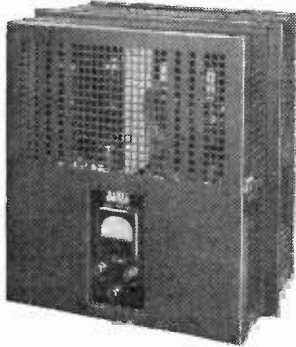


ALTEC

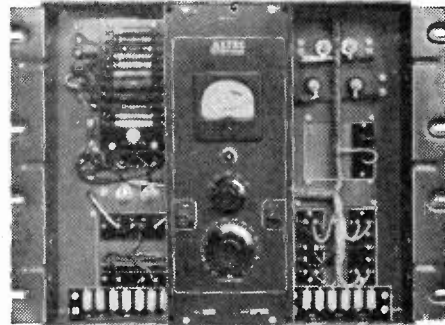
LANSING CORPORATION

POWER AMPLIFIERS

1161 N. VINE STREET
HOLLYWOOD 38, CALIF.
161 SIXTH AVENUE
NEW YORK 13, N. Y.



A-287 F or W AMPLIFIER



A-256A AMPLIFIER

Altec Lansing A-127 and A-256-A amplifiers have been designed for the most exacting applications.

These amplifiers will deliver Power within 1 db of rating from 40 to 10,000 cycles with not more than 8% intermodulation distortion; when operated 3 db below rating their frequency response is uniform from 20 to 20,000 cycles. Thus they are particularly suited to broadcast or recording applications, where preemphasis or other equalization is used.

Input transformers have 90 db of magnetic shielding to allow operation in high magnetic fields. All components are conservatively used for long dependable service.

These amplifiers, finished in blue-gray baked enamel, are assembled

on relay rack panels of recess pan construction, making them adaptable for either rack or cabinet mounting. The front panel and mat are readily removable, exposing all parts for quick servicing. A panel meter permits checking tube currents while in operation.

The 287 series amplifiers are available for use where very high audio power is required such as skating rinks, stadiums, large plants, etc.

They are of the single stage push-pull type, with self-contained power supply and in general are constructed on the same lines as other Altec rack mounted amplifiers. As they are strictly power amplifiers, they must be operated from a driver amplifier such as the A-127 series or the A-256-A.

	A-127	A-256A	A-287F	A-287W
GAIN	A-127: Max. 66 db from 100,000-ohm input. A-127A-B: Max. 66 db for all impedances without fixed pad. A gain control of 40 db range in steps of 2 db is provided on input.	50 db.; 30 db. bridging. Gain control provided.	15 db from all input impedances.	12 db from 3,000-ohm impedance driver.
FREQUENCY RANGE	±1 db 20-20,000 cycles.	± ½ db 20-20,000 cycles.	±1 db 20-20,000 cycles.	±1 db 100-10,000 cycles.
POWER OUTPUT	15 watts with not more than 8% intermodulation or 2% total harmonics. Delivers 15 watts within 1 db from 40 to 10,000 cycles.	65 watts with not more than 8% intermodulation or 75 watts with less than 2% total harmonics. Delivers full power within 1 db from 40 to 15,000 cycles.	75 watts with less than 8% intermodulation or 2% total harmonics. Delivers 75 watts within 1 db from 40 to 10,000 cycles.	250 watts with not more than 5% total harmonics. Class B. Delivers 250 watts in the range of 100 to 10,000 cycles.
NOISE LEVEL	-42 dbm (ref .001 watt).	-45 dbm (ref .001 watt).	-22 dbm (ref .001 watt).	-20 dbm (ref .001 watt).
INPUT IMPEDANCE	A-127: Grid input 100,000 ohms. A-127A-B: 600/500, 300/250, 36/30 ohms.	500/600, 300/250, 36/30 ohms.	14, 56, 125, 220, 500 ohms. Requires 5 watts driver power.	3,000 ohms CT. Can be used with input transformer giving 10 or 20 ohms. Requires 15 watts driver power.
OUTPUT IMPEDANCE	A-127 and A-127-A: 10 or 20 ohms. *A-127B: 3,000, 2,000, 750, 500 ohms.	10 or 20 ohms.	24/48, 12/24, 6/12, 3/6 ohms. Maximum power developed when amplifier works into 36, 18, 9, or 4.5 ohms.	Taps to work into loads from 2.25 to 20 ohms.
POWER REQUIREMENTS	105, 117 or 130 volts, 50-60 cycles, 110 watts. Fused.	105, 117 or 130 volts, 50-60 cycles, 200 watts. Fused.	105, 117 or 130 volts, 50-60 cycles, 400 watts. Fused.	105, 117 or 130 volts, 50-60 cycles, 700 watts. Fused.
POWER AVAILABLE EXTERNALLY	6.3 V. AC at 2.5 amp. 350 V. DC at 20 ma.	6.3 V. AC at 1.0 amp. 350 C. DC at 10 ma.		
TUBES USED	1-6J7, 1-6J5, 2-6L6G, 1-5U4G.	2-6817, 2-6SN7, 2-807, 2-5R4GY, 4-VR-150/ODS.	2-845 or 284. 2-866A.	2-805. 2-866A.
PANEL EQUIPMENT	Plate Current Meter, Selector Switch, Attenuator, AC Fuse, AC Switch, Pilot Lamp.	Plate Current Meter, Selector Switch, Attenuator, AC Fuse, AC Switch, Pilot Lamp.	Plate Current Meter, Push-type Meter Switches, Fil-Plate Power Switch.	Plate Current Meter, Push-type Meter Switches, Fil-Plate Power Switch.
DIMENSIONS	8 ¾" high, 19" wide, 7" deep.	14" high, 19" wide, 10" deep.	19 ¼" high, 19" wide, 12 ½" deep.	19 ¼" high, 19" wide, 12 ½" deep.
WEIGHT	18 pounds.	60 pounds.	141 pounds.	141 pounds.
LIST PRICE	A-127 \$246.67 A-127A-B \$280.00 Includes 1 set of tubes.	\$393.33. Includes 1 set of tubes.	\$794.67. Includes 1 set of tubes.	\$913.33. Includes 1 set of tubes.

*Particularly suitable for driving A-287-W 250-watt Class B amplifier; provided with output transformer with tertiary winding for inverse feedback.

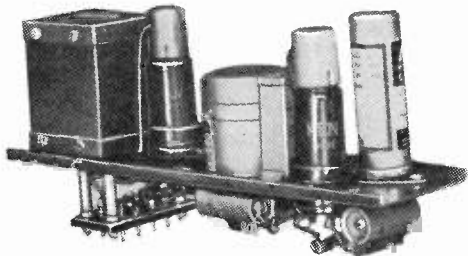
ALTEC

LANSING CORPORATION

PRE-AMPLIFIERS

1161 N. VINE STREET
HOLLYWOOD 38, CALIF.

161 SIXTH AVENUE
NEW YORK 13, N. Y.



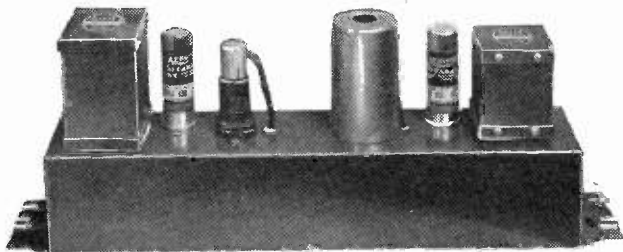
A-425B PRE-AMPLIFIER AND MIXER

The A-425B Pre-Amplifier and Mixer is designed for high quality speech input equipment and P.A. application. It is a microphone pre-amplifier, and one pre-amplifier is required for each microphone. The output of the second stage is coupled to a 20,000-ohm mixer control which is mounted on the chassis but may be removed and mounted up to 12 inches away from the amplifier if required. The chassis may be mounted on a standard relay rack through the use of the 10625 Assembly or it may be mounted in a mixer console designed for that purpose.

The A-425C Pre-Amplifier with required equalization is available for phonograph input using a variable reluctance pickup. A crystal phonograph pickup may be connected directly into the input of the A-426 Amplifier.

SPECIFICATIONS

Voltage Gain	54 db into 66,000 ohm load (62 db high gain connection)
Frequency Range	± 1 db 20 to 20,000 cycles at normal gain ± 1 db 25 to 15,000 cycles at high gain
Maximum Power Output	.001 watts
Noise Level	-80 dbm
Input Impedance	30/36, 250/300, 500/600 ohms
Output Impedance	20,000 ohms
Power Supply Required	6.3 V. AC at .6 amps., 380 V. DC at 5.5 ma (From P-505)
Weight	3 1/2 lbs.
Tubes	2 - 6J7
Color	Blue-Gray
Dimensions	2 1/8" x 10 1/2"
List Price, A-425B	\$138.00
List Price, A-425C	\$132.00

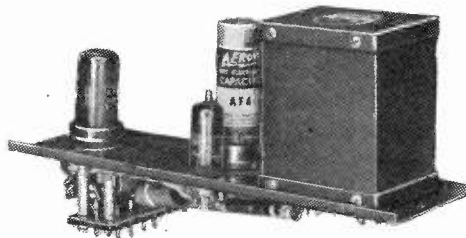


A-420 PRE-AMPLIFIER

The Altec Lansing A-420 is a fixed gain low level pre-amplifier designed to operate into the Altec Lansing A-127-A or -B or A-256A amplifier, from which it obtains its power supply. It is intended as a pre-amplifier for microphone, phonograph pick-up or other low level signal. The input transformer has 90 db of magnetic shielding for hum-free operation. This amplifier, finished in blue-gray baked enamel, is assembled on a relay rack panel of recess construction so that it may be mounted on a rack or in a cabinet.

SPECIFICATIONS

Voltage Gain	Normal: 42 db. High: 49 db
Frequency Range	20-20,000 cycles within 1 db
Maximum Power Output	-2 dbm (.001 watt ref.)
Noise Level	-77 dbm (.001 watt ref.)
Input Impedance	30/36, 250/300, 500/600 ohms
Output Impedance	600/500, 300/250, 150/125, 75/62.5
Power Supply Required	6.3 V. AC at .6 amps., 325 V. DC at 6 ma.
Weight	12 lbs.
Tubes	2 - 6J7
Dimensions	3 1/2" high x 19" wide x 7" deep
List Price (Including Vacuum Tubes)	\$166.67

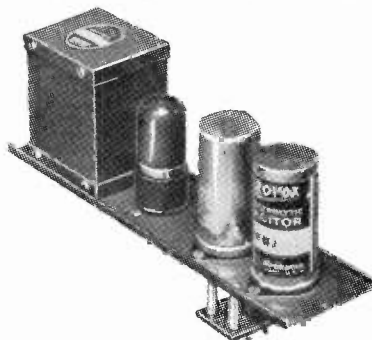


A-426B LINE AMPLIFIER

The A-426B Line Amplifier is used to amplify the signal output of one to four A-425B Pre-Amplifiers. A separate input terminal is provided for each A-425B Pre-Amplifier. When less than four A-425B Pre-Amplifiers are used, the unused terminals should be strapped to ground which prevents the gain of the amplifier from changing. Interaction between controls is less than 2 db. The chassis is designed to mount with the A-425B Pre-Amplifiers either in the rack mounting assembly or in the console. An input transformer may be installed in this amplifier for low impedance input when desired.

SPECIFICATIONS

Voltage Gain	18 db
Frequency Range	± 1 db 20 to 20,000 cycles
Maximum Power Output	+18 dbm
Noise Level	-70 dbm
Input Impedance	66,000 to 550,000 ohms
Output Impedance	600/500, 300/250, 150/125, 75/62.5
Power Supply Required	6.3 V. AC at .6 amps., 380 V. DC at 15 ma. (From P-505)
Weight	3-7/10 lbs.
Tubes	2 - 6J7
Color	Blue-Gray
Dimensions	2 1/8" x 10 1/2"
List Price	\$128.00



P-505B POWER SUPPLY

The P-505B Power Supply is AC operated and supplies all power requirements for four A-425B or A-425C Pre-Amplifiers and one A-426B Line Amplifier. It is mounted on the same type chassis as the pre-amplifiers and is designed to mount in the rack mounting assembly or in the console. The external magnetic field in this unit is sufficiently low that it can be mounted directly beside the A-426B Line Amplifier.

SPECIFICATIONS

DC Output Voltage	380 volts
Line Voltage Requirements:	105, 117 or 130 volts selected by taps on the transformer
Output Current	40 ma.
Tube	1 - 6X5
Dimensions	2 1/8" x 10 1/2"
Weight	3 1/2 lbs.
Color	Blue-Gray
List Price	\$48.00

THE A-10625 MOUNTING BASE

is provided for mounting any combination of A-425B or C, A-426B amplifier and/or P505B Power Supplies. Up to six units may be accommodated. The base has been so designed that it may be installed within as an integral part of a mixer console or in a standard relay rack or cabinet. 10 1/2" of standard rack space is required. List Price, \$24.00

ALTEC

LANSING CORPORATION

AMPLIFIERS

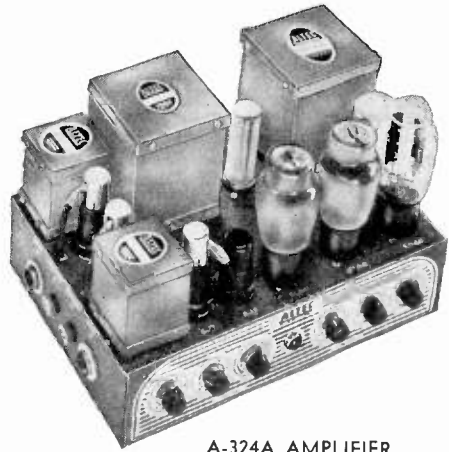
1161 N. VINE STREET
HOLLYWOOD 38, CALIF.
161 SIXTH AVENUE
NEW YORK 13, N. Y.



A-323B AMPLIFIER

The A-323B is a portable conventional chassis-type general-purpose amplifier designed for high quality reproduction of sound, music, and speech from records, radio and microphone. It is engineered and manufactured to meet the high quality standards required of an amplifier when used in conjunction with Altec Lansing speakers.

The outstanding features are: (1) Full rated Power output within 1 db from 35 to 12,000 cycles. (2) Hum balancing potentiometer to eliminate necessity of careful selection of tubes for quiet operation. (3) Two inputs with selector switch for high and low gain. (4) Continuous variable low frequency tone control. (5) High frequency equalization through use of a stepped controlled low pass filter which gives sharp cutoff of noise frequencies yet allows full reproduction of usable high frequencies. Operation of this low pass filter is quite different from customary treble tone control and is only available generally on the most expensive amplifiers. (6) Equalization for phonograph pickup in the first amplification stage designed primarily for the new General Electric variable reluctance or Pickering pickup but which also meets the requirements of other types of reproducers for the reproduction of commercial recordings. This phonograph equalization which is not in the low gain input circuit for radio, can be removed by unsoldering a strap when a microphone is used on high gain phonograph input for P.A. work. This leaves a flat frequency response that can be varied by means of the bass and treble tone controls.



A-324A AMPLIFIER

The Altec Lansing A-324A Amplifier is a portable 15-watt Public Address amplifier designed for use in high quality public address and music systems.

The outstanding features of this amplifier are: (1) Flat frequency response ± 1 db from 20 cycles to 20,000 cycles (when tone controls are set for flat response). (2) Delivers full rated Power within 1 db from 35 cycles to 12,000 cycles. (3) Two high-gain low-impedance microphone inputs with individual volume controls on each input for mixing purposes. (4) Two low-gain high-impedance inputs for AM or FM tuner, crystal phonograph pickup or high impedance microphone. These two inputs have a dual "fader" type volume control which allows fading smoothly from one input to the other. (5) Bass control gives flat bass response or continuously variable bass boost of 12 db at 50 cycles. When set at "PA" position, the bass response of the low impedance microphone inputs is attenuated to eliminate "boominess" due to improper microphone technique. (6) Continuously variable treble attenuator from flat response. (7) Microphone input transformers have electrostatic shield between primary and secondary, and 90 db of magnetic shielding — eliminating hum pickup from stray magnetic fields. (8) Extra AC power socket on chassis for connecting radio tuner or record changer. (9) Pilot lamp jewel indicates when amplifier is in operation.

The Altec Model A-324A Amplifier is a professional amplifier, constructed of heavy duty parts and is designed for continuous service. Finish is grey crackle with chrome operating control panel.

SPECIFICATIONS

	A-323B	A-324A		A-323B	A-324A
GAIN	117 db (phono input) 77 db (radio input)	102 db (mic. #1 input) 102 db (mic. #2 input) 72 db (phono inputs #1 & #2)	OUTPUT IMPEDANCE	2.5-5, 8-12, 16-24 ohms	2.5-5, 8-12, 16-24 ohms
GAIN CONTROL	Continuously variable	Continuously variable. Individual controls for microphone inputs. Dual fader type control for phono inputs.	POWER SUPPLY	110-125 V. AC, 50-65 cycles, 110 watts. Fused.	110-125 V. AC, 50-60 cycles. Fused.
FREQUENCY RESPONSE	20-20,000 cycles ± 1 db	20-20,000 cycles ± 1 db	TUBES USED	2-6J7, 1-6J5, 2-6L6G, 1-5U4G. Tubes furnished with amplifier	3-6J7, 1-6J5, 2-6L6G, 1-5U4G. Tubes furnished with amplifier
POWER OUTPUT	15 watts (+34 db, .006 watts reference)	15 watts (+34 db, .006 watts reference)	DIMENSIONS	9" x 12" x 9" high including cover	9" x 12" x 9" high including cover
POWER CHARACTERISTICS	Delivers full power within 1 db from 35 to 12,000 cycles	Delivers full power within 1 db from 35 to 12,000 cycles.	WEIGHT	12 lbs.	14 lbs.
DISTORTION	No more than 2% total harmonics—less than 8% INTERMODULATION at 15 watts output	No more than 2% total harmonics—less than 8% intermodulation at 15 watts output	FINISH	Dark Grey Crackle Chrome Operating Panel	Dark Grey Crackle Chrome Operating Panel
NOISE LEVEL AT FULL GAIN	-30 db (.006 watts reference) high gain input; -50 db (.006 watt reference) low gain input	-20 db (.006 watt reference) microphone input -45 db (.006 watt reference) phono input	LIST PRICE	\$177.32 (price includes Excise Tax)	\$240.00 no excise tax
INPUT IMPEDANCE	Both inputs, phono and radio, are 500,000 ohms	Microphone #1 30-250-500/600 ohms Microphone #2 30-250-500/600 ohms Phono #1 and #2 500,000 ohms	ACCESSORIES	Input connector plugs supplied with amplifier. 10349 Carrying cover must be ordered as a separate item. List price—\$11.33	Input connector plugs supplied with amplifier 10349 Carrying Cover must be ordered as a separate item. List price—\$11.33



HAMILTON ELECTRONICS

DS SERIES OF PORTABLE AMPLIFIER SYSTEMS

HAMILTON amplifier systems operate on 110-125 volt, 60 cycles, alternating current. Each system comes complete in all respects, including tubes, microphone, speakers and instructions.

Hamilton amplifier systems are housed in a single three-piece carrying case. Each piece fastens securely and easily. The upper halves each hold a heavy duty Jensen Alnico V speaker, plus a 25-foot cable with plug attached. The lower section of the case contains the perfect tone amplifier. The crystal microphone with shielded plug-in and 25 feet of cable rests in a special holder.

All the controls for the DS series amplifier are on the front panel, along with the toggle power switch, pilot light and protective fuse. Nothing is hidden or hard-to-get-at. The independent volume controls for both channels allow perfect mixing of sound. Bass-treble tone control permits tonal range from deep bass to high treble and allows for acoustical compensation wherever the equipment is used. Each Hamilton amplifier system has its own set of matched tubes, the larger units having the tubes clamped down.

