼/1¼	20.00
DA-104B	P.P. par. 50, 2A3 fixed or self-bias	2500/625 1500/375	500 15/7½/5/3¼/1¼	25.00

De Luxe Audio Reactors

Type	Application	Inductance (Henrys)	List Price
L-243B	01A, 26, 27, 30, 37, 55, 56, 85, or 88A	300	\$8.00
L-244B		350	10.00

AMERTRAN SILCOR AUDIO TRANSFORMERS

Mixing Audio Transformers

Type	List Price
J-791	500, 333, 235, 200, 125 or 50-ohms primary to 500, 333, 235, 200, 125 or 50-ohms secondary

Line-to-Grid Audio Transformers

Type	List Price
J-771	500, 333, 235, 200, 125 or 50-ohms to single grid
J-781	500, 333, 235, 200, 125 or 50-ohms to push-pull grids
J-811	2000, 1000 or 500-ohm pick-up unit to single grid

Interstage Audio Transformers

Type	List Price
J-711	Detector or single plate to single grid, 1:3½ ratio
J-721	Single plate to push-pull grids, 1:2 ratio e.s.c.
J-751	Push-pull plates to push-pull grids, 1:1.15 ratio

Interstage Driver Audio Transformers

Type	List Price
J-783	Class "A" plate to Class "B" grids, 5:1 or 2.66:1 ratio
J-784	Class "A" plate to Class "B" grids, 3.7:1 or 3:1 ratio
J-785	Class "A" plate to Class "B" grids, 2.6:1 or 2.2:1 ratio
J-753	Class "A" plates to Class "B" grids, 2.11:1 ratio

Audio Reactors (Choke Coils)

Type	List Price
Z-301	Parallel-feed audio choke, 300 henrys at 5 mA. d.c., 4000 ohms d.c. resist. With general-purpose tubes
Z-306	Parallel-feed audio choke, 32 henrys at 100 mA. d.c., 450 ohms d.c. resist. With power tubes

Filter Reactors (Choke Coils)

Type	List Price
Z-313	Two-section filter choke—for series or parallel connection. Series: 32 henrys at 100 mA. d.c., 450 ohms d.c. resist. Parallel: 8 henrys at 200 mA. d.c., 112 ohms d.c. resist.

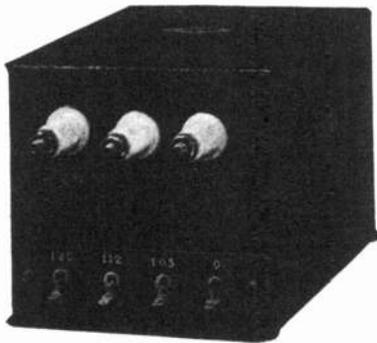
Output Audio Transformers

Type	List Price
J-871	30 dB., 20000, 16000, 5000, 4000-ohms primary; 500 ohms and/or 15, 7½, 5, 3¾ or 1¼-ohms secondary
J-872	31 dB., 14000, 12000, 3500, 3000-ohms primary; 500 ohms and/or 15, 7½, 5, 3¾, 1¼-ohms secondary
J-873	28 dB., 10000, 8000, 2500, 2000-ohms primary; 500 ohms and/or 15, 7½, 5, 3¾, 1¼-ohms secondary
J-874	35 dB., 10000, 6000, 2500 or 1500-ohms primary; 500 ohms and/or 15, 7½, 5, 3¾, 1¼-ohms secondary
J-875	34 dB., 5000, 3000, 1250 or 750-ohms primary; 500 ohms and/or 15, 7½, 5, 3¾, 1¼-ohms secondary

Line-to-Speaker Audio Transformers

Type	List Price
J-831	34 dB. (15 watts), 500 ohms to 15, 7½, 5, 3¾-ohms

PEERLESS TRANSFORMERS



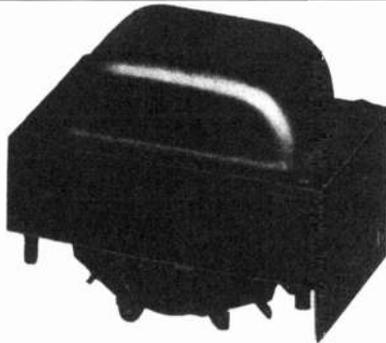
J MOUNTING

Case Size	J1	J2	J3	J4	J5	J6	J7	J8
Height*	3	4	5	6½	7	8	9	10
Length	4½	5½	6¼	7	7	8	9	12
Width	3½	4½	5	5	7	8	9	8