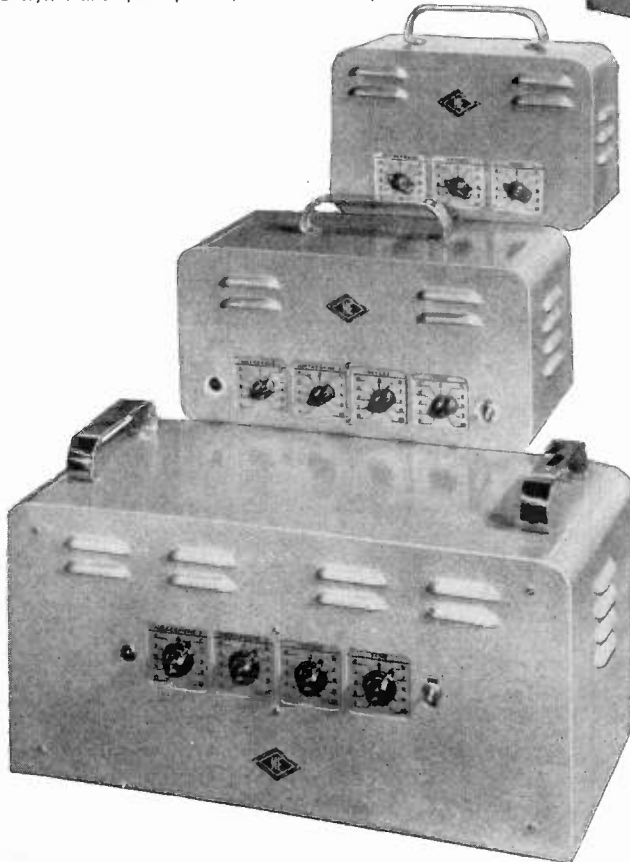
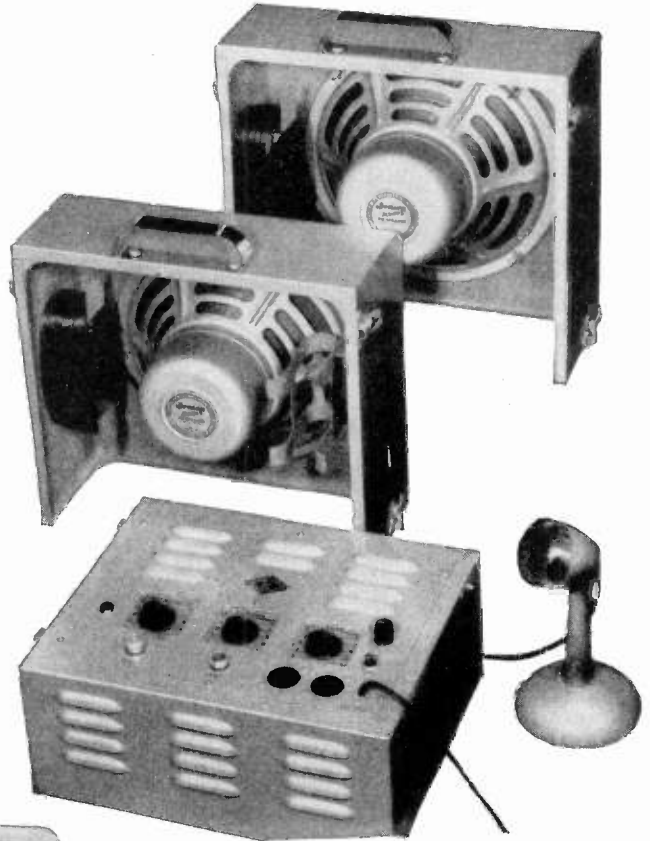
MODEL SPECIFICATIONS

DS-720 — 20 watts List Price \$175.00
Size: 14" x 12" x 20". Net wt.: 43 lbs. Shipping wt.: 52 lbs.
Tubes: 1-6SJ7, 1-6SL7, 2-6L6G, 1-5U4G. 12" speakers.

DS-715 — 15 watts List Price \$150.00
Size: 12" x 10" x 18". Net wt.: 34 lbs. Shipping wt.: 42 lbs.
Tubes: 1-6SJ7, 1-6SL7, 2-6L6GT, 1-5Y3GT. 10" speakers.

DS-710 — 10 watts List Price \$125.00
Size: 11" x 9" x 16". Net wt.: 26 lbs. Shipping wt.: 38 lbs.
Tubes: 1-6SJ7, 1-6SL7, 2-6Y6GT, 1-5Y3GT. 8" speakers.

DYNAMIC MICROPHONE—For a dynamic microphone instead of a crystal microphone, add \$5.00 to the list price.



H SERIES OF AMPLIFIERS

H-707-A SPECIFICATIONS — 7-watt output. Tubes: 2-6SJ7, 1-6L6, 1-5Y3GT. Inputs: 1 Microphone, 1 Phono; both high impedance. Output impedances to voice coil. Operates on 117-volt, 60 cycles, draws 65 watts. Baked grey hamerloid finish. Size: 11" x 7" x 5". Net wt.: 9 lbs.; shipping wt.: 12 lbs. Audience coverage, up to 700 persons; area coverage, up to 4000 square feet. This is the ideal amplifier for all those smaller installations.

H-707-A — List Price \$48.00

H-715-B SPECIFICATIONS — 15-watt output. Tubes: 2-6SJ7, 1-6SL7, 2-6L6, 1-5Y3GT. Inputs: 2 Microphones, 1 Phono; all high impedance. Output impedances: 4, 8, 15 and 500 ohms. Operates on 117-volt, 60 cycles, draws 100 watts. Baked grey hamerloid finish. Size: 14" x 7 1/2" x 6 1/2". Net wt.: 14 1/2 lbs.; shipping wt.: 21 lbs. The tried and tested amplifier for general PA work. Many are in operation in garages, churches, factories, school auditoriums and restaurants. Will cover audiences up to 1500 people or an area of 8000 square feet.

H-715-B — List Price \$75.00

H-730-B SPECIFICATIONS — 30-watt output. Tubes: 3-6SJ7, 1-6SN7, 2-807, 1-5Z3. Inputs: 2 Microphones, 1 Phono; all high impedance. Output impedances: 4, 8, 15 and 500 ohms. Operates on 117-volt, 60 cycles, draws 145 watts. Baked grey hamerloid finish. Size: 10" x 20" x 8 1/2". Net wt.: 27 lbs.; shipping wt.: 45 lbs. An outstanding amplifier value, low in cost but high in quality. This amplifier will fill 75% of all sound job requirements.

H-730-B — List Price \$125.00

H-750-B SPECIFICATIONS — 50-watt output. Tubes: 3-6SJ7, 1-6SN7, 4-807, 1-83. Inputs: 2 Microphones, 1 Phono; all high impedance. Output impedances: 4, 8, 15 and 500 ohms. Operates on 117-volt, 60 cycles, draws 245 watts. Baked grey hamerloid finish. Size: 10" x 20" x 10". Net wt.: 31 lbs.; shipping wt.: 48 lbs. One of the finest amplifiers obtainable; only the highest quality parts and the best workmanship are put into it. The ideal amplifier for the large job where volume or coverage is needed. This is really high-power sound.

H-750-B — List Price \$175.00

BELL SOUND EQUIPMENT

15 WATT BELL AMPLIFIER

Model 3715



- Three Input Circuits.
- Illuminated Control Panel.
- Beam Power Output Tubes.
- Simplified Operation.
- Exceptional Tone Quality.

This amplifier is as fine in performance as its functional and modern design suggests. The beautiful gray and silver case, with its illuminated, full-view control panel, is high lighted by distinctive red plastic control knobs. The amplifier has an undistorted output of 15 watts with a peak of 18 watts. It utilizes harmonic distortion, and has three input channels with separate volume controls that permit mixing of two microphones and a phonograph simultaneously.

SPECIFICATIONS

Model 3715

Power Output: 15 Watts at less than 5%. Peak Power 18 Watts.
Freq. Response: Plus or Minus 1 db. 30 to 18,000 Cycles.
Overall Gain: Microphone Channels 120 db.; Phono Channel 87 db.
Hum Level: -63 db. Below Rated Output.
Inputs: 2 Microphone; 1 Phonograph.
Input Imped: Microphone Channels 10 Megs; Phono Channel 1/2 Meg.

Controls: 2 Microphone Volume Controls; 1 Phono Volume Control; 1 Tone Cont. W/AC Switch.
Output Imp: 2.5; 4; 8; 15; 250; 500 ohms.
Power Cons: 100 Watts; 117 Volts; 50-60 Cycles.
Tubes: 2-7B7; 1-6SF5; 1-6N7; 2-6V6G; 1-5U4G.
Dimensions: 11 1/2" Deep; 8" High; 16 1/2" Wide.
Shipping Weight: 32 lbs.

25 WATT BELL AMPLIFIER

Model 3725

An ideal Amplifier of medium wattage. This seven tube model has proven to be one of the most popular units that Bell has ever manufactured. For a good all around amplifier of medium price it cannot be beaten. Experienced engineering and time proven circuits has made it one that thousands of users rely on day in and day out for continuous satisfactory service. The Model 3725 is truly the "Work Horse" of Bell's entire amplifier line.

SPECIFICATIONS

Model 3725

Power Output: 25 Watts at Less than 5%. Peak Power 33 Watts.
Freq. Response: Plus or Minus 2 db. 50 to 18,000 Cycles.
Overall Gain: Microphone Channels 122 db.; Phono Channel 89 db.
Hum Level: -65 db. Below Rated Output.
Inputs: 2 Microphone; 1 Phonograph.
Input Imped: Micro. Channels 10 Megs; Phono Channel 1/2 Meg.
Controls: 2 Microphone Volume Con-

trols; 1 Phono Vol. Control; 1 Bass Tone Cont.; 1 Treble Tone Cont. W/AC Sw.
Output Imp: 2.5; 4; 8; 15; 250; 500 ohm.
Power Cons: 150 Watts; 117 Volts; 50-60 Cycles.
Tubes: 2-7B7; 1-6SF5; 1-6N7; 2-6L6G; 1-5U4G.
Dimensions: 11 1/2" Deep; 8" High; 16 1/2" Wide.
Shipping Weight: 38 lbs.



- Treble and Bass Boost.
- Ultra-Modern Design.
- Three Input Circuits.
- Illuminated Control Panel.
- Built to Last—Easy to Service.

50 WATT BELL AMPLIFIER

Model 3750



- Rugged Construction.
- Four Inputs.
- Bass and Treble Boost.
- Available for Remote Standby Operation.
- Excellent Frequency Response.

This unit offers "powerhouse" performance with sufficient wattage to cover 90% of all commercial sound requirements. It has power to spare and has been designed for the ultimate in flexibility and operation. Three microphones and a phonograph can be simultaneously mixed by the operator. New tone control circuits, operating in an inverse feedback network, provide extremely wide tone adjustments with greatly reduced distortion. For example, the Bass Control is adjustable from flat response to plus 10 db or to minus 20 db and the treble control from plus 8 db to minus 22 db, 30 db overall.

SPECIFICATIONS

Model 3750

Power Output: 50 Watts at Less than 5%. Peak Power 88 Watts.
Freq. Response: Plus or Minus 1 db. 30 to 15,000 Cycles.
Overall Gain: Microphone Channels 125 db.; Phono Channel 90 db.
Hum Level: -67 db. Below Rated Output.
Inputs: 3 Microphone; 1 Phonograph.
Input Imped: Microphone Channels 10 Megs; Phono Channel 1/2 Meg.
Controls: 3 Microphone Volume Controls; 1 Phono Volume Control; 1 Bass Tone Cont.; 1 Treble Tone Cont. W/AC Switch.

Output Imp: 2.5; 4; 8; 15; 250; 500 ohms.
Power Cons: 260 Watts; 117 Volts; 50-60 Cycles.
Tubes: 3-7C6; 3-6SC7; 1-6SN7; 2-6L6G; 1-5U4G; 1-5R4GY; 1-5V4G.
Dimensions: 16 1/2" Deep; 8" High; 16 1/2" Wide.
Shipping Weight: 62 lbs.

Model 3750-R same as above but provided with a relay to permit remote operation of "B" supply.

Mfg. by THE BELL SOUND SYSTEMS, Inc. •

BELL SOUND EQUIPMENT

6 WATT BELL MOBILE AMPLIFIER

Model 3706-M



- Phono & Micro Inputs.
- Chassis Removable for Servicing.
- Fits under most dashboards.
- Battery Stand-by Switch.

Here is a brand new addition to the time-proven Bell line of amplifiers. A compact, rugged and amazingly efficient low wattage mobile amplifier. It was especially designed for use by Municipal Police and Fire Departments, Safety Patrols, Traffic Control and outdoor audible advertising. The tubes and vibrator can be inspected or changed without disturbing the installation because the chassis and front panel are so constructed that they easily slide out of the case. In an emergency a whole new spare unit can be inserted in the case. It will operate on 6 volts DC or 117 volts 60 cycles and is provided with a standby switch to conserve battery drain. It comes complete with two cables. Any high impedance microphone can be used with this amplifier.

SPECIFICATIONS

Model 3706-M

Power Output: 6 Watts at Less than 5%.
Peak Power 8 Watts.
Freq. Response: Plus or Minus 2 db., 60 to 15,000 Cycles.
Overall Gain: Microphone Channel 112 db.; Phono Channel 75 db.
Hum Level: -60 db. Below Rated Output.
Inputs: 1 Microphone; 1 Phonograph.
Input Imped: Microphone Channel 10 meg.; Phono Channel 1 meg.

Controls: 1 Microphone and Phono Volume Control with Power Switch; 1 Battery saver stand-by switch.

Output Imp: 4; 8; 15 ohms.
Power Cons: 45 Watts; 117 Volts; 60 Cycles; 8 Amperes; 6 Volts D.C.

Tubes: 1-6SJ7; 1-6SN7; 1-6L6; 1-6X5GT.
Dimensions: 10" Deep; 6½" High; 5½" Wide.
Shipping Weight: 15 lbs.

25 WATT BELL MOBILE AMPLIFIER

Model 3723-M

This unit is another new member of the Bell line of Amplifiers. It is a medium wattage mobile Amplifier of the most modern design. It has a microphone input and a built-in phono unit. The volume of both the microphone and phono are individually controlled and in addition, a tone control is provided to permit individual selection or adjustment of the bass or treble response. There is also a stand-by switch provided to turn off the "B" supply while the filaments remain heated. This permits economical operation and extends the life of the battery power supply.

SPECIFICATIONS

Model 3723-M

Power Output: 25 Watts at Less than 5%. Peak Power 38 Watts.
Freq. Response: Plus or Minus 2 db. 30 to 15,000 Cycles.
Overall Gain: Microphone Channel 115 db.; Phono Channel 82 db.
Hum Level: -60 db. Below Rated Output.
Inputs: 1 Microphone; 1 Phonograph.
Input Imped: Microphone Channel 10 meg.; Phono Channel ½ meg.
Controls: 1 Microphone Volume Control; 1 Phono Volume Control; 1

Tone Control W/AC Switch, 1 Standby Switch, 1 Phono motor off-on switch.

Output Imp: 2.5; 4; 8; 15; 250; 500 ohms.

Power Con: 115 Watts; 117 Volts 60 Cycles; 19 Amperes; 6 Volts D.C.

Tubes: 1-7B4; 1-6C5; 1-6SN7; 2-6L6; 2-6X5GT.

Dimensions: 11½" Deep; 10" High; 16½" Wide.

Shipping Weight: 40 lbs.



- Built in Phono unit.
- Standard Bell Cabinet.
- Illuminated Control Panel.
- Remote Drive on Controls.
- Heavy Steel Construction.

30 WATT BELL MOBILE AMPLIFIER

Model 3728-M



- Astatic AB-8M Mobile Pickup.
- Circuit Breaker Protection on 6 volts.
- Bass Boost and Treble Compensators.
- Power Economizer Switch.
- Three Input Channels.
- Heavy Duty Dual Vibrator.

One of the most completely satisfying mobile Amplifiers ever offered for general use. The "Moto-Master" combines a 30-watt amplifier of tone and quality, with a phono pickup of new design, that plays all 12" and smaller records. Market research proves it's capacity is more than ample for the majority of needs.

This high gain unit operates on either a 6 volt DC storage battery or 117 volt 60 cycle AC line current. Conversion from one type of current to another is achieved by simply removing one plug and inserting the other. Current consumption on battery is reduced by a power economizer switch. High fidelity; improved wide range tone controls; beam power output tubes; and two microphones inputs and one phono input, each with separate volume controls are features of the "Moto-Master".

Turntable speed of 78 r.p.m. New type crystal pickup stays "in the groove."

SPECIFICATIONS

Model 3728-M

Power Output: 30 watts at Less than 5%.
Peak Power 45 Watts.
Freq. Response: Plus or Minus 2 db. 50 to 14,000 Cycles.

Overall Gain: Microphone Channels 120 db.; Phono Channel 84 db.

Hum Level: -60 db. Below Rated Output AC; -58 db. on DC.

Inputs: 2 Microphone; 1 Phonograph.
Input Imped: Microphone Channels 10 Meg.; Phono Channel 1 Meg.

Controls: 2 Microphone Volume Controls;

1 Phono Volume Control; 1 Bass Tone Cont.; 1 Treble Tone Cont. with Power Switch; 1 Stand by Switch; 1 Phono OFF-ON Switch.

Output Imp: 2.5; 4; 8; 15; 250; 500 ohms.
Power Cons: 22 amp. 6 volts DC; 120 watts; 117 volts; 60 Cycles.

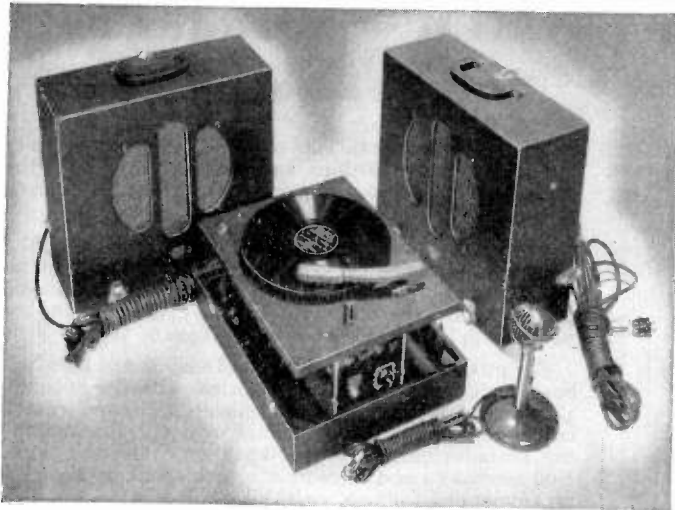
Tubes: 1-7Y4; 2-7Z4; 3-7B4; 1-6SL7; 2-6L6GA.

Dimensions: 16½" Deep; 10" High; 16½" Wide.

Shipping Weight: 60 lbs.

Mfg. by THE BELL SOUND SYSTEMS, Inc.

BELL SOUND EQUIPMENT



10 WATT BELL PHONO-PA SYSTEM

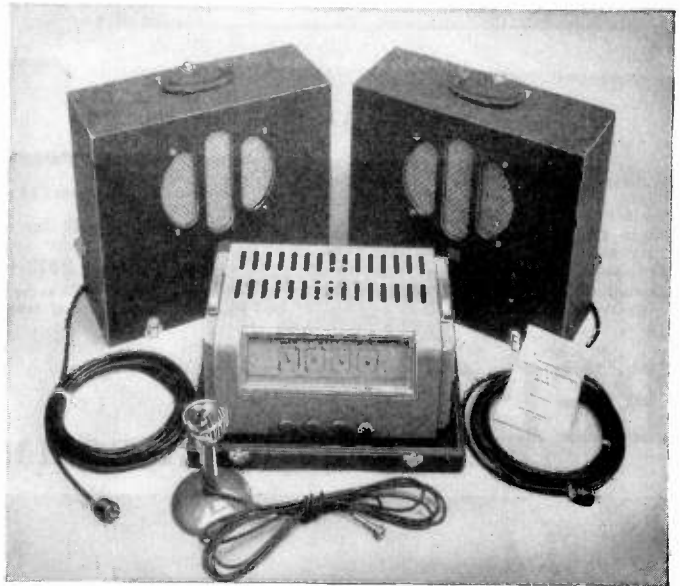
SPECIFICATIONS Model PA-3710-P

- Amplifier: 3710.
- Speakers: 2-10" Heavy Duty P.M.
- Cables: 2-25' Type SV with Plugs.
- Phono Equipment: 78 RPM Turntable with Crystal Pickup.
- Microphone: JT-30 with desk type stand.
- Microphone Cable: 15' Shielded Rubber with Connector.
- Microphone Stand: Furnished with Micro.
- Case: Model 3710, 3 piece Portable.
- Dimensions: 12" Deep; 18½" High; 15¾" Wide.
- Shipping Weight: 50 lbs.

15 WATT BELL SINGLE CASE PA SYSTEM

SPECIFICATIONS Model PA-3715-E

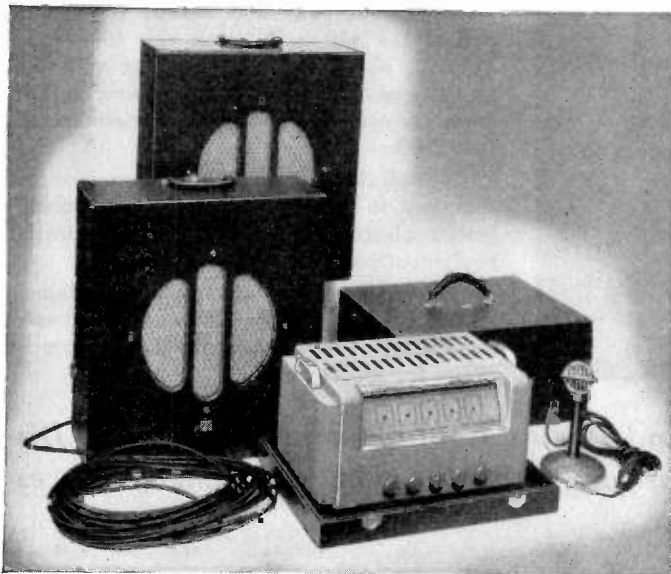
- Amplifier: 3715 (See page B-5).
- Speakers: 2-10" Heavy Duty P.M.
- Cables: 2-25' Type SV with Plugs.
- Built-in Phono Equipment: None.
- Microphone: JT-30 with desk-type stand.
- Microphone Cable: 15' Shielded Rubber with Connector.
- Microphone Stand: Furnished with Micro.
- Case: Model 15 Three pc.
- Dimensions: 13¾" Deep; 19¾" High; 17¾" Wide.
- Shipping Weight: 62 lbs.