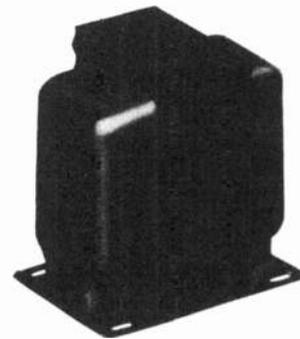
M MOUNTING

Case Size	M1	M2	M3
Height	5½	6⅞	6⅞
Width	4⅜	5½	7¾



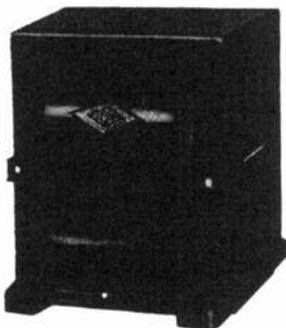
B MOUNTING

Case Size	B1	B2	B3	B4
Height	2¾	3 1/16	3⅜	4
Width	2¼	2 9/16	2 13/16	3½



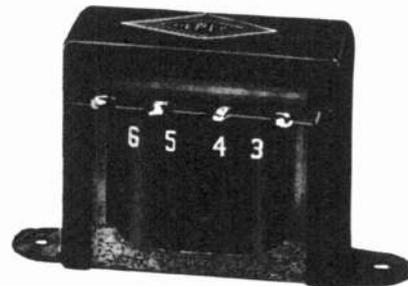
A MOUNTING

Case Size	A1	A2	A3	A4
Height	2¾	3 1/16	3⅜	4
Width	2¼	2 9/16	2 13/16	3½



F MOUNTING

Case Size	F1	F2	F3
Height	5½	6⅞	6⅞
Width	4⅜	5½	7¾



X and Z MOUNTING

Case Size	Horiz. Mounting		Vertical	
	X1	X2	X3	Z1
Height	1⅝	2	2¼	1⅞
Width	2¾	3⅜	3¾	2½

PEERLESS TRANSFORMERS

REPLACEMENT POWER TRANSFORMERS

Cat. No.	List Price	Case Style	Depth	Pri. Volts	Sec. Volt	Sec. Current	Fil. Vol. & Current	
400	2.20	A2	2 11/16"	115	635	40 M.A.	5 V.	2 A
		B2	2 11/16"		CT		2.5 V. CT	4 A
406	2.20	A2	2 11/16"	115	635	40 M.A.	5 V.	2 A
		B2	2 11/16"		CT		6.3 V. CT	1.6 A
407	2.50	A2	2 3/4"	115	650	45 M.A.	5 V.	2 A
		B2	2 3/4"		CT		2.5 V. CT	5 A
408	2.50	A2	2 3/4"	115	650	45 M.A.	5 V.	2 A
		B2	2 3/4"		CT		6.3 V. CT	1.9 A
500	2.75	A2	2 7/8"	115	700	50 M.A.	5 V.	2 A
		B2	2 7/8"		CT		2.5 V. CT	5 A
506	2.75	A2	2 7/8"	115	700	50 M.A.	5 V.	2 A
		B2	2 7/8"		CT		6.3 V. CT	2 A
508	3.10	A2	3 1/4"	115	675	45 M.A.	5 V.	3 A
		B2	3 1/4"		CT		2.5 V.	5.5 A
610	2.95	A2	3"	115	600	60 M.A.	5 V.	2 A
		B2	3"		CT		2.5 V. CT	6 A
616	2.95	A2	3"	115	600	60 M.A.	5 V.	2 A
		B2	3"		CT		6.3 V. CT	2 A
700	3.40	A3	2 7/8"	115	700	65 M.A.	5 V.	2 A
		B3	2 7/8"		CT		2.5 V. CT	7 A
706	3.40	A3	2 7/8"	115	700	65 M.A.	5 V.	2 A
		B3	2 7/8"		CT		6.3 V. CT	2.3 A
800	3.80	A3	3 1/4"	115	700	80 M.A.	5 V.	3 A
		B3	3 1/4"		CT		2.5 V. CT	3.5 A
806	3.70	A3	3 1/4"	115	700	80 M.A.	5 V.	3 A
		B3	3 1/4"		CT		6.3 V. CT	3 A

PEERLESS TRANSFORMERS

REPLACEMENT POWER TRANSFORMERS

Cat. No.	List Price	Case Style	Depth	Pri. Volts	Sec. Volt	Sec. Current	Fil. Vol. & Current			
903	4.25	A4	3 1/16"	115	750	100 M.A.	5 V.	3 A		
		B4	3 1/16"				CT	2.5 V.	9 A	2.5 V. CT	5 A
907	4.25	A4	3 1/16"	115	750	100 M.A.	5 V.	3 A		
		B4	3 1/16"				CT	6.3 V. CT	5 A	
904	5.00	A4	3 3/8"	115	750	125 M.A.	5 V.	3 A		
		B4	3 3/8"				CT	2.5 V. CT	4 A	2.5 V.	16 A
906	5.00	A4	3 3/8"	115	750	125 M.A.	5 V.	3 A		
		B4	3 3/8"				CT	2.5 V. CT	4 A	6.3 V. CT	5 A
1015	5.90	A4	3 3/4"	115	750	150 M.A.	5 V.	3 A		
		B4	3 3/4"				CT	2.5 V.	9 A	2.5 V. CT	4 A	2.5 V. CT	3.5 A
901	4.10	A3	3"	115	500	65 M.A.	5 V. CT	1 A		
		B3	3"				CT	5 V.	2 A	2.5 V.	10.5 A	1.5 V. CT	6.5 A	1.5 V.	2.5 A
902	4.75	A3	3 1/8"	115	750	85 M.A.	5 V.	3 A		
		B3	3 1/8"				CT	2.5 V. CT	3.5 A	2.5 V.	3.5 A	1.5 V.	6.5 A	1.5 V. CT	2.5 A
908	5.50	A4	3 5/8"	115	750	150 M.A.	5 V.	3 A		
		B4	3 5/8"				CT	6.3 V.	5 A	
909	5.70	A4	3 5/8"	115	750	150 M.A.	5 V.	3 A		
		B4	3 5/8"				CT	2.5 V. CT	5 A	2.5 V.	10 A

Automobile Power Supply Transformers

48	2.10	A2 B2	2 1/2"	6V·DC	450 CT	50 M.A.		
47	2.50	A2 B2	2 3/4"	6V·DC	500 CT	60 M.A.		

PEERLESS TRANSFORMERS

INPUT TRANSFORMERS

Cat. No.	List Price	Case Style	Depth	Description	Impedance Ratio
2112	2.00	X2	2"	Ribbon mike to one or two grids	1/4 or 1 to 120,000 CT.
2111	2.20	X2	2"	Dynamic mike to one or two grids	30 CT./130,000 CT.
2050	1.30	Z1	1 3/4"	Single button to one or two grids	200/140,000 CT.
2010	2.00	X2	2"	Double button to one or two grids	400 CT./130,000 CT.
2057	2.00	X2	2"	Line to one or two grids	500 CT./110,000 CT.
2062	1.50	Z1	1 3/4"	Line to one grid	500 CT. or 125/90,000
2113	3.00	X3 A1	2 1/8" 2 3/8"	Multiple line to one or two grids	500,125/120,000 CT. 200,50/
2048	1.65	Z1	1 3/4"	(For Transceivers) Single button mike or single plate to one or two grids	200 or /120,000 CT. 20,000/
2114	2.40	X2	2"	Line or high impedance pickup to one or two grids	500 or /120,000 CT. 2,000/

AUDIO AND MODULATION CHOKES

Cat. No.	List Price	Case Style	Depth	Inductance	Current	Resistance	Voltage Insulation
2049	1.45	X2	2"	250 H. CT.	5 M.A.	3700 ohms	1500 V.
1031	1.50	X2	2"	100 H.	15 M.A.	2000 ohms	1500 V.
1072	5.25	B2 A2	3 1/2" 3 1/2"	60 H.	50 M.A.	1200 ohms	2500 V.
1054	6.50	A4	3 1/4"	40 H.	125 M.A.	425 ohms	2500 V.
1056	8.50	A4 B4	5 1/2"	40 H.	200 M.A.	340 ohms	5000 V.
1052	11.55 13.00	F1 M1	5 1/4" 6 1/4"	50 H.	300 M.A.	290 ohms	5000 V.
1055	17.00	J4		50 H.	300 M.A.	290 ohms	10000 V.
1053	25.30	J5		50 H.	400 M.A.	240 ohms	10000 V.
1079	50.00	J8		60 H.	500 M.A.	250 ohms	10000 V.