25 WATT BELL DUO-CASE PA SYSTEM

SPECIFICATIONS Model PA-3725-E

- Amplifier: 3725 (See Page B-5).
- Speakers: 2-12" Heavy Duty P.M. with Line Matching Trans.
- Cables: 2-50' Type SV with Plugs.
- Built-in Phono Equipment: None.
- Microphone: JT-30 with desk type stand.
- Microphone Cable: 15' Shielded Rubber covered with Connector.
- Microphone Stand: Furnished with Micro.
- Case: 1 Model 95. 1 Model 14-A.
- Dimensions: Model 14-A, 13½" Deep; 10¼" High; 18" Wide.
Model 95, 10¼" Deep; 19¾" High; 19" Wide.
- Shipping Weight: Complete System, 90 lbs.



Mfg. by THE BELL SOUND SYSTEMS, Inc. •

BELL SOUND EQUIPMENT

25 WATT BELL PHONO-PA SYSTEM

Model 2078



The School-Master

The Bell "Schoolmaster" has been received with great public acclaim. This unit has proven extremely popular with institutions and schools throughout the country. One city school system has over one hundred of these units in operation.

Practically every need for high quality public address and music coverage is met with this system. With its governor-controlled, two speed motor and professional type tone arm, it will give excellent reproduction of lateral cut records from 6" to 16".

For auxiliary equipment, the Model 98 speaker has been designed. This unit is identical with the speaker portion or top half of the model 2078 and comes complete with a P-12-Q speaker or equal, line matching transformer, fifty foot speaker cable and plug. Bell models 93 and 95 complete with speakers are also recommended for use with this equipment.

SPECIFICATIONS Model No. 2078

Amplifier: 3725 (See page B-5).

Speakers: 1—12" P-12-Q or equal Heavy Duty P.M.

Cables: 25' Type SV with plug.

Phono Equip: Built-in 2—Speed (78-33 $\frac{1}{2}$ RPM) Motor; Type HP-16 Tone Arm.

Microphone: JT-30 with desk type Stand.

Microphone Cable: 15' Shielded Rubber covered with Connector.

Microphone Stand: Furnished with Micro.

Case: Model 2078.

Dimensions: 19" Deep; 13 $\frac{1}{4}$ " High; 19 $\frac{3}{4}$ " Wide.

Shipping Weight: 73 lbs.

Model 2078-CH

Same as Model 2078 except with Webster 56 Changer in place of transcription unit.



BELfone

INTERCOMMUNICATION SYSTEMS



WE offer the finest and most complete line of inter-office communicating equipment in the world today.

Four entirely different series of BELfones are available. The 350 Series, the 374-SS Series, the 440 Series and the 460 Series. There is a BELfone System that will meet every need; and for clarity of tone, appearance, low operating cost and maintenance, the Bell line has no peer.

The Bell Sound Systems, Inc., was the first company to design and produce reasonably priced electronic inter-office communication equipment commercially.

The complete line of BELfone equipment and accessories are shown in our special catalog for inter-office communicating equipment. Write for it today.

Bell also builds *Industrial Sound and Paging Equipment; School Sound Distribution Systems; Recording Units; and other Sound Equipment and Accessories.* For further details write to

BELL SOUND SYSTEMS, Inc. •

THORDARSON AMPLIFIERS



THORDARSON 8 WATT AMPLIFIER — T-31W08

This amplifier combines maximum performance with minimum size. It is ideal for ballyhoo installations, carnivals, or inter-phone applications. The quality is such that it may be used for reproduction of the finest records. Individual controls for phono and microphone provide electronic mixing. The treble attenuation tone control has sufficiently smooth operation for satisfactory elimination of needle scratch or objectionable highs; or with the control in a normal position the highest treble tone can be clearly reproduced.

List Price \$64.00

POWER OUTPUT—8 Watts (+31.25 Db) at less than 9% distortion.
TWO INPUT CIRCUITS—

One high impedance microphone channel—115 Db gain (based on 100,000 ohms input impedance).

One high impedance phono channel—72 Db gain (based on 100,000 ohms input impedance).

All input circuits may be mixed.

Low impedance microphone input optional at slight additional cost (50, 250, or 500 ohms).

IMPROVED TONE CONTROL—(high frequency attenuator type). Maximum position attenuated 1,000 C.P.S. 4 Db, 5,000 C.P.S. 17 Db, 10,000 C.P.S. 22 Db.

FREQUENCY RESPONSE—Flat within 1 Db from 50 to 10,000 C.P.S.
CHASSIS TYPE CONSTRUCTION—Attractive three-tone control panel.

INVERSE FEED-BACK CIRCUIT.

OUTPUT IMPEDANCES—4, 8, 15, 250, 500 ohms—all available at an 8-prong receptacle.

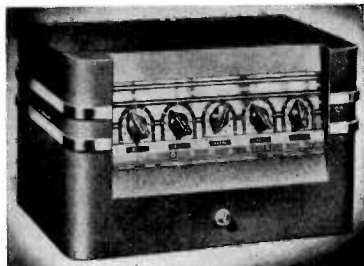
HUM LEVEL—60 Db below rated output.

TUBES—1-6J7; 1-6SJ7; 1-6L6; 1-5Y3.

DIMENSIONS—10" x 6" x 7½" high.

POWER CONSUMPTION—70 watts, 110-120 volts, 50-60 cycles other primary voltages on special order.

(WEIGHT NET)—14¾ pounds; shipping 16 pounds.



THORDARSON 25 WATT AMPLIFIER — T-31W25AX

Sufficient undistorted power is available from this unit for large auditorium or night club installations. Two low level inputs and one high level input will allow the use of two microphones with low impedances or high impedances to be satisfactorily mixed with a phono input for musical background. The attractive front panel is supplied with three gain controls and two tone controls. The tone controls provide individual bass or treble attenuation to eliminate undesirable highs in recordings or undesirable lows for crisp speech output. When the tone controls are in the normal position—Tru-Fidelity output is available.

List Price \$135.00

POWER OUTPUT—25 watts (+36.2 Db) at less than 3% distortion.

TWO INPUT CIRCUITS—

One high-impedance microphone channels—116 Db gain (based on 100,000 ohms input impedance).

One high impedance phono channel—72 Db gain (based on 100,000 ohms input impedance).

Low impedance microphone input optional at slight additional cost (50, 250, 500 ohms).

All input circuits may be mixed.

IMPROVED TONE CONTROLS (Treble and bass attenuators).

Maximum attenuation positions

Bass—50 C.P.S.—20 Db. 100 C.P.S.—12 Db.

Treble—1,000 C.P.S.—4 Db 5,000 C.P.S.—15 Db 10,000 C.P.S.—

23 Db.

FREQUENCY RESPONSE—Flat within 1 Db from 30 to 15,000 C.P.S.
FULLY ENCLOSED CONSTRUCTION—All-steel streamlined cabinet—Attractive three-tone control panel.

MULTIPLE INVERSE FEED-BACK CIRCUIT.

OUTPUT IMPEDANCES—4, 8, 15, 250, 500 ohms—all available at 8-prong receptacles, selected by means of a switch.

HUM LEVEL—65 Db below rated output.

TUBES—2-6J7; 1-6SJ7; 1-6N7; 2-6L6; 1-5X4G.

DIMENSIONS—15¾" x 10" x 9" high.

POWER CONSUMPTION—137 watts—110-120 volts, 50-60 cycles (other primary voltages on special order).

WEIGHT NET—28 pounds; shipping 32 pounds.



THORDARSON 50 WATT AMPLIFIER — T-31W50AX

This amplifier employs 4-Beam Power tubes; is conservatively rated at 50 watts and will supply over 65 watts of peak power. The unit is ideal for large stadium or roller-rink applications. The three low-level microphone and two high-level phono inputs will satisfactorily handle the most elaborate mixing applications. Dual tone controls will attenuate individually either the bass or treble or individually boost the bass or treble. Either low or high impedance inputs may be accommodated. The range of output impedances provided will accommodate multiple speaker applications.

List Price \$260.00

POWER OUTPUT—50 Watts (+39.6 Db) at less than 5% distortion.

FIVE INPUT CIRCUITS—

Three input microphone channels—115 Db gain (based on 100,000 ohms input impedance).

Two phono fader inputs—75 Db gain (based on 100,000 ohms input impedance).

Low impedance microphone input optional at slight additional cost (50, 250, 500 ohms).

TWO TONE CONTROLS—

One bass control providing a bass boost of 9½ Db at 80 C.P.S. to a bass attenuation of 25 Db at 80 C.P.S.

One treble control providing a boost of 11½ Db at 8,000 C.P.S. to an attenuation of 25 Db at 8,000 C.P.S.

Nine extreme individual response curves available with the two tone controls

FREQUENCY RESPONSE—Flat within 1 Db from 30 to 15,000.

CHASSIS TYPE CONSTRUCTION—All-steel streamlined cabinet—Attractive three-tone control panel.

INVERSE FEED-BACK CIRCUIT.

OUTPUT IMPEDANCES—4, 6, 8, 15, 125, 250 and 500 ohms—selected by means of a selector switch.

HUM LEVEL—70 Db below rated output.

TUBES—2-6X4; 1-6X5; 4-6L6; 1-6V6; 3-6J7; 1-6SJ7; 1-6J5.

DIMENSIONS—17" x 11¾" x 8¾" high.

POWER CONSUMPTION—250 Watts at 110-120 volts, 50-60 cycles (other primary voltages on special order).

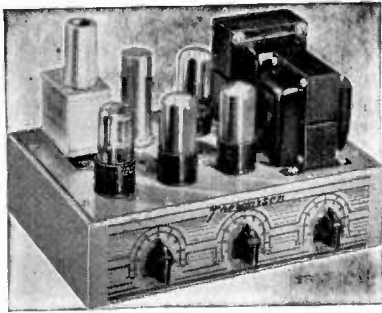
WEIGHT NET—44 pounds; shipping 50 pounds.



TRANSFORMER SPECIALISTS SINCE 1895 THORDARSON

THORDARSON AMPLIFIERS

T-32W10 AUDIO AMPLIFIER



America's greatest value in quality. **VERSATILE**—available with or without pre-amplifier. Buy only what you need, add pre-amplifier if needed later.

FEATURES—Frequency responses from 20 to 20,000 cycles ● —70 DB hum level below rated output ● Adequate gain to obtain full output from the ordinary high impedance pickup or tuner ● A treble boost and treble attenuation tone control feature ● A bass boost or flat response control ● Both tone controls continuously variable ● Output for 3 to 4 ohms, or 15 to 16 ohms which covers all popular high fidelity speakers ● The unit will be supplied with felt mounting feet and a separate bracket for permanent installations ● Gray hammertone finish ● A pre-wired socket will allow the use of a T-32W00 plug-in-pre-amp which will accommodate any of the popular magnetic reluctance phono pickups or a high impedance microphone ● A frequency compensated pre-amplifier, T-32W00 can be supplied with 15 DB of bass compensation for use with magnetic phone pickups. The bass compensation can be removed for flat response when microphone operation is desired ● Output impedances are terminated to a four-screw terminal board ● Tubes: One 6SL7-GT, two 6V6-GT, one 5Y3-GT ● Complete with self-contained power supply, 115 volts A.C., and tubes ● Output—10 clean watts at less than 2% distortion.

New THORDARSON T-32W10 AUDIO AMPLIFIER. Less T-32W00 Pre-Amplifier—
but complete for use with high impedance pickup or tuner. **List Price \$55.00**

New THORDARSON T-32W00 Plug-in Pre-Amplifier. Necessary when Audio Amplifier is to be used with any of the popular reluctance phono pickups or high impedance microphones. **List Price \$9.90**

T-31W10AX TRU-FIDELITY PHONO-AMPLIFIER

Unique in design the Thordarson 10 Watt Phono Amplifier combines versatility of application with Tru-Fidelity performance. Both microphone and phono input channels allow the 31W10AX to be used in conjunction with the High-Fidelity Meissner AM-FM Tuner and other tuners of comparable performance; as a speech amplifier in amateur transmitters; or as the amplifier section in a recording set-up. Little is left to be desired in naturalness and brilliance of tone.

Separate bass and treble controls with both boost and attenuation action assure complete adaptation of the output to all acoustical conditions, plus the pleasure of listening to music the way it is desired to be heard. Production cost is lowered by the mounting of this unit on a simple chassis inasmuch as the amplifier is usually installed in cabinet, no cover is required. **LIST PRICE \$127.50**

T-31W10AX Specifications

POWER OUTPUT—10 Watts at less than 5% distortion (50 to 10,000 cycles).

TWO INPUT CIRCUITS—

One high impedance microphone channel—107 Db gain (based on 100,000 ohms input impedance).

One high impedance phono channel—71 Db gain (based on 100,000 ohms input impedance).

TWO TONE CONTROLS—

One bass control providing a bass boost of 12 Db at 80 C.P.S. to a bass attenuation of 13 Db at 80 C.P.S.

One treble control providing a treble boost of 12 Db at 8000 C.P.S. to an attenuation of 18 Db at 8000 C.P.S.

FREQUENCY RESPONSE—Flat within 1 Db from 40 to 15,000 C.P.S.

CHASSIS TYPE CONSTRUCTION—Attractive three-tone control panel.

INVERSE FEED-BACK CIRCUIT

OUTPUT IMPEDANCES—4, 8, 15, 125, 250, 500 ohms—all available at an eight-prong receptacle.

HUM LEVEL—60 Db below maximum rated output.

TUBES—1-6J7; 1-6SJ7; 1-6J5; 1-6SN7; 2-6B4; 1-5U4G.

DIMENSIONS—14" x 8" x 7½" high.

POWER CONSUMPTION—117 Watts full signals—110-120 volts, 50-60 cycles (other primary voltages available on special order).

WEIGHT NET—19 pounds; shipping 22 pounds.

T-31W20AX 20 WATT MOBILE AMPLIFIER

Conservatively-rated, this universal mobile amplifier furnishes sufficient undistorted power for sound truck, picnic, carnival and similar installations that require the versatility of 6 volts D.C. volts and 115 volts A.C. operation.

The electric turntable and pick-up mounted on top of the amplifier operates practically in any position, whether tilted vertically or horizontally. Shock-mounted for smooth operation over rough terrain,

it is truly versatile. With all connections on the back of the chassis, simplification of hook-up is provided, leaving trimness of style for the front panel.

Treble attenuation tone compensation makes allowance for correcting to acoustical conditions and reducing record scratch. Mixing procedure is completely controlled with the coupled phono and microphone input channels. **LIST PRICE \$200.00**

T-31W20AX Specifications

POWER OUTPUT—20 Watts at less than 6% distortion (50 to 10,000 cycles).

TWO INPUT CIRCUITS—

One high impedance microphone channel—110 Db gain (based on 100,000 ohms input impedance).

One high impedance phono channel—72 Db gain (based on 100,000 ohms input impedance).

Both input circuits may be mixed.

FREQUENCY RESPONSE—Flat within 1 Db from 40 to 15,000 C.P.S.

IMPROVED TONE CONTROL—(high frequency attenuator type). Maximum position attenuated 1,000 C.P.S. 1 Db; 5,000 C.P.S. 10 Db; 10,000 C.P.S. 16 Db.

FULLY ENCLOSED CONSTRUCTION—Trim light grey wrinkle cabinet with three-tone control panel.

CRYSTAL PICK-UP—Specially-designed pick-up arm. Spring-action holds arm in place.

INVERSE FEED-BACK CIRCUIT

OUTPUT IMPEDANCES—4, 8, 15, 125, 250, 500 ohms—all available at two 8-prong receptacles, selected with switch.

HUM LEVEL—66 Db below maximum rated output.

TUBES—1-6J7; 1-6SJ7; 1-6N7; 2-6L6; 2-6X5.

DIMENSIONS—15½" x 10" x 11" high.

POWER CONSUMPTION—140 Watts full signal—110-120 volts, 50-60 cycles; 6 volts D.C. 23 Amp. (6 watts standby current—5.15 Amps.).

WEIGHT NET—34½ pounds; shipping 39 pounds.

T-31K09 COVER

A trim grey wrinkle finish cover, perforated for complete ventilation; for use on the T-31W08 amplifier.



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FOR BEST RESULTS SELECT

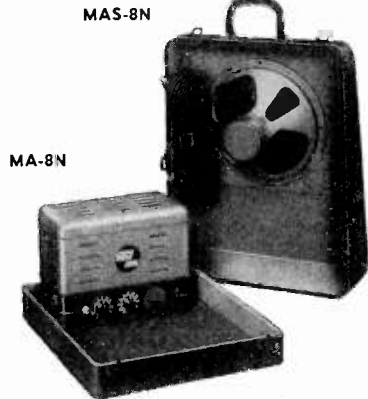


MASCO manufactures a complete line of amplifiers and sound systems ranging in power output from 8 to 75 watts, including phono-top, mobile, high fidelity and musical instrument amplifiers and recorders, transcription players, school systems, plant broadcasting and intercommunication systems. All MASCO amplifiers, many of which are shown as portable systems are recommended for use in FIXED SYSTEMS.

MA-8N 8-WATT AMPLIFIER and MAS-8N 8-WATT PORTABLE SYSTEM

AMPLIFIER FEATURES: Microphone and phono input separately controlled • Bass-treble tone control • Hammertone-finish chassis • Light, compact and sturdy • U/L Approved.

APPLICATIONS FOR AMPLIFIER AND SYSTEM: Both units are ideal for paging systems for bus and railroad stations and they are recommended for side shows, auction rooms, sales meetings, small taverns and clubs.



AMPLIFIER SPECIFICATIONS MODEL MA-8N

POWER OUTPUT.....8 Watts, Class A, at less than 5% distortion
 PEAK POWER.....13 Watts
 INPUTS.....Two: 1-microphone, and 1-phono
 FREQUENCY RESPONSE.....± 2 DB 50 to 10,000 CPS
 POWER GAIN.....Microphone, 128.5 DB; Phono, 75 DB
 CONTROLS.....Three: Microphone, Phono, Tone (On-Off Switch)
 TUBES.....1-6SF5, 1-6SJ7, 1-6L6G, 1-5Y3GT (Rectifier)
 OUTPUT IMPEDANCES 3.2, 8 and 500 Ohms
 HUM LEVEL.....60 DB below output level of 8 Watts
 POWER CONSUMPTION 75 Watts at 117 Volts
 VOLTAGE.....105-125 Volts, 60 CPS
 DIMENSIONS.....10" x 6" x 7 1/2" high

PRICES

List Price
 MA-8N Amplifier (less Cover, less Tubes) \$47.75
 Shipping Weight 14 lbs.
 Cover for MA-8N 4.50
 Kit of Matched Tubes for MA-8N 7.25
 Kit of Matched Plugs and Connectors 2.00
MAS-8N Portable System 110.45
 Shipping Weight: 30 lbs.
 Consists of: 1—MA-8N Amplifier with Cover (less tubes)
 1—Jensen P10-S 10" PM Speaker, or equal
 1—25-ft. Speaker Cable and Plug
 1—Model 303 Portable Carrying Case (Attractive Luggage Style)
 1—Astatic JT-30 Microphone with 12-ft. Cable and Connectors
 (If microphone is not desired, deduct \$14.00 from above list price. If cover is not desired with system, deduct from list price \$4.50.)

MA-17N 17-WATT AMPLIFIER and MAS-17N 17-WATT PORTABLE SYSTEM

AMPLIFIER FEATURES: Two microphone inputs • One phono input • Individual volume controls • Separate bass and treble controls • Tapped line and voice-coil impedances • Impedance selector switch • U/L Approved.

APPLICATION FOR AMPLIFIER AND SYSTEM : They are suitable for small orchestras, lecturers, ballyhoo, store demonstrations, night clubs and ballrooms.