PEERLESS TRANSFORMERS

INTERSTAGE TRANSFORMERS

Cat. No.	List Price	Case Style	Depth	Description	Total Turn Ratio
One plate to one grid Class "A"					
2045	1.20	Z1	1¾"	General purpose tubes	1/3
2020	1.50	X2	2"	" " "	1/3
2021	2.00	X2	2¼"	" " "	1/4
2102	2.60	X3	2⅛"	" " "	1/3
	2.85	A1	2⅜"		
One plate to P.P. grids Class "A"					
2046	1.30	Z1	1¾"	General purpose tubes	1/3
2017	1.60	X2	2"	" " "	1/3
2019	2.00	X2	2¼"	" " "	1/3
2053	2.70	X3	2⅛"	" " "	1/3
	2.95	A1	2⅜"		
One plate to P.P. grids Class "AB"					
2026	3.50	A2	2⅝"	6F6 triode, etc., driver tube	.8/1
One plate to P.P. grids Class "B"					
2022	1.70	X2	2"	6C5 etc., driver tube	2.5/1
2027	3.60	A2	2⅝"	6F6 triode, etc., driver tube	1.1/1
2109	3.60	A2	2⅝"	89 triode, etc., driver tube	1.85/1
P.P. plates to P.P. grids Class "A"					
2023	2.30	X2	2¼"	General purpose tubes	1/2
2108	2.75	X3	2⅛"	" " "	1/2
	3.00	A1	2⅜"		
P.P. plates to P.P. grids Class "AB"					
2028	2.25	X2	2¼"	6C5's etc., driver tubes	1.75/1
2066	3.25	A1	2⅜"	P.P. 6C5's, etc., to 6L6's "AB," etc.	3.3/1
P.P. plates to P.P. grids Class "B"					
2110	3.15	A1	2⅜"	P.P. 6F6's triodes, etc., drivers	1.1/1

PEERLESS TRANSFORMERS

OUTPUT TRANSFORMERS

Cat. No.	List Price	Case Style	Depth	Description	Impedance Ratio
2033	1.80	X2	2"	Single plate to line	20,000/500 or /200
2115	1.90	X2	2"	P.P. plates to line	10,000 CT. /500 or /200
2047	1.10	Z1	1¾"	Single plate to voice coil	7,000/4
2029	1.50	X2	2"	Universal output to dynamic speaker tapped secondary	Will match most types of tubes to standard voice coils
2030	2.10	X2	2¼"	Single or P.P. triodes or single pentodes to dynamic speaker tapped secondary	3,000 CT. to / 8,000 CT. /Spkr.
2031	2.20	X2	2¼"	P.P. pentodes or high impedance plates to dynamic speaker tapped secondary	10,000 CT. to / 20,000 CT. /Spkr.
2117	2.45 2.70	X3 A1	2¼" 2¾"	Single 45 or P.P. 2A3's, etc., to 1.5, 3, 4.5, 6, 9, 15 ohms (15 watts)	5,000 CT. to / 3,000 CT. /Spkr.
2118	2.25 2.50	X3 A1	2⅛" 2¾"	Same primary as above to line (15 watts)	5,000 CT. to /500 3,000 CT. /or 200
2119	2.60 2.85	X3 A1	2⅛" 2¾"	P.P. pentodes or triodes to 1.5, 3, 4.5, 6, 9, 15 ohms (15 watts)	14,000 CT. to / 8,000 CT. /Spkr.
2120	2.40 2.65	X3 A1	2⅛" 2¾"	Same primary as above to line (15 v)	14,000 CT. to /500 8,000 CT. /or 200
2032	3.30	A2	2¾"	8000 CT. or 4000 CT. to line or 1.5, 3, 4.5, 6, 9, 15 ohms (15 watts)	Pri./500 or /Spkr.
2139	6.00	A4	3¼"	P.P. 6L6's Class AB 6600 ohms CT. to 500 CT. or 3, 6, 9, 15 ohms (34 watts)	
2068	4.50	A4 B4	3½" 3½"	P.P. 6L6's Class AB 3800 ohms CT. to 500 CT. 60 watts or 4, 8, 15 ohms (20 watts)	