AMPLIFIER SPECIFICATIONS • MODEL MA-17N

POWER OUTPUT.....17 Watts, Class A, at less than 5% distortion
 PEAK OUTPUT.....26 Watts
 INPUTS.....Three: 2-microphone, 1-phono
 FREQUENCY RESPONSE.....± 2 DB 50 to 12,000 CPS
 POWER GAIN.....Microphone, 132 DB; Phono, 78 DB
 CONTROLS.....Five: 2-microphone, Phono, Bass, Treble, Separate Power On-Off Switch
 TUBES.....1-6SC7, 1-6SJ7, 1-6SL7GT, 2-6L6G, 1-5V4G (Rectifier)
 OUTPUT IMPEDANCES.....4, 8, 15, 125, 250, 500 Ohms
 HUM LEVEL.....62 DB below output level of 17 Watts
 POWER CONSUMPTION.....125 Watts at 117 Volts
 VOLTAGE.....105-125 Volts, 60 CPS
 DIMENSIONS.....13" x 8" x 8 3/8" high

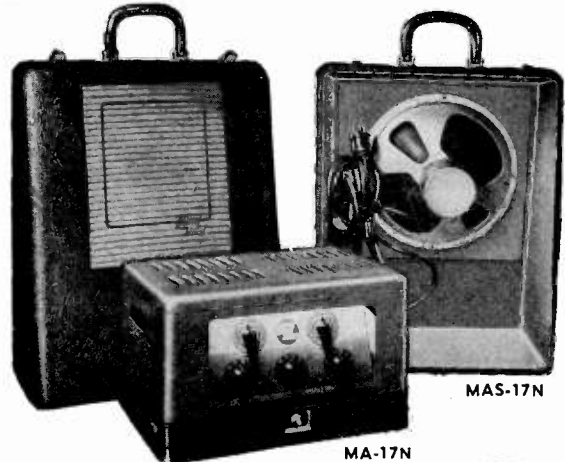
PRICES

List Price
 MA-17N Amplifier (less Tubes) \$75.75
 Shipping Weight: 45 lbs.
 Kit of Matched Tubes for MA-17N 14.25
 Kit of Matched Plugs and Connectors 2.95

MAS-17N Portable System 170.65
 Shipping Weight: 45 lbs.

Consists of: 1—MA-17N Amplifier (less tubes)
 2—Jensen P10-S 10" PM Speakers, or equal
 2—25-ft. Speaker Cables and Plugs
 1—Model 304 Portable Carrying Case (attractive luggage style)
 1 Astatic JT-30 Microphone with 12-ft. Cable and Connectors

(If microphone is not desired, deduct \$14.00 from above list price)



MA-17PN 17-WATT PHONO TOP AMPLIFIER and MAS-17PN 17-WATT PHONO TOP PORTABLE SYSTEM

APPLICATION FOR AMPLIFIER AND SYSTEM:

For recorded music, alone or combined with voice • Plays 12" and smaller records • Widely preferred as record demonstrators.

AMPLIFIER SPECIFICATIONS MODEL MA-17PN

Same as MA-17N (Described on this page) but includes phono-top.
 Chassis size: 14" x 11" x 8 3/8".

PRICES List Price
 MA-17PN Amplifier (less tubes) \$105.25
 Kit of Matched Tubes 14.25
 Kit of Plugs and Connectors 1.90



List Price
MAS-17PN Portable System \$207.70
 Shipping Weight: 56 lbs.

Consists of:
 1—MA-17PN Amplifier (less tubes)
 2—HEAVY-DUTY Jensen P12-S 12" PM Speakers, or equal
 2—25-ft. Speaker Cables and Plugs.
 1—Model 305 Portable Carrying Case (attractive luggage style)
 1—Astatic JT-30 Microphone with 12-ft. Cable and Connectors
 (If microphone is not desired, deduct \$14.00 from above list price)



To secure a LOW-IMPEDANCE INPUT for amplifiers, see PAGE B-13

WEST OF ROCKIES ADD 5% TO ABOVE LIST PRICES

Amplifiers licensed under U.S. patents of Western Electric Company, Inc., and American Telephone and Telegraph Company. Specifications and prices subject to change without notice.



MARK SIMPSON MANUFACTURING CO. • LONG ISLAND CITY, N. Y.

FOR BEST RESULTS SELECT

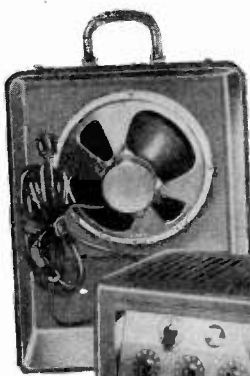
TYPICAL PORTABLE SYSTEM ILLUSTRATED →



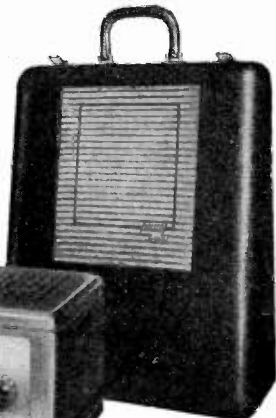
MAS-25N and MAS-25PN Systems incorporate carrying case as illustrated.



MA-25N MA-25NR



MA-35-3N



MAS-35-N



MA-25PN

MA-25N 25-Watt Amplifier and MAS-25N 25-Watt Portable System

AMPLIFIER FEATURES: Four inputs • Four-channel electronic mixing • Separate bass and treble controls • Tapped line and voice-coil impedances • Full 25 watts of undistorted output • Over-all negative feedback • U/L Approved.

APPLICATIONS FOR AMPLIFIER AND SYSTEM:

They are ideal for the larger auditoriums, churches, night clubs, orchestras, indoor sports arenas, and also for outdoor use at fairs, bazaars, children's camps, and similar locations.

AMPLIFIER SPECIFICATIONS MODEL MA-25N

POWER OUTPUT.....25 Watts, Class AB-1, at less than 5% distortion
 PEAK POWER.....40 Watts
 INPUTS.....Four: 3-microphone, 1-phono
 FREQUENCY RESPONSE.....± 2 DB 50 to 15,000 CPS
 POWER GAIN.....Microphone, 133.5 DB; Phono, 79 DB
 CONTROLS.....Six: 3-microphone, Phono, Bass, Treble, Separate Power On-Off Switch
 TUBES.....4-6J7, 2-6SC7, 2-6L6G, 1-5V4G (Rectifier)
 OUTPUT IMPEDANCES.....4, 8, 15, 125, 250, 500 Ohms
 HUM LEVEL.....64 DB below output level of 25 Watts
 POWER CONSUMPTION.....145 Watts at 117 Volts
 VOLTAGE.....105-125 Volts, 60 CPS
 DIMENSIONS.....15" x 8 1/2" x 8 3/8" high

PRICES List Price
 MA-25N Amplifier (less tubes).....\$92.30
 Shipping Weight: 30 lbs.
 Kit of Matched Tubes for MA-25N.....20.20
 Kit of Matched Plugs and Connectors.....3.55
 MAS-25N Portable System.....194.75
 Shipping Weight: 60 lbs.

Consists of:
 1—MA-25N Amplifier (less tubes)
 2—Jensen P12-S 12" PM Speakers, or equal
 2—25-ft. Speaker Cables and Plugs
 1—Model 305 Portable Carrying Case (Attractive Luggage Style)
 1—Astatic JT-30 Microphone with 12-ft. Cable and Connectors
 (If microphone is not desired, deduct \$14.00 from above List Price.)

MA-25NR 25-Watt Remote-Control Amplifier

The Model MA-25NR Remote-Control Amplifier follows closely all specifications for the Model MA-25N, but has, in addition, a built-in circuit for remote control of two of the microphone channels when used with the Model RCB Remote-Control Box as shown on page B-13.

PRICES List Price
 MA-25NR Remote-Control Amplifier (less tubes).....\$99.80
 Kit of Matched Tubes for MA-25NR.....20.20
 Kit of Matched Plugs and Connectors for MA-25NR.....3.55

MA-35N 35-Watt Amplifier and MAS-35N 35-Watt Portable System

AMPLIFIER FEATURES: Four inputs • Three microphone and one phono input, each separately controlled • Electronic mixing over-all • Individual bass and treble equalizers • Tapped output impedances of 4, 8, 15, 125, 250, and 500 ohms • Over-all negative feedback.

APPLICATIONS FOR AMPLIFIER AND SYSTEM:

They are suitable for use at beaches and fairs, for paging and announcing at airports and terminals and the like, and equally ideal for orchestras, theatres and carnivals.

AMPLIFIER SPECIFICATIONS MODEL MA-35N

POWER OUTPUT.....35 Watts, Class AB-2, at less than 5% distortion
 PEAK POWER.....50 Watts
 INPUTS.....Four: 3-microphone, 1-phono
 FREQUENCY RESPONSE.....± 2 DB 50 to 15,000 CPS
 POWER GAIN.....Microphone, 135 DB; Phono, 80.5 DB
 CONTROLS.....Six: 3-microphone, Phono, Bass, Treble, Separate Power On-Off Switch
 TUBES.....1-6SC7, 3-6J7, 3-6SN7GT, 2-6L6G, 1-5U4G, 1-6X5GT (Rectifier)
 OUTPUT IMPEDANCES.....4, 8, 15, 125, 250, 500 Ohms
 HUM LEVEL.....65 DB below output level of 35 Watts
 POWER CONSUMPTION.....190 Watts at 117 Volts
 VOLTAGE.....105-125 Volts, 60 CPS
 DIMENSIONS.....15" x 9 1/2" x 8 3/8" high

PRICES List Price
 MA-35N Amplifier (less tubes).....\$131.60
 Shipping Weight: 32 lbs.
 Kit of Matched Tubes for MA-35N.....23.40
 Kit of Matched Plugs and Connectors.....3.55
 MAS-35N Portable System.....240.05
 Shipping Weight: 63 lbs.

Consists of:
 1—MA-35N Amplifier (less tubes)
 2—EXTRA-HEAVY-DUTY Jensen P12-R 12" PM Speakers, or equal
 2—25-ft. Speaker Cables and Plugs
 1—Model 305 Portable Carrying Case (Attractive Luggage Style)
 1—Astatic JT-30 Microphone with 12-ft. Cable and Connectors
 (If microphone is not desired, deduct \$14.00 from above List Price.)

NOTE: For areas of high temperature and humidity a Model PN Crystal Cartridge may be substituted in Model MA-17PN, MA-25PN and MA-35RCN Amplifiers at cost of \$3.50 list.

MA-25PN 25-Watt Phono Top Amplifier and MAS-25PN 25-Watt Phono Top Portable System

Application for Amplifier and System for recorded music alone, or combined with voice. Plays 12" and smaller records. Widely preferred as record demonstrators.

AMPLIFIER SPECIFICATIONS MODEL MA-25PN

Same as MA-25N Amplifier (described on this page) but includes phono top. Chassis size for MA-25PN: 14" x 11" x 8 3/8" high.

PRICES List Price
 MA-25PN Amplifier (less tubes).....\$114.80
 Shipping Weight: 32 lbs.
 Kit of Matched Tubes for MA-25PN.....20.20
 Kit of Matched Plugs and Connectors.....2.50
 MAS-25PN Portable System.....217.25
 Shipping Weight: 61 lbs.

Consists of:
 1—MA-25PN Amplifier (less tubes)
 2—HEAVY DUTY Jensen P12-S 12" PM Speakers, or equal
 2—25-ft. Speaker Cables and Plugs
 1—Model 305 Portable Carrying Case (Attractive Luggage Style)
 1—Astatic JT-30 Microphone with 12-ft. Cable and Connectors
 (If microphone is not desired, deduct \$14.00 from above List Price.)



MA-35RCN

MA-35RCN 35-Watt Amplifier with Automatic Record Changer Top

Amplifier specifications same as MA-35N (except for record changer mechanism). Chassis size: 15" x 15" x 10 1/2" high.

PRICES List Price
 MA-35RCN Amplifier (less tubes).....\$186.60
 Shipping Weight: 52 lbs.
 Kit of Matched Tubes for MA-35RCN.....23.40
 Kit of Matched Plugs and Connectors.....2.50



To secure a LOW-IMPEDANCE INPUT for amplifiers, see PAGE B-13

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MA-50N MA-50NR

MA-50NR 50-WATT REMOTE-CONTROL AMPLIFIER

The Model MA-50NR is similar in construction and circuit to the Model MA-50N, but has, in addition, a built-in circuit for remote control of two of the microphone channels, when used with the Model RCB Remote-Control Box as described below.

PRICES	List Price
MA-50NR Amplifier (less tubes).....	\$159.50
Shipping Weight: 41 lbs.	
Kit of Matched Tubes for MA-50NR.....	30.05



MA-75N

PRICES	List Price
MA-75N Amplifier (less tubes).....	\$191.55
Shipping Weight: 63 lbs.	
Kit of Matched Tubes for MA-75N.....	33.45
Kit of Matched Plugs and Connectors.....	4.80



RCB

MODEL RCB • DUAL-CHANNEL REMOTE-CONTROL BOX

Compact remote volume-control unit containing two volume controls. Provides independent or simultaneous operation from a remote position of two microphone channels of either the Model MA-25NR Amplifier, Page B-12, or MA-50NR shown above.

Can be used with up to 2,000 feet of cable with negligible cable loss. Tone quality is not affected, and there is no inductive hum pick-up in either the control unit or cable. Dimensions of Model RCB are 5 3/4" x 2 3/4" x 2 1/2" high.

PRICES	List Price
RCB Remote Control Box (less cables).....	\$12.50
Shipping Weight: 3 lbs.	
CA-50 Fifty-Foot Cable and Plugs.....	6.75
CA-100 One Hundred-Foot Cable and Plugs.....	11.75

Above cables for use with RCB-Remote Control Box

MA-50N 50-WATT AMPLIFIER

AMPLIFIER FEATURES: Five input channels • Four microphone and one phono input • Full electronic mixing of all channels • Individual bass and treble equalizers • Fifty watts of undistorted power • Peak power output: 70 watts • Negative feedback • U/L Approved • Fully fused.

APPLICATION: It is suitable for rack mounting and heavy-duty service, and is successfully used for the larger auditoriums, theatre re-inforcement, indoor and outdoor rinks, stadia, and the like, wherever numerous speakers are required. It is excellent for church chime applications. With suitable speakers and

horns, the power can be concentrated where needed at points of high noise level, as at the starting line of an auto race, or in steel mills. Other speaker arrangements permit uniform coverage of large areas, such as football fields or circuses. Ideal as the basic unit for paging and fire-alarm systems in hotels.

AMPLIFIER SPECIFICATIONS • MODEL MA-50N

POWER OUTPUT.....	50 Watts, Class AB-1, at less than 5% distortion
PEAK POWER.....	70 Watts
FREQUENCY RESPONSE.....	2 DB 50 to 15,000 CPS
INPUTS.....	Five: 4-microphone, 1-phono
POWER GAIN.....	Microphone, 136.5 DB; Phono, 82 DB
CONTROLS.....	Seven: 4-microphone, Phono, Bass, Treble, Separate Power On-Off Switch

PRICES

	List Price
MA-50N Amplifier (less tubes).....	\$154.95
Shipping Weight: 41 lbs.	
Kit of Matched Tubes for Model MA-50N.....	30.05
Kit of Matched Plugs and Connectors.....	4.80

TUBES.....	1-6SJ7, 4-6J7, 2-6SC7, 4-6L6G, 2-5V4G (Rectifiers)
OUTPUT IMPEDANCES.....	4, 8, 15, 125, 250, 500 Ohms
HUM LEVEL.....	67 DB below output level of 50 Watts
POWER CONSUMPTION.....	190 Watts at 117 Volts
VOLTAGE.....	105-125 Volts, 60 CPS
DIMENSIONS.....	16" x 11" x 8 3/4" high

MA-75N 75-WATT AMPLIFIER

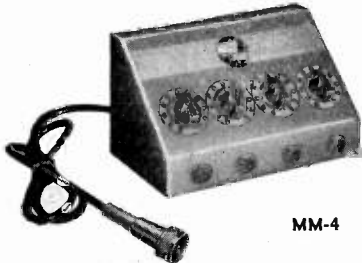
AMPLIFIER FEATURES: Five input channels • Separate controls for each input • Impedance selector switch • Separate plate and screen supplies • Peak power: 125 watts • Electronic mixing of all channels • Fully fused • U/L Approved.

APPLICATION: The Model MA-75N is widely used in rack and mounted installations, and also by itself for covering large outdoor areas such as football fields, baseball diamonds, motor speedways, and airports. It finds industrial use for paging and announcing in large steel mills, cotton mills, drydocks, shipways, and on heavy construction jobs of all kinds. At sea it is used for paging and announcing from the bridge, and with suitable horns, for ship to ship and ship to shore voice communications.

AMPLIFIER SPECIFICATIONS • MODEL MA-75N

POWER OUTPUT.....	75 Watts, Class AB-2, at less than 5% distortion
PEAK POWER.....	125 Watts
INPUTS.....	Five: 4-microphone, 1-phono
FREQUENCY RESPONSE.....	2 DB 50 to 15,000 CPS
POWER GAIN.....	Microphone, 138 DB; Phono, 83.5 DB
CONTROLS.....	Seven: 4-microphone, Phno, Bass, Treble, Power On-Off Switch

TUBES.....	4-6J7, 2-6SC7, 2-6V6GT, 4-6L6G, 1-5Y3GT, 2-5V4G (Rectifiers)
OUTPUT IMPEDANCES.....	8, 15, 60, 125, 250 Ohms
HUM LEVEL.....	68 DB below output level of 75 watts
POWER CONSUMPTION.....	260 Watts at 117 Volts
VOLTAGE.....	105-125 Volts, 60 CPS
DIMENSIONS.....	17" x 12" x 8 3/4" high

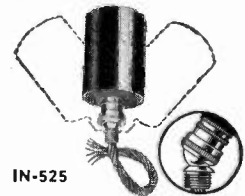


MM-4

MM-4 • FOUR-CHANNEL MICROPHONE MIXER

Can be connected to the high-impedance microphone input of any amplifier. Equipped with four independent gain controls and four microphone connectors, allowing for mixing and fading over-all. It readily converts an amplifier having only one microphone input to four-channel operation. Four feet of rubber-covered shielded cable with standard screw-on connector are supplied. It is completely shielded in an all-metal housing finished to match the MASCO amplifiers.

PRICES	List Price
MM-4 Four-Channel Mixer, with 4-ft. Cable and Connector.....	\$25.00
Shipping Weight: 4 lbs.	



IN-525

IN-525 • LOW-IMPEDANCE TRANSFORMER CONVERSION TO LOW-IMPEDANCE INPUT

One or more of the high impedance microphone inputs regularly incorporated in MASCO Amplifiers may be readily converted to a low impedance by the installation of MASCO Transformer No. IN-525. It is multi-alloy shielded and is mounted on a swivel-ball joint which allows complete rotation and tilting and assures hum-free operation. Primary impedances available are: 50 ohms unbalanced line; 200 ohms or 500 ohms balanced line. Specify tap-setting when ordering.

PRICES	List Price
Factory-installed Low Impedance Input Transformer (per input).....	\$29.95
IN-525 Low Impedance Transformer (for use with any Standard Amplifier).....	21.00
Shipping Weight: 2 lbs.	



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MASCO'S OUTSTANDING MOBILE SOUND EQUIPMENT 6-VOLT DC AND 117-VOLT AC MOBILE AMPLIFIERS



THE ONLY COMPLETE LINE OF U/L APPROVED MOBILE EQUIPMENT • 7 DIFFERENT MODELS

AMPLIFIER FEATURES contained in all models are: Four input channels • Stand-by switch • Heavy-duty switches • Low battery drain • Double-fused circuit • Hum-and-ripple-free operation • Heavy-duty dual vibrator • Crystal pick-up input. **APPLICATION:** The widely varied types of these amplifiers adequately meet all possible needs or applications such as outdoor gatherings, bathing beaches, traveling road shows, open-air theatres, election campaigns and charity drives, traveling evangelists, police and fire-department rescue work, and other locations where AC power is unavailable. Operates as efficiently from 6-volt batteries as from 117-volt AC source. Rugged and powerful, expressly designed for sound truck and other outdoor applications. The battery-saver switch, which shuts off the vibrator during intermission, reduces battery drain to a minimum. The extra-heavy-duty dual vibrator maintains steady voltage and frequency. These amplifiers are provided with separate cable, fitted with rugged heavy-duty plugs and receptacles for each voltage supply.



GENERAL AMPLIFIER SPECIFICATIONS:

POWER OUTPUT: 25 Watts, Class AB-1, at less than 5% distortion
PEAK POWER: 40 Watts
INPUTS: Four: 3-microphone, 1-phono
FREQUENCY RESPONSE: ± 2 DB 50 to 15,000 CPS
POWER GAIN: Microphone, 133.5 DB; Phono, 79 DB
CONTROLS: Six: 3-microphone, Phono, Bass, Treble, Separate Motor Switch and Battery-Saver Switch
TUBES: 4-6J7, 1-6SCT, 2-6L6G, 1-6SL7, 2-7Z4 (Rectifiers)

OUTPUT IMPEDANCES: 4, 8, 15, 125, 250, 500 Ohms
HUM LEVEL: AC: 64 DB below output of 25 Watts;
 DC: Ripple-free
POWER CONSUMPTION: AC: 145 Watts at 117 Volts (including phono motor);
 DC: 23 Amps. at 6 Volts (battery) (includes phono motor)
VOLTAGE: 105-125 Volts, 60 CPS AC or 6 Volts DC (Storage Battery)
 Power Cables included with all Mobile Amplifiers.

MC-25PN List Price
 Phono-top Mobile Amplifier (less tubes) \$158.20
 Shipping Weight: 44 lbs.
 Kit of Matched Tubes 21.80
 Kit of Matched Plugs and Connectors 2.50
 Dimensions: 14" x 11" x 8 3/4" high.

MAC-25PN List Price
 Portable Mobile System \$260.65
 Shipping Weight: 72 lbs.

Consists of:
 1—MC-25PN Phono-top Amplifier (less tubes)
 2—Jensen P12-S 12" Speakers (or equal)
 2—25-ft. Speaker Cables and Plugs
 1—Model 305 Portable Carrying Case (Attractive Luggage Style)
 1—Astatic JT-30 Microphone with 12-ft. Cable and Connectors
 (If microphone is not desired, deduct \$14.00 from above list price.)
 (If amplifier is desired with plain cover less phono top mechanism, deduct from above list price \$10.00)

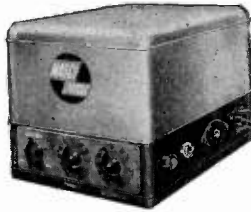
Kit of Matched Tubes 21.80
MC-25PC List Price
 Phono-top Mobile Amplifier with Hinged Cover (less tubes) \$178.20
 Shipping Weight: 46 lbs.
 Kit of Matched Tubes 21.80
 Kit of Matched Plugs and Connectors 2.50
 Dimensions: 14" x 11" x 10 1/2" high.

MODEL PN CRYSTAL CARTRIDGE is recommended for use in areas of humidity and high temperature with phono-top equipment. For substitution, add to list price \$3.50.

MC-10 10-WATT MOBILE AMPLIFIER

AMPLIFIER FEATURES: Two inputs, microphone and phono • Light-weight, rugged • Push-pull output • Separate microphone and phono control • Low battery drain • U/L Approved. **APPLICATION:** For application in police safety and traffic work, fire department, transportation systems, hearses and ambulance service.

AMPLIFIER SPECIFICATIONS • MODEL MC-10
POWER OUTPUT: 10 Watts, Class A, at less than 5% distortion
PEAK POWER: 14 Watts
INPUTS: Two: 1-microphone, 1-phono
FREQUENCY RESPONSE: ± 3 DB 100 to 8,000 CPS
POWER GAIN: Microphone, 110 DB; Phono, 75 DB
CONTROLS: Microphone, Phonograph, On-off Stand-by-Operate (Battery-Saver) Switch
TUBES: 1-6SF5, 1-6SL7GT, 2-6V6GT, 1-7Z4 (Rectifier)
OUTPUT IMPEDANCES: 3.2, 8, and 15 Ohms
HUM LEVEL: 60 DB below output level of 10 Watts
POWER CONSUMPTION: AC: 60 Watts at 117 Volts
 DC: 8 Amps. at 6 Volts (Battery)
VOLTAGE: 105-125 Volts, 60 CPS AC or 6 Volts DC (Storage Battery)
DIMENSIONS: 7 1/2" x 6" x 6" high



MC-10 List Price
PRICES
MC-10 Mobile Amplifier with Power Cables (less tubes) \$62.65
 Shipping Weight: 16 lbs.
 Kit of Matched Tubes for MC-10 9.85
 Kit of Matched Plugs and Connectors 2.00



MODEL RCM REMOTE CONTROL FOR MODEL MC-10

is a compact unit which clamps to the steering-post of a car, handy to the driver. Permits within-reach adjustment of the controls, simplifying operation while driving. Individual control of microphone and phono channels is provided.

RCM REMOTE CONTROL List Price
 with 6-ft. Cable, Connector and Clamp for attachment to steering-post \$15.00



To secure a LOW-IMPEDANCE INPUT for amplifiers, see PAGE B-13
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MASCO SOUND BROADCASTER for Industrial and Institutional Use



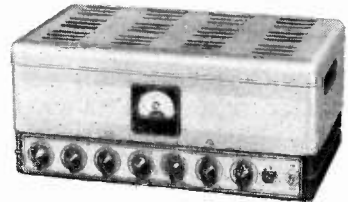
BR-50



MB-50N



MB-75



DR-5M

BR-50 50 WATT SOUND BROADCASTER

FEATURES: U/L approved • Six-position zone selector switch • 50-watt heavy-duty amplifier • Separate all-call switch • Constant voltage output • Oversized components assuring trouble-free service • Four inputs • Attractive Hammertone steel cabinet • Hinged door • Self-powered AM-FM Superheterodyne tuner.

APPLICATION: Offers performance to be had ONLY in custom-built equipment. Its all-in-one feature allows for Voice Paging, Phono and Radio Operation • For use in Airports • Hospitals • Institutions • Department Stores • Factories • Auditoriums • Schools and Playgrounds.

Write the factory for Quotations on your custom built requirements.

PRICES List Price
BR-50 Sound Broadcaster..... \$495.00
No Federal Excise Tax applies

Shipping Weight: 120 lbs.

Consists of:

- 1—Steel Cabinet with Hinged Door
- 1—50-Watt Amplifier
- 1—AM-FM Superheterodyne Self-Powered Tuner
- 1—Oak Mfg. Co. Two-Post Record Changer
- 1—Six-Position Zone Selector Switch
- 1—Separate "All-Call" Switch
- 1—Built-in Monitor Speaker
- 1—Set of Matched Tubes

BR-50R Sound Broadcaster, same as above but with Built-in Microphone Relay and Built-in Tone Signal..... \$545.00
No Federal Excise Tax applies

For one additional Built-in Six-Position Zone Selector Switch, add..... 15.00

MB-50N 50-WATT BOOSTER AMPLIFIER

AMPLIFIER FEATURES: Zero-level input • For standard rack mounting • Designed for parallel operation • Oversize components • Tapped line and voice-coil impedances • Mast gain control • Separate On-off switch • Fused circuit • 50 watts of undistorted power • 70 watts of peak power • U/L Approved.

APPLICATION: Used for centralized sound systems, either alone or in parallel with other MB-50N boosters, or MB-75 boosters, thus providing power in steps of 50 watts or 75 watts. It can also be used to step up the power of existing systems. Especially recommended for use with the Model DR-5 Driver Amplifier.

AMPLIFIER SPECIFICATIONS MODEL MB-50N

POWER OUTPUT.....50 Watts, Class AB-1, at less than 5% distortion
PEAK POWER.....70 Watts
INPUTS.....500 Ohms balanced or unbalanced line
FREQUENCY RESPONSE.....± 2 DB 50 to 15,000 CPS
POWER GAIN.....46 DB
CONTROLS.....One: Master Gain, Separate On-Off Switch
TUBES USED.....2-6SN7GT, 4-6L6G, 2-5V4G (Rectifiers)
OUTPUT IMPEDANCES.....4, 8, 15, 125, 250, 500 Ohms
HUM LEVEL.....60 DB below output level of 50 Watts
POWER CONSUMPTION.....185 Watts at 117 Volts
VOLTAGE.....105-125 Volts, 60 CPS
DIMENSIONS.....17" x 12" x 8 1/2" high

PRICES List Price
MB-50N Booster Amplifier (less tubes)..... \$114.20
Shipping Weight: 41 lbs.
Kit of Matched Tubes for MB-50N..... 20.80
Kit of Two Output Plugs..... 1.35

MB-75 75-WATT BOOSTER AMPLIFIER

AMPLIFIER FEATURES: Zero-level input • Full 75 watts undistorted power • Peak power 125 watts • Safety fused • Tapped line and voice-coil impedances • Impedance selector switch • U/L Approved.

APPLICATION: One or more boosters mounted in a rack along with a driver amplifier, record changer and radio (any radio can be adjusted to operate with this amplifier) form a complete and powerful sound system with facilities for microphone, recorded music, and radio reproduction. Such systems, of 400 to 1,000 watts power, are used in large mills and factories for morale music, special announcements, radio broadcast distribution, and other purposes where a very large number of speakers and horns is required. Especially recommended for use with the DR-5 Driver Amplifier.

AMPLIFIER SPECIFICATIONS MODEL MB-75

POWER OUTPUT.....75 Watts, Class AB-2, at less than 5% distortion
INPUTS.....500 Ohms balanced or unbalanced line
FREQUENCY RESPONSE.....± 2 DB 50 to 15,000 CPS
POWER GAIN.....47.5 DB
CONTROLS.....Master Gain, Separate On-Off Power Switch
TUBES USED.....1-6SN7GT, 2-6V6GT, 4-6L6G, 1-5Y3GT, 2-5V4G (Rectifier)
OUTPUT IMPEDANCE.....8, 15, 60, 125, 250 Ohms
HUM LEVEL.....68 DB below output level of 75 Watts
POWER CONSUMPTION.....250 Watts at 117 Volts
VOLTAGE.....105-125 Volts, 60 CPS
DIMENSIONS.....17" x 12" x 8 1/2" high

PRICES List Price
MB-75 Booster Amplifier (less tubes)..... \$158.35
Shipping Weight: 57 lbs.
Kit of Matched Tubes for MB-75..... 23.65
Kit of Two Output Plugs..... 1.35

DR-5 DRIVER PRE-AMPLIFIER less meter and DR-5M (illustrated) DRIVER PRE-AMPLIFIER with built-in DB Output Meter

AMPLIFIER FEATURES: Five inputs • Four high-gain microphone inputs • Phono input • Provision for Radio Tuner • Inputs separately controlled • Electronic mixing • Separate bass and treble equalizers • U/L Approved.

APPLICATION: Suitable for mixing and adding additional microphone input channels to existing low-gain and booster amplifiers. They are ideal for telephone line work, and for studio, theatre and sound-stage applications. They may be used either in or out of racks. They are recommended for mixing and for pre-amplification in rack systems using the Model MB-50N or Model MB-75 Boosters.

AMPLIFIER SPECIFICATIONS MODEL DR-5

POWER OUTPUT.....1.9 Volts across 500-Ohm Line at less than 5% distortion
INPUTS.....Six: 4-microphones, 1-phono-radio
FREQUENCY RESPONSE.....± 2 DB: 50 to 15,000 CPS
POWER GAIN.....Microphone, 97 DB; Phono, 65 DB
CONTROLS.....Seven: 4-microphone, Phono-Radio, Bass, Treble, Separate On-Off Switch, Bass Boost at 50 CPS; 9 DB. Attenuation: 10 DB. Treble Boost at 10,000 CPS; 10 DB. Attenuation: 12 DB.
TUBES USED.....1-6SL7GT, 5-6J7, 1-6SN7GT, 1-6X5GT (Rectifier)
OUTPUT IMPEDANCES.....500 Ohms balanced or unbalanced line
HUM LEVEL.....35 DB below zero level of .006 Watts
POWER CONSUMPTION.....40 Watts at 117 Volts
VOLTAGE.....105-125 Volts, 60 CPS
DIMENSIONS.....15" x 8 1/2" x 8 3/4" high
DR-5M Same as DR-5 but includes built-in DB output meter.

PRICES List Price
DR-5 Driver Pre-Amplifier (less tubes)..... \$ 86.40
DR-5M Driver Pre-Amplifier with Built-in Output Meter (less tubes)..... 113.90
Kit of Matched Tubes for Model DR-5 or Model DR-5M..... 16.10
Kit of Matched Plugs and Connectors..... 3.80

To secure a LOW-IMPEDANCE INPUT for amplifiers, see PAGE B-13
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THE ULTIMATE IN HIGH FIDELITY AMPLIFIERS

... UNEXCELLED BY ANY STANDARD



MA-12HF
MA-12EX

MA-12HF 12-WATT HIGH FIDELITY AMPLIFIER
MA-12EX (illustrated) 12-WATT HIGH FIDELITY AMPLIFIER WITH EXPANDER

AMPLIFIER FEATURES:

Available with or without expander • Compensated inputs with switching arrangement for G-E, Pickering and crystal pick-ups • Radio Tuner Input • Separate Bass and Treble Controls • U/L Approved.

The Model MA-12EX expander model incorporates the many outstanding features of the MA-12HF, but has in addition the new MASCO variable expander, which operates instantaneously; has no chopping effect or time lag.

APPLICATION:

Model MA-12HF is especially adapted for use by broadcast stations for bridging applications and recording. Is ideal as a distribution amplifier for wired music applications.

AMPLIFIER SPECIFICATIONS:

MODEL MA-12HF and MODEL MA-12EX	
RATED POWER OUTPUT.....	12 Watts at less than 5% distortion 9 Watts at less than 2% distortion
PEAK POWER OUTPUT.....	17 Watts
FREQUENCY RESPONSE.....	± 2 DB 50 to 15,000 CPS (tone control normal)
INPUT SENSITIVITY & GAIN.....	Magnetic pickup .008 Volts (90 DB) High level crystal pickup 1.5 Volts (60 DB) Low level crystal pickup .45 Volts (70 DB) Radio Tuner, Bridging .3 Volts (75 DB)
CONTROLS.....	Magnetic pickup, crystal pickup, radio tuner-1-Bass, 1-Treble (Model MA-12EX has separate expander control)
TUBES FOR MA-12HF.....	1-6SC7, 2-6SL7GT, 2-6V6GT, 1-5Y3GT (Rectifier)
TUBES FOR MA-12EX.....	1-6SC7, 2-6SL7GT, 2-6SN7GT, 2-6V6GT, 1-5Y3GT (Rectifier)
OUTPUT IMPEDANCES.....	2, 4, 8, 15, 500 Ohms
HUM LEVEL.....	65 DB below output level of 12 Watts
POWER CONSUMPTION.....	80 Watts at 117 Volts
VOLTAGE.....	105-125 Volts, 60 CPS
DIMENSIONS.....	13" x 8" x 8 5/8" high
Both Models supplied with Connectors.	

PRICES	List Price
MA-12HF Amplifier, less tubes.....	\$ 83.15
Kit of Matched Tubes for Model MA-12HF.....	11.85
MA-12EX Amplifier, less tubes.....	108.75
(with built-in Expander Circuit)	
Kit of Matched Tubes for Model MA-12EX.....	16.25
If Cover is not desired, deduct from either model.....	6.90
Shipping Weight — either model: 20 lbs.	

To secure a LOW-IMPEDANCE INPUT for amplifiers, see PAGE B-13
WEST OF ROCKIES ADD 5% TO ABOVE LIST PRICES



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Specifications and prices subject to change without notice.



MA-25HF
MA-25EX

MA-25HF (illustrated) 25-WATT HIGH FIDELITY AMPLIFIER
MA-25EX 25-WATT HIGH FIDELITY AMPLIFIER WITH EXPANDER

FEATURES:

Available with or without volume expander • Four inputs separately controlled • Input switching arrangement for G-E, Pickering, High and Low output crystal and magnetic pick-ups, microphone and radio tuner • Separate bass and treble controls • Output tapped at 4-8-16-250 and 500 ohms • Flat frequency response • Over-all negative feedback • U/L Approved.

The specially designed Controlled Expander Circuit built into the MA-25EX offers true expander functions since it allows expansion on only the "above average" passages of a record. Expansion is variable from zero to 15 DB and is entirely free from time lag, thump and microphonics.

APPLICATION:

For broadcast stations, recording studios, bridging and monitoring, transcription playback and the "critical" music lover.

AMPLIFIER SPECIFICATIONS:

MODEL MA-25HF and MODEL MA-25EX	
RATED POWER OUTPUT.....	25 Watts at less than 5% distortion 20 Watts at less than 2% distortion (at all frequencies from 30 to 20,000 CPS)
PEAK POWER.....	43 Watts
FREQUENCY RESPONSE.....	± 1 DB 30 to 20,000 CPS (tone controls normal)
INPUT SENSITIVITY & GAIN.....	Magnetic pickup, .008 Volts (90 DB) High level crystal pickup, 1.5 Volts (60 DB) Low level crystal pickup, .45 Volts (70 DB) Radio Tuner, Bridging .3 Volts (75 DB) Microphone, .005 Volts (120 DB)
CONTROLS.....	Microphone, Magnetic pickup, crystal pickup and Radio-1-bass, 1-treble (Model MA-25EX has separate expander control)
TUBES FOR MA-25HF.....	1-12SC7, 1-12SJ7, 2-6SL7GT, 2-6L6G, 1-5V4G (Rectifier)
TUBES FOR MA-25EX.....	1-12SC7, 1-12SJ7, 2-SN7GT, 2-6SL7GT, 2-6L6G, 1-5V4G (Rectifier)
OUTPUT IMPEDANCES.....	4, 8, 16, 250, 500 Ohms
HUM LEVEL.....	80 DB below output level of 25 Watts
POWER CONSUMPTION.....	140 Watts at 117 Volts
VOLTAGE.....	105-125 Volts, 60 CPS
DIMENSIONS.....	14" x 10" x 8 5/8" high
Both Models supplied with Connectors.	

PRICES	List Price
MA-25HF Amplifier, less tubes.....	\$138.15
Kit of Matched tubes for Model MA-25HF.....	16.85
MA-25EX Amplifier, less tubes.....	147.25
(with built-in Expander Circuit)	
Kit of Matched Tubes for Model MA-25EX.....	21.25
If Cover is not desired, deduct from either model.....	7.40
Shipping Weight — either model: 34 lbs.	

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FOR BEST RESULTS SELECT

THE ULTIMATE IN HIGH FIDELITY AMPLIFIERS

... UNEXCELLED BY ANY STANDARD



MHP-110
MHP-110X

MHP-110 10-WATT HIGH FIDELITY AMPLIFIER
MHP-110X (illustrated) 10-WATT HIGH FIDELITY AMPLIFIER WITH BUILT-IN EXPANDER CIRCUIT

AMPLIFIER FEATURES:

Exclusive MASCO 4-Way Tone Compensator • Voltage Supply Socket for Attachment of External Pre-amplifier • Power Supply Socket • Crystal Pickup input provision • Radio Tuner input provision • Pre-amplifier input provision • Safety fused • Over-all negative feedback • U/L Approved • Expander circuit available • 10-Watt power output • 4-foot extension controls for cabinet mounting.

AMPLIFIER SPECIFICATIONS:

MODEL MHP-110 and MODEL MHP-110X

POWER OUTPUT..... 10 Watts at less than 5% distortion
PEAK POWER OUTPUT..... 14 Watts
FREQUENCY RESPONSE..... ± 1 DB 40 to 15,000 CPS (Tone Compensator Normal)
GAIN AND SENSITIVITY..... MHP-110: .9 Volts — 70 DB
MHP-110X: .5 Volts — 75 DB
FLAT RESPONSE..... With Tone Compensator at Normal: Response is ± 1 DB 40 to 15,000 CPS
VOLUME CONTROL..... Continuously Variable with Power On-Off Switch
4-WAY INDIVIDUAL TONE COMPENSATOR:
Position —
No. 1: Deep bass with high cut
No. 2: Medium bass (Bass Boost with normal treble)
No. 3: Normal (Flat response)
No. 4: Treble (Normal bass with treble boost)
VARIABLE EXPANDER (MHP-110X only):
Manually controlled from zero to + 10 DB. Operates instantaneously. No chopping effect. No time lag.
TUBES USED MHP-110..... 1-6SL7GT, 2-6V6GT, 1-5Y3GT (Rectifier)
TUBES USED MHP-110X..... 3-6SL7GT, 2-6V6GT, 1-5Y3GT (Rectifier)
OUTPUT IMPEDANCES..... 4 and 8 Ohms
POWER CONSUMPTION..... 60 Watts at 117 Volts, 60 CPS
HUM LEVEL..... 80 DB below 10 Watts
AC RECEPTACLE..... Provided for external attachment of phonograph or radio tuner. (Radio tuner may be adjusted for use.)
CHASSIS DIMENSIONS..... 10" x 5 1/2" x 2 1/2" high

PRICES

List Price

MHP-110 High Fidelity 10-Watt Amplifier with Tubes and Input Connectors..... \$ 48.75
Weight: 9 lbs.
MHP-110X High Fidelity 10-Watt Amplifier with Built-in Expander Circuit, with Tubes and Input Connector..... 59.95
Weight: 9 1/2 lbs.
EXT-4 4-Foot Extension Control Cables for Cabinet Mounting. May be used with either model. Specify when ordering, and add to the above list price..... 6.90

To secure a LOW-IMPEDANCE INPUT for amplifiers, see PAGE B-13

WEST OF ROCKIES ADD 5% TO ABOVE LIST PRICES



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Specifications and prices subject to change without notice.



MA-10HF
MA-10EX

MA-10HF (illustrated) 10-WATT HIGH FIDELITY AMPLIFIER

MA-10EX 10-WATT HIGH FIDELITY AMPLIFIER WITH BUILT-IN EXPANDER CIRCUIT

AMPLIFIER FEATURES:

10 Watts of hum-free power • Built-in compensated pre-amplifier • Four inputs • Two inputs equalized for various magnetic and reluctance pickups • One input equalized for crystal pickup • One input unequalized for radio tuner • Ideal for L.P. pickups • Expander circuit available • Individual bass and treble boost and attenuation • Heavy duty output transformer with impedances of 2-4-8-16 and 500 ohms to match most all speakers • Inverse feedback 12 DB over-all • Safety fused • U/L Approved.