MATCHING TRANSFORMERS

2123	1.30	Z1	1¾"	Ribbon mike to line	¼ or 1 to 500 or 200
2124	2.35	X2	2"	Dynamic mike to line	30/500 or 200
2125	2.45	X2	2"	Line to line	200 or 50/500 or 125
2126	3.25	A2	2¾"	Line to speakers (20 watts)	500 or 200 line to 1¼, ¾, 5, 7½, 10, 15 ohm voice coil

PEERLESS TRANSFORMERS
FILAMENT TRANSFORMERS

Cat. No.	List Price	Case Style	Depth	Primary Voltage	Fil. Voltage	Current	Insulation
1018	1.65	X2	2"	115	2.5 CT.	4. A	2500 V.
1005	2.40	B2 A2	2½"	110-120	2.5 CT.	7. A	2500 V.
1033	6.00	J1		105-112-120	2.5 CT.	12. A	10000 V.
1009	4.50	B2 A2	2⅝"	110-120	2.5 CT.	15. A	5000 V.
1078	2.10 2.30	X3 A1	2⅛" 2⅜"	110-120	5.0 CT.	3. A	2500 V.
1010	4.00	B3 A3	3"	110-120	5.0 CT.	10. A	5000 V.
1024	4.50	B3 A3	3⅛"	110-120	5.0 CT.	12. A	5000 V.
1013	5.50	B4 A4	3⅛"	110-120	5.0 CT.	20. A	5000 V.
1029	10.00	J2		105-112-120	5.0 CT.	20. A	10000 V.
1021	1.65	X2	2"	115	6.3 CT.	1.6 A	2500 V.
1007	2.40	B2 A2	2½" 2½"	110-120	6.3 CT.	3.5 A	2500 V.
1008	2.60	B2 A2	2½" 2½"	110-120	7.5 CT.	3.5 A	2500 V.
1030	3.00	B2 A2	2⅝"	110-120	7.5 CT.	3.75A	5000 V.
660	4.10	B2 A2	2¾" 2¾"	110-115	7.5 CT.	5.0 A	5000 V.
1011	4.60	B3 A3	3⅛" 3⅛"	110-120	7.5 CT.	7.5 A	5000 V.
1019	3.00	B2 A2	2⅝" 2⅝"	110-120	10.0 CT.	3.5 A	2500 V.
1012	4.40	B3 A3	3" 3"	110-120	10.0 CT.	5.0 A	5000 V.
1025	4.00	B2 A2	3¼" 3¼"	110-120	10.0 CT.	7.0 A	2500 V.
1026	4.65	B4 A4	3⅛" 3⅛"	110-120	11.0 CT.	10.0 A	2500 V.
1006	2.60	B2 A2	2⅝" 2⅝"	110-120	2.5 CT. 5.0	7.0 A 3.0 A	2500 V.
1028	9.00	J2	3⅛"	110-120	2.5 CT. 10.0 CT.	10.0 A 7.0 A	12000 V.
664	12.50	J2		105-110-115-120	2.5 CT. 2.5 2.5	5.0 A 5.0 A 10.0 A	12000 V. For Bridge 866's
1027	3.85	B2	3¼"	115	Tube tester transformer. 1.1, 1.5, 2, 2.5 3.3, 5, 6.3, 7.5 10, 12.6, 15, 25, 30		