AMPLIFIER SPECIFICATIONS:

MODEL MA-10HF and MODEL MA-10EX

POWER OUTPUT..... 10 Watts at less than 5% distortion
PEAK POWER OUTPUT..... 14 Watts
FREQUENCY RESPONSE..... ± 1 DB 40 to 20,000 CPS (Tone controls normal)
GAIN AND SENSITIVITY..... Magnetic Input No. 1: .01 Volts 92 DB at 1000 CPS
Magnetic Input No. 2: .08 Volts 78 DB at 1000 CPS
Crystal Input: .5 Volts 70 DB at 1000 CPS
Radio Input: .5 Volts 70 DB at 1000 CPS
VOLUME CONTROLS..... Continuously variable
TREBLE CONTROLS (MA-10HF only)..... High frequency boost 15 DB
Attenuation at 15,000 CPS 14 DB
BASS CONTROL (MA-10HF only)..... 12.5 DB boost at 50 CPS, and 12.5 DB attenuation at 50 CPS
FLAT RESPONSE..... With controls at normal, response is ± 1 DB 40 to 20,000 CPS
4-WAY INDIVIDUAL TONE COMPENSATION (MA-10EX only):
Position —
No. 1: Deep bass with high cut
No. 2: Medium bass (Bass boost with normal treble)
No. 3: Normal (Flat response)
No. 4: Treble (Normal bass with treble boost)
VARIABLE EXPANDER (MA-10EX only):
Manually controlled from zero to + 10 DB. Operates instantaneously. No chopping effect. No time lag.
TUBES USED MA-10HF..... 1-6SC7, 2-6SL7GT, 2-6V6GT, 1-5Y3GT (Rectifier)
TUBES USED MA-10EX..... 1-6SC7, 3-6SL7GT, 2-6V6GT, 1-5Y3GT (Rectifier)
OUTPUT IMPEDANCES..... 2, 4, 8, 16, 500 Ohms
POWER CONSUMPTION..... 75 Watts at 117 Volts, 60 CPS
HUM LEVEL..... 70 DB below 10 Watts
Contains 2 hum balancing potentiometers
AC RECEPTACLE..... Provided for external attachment of phonograph or radio tuner. (Radio tuner may be adjusted for use.)
CHASSIS DIMENSIONS..... 12" x 7" x 2 1/2" high

PRICES

List Price

MA-10HF High Fidelity 10-Watt Amplifier with Tubes and Input Connector..... \$ 68.95
Weight: 11 1/2 lbs.
MA-10EX High Fidelity 10-Watt Amplifier with Built-in Expander Circuit, with Tubes and Input Connector..... 84.95
Weight: 12 lbs.
EXT-3 Set of 3 Extension Shafts, each 6" long, may be used with either model for cabinet mounting; specify when ordering..... 2.50

MARK SIMPSON MANUFACTURING CO. • LONG ISLAND CITY, N. Y.

FOR BEST RESULTS SELECT



RK-5 and RK-5M DUAL-SPEED DISC RECORDERS AND PLAYBACK

FEATURES: Instant play-back • Recording and play-back at both 78 and 33 1/3 rpm • Electronic Volume-Level Indicator • Heavy-duty 6" PM Alnico V Speaker • Separate volume and tone controls • Adjustable cutting head • Heavy-duty recording motor and table • Three input channels • U/L Approved.

APPLICATION: Invaluable for use in educational programs, for self-criticism by vocalists, actors, elocutionists, physicians, orchestras, language students and for any form of program recording or use in the "rumpus room."

AMPLIFIER SPECIFICATIONS:

MODEL RK-5 and RK-5M

TUBES.....2-6SL7GT, 1-6V6GT, 1-6U5, 1-6X5GT (Rectifier)

POWER CONSUMPTION.....75 Watts, including motor

VOLTAGE.....117 Volts, 60 CPS

CASE COVERING.....Brown Alligator Fabrikoid

CASE DIMENSIONS.....16" x 19 1/4" x 8 1/2" high

Models RK-5L and RK-5ML Disc Recorders with additional pick-up for playback of long playing records (Same Amplifier specifications as RK-5 and RK-5M).

PRICES

List Price (*Plus Federal Excise Tax)

RK-5 Recorder with Crystal Cutting Head and Tubes.....\$150.00*

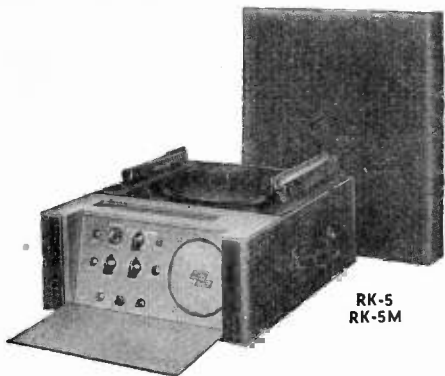
RK-5M Recorder with Magnetic Cutting Head and Tubes.....155.00*

RK-5L Recorder with Tubes and additional LP Pick-up Arm.....160.00*

RK-5ML Recorder with Tubes, Magnetic Cutting Head and additional LP Pick-up Arm.....165.00*

Shipping Weight — all models: 40 lbs.

MODEL PN CRYSTAL CARTRIDGE is recommended for use in area of humidity and high temperature. Add to list price \$3.50.



RK-5
RK-5M



TP-16A

TP-16A DE LUXE 16" TRANSCRIPTION PLAYER with Built-in 5-WATT AMPLIFIER

FEATURES: Individual microphone and phono input • Individual bass and treble equalizers • Heavy-duty 10" PM speaker • Plays 16" and standard recordings • Dual speed motor • Easily portable • Astatic No. 400 arm with QT cartridge • U/L Approved.

APPLICATION: Expressly designed for reproduction of 16" transcriptions for broadcasting studios, advertising agencies, theatrical agencies, lectures, and sales meetings.

AMPLIFIER SPECIFICATIONS:

MODEL TP-16A

TUBES.....2-6SL7GT, 1-6V6GT, 1-6X5GT (Rectifier)

POWER CONSUMPTION.....80 Watts, including motor

VOLTAGE.....105-125 Volts, 60 CPS

CASE COVERING.....Brown Alligator Fabrikoid

CASE DIMENSIONS.....17 1/4" x 22" x 10 3/4" high

Model TP-16AL Transcription Player with additional Pick-up Arm for playback of long-playing records. Same Amplifier specifications as TP-16A.

List Price

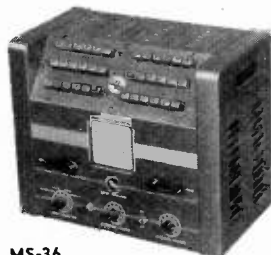
(*Plus Federal Excise Tax)

TP-16A Transcription Player, with Tubes.....\$155.00*

TP-16AL Transcription Player, with Tubes and additional LP Pick-up Arm.....170.00*

Shipping weight: 43 lbs.

MODEL PN CRYSTAL CARTRIDGE is recommended for use in areas of humidity and high temperature. Add to list price \$3.50.



MS-36

MS SERIES SCHOOL AND INDUSTRIAL SYSTEMS

FEATURES: 28 - Watt Amplifier • Two-way conversation • Simultaneous or selective paging • Provides for up to 36 rooms • External phono provision • Volume-level indicator • Input selector switch • External microphone provision • Provision for radio input • U/L Approved.

APPLICATION: An invaluable aid to the efficiency of educational institutions. Addresses may be heard in several or all rooms at once. Control of fire drills or other emergencies is facilitated. Many of these advantages apply with equal force to hospitals, institutions, clubs, hotels, and passenger ships.

AMPLIFIER SPECIFICATIONS • MS SERIES

POWER OUTPUT.....28 Watts, Class AB-1, at less than 5% distortion

PEAK POWER.....40 Watts

INPUTS.....External microphone, phono and radio provision, built-in intercommunication speakers

FREQUENCY RESPONSE.....± 2 DB 50 to 15,000 CPS

POWER GAIN.....Microphone, 130 DB; Phono, 85 DB

CONTROLS.....Separate incoming and outgoing volume controls, Function selector switch, "Talk-Listen" switch, Master call switch, Station selector switches, Power On-Off switch, Eye level control

TUBES.....1-6SC7, 1-6SL7GT, 1-6SN7GT, 2-6L6G, 1-6U5, 1-5V4G (Rectifier)

OUTPUT IMPEDANCES.....80 Ohm balanced line, constant voltage output

HUM LEVEL.....64 DB below output level of 28 Watts

POWER CONSUMPTION.....145 Watts at 117 Volts

VOLTAGE.....105-125 Volts, 60 CPS

CABINET (Metal).....Finished in Brown Hammerstone

DIMENSIONS.....16" x 9 1/2" x 13" high

PRICES

MS-24-1 (6 rooms) Amplifier with Tubes \$184.50

MS-24-2 (12 rooms) Amplifier with Tubes 189.50

MS-24-3 (18 rooms) Amplifier with Tubes 194.50

MS-24 (24 rooms) Amplifier with Tubes 199.50

MS-30 (30 rooms) Amplifier with Tubes 217.00

MS-36 (36 rooms) Amplifier with Tubes 229.50

Shipping Weight — all models: 37 lbs.

List Price



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JM-5 MASTER

MODERN PACKAGED INTER-COMMUNICATION SYSTEMS

FEATURES: Master Station equipped with Volume Control with "on-off" switch • Separate "press to talk" switch • Remote Station has "press to talk" switch to originate call to master station if desired and allow for privacy • Remote Station can be used for two-way conversation without manual operation • Natural Voice reproduction • Ample Sensitivity • Matching Master and Remote Stations • Unbreakable cast-aluminum housings • Finished in attractive Walnut Hammerstone • U/L Approved.

List Price

MODEL JMR—Two-Station System complete. One master with tubes, one remote, and 50-ft. cable.....\$42.50

MODEL JM5—Master, with tubes. For communication between it and 5 remote stations; can converse with all 5 stations or can select any one remote station. Master has press-to-talk and station selector switch and volume control with on-off switch.....37.50

MODEL JR—Remote. "Press-to-talk" switch allows remote to originate call to JM5 Master, permitting privacy; JR can be used as two-way paging system. Use of switch may be omitted. System uses 3-Wire Vinylite Covered Cable.....12.75

MODEL IM-5—All Master, with tubes. Communication between it and 5 other masters. Each master can converse two-way with any or all masters in system. Has press-to-talk and station selector switches and volume control with on-off switch.....37.50

7-Conductor Cable. Must be used with 5 or more master stations... (per foot) .25

5-Conductor Cable for use with up to 4 master stations... (per foot) .20

(All units are available in white baked enamel finish at slight additional cost)

SPECIFICATIONS FOR IM-5, JM-5 and JMR MASTER:

VOLTAGE.....117 Volts AC or DC

POWER OUTPUT.....2.5 Watts

POWER CONSUMPTION.....30 Watts

TUBES.....14F7 Dual Voltage Amplifier, 50L6 Beam Power Amplifier, 50Y6 Rectifier

SPEAKER.....4" Alnico V Magnet, 13-Ohm voice coil used in master and remotes.

DIMENSIONS.....L 6 5/8", W 7 1/8", H 5 1/4"

SHIPPING WEIGHTS:

JM-5: 6 lbs.

JR: 3 1/4 lbs.

IM-5: 6 lbs.

JMR System: 9 1/4 lbs.



JR - REMOTE



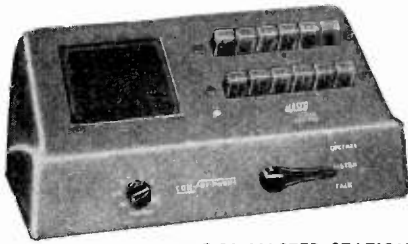
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FOR BEST RESULTS SELECT

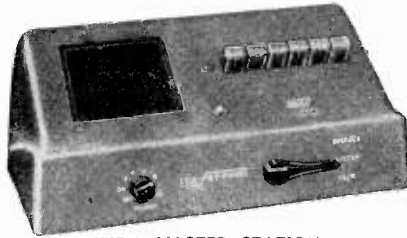
CON-FER-PHONE Line of INTER-MIX, INTERCOMMUNICATION Equipment



Build a system around any one Master to meet your requirements. Available in Six and Twelve-Station Masters. Remote available WITH or WITHOUT Call Switch or with 6-Position Master Station Selector.



JMP-12 MASTER STATION



JMP-6 MASTER STATION



JS-6 REMOTE

FEATURES:

- For Master-to-Master-to-Remote Inter-Mix Installation.
- For Master-to-Master Installation.
- For Master-to-Remote Installation.
- Remote Station for two-way conversation with Masters.
- Remote Station can originate call to Masters.
- Masters may have personal remotes.
- Push-Button station selection.
- Press-to-talk switch with dictate position on Master.
- Individual or group conversation.
- Volume control with on-off switch.
- On-Off indicating light.
- AC-DC operation.
- Finished in attractive walnut hammertone.
- Finish available in baked white enamel.
- U/L Approved.

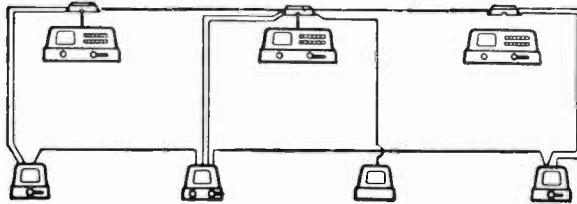


Illustration of a Master-to-Master-to-Remote Inter-Mix Installation:

The above is an inter-mixed system using both Masters and Remotes. Masters may call selectively or to all masters and remotes in the circuit. Master stations can originate calls to any remote at will. Remotes can answer any master from a distance but cannot originate calls nor talk to other remotes. Remotes can originate calls to any master in the circuit, but cannot talk with other remotes. Model JS Remote may originate a call to only one master. Model JS-6 Remote may originate a call to as many as six masters. Remotes with switch can be installed for private or non-private use.

Each master can have his own private hook-up of remotes. The remotes may or may not originate calls to the individual master. Masters can call each other regardless of whether master being called has its power on or off.

Illustration shows less than the maximum number of units possible in installation.

A JMP-6 Master may be connected to a total of six other units and a JMP-12 Master to a total of twelve other units. These units may be other masters or the JL, JS, and JS-6 Remotes, or the MB-8N Booster Amplifier. All of these units may be mixed.

SPECIFICATIONS FOR MODELS JMP-6 and JMP-12, MASTERS and MODELS JL, JS, and JS-6 REMOTES

MASTER	
VOLTAGE	117 Volts AC or DC
POWER OUTPUT	2.5 Watts
POWER CONSUMPTION	30 Watts
CONTROLS	6 and 12 Push-Button station selectors Volume control with on-off switch
TUBES	1-14F7 Dual Triode Amplifier 1-50L6 Beam Power Amplifier 1-50Y6 Rectifier

MASTER AND REMOTE SPEAKER	4" Alnico V Magnet 13-Ohm Voice Coil
FINISH	Walnut Hammertone or White Baked Enamel
DIMENSIONS	Master: 12 3/4" x 7 1/2" x 5 1/2" high Remote: 6 3/4" x 7 1/2" x 5 1/4" high
SHIPPING WEIGHT	Master: 8 lbs. Remote: 3 1/4 lbs.

MB-8N 8-WATT BOOSTER AMPLIFIER

- FEATURES:** U/L Approved
• Tapped Output • Master Gain Control • Input Matched to Master • Designed for Long Hour Usage.

APPLICATION: Where paging is required in conjunction with intercommunication. It is the answer to high noise level voice penetration or for large area voice coverage. It is used with separate speakers and baffles.

PRICES		List Price
JMP-6	Six-Station Master with Tubes	\$57.95
JMP-12	Twelve-Station Master with Tubes	67.95
JL	Remote Less Call Switch	12.75
JS	Remote With Call Switch	14.00
JS-6	Remote with 6-Position Master Station Selector and Call Switch	19.95

MB-8N	Booster Amplifier, 8 Watts, with Cover, with Matched Tubes	57.50
BJ-6	Junction Box for use with JMP-6 Master and JS-6 Remote. Consists of a terminal strip containing 8 pair of terminal lugs mounted on a metal chassis including a dust cover Above Junction Box, factory installed	7.00 9.50
BJ-12	Junction Box for use with JMP-12 Master. Consists of a terminal strip containing 14 pair of terminal lugs mounted on a metal chassis and includes a dust cover Above Junction Box, factory installed	7.25 10.00

CABLE PRICES		List Price, per 100 ft.
SC	One Pair Shielded Twisted No. 20 Solid. No outside covering	\$ 6.75
SCB	One Pair Shielded Twisted No. 20 Solid, with over-all Weather-proof Braid Covering. (This is not water-proof)	8.50
TW-4	Four Pair, each pair Twisted No. 20 Solid with over-all outside Braid Covering all four pair	17.00
TW-7	Seven Pair, each pair Twisted No. 20 Solid with over-all outside Braid Covering all seven pair	23.75
TW-13	Thirteen Pair, each pair Twisted No. 20 Solid with over-all outside covering all thirteen pair	47.50
S	One Pair Twisted Unshielded No. 20 Solid. No outside covering	3.75



MB-8N

AMPLIFIER SPECIFICATIONS • MODEL MB-8N

POWER OUTPUT	8 Watts, at less than 5% distortion
PEAK OUTPUT	13 Watts
INPUT	One, 13 Ohms
FREQUENCY RESPONSE	± 2 DB 50 to 10,000 CPS
CONTROLS	One, Master Gain with On-Off Switch
TUBES	1-68L7, 1-6L6G, 1-5Y3GT (Rectifier)
OUTPUT IMPEDANCES	3.2, 8, 500 Ohms
HUM LEVEL	60 DB below output of 8 Watts
POWER CONSUMPTION	75 Watts, 117 Volts, 60 Cycles
DIMENSIONS	10" x 6" x 7 1/2" high
SHIPPING WEIGHT	14 lbs.

Write to factory for catalog giving complete description of Con-Fer-Phone Intercommunication Equipment.

WEST OF ROCKIES ADD 5% TO ABOVE LIST PRICES

To secure a LOW-IMPEDANCE INPUT for amplifiers, see PAGE B-13

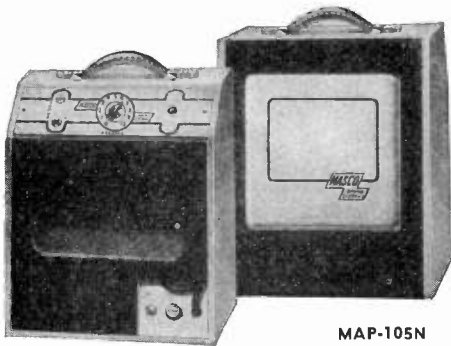
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FOR BEST RESULTS SELECT

MASCO MUSICAL INSTRUMENT AMPLIFIER SYSTEMS



MAP-105N

MAP-105N 5-WATT MUSICAL INSTRUMENT AMPLIFIER SYSTEM

AMPLIFIER FEATURES: Two inputs • 8" heavy-duty, built-in PM speaker • Safety-fused circuit • Hum-free operation • Fully enclosed back • Indicating Pilot Light • U/L - CSA Approved.

APPLICATION: Suitable for use by musicians, singers, lecturers, and other entertainment applications. The dual-channel input permits mixing of singing with dance band or other instrumental music.

AMPLIFIER SPECIFICATIONS • MODEL MAP-105N

POWER OUTPUT	5 Watts, at less than 5% harmonic distortion
INPUTS	Two, suitable for microphone or musical-instrument pick-up
FREQUENCY RESPONSE	± 2 DB 100 to 8,000 CPS
POWER GAIN	105 DB
TUBES	1-6SL7GT, 1-6V6GT, 1-6X5GT (Rectifier)
HUM LEVEL	60 DB below output level of 5 Watts
POWER CONSUMPTION	30 Watts at 117 Volts, 60 CPS
DIMENSIONS	11 3/4" x 8 1/2" x 13" high

PRICES	List Price
MAP-105N Musical Instrument Amplifier System as described (less tubes)	\$49.10
Shipping Weight: 15 lbs.	
Kit of Matched Tubes for MAP-105N	5.90



MAP-15

MAP-15 15-WATT MUSICAL INSTRUMENT AMPLIFIER SYSTEM

AMPLIFIER FEATURES: Three inputs • Separate volume and tone controls • 15 watts of undistorted power • Acoustically-built case • Heavy-duty 12" PM speaker.

APPLICATION: Used by bands, orchestras, and discriminating musicians wherever pure tonal reproduction is required. Suitable for instrumental solos and for voice and instruments combined.

AMPLIFIER SPECIFICATIONS • MODEL MAP-15

POWER OUTPUT	15 Watts, Class A, at less than 5% distortion
PEAK POWER	25 Watts
FREQUENCY RESPONSE	± 3 DB 50 to 12,000 CPS
INPUTS	Three: 1-microphone and 2-instrument
POWER GAIN	110 DB
CONTROLS	Two: Master Volume and Tone
SWITCHES	On-Off AC
TUBES	1-6SC7, 1-6SL7GT, 2-6L6G, 1-5Y3GT (Rectifier)
POWER CONSUMPTION	95 Watts at 117 Volts, 60 CPS

PRICES	List Price
MAP-15 Musical Instrument Amplifier, as described (less tubes)	\$87.85
Shipping Weight: 30 lbs.	
Kit of Matched Tubes for MAP-15	11.65

MUSICAL CONTACT MICROPHONES



L-10

WC-20

Model L-10 (less volume control)
Model WC-20 (with volume control)

FEATURES: Operate with all makes of amplifiers • Mellow, rounded tone • Will not mar surfaces • Easy to install • Operate with all instruments. The brilliance of tone resulting from the use of these pick-ups far exceeds the power of the instruments alone. They require no special strings or changes.

PRICES	List Price
WC-20 Contact Microphone with Volume Control and 8-foot Cable	\$13.75
L-10 Contact Microphone with 8-foot Cable, less volume control	10.50
All-Metal Plug attached to WC-20 or L-10	1.85

MAP-120N 12-WATT MUSICAL INSTRUMENT AMPLIFIER SYSTEM

AMPLIFIER FEATURES: Two inputs • 12 watts undistorted output • 10" heavy-duty built-in matched speaker • Master volume control • Separate tone control • Heat-free operation • Fused circuit for safety • U/L - CSA Approved.

APPLICATION: Can be used by soloists and orchestras, by the MC at night clubs and taverns, for concerts, recitals, ballyhoo, etc.

AMPLIFIER SPECIFICATIONS:

MODEL MAP-120N

POWER OUTPUT	12 Watts, with less than 5% harmonic distortion
INPUTS	Two, suitable for microphone or musical-instrument pick-up
FREQUENCY RESPONSE	± 2 DB 50 to 10,000 CPS
POWER GAIN	110 DB
TUBES	2-6SL7GT, 2-6V6GT, 1-5Y3GT (Rectifier)
HUM LEVEL	62 DB below output level of 12 Watts
POWER CONSUMPTION	60 Watts at 117 Volts, 60 CPS
DIMENSIONS	13" x 8" x 16 1/2" high

PRICES	List Price
MAP-120N Musical Instrument Amplifier System as described (less tubes)	\$72.65
Shipping Weight: 22 lbs.	
Kit of Matched Tubes for MAP-120N	9.85



MAP-120N

MAP-18 18-WATT DE LUXE MUSICAL INSTRUMENT AMPLIFIER SYSTEM

AMPLIFIER FEATURES: Three inputs • Separate input controls • Individual bass and treble tone controls • Finest stringed-instrument reproduction • Built-in heavy-duty 12" PM speaker • 18 watts of undistorted output • Convenient top-mounted control panel • U/L - CSA Approved.

APPLICATION: Three instruments or microphones, or any combination may be used separately or simultaneously by means of the three separate volume controls. Voice and instrument may be combined, with individual volume control of each. The bass and treble tone controls vary the overtones from crisp, clear melody, to rich, mellow bass. An 18-watt amplifier is housed in an attractive, portable case. It provides 18 watts of undistorted output by means of an exclusive circuit design. A 12" heavy-duty speaker is incorporated in an acoustically designed case which eliminates all distortion and false harmonics. The control panel is mounted on top to provide quick access to the professional and discriminating musician.



MAP-18

AMPLIFIER SPECIFICATIONS:

MODEL MAP-18

POWER OUTPUT	18 Watts, at less than 5% distortion
PEAK POWER	27 Watts
INPUTS	Three: instrument or microphone
FREQUENCY RESPONSE	± 2 DB 50 to 12,000 CPS
POWER GAIN	110 DB
TUBES	3-6SF5, 1-6SJ7, 1-6SL7GT, 2-6L6G, 1-5Y4G (Rectifier)
HUM LEVEL	62 DB below output level of 18 Watts
POWER CONSUMPTION	140 Watts at 117 Volts
VOLTAGE	105-125 Volts, 60 Cycles AC
DIMENSIONS	15 3/4" x 9 5/8" x 18 3/4" high

PRICES	List Price
MAP-18 Musical Instrument Amplifier System, as described (less tubes)	\$145.30
Shipping Weight: 36 lbs.	
Kit of Matched Tubes for Map-18	17.20

To secure a LOW-IMPEDANCE INPUT for amplifiers, see PAGE B-13
WEST OF ROCKIES ADD 5% TO ABOVE LIST PRICES
Amplifiers licensed under U. S. patents of Western Electric Company, Inc., and American Telephone and Telegraph Company. • Specifications and prices subject to change without notice.

MARK SIMPSON MANUFACTURING CO. • LONG ISLAND CITY, N. Y.

SOUND-REEL

MAGNETIC TAPE RECORDERS



MODEL 375 and MODEL R-3 (Model R-3 has self-contained Radio)

For One Hour Single Channel Continuous Recording

ELECTRICAL AND MECHANICAL SPECIFICATIONS—MODELS 375 and R-3

POWER OUTPUT 5 watts to speaker
 OUTPUTS Three—To Internal Speaker, External Speaker Jack, Jack for Monitoring

FREQUENCY RESPONSE ± 3 db 100-7000 cps
 SIGNAL TO NOISE RATIO 40 db

INPUT CHANNELS Microphone and Radio-Phono
 INPUT SENSITIVITY Microphone: .003 volts for full recording level
 Radio-Phono: 4 volts for full recording level

AMPLIFIER CONTROLS Two: Volume and Tone
 TONE CONTROL Treble Attenuator (Variable)

PLAYING TIME 3.75 inches per second—one hour
 ERASE Permanent Magnet Type

TUBES FOR MODEL 375 1-6S17 — 1-6SC7 — 2-6V6GT
 1-5Y3GT (Rectifier)

TUBES MODEL R-3 1-6S17 — 1-6SC7 — 1-6SA7
 1-6SF7 — 2-6V6GT — 1-5Y3GT (Rectifier)

POWER CONSUMPTION 117 volts—60 cps, at 118 watts
 INPUT IMPEDANCE Microphone—2.7 Meg.
 Radio-Phono— $\frac{1}{2}$ Meg.

LOW IMPEDANCE AVAILABLE The microphone input may be converted for low impedance 500 or 200 ohms balanced or 50 ohms unbalanced. Model IN-525 used.

SPEED VARIATIONS INSTANTANEOUS $\pm 0.1\%$

SPEAKER 9" x 6" Oval Heavy-Duty P.M.
 OUTPUT IMPEDANCE 3.2 ohms

MONITOR JACK For headphone monitoring of recording

FAST-FORWARD REWIND
 HCM LEVEL Negligible
 CAPSTAN Provides constant tape speed, no Wow or flutter

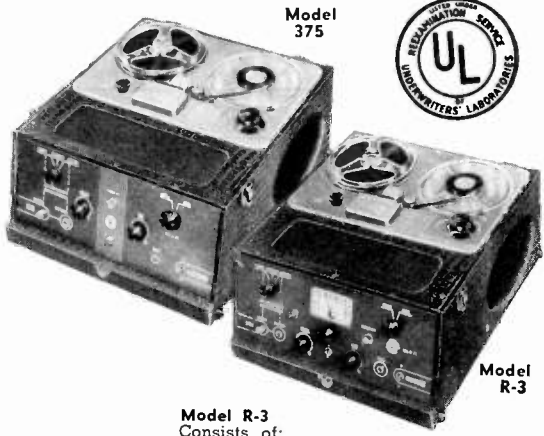
TAPE BIAS FREQUENCY 40 KC

MOTOR Heavy-duty, requires no oiling
 FLY-WHEEL Precision balanced assures no Wow or flutter

BEARINGS Precision Oilite Bearings give Lifetime use without oiling

MECHANICAL FEATURES

- Precision Ground Rubber Surfaces
- Individual Bias Oscillator
- No pressure on rubber drives during idling period
- Recordings may be spliced with "Scotch" tape
- Pre-Equalized Recording Circuit
- Quiet mechanical operation
- No tape spillage



Model 375
 Consists of:
 The complete portable Magnetic Tape Recorder in two piece case • One Electro-Voice #915 Crystal Microphone with 7 1/2 ft. of cable and plug • One 1200 ft. reel of Minnesota Mining model 111A Plastic Tape • One take-up reel

Case Dimensions:
 19 3/4" x 16 7/8" x 10 1/4" high

Gross Weight 46 lbs.
 List Price \$189.50

Model R-3
 Consists of:
 The complete portable Magnetic Tape Recorder in two piece case • One built-in AM Superheterodyne Radio Tuner • One Electro-Voice #915 Crystal Microphone with 7 1/2 ft. of cable and plug • One 1200 ft. reel of Minnesota Mining model 111A Plastic Tape • One take-up reel

Case Dimensions:
 19 3/4" x 16 7/8" x 10 1/4" high

Gross Weight 48 lbs.
 List Price \$218.50

Note: If Microphone is not desired, deduct \$5.00 from the above List Prices.

MAGNETIC TAPE RECORDING ACCESSORIES

MASCO now makes it possible to use your existing amplification equipment for magnetic tape recording and reproduction by using these MASCO accessories.



MODEL M-60 TAPE HANDLING MECHANISM

Complete ready to use supplied with a bias oscillator coil, take-up reel with instructions and circuit diagrams for building own pre-amplifier.

SPECIFICATIONS

SINGLE CHANNEL RECORDING
 TAPE SPEED 3.75 inches per second
 PLAYING TIME One hour (1200 ft. reel of tape)
 FREQUENCY RESPONSE 5db 100 to 7000 cps
 FAST FORWARD FAST REWIND

ONE FUNCTION SWITCH To play tape, stop tape, erase tape, rewind and fast forward

SEPARATE ERASE HEAD CONTROL
 RECORDING BIAS FREQUENCY 40 KC
 HEADS Two: one erase, one record-playback
 CONSTANT SPEED CAPSTAN DRIVE
 HEAVY DUTY MECHANICAL CONSTRUCTION
 MOTOR Heavy duty, shock mounted, requires no oiling

WEIGHT 17 lbs.
 DIMENSIONS 15 3/4" x 11" x 6"

MODEL M-60 as described (not including reel of tape) List Price \$99.90



MODEL P-4 RECORD AND PLAYBACK PRE-AMPLIFIER

Pre-amplifier contains bias oscillator and is equalized for both playback and record. It is used in conjunction with your existing power amplifier for tape playback reproduction.

SPECIFICATIONS

INPUTS—THREE Tape, Microphone, Phono-Radio
 INPUT SENSITIVITY Microphone—.003 volts for full recording level
 Phono-Radio—.4 volts for full recording level

OUTPUTS—TWO Output to power amplifier, 1.5 volts
 Output to recording head

CONTROLS—FOUR Volume, Record-Playback Switch, Input Selector Switch, Power On-Off Switch

FREQUENCY RESPONSE ± 3 db 100 to 7000 cps
 BIAS OSCILLATOR 40 KC
 RECORDING LEVEL INDICATOR Neon

TUBES 1-6SC7, 1-6SN7, 1-6V6GT, 1-6X5GT (Rectifier)

POWER CONSUMPTION 30 watts. 117 volts, 60 cps

CHASSIS FINISH Gray Hammerstone
 CHASSIS DIMENSIONS 12" x 6 3/4" x 2 3/4" High
 WEIGHT 8 lbs.

PRICE: Model P-4 Pre-Amplifier, as described, WITH tubes List Price \$82.00



MODEL BT—MOUNTING BASE FOR TAPE HANDLING MECHANISM

Attractive walnut finished wood base for convenient mounting. List Price \$10.00



MODEL RT-7—TAPE RECORDING TIMER

Designed to facilitate the location of a particular part of the tape recording. Simple to install—Timer is mounted on bracket attached to the chassis of the Tape Handling Mechanism. Flexible shaft snaps on to spindle of supply reel. Model RT-7, ready to install...List Price \$21.80

TO CONVERT MICROPHONE INPUT TO LOW IMPEDANCE

Model IN-525 Low Impedance Transformer is multi-alloy shielded and is mounted on a swivel-ball joint which allows complete rotation and tilting and assures hum-free operation. Primary impedances available are: 50 ohms unbalanced line; 200 ohms or 500 ohms balanced or unbalanced line. Specify tap setting when ordering. Factory installed Model IN-525 Transformer (per input) List Price \$29.95



West of the Rockies add 5% to above List Prices. Specifications and prices subject to change without notice.

MARK SIMPSON MANUFACTURING CO. • LONG ISLAND CITY, N. Y.

Thank You!

When writing for additional
information or when ordering
from sources of supply listed
in this book, please mention

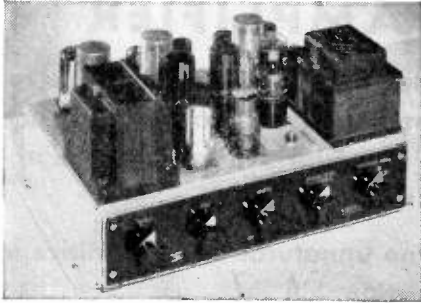
RADIO'S MASTER



HERMON HOSMER SCOTT, INC.

"PACKAGED ENGINEERING"

385 PUTNAM AVE. • CAMBRIDGE 39, MASS.



H. H. SCOTT Model 210-A Amplifier

Brilliant, realistic reproduction of broadcast and recorded music is assured with the H. H. Scott model 210-A amplifier. Built to laboratory standards of electrical, mechanical, and musical excellence, this 20-watt amplifier is essential to satisfactory custom performance in both FM and AM radio reproduction as well as in record playing. Also available: all-triode model, 211-A.

SPECIFICATIONS

- Dynamic noise suppressor for both scratch and rumble.
- Equalization for standard and long-playing records.
- Extended listening range.
- Squelch circuit.
- Twenty-watt output — negligible distortion.
- "Distortion and whistle" filter for AM especially.
- Matches all speakers from 2 to 500 ohms.
- Minimum controls — maximum flexibility.
- Compact design with oversize components.
- Calibrated adjustments for all types of pickups.
- Variable bass and treble boosts.

H. H. SCOTT Model 110-A

*Dynamic Noise Suppressor

Now *Dynamic noise suppression is possible with your present radio-phonograph or amplifier on both standard and long-playing records with the H. H. Scott "Little Wonder" *Dynamic Noise Suppressor. Scratch and rumble are reduced without fixed loss of "high" or "low." Add realism to your music reproduction by these 2 simple steps.

1. Plug in the "Little Wonder" between your pick-up and amplifier.
2. Plug in the socket adapter to the power-tube socket.

The "Little Wonder" realizes the full capabilities of your present equipment; remote control mounts anywhere; high-and-low-frequency noise suppression; two-inductor-type high-frequency gate circuit; two separate control rectifiers; compact — 7 x 3 $\frac{3}{4}$ x 4 $\frac{3}{4}$ inches.



H. H. SCOTT Model 410-A Sound Level Meter

The H. H. Scott Model 410-A sound level meter, is a self-contained unit meeting all requirements of the ASA and weighing only a little over two pounds. It is the only truly modern sound-level meter now available, and is unsurpassed for speed, accuracy, and convenience. Held and operated in one hand, it is merely pointed at the noise source and an accurate reading taken from the meter. Provision is made for using the microphone on an extension cable or for using other microphones, vibration integrator 410-X5, and vibration pickup 410-X6.

SPECIFICATIONS

Range: 34 to 140 db above ASA reference level. All standard ASA curves for weighting are provided: flat, 70 db, and 40 db. • Humidity-sealed crystal diaphragm type microphone. • Two-speed type meter provides either standard ASA ballistics or heavy damping. • Simple adjustment resets amplifier gain to original factory-calibrated value. • Only 11 $\frac{3}{4}$ " long, 2 $\frac{1}{2}$ " diameter.

H. H. SCOTT Model 910-C

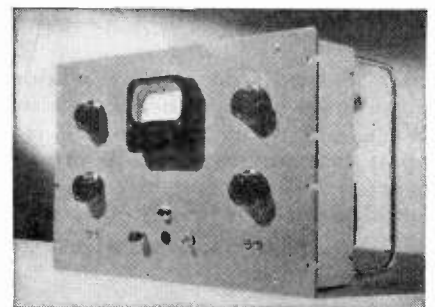
*Dynamic Noise Suppressor

The type 910-C H. H. Scott *dynamic noise suppressor, is widely used by leading independent and net-work stations to provide wide-range, low-noise-level program material from records and transcriptions of music. This is the first and only device of its type available commercially for broadcast station use. Indispensable for FM and high-fidelity AM stations. Also available: smaller model, 912-A, for separate turntables.

SPECIFICATIONS

- Reduces scratch and rumble noises.
- Remote control.
- Distortion less than 0.3%.
- Hum level 80 db below standard test level.
- Operating level — 30 to plus 10 VU.
- Illuminated meter for monitoring.

*Licensed under U.S. and foreign patents pending and issued.

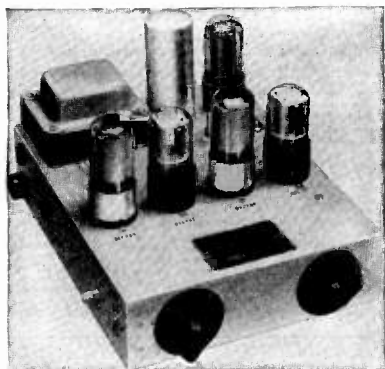


License laboratories maintained for *Dynamic Noise Suppressor.

For information on products now in development, write for latest data on H. H. Scott products.

S O M E R S E T

DYNAMIC NOISE SUPPRESSOR



SPECIFICATIONS

115 Volts 50-60-Cycle 25 Watts
40-15000 CPS Chassis: 7" x 9" x 12"

Tubes: 2-6SL7GT 1-6SK7GT
1-6SJ7GT 1-5Y3GT

Input: Magnetic or Crystal Pickup or
FM or AM Detector Output

Gain: .02 Volts Input produces .8 Volts
Output to Volume Control of .25
to 1 Megohm

Somerset Laboratories Incorporated has developed a new dynamic Noise Suppressor Pre-amplifier with an optimum frequency response characteristic, so controlled, that wide range quality and naturalness are preserved at all volume levels. Limitation of high frequency noise, during intervals when the varying intensity of the program is insufficient to mask the noise, is accomplished, not by a sharp frequency cutoff, but by a gradual "roll off" attenuation of all of the higher frequencies.

This method substantially retains the relative magnitudes of overtones. Likewise, the pleasing effect of complex tones, which is so dependent upon the many overtones is preserved. The hollow tonal character which may result in sharp cutoff suppressor operation is avoided.

The Somerset Suppressor, with its dynamic "roll

PREAMPLIFIER

- Accomplishes a high degree of noise reduction — maintains natural brilliance and realism — essential overtones are reproduced at all volume levels.
- Introduces no unnatural tonal qualities in the reproduction.
- Installation and operation require no technical skill.
- Also supplied in combination with a high-quality power amplifier for custom and commercial installations.

Net Price **\$59.50**

The Somerset Noise Suppressor is essential if you have other high fidelity equipment. A 15,000-cycle wide range reproducing system is of little value if it must be limited to 4,000 or 5,000 cycles by treble control to avoid surface scratch or hiss.

off," maintains aural balance to such extent that control of the low frequencies is neither desirable nor necessary.

The Somerset Noise Suppressor Preamplifier is equipped with power supply and includes a two-stage high- μ triode preamplifier with feedback, compensated for selective use — by a four-position switch — with a number of the better quality phonograph pickups as well as with FM or AM radio tuners.

A unique and highly desirable feature of the circuit arrangement is that the variable gain element, which controls the high frequency amplification, is not directly in the signal path. Distortion at high levels, commonly introduced by non-linearity in variable gain stages through which the signal passes, is not encountered in this circuit.

SOMERSET LABORATORIES INC.

BOGEN HIGH POWER SOUND EQUIPMENT

MODEL E75

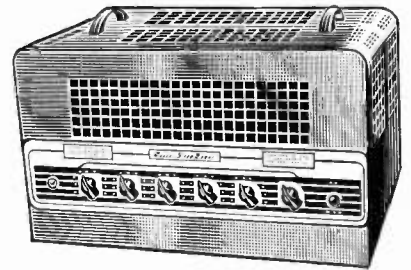
70 WATTS

SPECIFICATIONS

POWER OUTPUT: 70 watts (2 - 35 watt power amplifier) at less than 4%. PEAK POWER: 160 watts.
 FREQUENCY RESPONSE: 30-14,000 cycles, ± 1 db.
 HUM: Fund.: -70 db. Mic.: -59 db.
 OUTPUT IMPEDANCE: Each power amplifier tapped at 4-8-15-500-1000 ohms.
 POWER CONSUMPTION: 290 watts, 117 V, 50-60 cycles AC.
 TUBES: Total 14: 2-6SF5, 2-6SL7GT, 2-6F6G, 2-7Z4, 4-6L6G, 2-5U4G.
 DIMENSIONS: 17 $\frac{1}{8}$ " long, 10" high, 12 $\frac{1}{2}$ " deep.