PEERLESS TRANSFORMERS

AMPLIFIER AND PLATE SUPPLY TRANSFORMERS

Cat. No.	List Price	Case Style	Depth	Primary Voltage	Primary V.A.	Sec. Voltage	Sec. Current	Filament Voltage and Current	
1003	6.60	A4 B4	4" 4"	115	185	800 CT	200 M.A.	5. V. 2.5 V. CT. 2.5 V. CT.	3.A 5.A 12.A
404	6.60	A4 B4	4" 4"	115	185	800 CT.	200 M.A.	5. V. 6.3 V. CT. 6.3 V. CT.	3.A 2.A 5.A
1016	9.50	A4 B4	4½" 4½"	115	235	1000 CT.	250 M.A.	5. V. 2.5 V. CT. 2.5 V.	3.A 5.A 9.A
1004	7.50	A4 B4	4¼" 4¼"	115	185	1000 CT.	250 M.A.	5. V.	3.A
1017	8.50	A4 B4	4¾" 4¾"	115	230	1200 or 1450 CT.	250 M.A.		
1022	9.00	A4 B4	4¼" 4¼"	115	250	1650 CT.	250 M.A.		
1087	10.25 11.75	F1 M1	4¾" 5¾"	115	300	1500 or 2000 CT.	250 M.A.		
1020	11.00 12.50	F1 M1	5¼" 6¼"	115	370	1700 or 2400 CT.	250 M.A.		
1023	16.50 18.00	F1 M1	5¾" 6¾"	115 230	550	2600 or 3500 CT.	250 M.A.		
689	4.00	A3 B3	3⅝" 3⅝"	110 120	80	300 CT.	300 M.A.	5 V.	3.A
575	9.00 11.50	F1 M1	4¾" 5¾"	110 120	315	1050 CT.	400 M.A.	5. V.	6.A
410	19.50 21.00	F1 M1	5" 6"	115	640	2800 CT.	400 M.A.		
913	5.00	A2	2¾"	115	Power supply transformer for RCA 913 Tube, Linear and AC sweep circuits using 885 gas triode				

PEERLESS TRANSFORMERS

MODULATION TRANSFORMERS

Cat. No.	List Price	Case Style	Depth	Description
Suppressor Grid Modulation Type				
2140	3.00	X3	2 1/8"	Single or P.P. Plates to Grid. Turn ratio 1/1
	3.25	A1	2 3/8"	
Plate Modulation Type				
2059	1.95	X2	2"	Class "B" 53,46's, etc., to 5000 or 3500 ohms 50 M.A.
2128	5.80	A2	3"	Class "B" P.P. 46's or P.P. Par. 53's to 5000 or 3500 ohms 100 M.A.
2154	6.25	A4 B4	3 1/2" 3 1/2"	6L6 Modulation Transformer, 3800 ohms, CT. Pri. to Modulate 100 watt Class C. Amp. Sec.; 5000 ohms, 3500 ohms, 2000 ohms Max. Class C. Current 225 M.A.
2130	17.50	J3		Universal Modulation Transformer, 75 watts ;100 M.A. per tube av., 100 to 200 M.A. Class C current. For Imp. ratios see chart
2129	30.00	J5		Universal Modulation Transformer, 160 watts; 125 M.A. per tube av. 175 to 350 M.A. Class C current. For Imp. ratios see chart.

SWINGING CHOKES

Cat. No.	List Price	Case Style	Depth	Inductance	Current	Resistance	Voltage Insulation
1044	3.70	A2 B2	3 1/8" 3 1/8"	30/5H.	15/150 M.A.	180 ohms	2500 V.
1046	4.15	A3 B3	3 3/8" 3 3/8"	30/5H.	20/200 M.A.	160 ohms	5000 V.
1049	4.60	A4 B4	3 1/4" 3 1/4"	30/5 H.	25/250 M.A.	150 ohms	5000 V.
1050	6.00	A4 B4	3 1/2" 3 1/2"	30/5 H.	37/375 M.A.	100 ohms	5000 V.
1047	8.80	A4 B4	5" 5"	30/5 H.	50/500 M.A.	65 ohms	5000 V.
1051	12.70 12.00	J3 M1	5"	30/5 H.	50/500 M.A.	90 ohms	10000 V.
1068	14.70	J3		30/5 H.	60/600 M.A.	70 ohms	10000 V.

PEERLESS TRANSFORMERS

SMOOTHING CHOKES

Cat. No.	List Price	Case Style	Depth	Inductance	Tap	Current	Resistance	Voltage Insulation
1035	1.10	Z1	1 ³ / ₄ "	25 H.		30 M.A.	700 ohms	1500 V.
212	1.30	X2	2"	25 H.		45 M.A.	550 ohms	2500 V.
1032	1.00	Z1	1 ³ / ₄ "	5 H.		60 M.A.	400 ohms	1500 V.
213	1.30	X2	2"	15 H.		60 M.A.	350 ohms	1500 V.
1085	1.40	X2	2"	20 H.		60 M.A.	600 ohms	2500 V.
1086	1.70 1.90	X3 A1	2 ¹ / ₈ " 2 ³ / ₈ "	20 H.		85 M.A.	650 ohms	2500 V.
1034	2.20	B1 A1	3" 3"	25 H. 10%		100 M.A.	480 ohms	2500 V.
1040	2.20	B1 A1	3" 3"	15 H. 10%		125 M.A.	250 ohms	2500 V.
1039	4.10	B3 A3	3 ¹ / ₄ " 3 ¹ / ₄ "	30 H. CT.		150 M.A.	250 ohms	3500 V.
662	3.65	B2 A2	3 ¹ / ₂ " 3 ¹ / ₂ "	15 H.		200 M.A.	250 ohms	3500 V.
1042	3.90	B4 A4	3 ¹ / ₄ " 3 ¹ / ₄ "	20 H. 10%		200 M.A.	290 ohms	3500 V.
1041	4.85	B4 A4	3 ³ / ₄ " 3 ³ / ₄ "	20 H. 10%		250 M.A.	160 ohms	5000 V.
1097	4.50	B4 A4	3 ³ / ₄ "	7 H. 10%		300 M.A.	55 ohms	3500 V.
1045	5.60	B4 A4	5" 5"	15 H. 10%		375 M.A.	150 ohms	5000 V.
1014	8.00 9.50	F1 M1	4" 5"	25 H.		400 M.A.	150 ohms	5000 V.
1043	11.75 13.25	F1 J3	4 ³ / ₄ " 5 ³ / ₄ "	15 H. 10%		500 M.A.	100 ohms	5000 V.
1048	17.00	J4		15 H. 10%		500 M.A.	100 ohms	10000 V.
1074	19.50 21.00 22.00	F2 M2 J5	7" 8"	30 H.		500 M.A.	150 ohms	5000 V.
679	14.15 15.65	F1 M1	5 ³ / ₄ " 6 ³ / ₄ "	15 H.		600 M.A.	110 ohms	5000 V.
1069	32.00	J7		30 H.		600 M.A.	100 ohms	10000 V.

PEERLESS TRANSFORMERS

SPECIAL TYPES FOR THE AMATEUR

The "K" type series shown has been developed primarily for amateur use—low in cost yet extremely rugged in design.

These transformers are individually tested with the breakdown voltages shown before leaving our factory.



CASE SIZE

	K1	K2	K3	K4
H	4	5 1/4	6 1/2	6 1/2
W	3 1/2	4 3/8	5 1/2	7 5/8

Plate Supply Transformers

Cat. No.	List	Mount	Depth	Pri. Volts	Pri. Va.	Sec. Volts	Sec. Current	Insulation Test
575	11.50	K2	5 3/4"	110 120	315	1050 C.T. 5 volts	400 M.A. 6 amps	3500 Volts
939	9.00	K2	5"	115	285	1000 or 1500 CT.	300 M.A.	5000 Volts
940	17.00	K2	7 1/4"	115	430	2000 or 2500 CT.	300 M.A.	7500 Volts
941	29.00	K3	7 1/2"	115 230	800	3000 or 3500 CT.	400 M.A.	10000 Volts
942	42.00	K4	7"	115 230	1440	4000 or 5000 CT.	500 M.A.	12000 Volts
943	45.00	K4	7 1/2"	115 230	1520	6600 or 5600 or 5000 CT.	400 M.A.	15000 Volts

Filament Transformers

1033	7.50	K1	3"	105 112 120	35	2.5 CT.	12 amps	12000 Volts
944	9.00	K1	4"	105 112 120	140	5 CT.	25 amps	12000 Volts
945	5.00	K1	3 1/2"	105 112 120	85	7.5 CT.	10 amps	5000 Volts
946	7.00	K1	4 1/2"	105 112 120	200	10 or 11 or 12 CT.	15 amps	5000 Volts

Other types suitable for transmitting purposes may be found elsewhere in this catalogue and will be supplied in the "K" type mounting upon special order.

COMPLETE STOCKS

Metal Racks, Chassis
Panels and Cabinets
Always on Hand

Special Cabinets
and Racks
Built to Order

QUOTATIONS ON REQUEST
OUR POLICY CATALOG

RADIO TELEVISION SUPPLY CO.
1701 SOUTH GRAND AVE., LOS ANGELES, CALIF.
ALL PHONES RICHMOND 6123