EXCLUSIVE DUAL-OUTPUT CONSTRUCTION — TWO MICROPHONE CHANNELS — ONE PHONOGRAPH CHANNEL — BASS-TREBLE TONE CONTROL — TWO MASTER GAIN CONTROLS

The E75 amplifier has two separate power amplifiers, driven by a common preamplifier. Each power amplifier has its own power supply, inverse feedback circuit and master gain control.



Model E75

E75 HIGH IMPEDANCE AMPLIFIER:
 Complete with tubes:
 List Price \$223.75

EL75 LOW IMPEDANCE AMPLIFIER:
 Same as E75, but first microphone input is low impedance 200 ohms. 50 or 500 ohms available if specified.
 List Price \$245.00

MODEL HX50

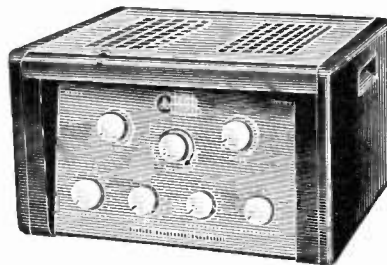
50 WATTS

SPECIFICATIONS

POWER OUTPUT: 50 watts at less than 3%.
 PEAK POWER: 90 watts.
 FREQUENCY RESPONSE: 20/20,000 cycles ± 2 db.
 TONE CORRECTOR RANGE: bass control: -30 to +20 db at 100 cycles; treble control: -14 to +21 db at 10,000 cycles.
 HUM: Fund.: -65 db. Mic.: -58 db.
 OUTPUT IMPEDANCE: 4-8-15 ohm and 2 constant voltage taps (70 and 140 V).
 POWER CONSUMPTION: 240 watts, 117 V, 50-60 cycles AC.
 TUBES: Total 12: 5-6SC7, 2-6SL7, 1-6SN7, 1-5R4GY, 2-807, 1-5Y3.
 DIMENSIONS: 17" long, 9" high, 14" deep.

THREE MICROPHONE CHANNELS — ONE PHONOGRAPH CHANNEL — DUAL ELECTRONIC TONE CORRECTORS — CONSTANT VOLTAGE OUTPUT

The proudest achievement in Bogen's 15 years of sound leadership. Incorporates the new Bogen ANTI-FEEDBACK CONTROL which permits easy "tuning out" of acoustic feedback. Allows greater output to be used—makes mike placement less critical—stabilizes entire sound system.



Model HX50

HX50 HIGH IMPEDANCE AMPLIFIER:
 Complete with tubes.
 List Price \$241.90

HXL50 LOW IMPEDANCE AMPLIFIER:
 Same as HX50 but first microphone input is low impedance 200 ohms. (50 or 500 ohms available if specified.)
 List Price \$263.15

MODEL H50

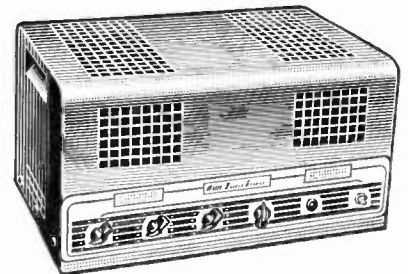
50 WATTS

SPECIFICATIONS

POWER OUTPUT: 50 watts at less than 5%. PEAK POWER: 90 watts.
 FREQUENCY RESPONSE: 30-20,000 cycles, ± 2 db.
 GAIN: Microphone inputs (2): 120 db. Phono input (1): 80 db.
 HUM: Fund.: -74 db. Mic.: -59 db.
 OUTPUT IMPEDANCE: 4-8-15 ohms and two constant voltage taps (70 V and 140 V).
 POWER CONSUMPTION: 210 watts, 117 V, 50-60 cycles AC.
 TUBES: Total 9: 3-6SC7, 1-6SL7, 1-6SN7, 2-807, 1-5R4GY, 1-5Y3.
 DIMENSIONS: 17" wide, 12 $\frac{1}{2}$ " deep, 9 $\frac{1}{4}$ " high.

TWO MICROPHONE CHANNELS — ONE PHONOGRAPH CHANNEL — BASS-TREBLE TONE CONTROL — CONSTANT VOLTAGE OUTPUT — UNDERWRITERS' LABORATORIES APPROVED

Push-Pull 807 output with constant voltage output taps to simplify line matching transformer calculations.



Model H50

H50 HIGH IMPEDANCE AMPLIFIER:
 Complete with tubes.
 List Price \$183.75

HL50 LOW IMPEDANCE AMPLIFIER:
 Same as H50 but first microphone input is low impedance, 200 ohms. 50 or 50 ohms available if specified.
 List Price \$205.00

MODEL HX30

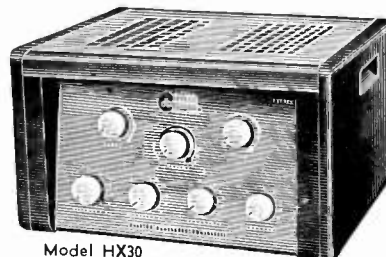
30 WATTS

SPECIFICATIONS

POWER OUTPUT: 30 watts at 2%.
 PEAK POWER: 45 watts.
 FREQUENCY RESPONSE: 50-18,000 cycles, ± 1.5 db.
 GAIN: Microphone inputs (3): 121 db. Phono input (1): 85 db.
 HUM: Fund.: -67 db. Mic.: -60 db.
 OUTPUT IMPEDANCE: 4-8-15-500 ohms and 70 volts.
 POWER CONSUMPTION: 140 watts, 117 V, 50-60 cycles AC.
 REMOTE CONTROL PROVISION: Built-in—permits mixing and fading two of the 4 available inputs from a remote point.
 TUBES: Total 10: 5-6SC7, 2-6SL7GT, 2-6L6G, 1-5U4G.
 DIMENSIONS: 17" wide, 9" high, 14" deep

THREE MICROPHONE CHANNELS — ONE PHONOGRAPH CHANNEL — DUAL ELECTRONIC TONE CORRECTORS — REMOTE CONTROL OF GAIN

Revolutionary Bogen anti-feedback control permits tuning out acoustic feedback for higher useable output, greater stability.



Model HX30

HX30 HIGH IMPEDANCE AMPLIFIER:
 Complete with tubes.
 List Price \$190.00

HXL30 LOW IMPEDANCE AMPLIFIER:
 Same as HX30 but first microphone input is low impedance, 200 ohms. 50 or 500 ohms available if specified.
 List Price \$211.25

FOR FURTHER INFORMATION ON AMPLIFIERS AND COMPLETE BOGEN SYSTEMS ASK FOR THE LATEST BOGEN CATALOG PRICES IN ZONE 2 ARE APPROXIMATELY 5% HIGHER * ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

BOGEN MEDIUM POWER SOUND EQUIPMENT

MODEL H30

30 WATTS

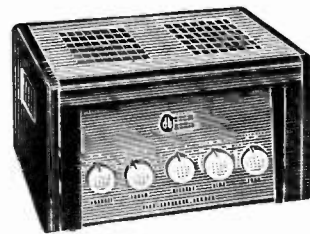
SPECIFICATIONS

POWER OUTPUT: 30 watts at less than 5%.
 PEAK POWER: 40 watts.
 FREQUENCY RESPONSE: 30-12,000 cycles, ± 2.5 db.
 GAIN: Microphone: 119 db. Phono: 77 db.
 HUM: Fund.: -68 db. Mic.: -60 db.
 OUTPUT IMPEDANCE: 4-8-16 ohms and 70V-TAP (167 ohms.)
 POWER CONSUMPTION: 140 watts, 117 V, 50-60 cycles AC.
 TUBES: Total 7: 3-6SF5, 1-6SL7, 2-6L6G, 1-5U4G.
 DIMENSIONS: 15 1/2" long, 11" deep, 7 1/2" high.

TWO MICROPHONE CHANNELS — ONE PHONOGRAPH CHANNEL
 SIX POSITION MULTI-RANGE TONE CORRECTOR
 LOW NOISE LEVEL

H30 HIGH IMPEDANCE AMPLIFIER:
 Complete with tubes.
 List Price \$115.00

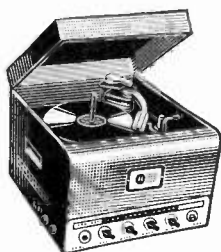
HL30 LOW IMPEDANCE AMPLIFIER:
 Same as H30 but first microphone input is low impedance, 200 ohms. (50 or 500 ohms available if specified.)
 List Price \$136.25



Model H30

MODELS F30M and F30A

30 WATT AMPLIFIERS
 With Built-in Phonographs



Model F30A

The perfect answer to a general duty portable amplifier with built-in phonograph. F30M has a built-in single speed (78 RPM) manual record player. F30A uses a single speed (78 RPM) Webster automatic record changer.

F30 Systems are ideal for square dances, funeral parlor installations, clubs, rental systems.

F30A — List Price \$186.50
 F30M — List Price 158.75

MODEL H15

15 WATTS

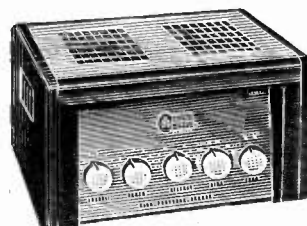
SPECIFICATIONS

POWER OUTPUT: 15 watts at less than 5%.
 PEAK POWER: 25 watts.
 FREQUENCY RESPONSE: 30-12,000 cycles, ± 1.5 db.
 GAIN: Microphone channels (2): 115 db.
 Phono channels (1): 74 db.
 HUM: Fund.: -70 db. Mic.: -60 db.
 OUTPUT IMPEDANCE: 4-8-16 ohms and 70 V.
 POWER CONSUMPTION: 95 watts, 117 V, 50-60 cycles AC.
 TUBES: Total 7: 3-6SF5, 1-6SL7GT, 2-6L6G, 1-5Y3G.
 DIMENSIONS: 15 1/2" long, 10 3/4" deep, 7 1/2" high.

TWO MICROPHONE CHANNELS — ONE PHONOGRAPH CHANNEL
 SIX POSITION MULTI-RANGE TONE CORRECTOR
 LOW HUM AND NOISE LEVEL

H15 HIGH IMPEDANCE AMPLIFIER:
 Complete with tubes.
 List Price \$98.75

HL15 LOW IMPEDANCE AMPLIFIER:
 Same as H15 but first microphone input is low impedance, 200 ohms. 50 or 500 ohms available if specified.
 List Price \$120.00



Model H15

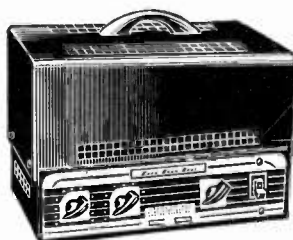
MODEL HE10

10 WATTS

SPECIFICATIONS

POWER OUTPUT: 10 watts at 4%.
 PEAK POWER: 15 watts.
 FREQUENCY RESPONSE: 60-10,000 cycles, ± 1.5 db.
 GAIN: Mic. channel: 117 db. Phono channel: 66 db.
 HUM: Fund.: -66 db. Mic.: -59 db.
 OUTPUT IMPEDANCE: 4-8-15-500 ohms.
 POWER CONSUMPTION: 70 watts, 117 V, 50-60 cycles AC.
 TUBES: Total 5: 1-6SJ7, 1-6SL7, 2-6V6, 1-5Y3GT.
 DIMENSIONS: 7" deep, 11" wide, 7 1/4" high.

ONE MICROPHONE CHANNEL — ONE PHONOGRAPH CHANNEL
 SIX POSITION MULTI-RANGE TONE CORRECTOR — PUSH-PULL OUTPUT
 FIVE TUBE, HIGH GAIN CIRCUIT — LOW NOISE LEVEL



Model HE10

HE10 HIGH IMPEDANCE AMPLIFIER:
 Complete with tubes.
 List Price \$61.50

HE10 LOW IMPEDANCE AMPLIFIER:
 Same as HE10 but microphone input is low impedance, 200 ohms. 50 or 500 ohms available on transformer.
 List Price \$82.75

FOR FURTHER INFORMATION ON AMPLIFIERS AND COMPLETE BOGEN SYSTEMS ASK FOR THE LATEST BOGEN CATALOG
 PRICES IN ZONE 2 ARE APPROXIMATELY 5% HIGHER * ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

DAVID BOGEN CO., INC., NEW YORK 12, N. Y.

BOGEN MOBILE SOUND EQUIPMENT

MODEL HX632

32 WATT MOBILE SYSTEM

SPECIFICATIONS

POWER OUTPUT: AC: 32 watts at less than 5%.
DC: 25 watts at 5%.

PEAK POWER: 40 watts.

FREQUENCY RESPONSE: 30-12,000 cycles ± 2 db.

GAIN: Mic. channel: 121 db. Phono channel: 80 db.

HUM: AC: -70 db.; DC: -60 db.

OUTPUT IMPEDANCE: 4-8-15-500 ohms, 70 V.

POWER CONSUMPTION: 120 watts, 117 VAC; 23.5 amps., 6 V DC.

TUBES: Total 7: 2-6SL7GT, 2-6SF5, 2-6L6G, 1-5U4G.

DIMENSIONS: 16" long, 16 $\frac{3}{8}$ " wide, 10 $\frac{5}{8}$ " high.

UNIVERSAL OPERATION 6 VOLT DC OR 110 VOLT AC
ONE MICROPHONE CHANNEL — ONE PHONOGRAPH CHANNEL
BUILT-IN PHONOGRAPH
SEPARATE BASS AND TREBLE CONTROLS



Model HX632

HX632 AMPLIFIER: Complete with tubes and phono.
List Price.....\$250.00

HX632TU OUTDOOR SYSTEM: Includes: HX632 amplifier with tubes; 2 Bogen-University LH trumpets with MA25 units; 1 Astatic JT30 crystal microphone with handle, interlocking base, 15' cable and plug.
List Price.....\$404.25

HX632TJ OUTDOOR SYSTEM: Same as HX632TU substituting 2 Jensen VH24 trumpets.
List Price.....414.25

MODEL H623

23 WATT MOBILE SYSTEM

SPECIFICATIONS

POWER OUTPUT: AC: 23 watts at 5%.
DC: 20 watts at 5%.

PEAK POWER: 30 watts.

FREQUENCY RESPONSE: 30-14,000 cycles ± 2.5 db.

GAIN: Microphone channel: 116 db. Phono channel: 73 db.

HUM: AC: Fund.: -74 db.; Mic.: -60 db.
DC: Fund.: -75 db.; Mic.: -62 db.

OUTPUT IMPEDANCE: 4-8-15 ohms and 70 V.

POWER CONSUMPTION: 115 watts, 117 V. AC; 14 amp., 6 V DC.

TUBES: Total 6: 2-6SF5, 1-6SL7GT, 2-6L6G, 1-7Z4.

DIMENSIONS: 15 $\frac{1}{4}$ " long, 10 $\frac{7}{8}$ " deep, 10 $\frac{1}{8}$ " high.

UNIVERSAL OPERATION 6 VOLT DC OR 110 VOLT AC
ONE MICROPHONE CHANNEL — ONE PHONOGRAPH CHANNEL
SIX POSITION TONE CORRECTOR
BUILT-IN PHONOGRAPH

H623 AMPLIFIER: Complete with phono and tubes.
List Price.....\$177.50

H623TJ OUTDOOR SYSTEM: Includes: H623 amplifier with tubes; 1 Jensen VH20 projector unit, 1 Bogen-Shure 710 crystal microphone with stand adapter, 7' cable and plug.
List Price.....\$250.50

H623TU OUTDOOR SYSTEM: Same as H623TJ substituting Bogen-University PH trumpet with MA25 unit.
List Price.....\$241.50



Model H623

MODEL E66

6 WATT MOBILE SYSTEM

SPECIFICATIONS

POWER OUTPUT: 6 watts at 5%. PEAK POWER: 8 watts.

FREQUENCY RESPONSE: 60-9,000 cycles, ± 2 db.

GAIN: Microphone channel (1): 110 db. Phono channel (1): 75 db.

HUM: AC: -50 db.; DC: -62 db.

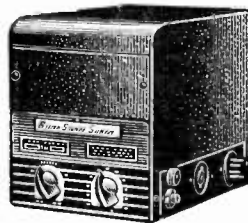
OUTPUT IMPEDANCE: 4-8-15 ohms.

POWER CONSUMPTION: 50 watts, 117 V AC; 7 amps, 6 V DC.

TUBES: Total 4: 1-6SJ7, 1-6SL7GT, 1-6L6GA, 1-6X5GT.

DIMENSIONS: 6 $\frac{1}{8}$ " wide, 9 $\frac{1}{4}$ " deep, 6 $\frac{7}{8}$ " high.

ONE MICROPHONE CHANNEL — PHONOGRAPH JACK — STANDBY POSITION ON POWER SWITCH — 110 V AC OR 6 V DC OPERATION



Model E66

MODEL E66 AMPLIFIER: Complete with tubes.
List Price.....\$71.50

MODEL E66F SYSTEM: Includes: 1-E66 amplifier with tubes, 1 University 1B8 trumpet, 1 Bogen-Shure 710 crystal microphone with stand adapter, 7' cable and plug.
List Price.....\$114.00

MODEL E66J SYSTEM: Same as above but trumpet is Jensen VH-91.
List Price.....\$114.00

FOR FURTHER INFORMATION ON AMPLIFIERS AND COMPLETE BOGEN SYSTEMS ASK FOR THE LATEST BOGEN CATALOG
PRICES IN ZONE 2 ARE APPROXIMATELY 5% HIGHER • ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

DAVID BOGEN CO., INC., NEW YORK 12, N. Y.

BOGEN HIGH FIDELITY EQUIPMENT

MODEL PX15 15 WATT PHONO AMPLIFIER

SPECIFICATIONS

POWER OUTPUT: 15 watts at less than 2% distortion. PEAK POWER: 30 watts.
 FREQUENCY RESPONSE: 30-20,000 cycles $\pm 1\frac{1}{2}$ db.
 TONE CORRECTOR RANGE: Bass control: -23 db. to +20 db. at 60 cps. Treble control: -20 db. to +20 db. at 10,000 cps.
 GAIN: Magnetic: 106 db.; Crystal: 78 db.
 HUM: -75 db (referred to rated output).
 OUTPUT IMPEDANCE: 4-8-16-500 ohms.
 POWER CONSUMPTION: 117 V, 50-60 cycles, 105 watts.
 TUBES: Total 6: 1-12SJ7, 1-12AH7, 1-6SL7, 2-6L6G, 1-5Y3GT.
 DIMENSIONS: 15" x 8" x 9 $\frac{1}{4}$ ".

PX15 AMPLIFIER and tubes (less cage).
 List Price.....\$137.50

PX15C—Same as PX15 but with 4 ft. extension controls.
 List Price.....\$151.25

CAG15—Cage for PX15 or PX15C.
 List Price.....\$6.25



Model PX15
Shown with Cage

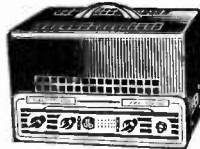
MODEL PX10 10 WATT PHONO AMPLIFIER

SPECIFICATIONS

POWER OUTPUT: 10 watts at 5%.
 PEAK POWER: 17 watts.
 FREQUENCY RESPONSE: 30-15,000 cycles ± 2 db.
 GAIN: Magnetic pickup: 97 db.; Crystal: 70 db.
 HUM: -70 db. (referred to rated output).
 OUTPUT IMPEDANCE: 4-8-15-500 ohms. 500 ohm tap is equivalent of 70 V constant voltage tap.
 POWER CONSUMPTION: 78 watts, 117 V 50-60 cycles AC.
 TUBES: Total 7: 1-6SC7, 2-6SL7GT, 1-6SA7, 2-6V6GT, 1-5Y3GT.
 DIMENSIONS: 11" long, 7" wide, 7 $\frac{1}{4}$ " high.
 SHIPPING WEIGHT: 15 lbs.
 EXPANDER: Straight Line.

FOR TRUE HIGH FIDELITY AT MODERATE COST

Built-in dynamic range expander. Built-in preamplifier for G.E., Pickering, Astatic and similar magnetic pickups. Provision for simple external switching of pickup and tuner, removing preamplifier load when tuner is in circuit. Preamplifier tube shock mounted to minimize feedback and microphonism.



Model PX10
Shown with Cage

PX10 AMPLIFIER and tubes (less cage).
 List Price.....\$85.25

PX10C—Same as PX10 but with 4 ft. extension controls.
 List Price.....\$93.50

CAG10—Cage for PX10 or PX10C.
 List Price.....\$5.00

MODEL PH10 10 WATT MULTI-RANGE PHONO AMPLIFIER

MODEL PH10 AMPLIFIER:
 Complete with tubes.
 List Price.....\$48.75

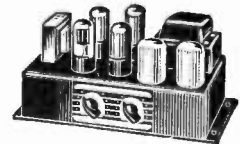
MODEL PH10C AMPLIFIER: Same as PH10 but with 4 ft. extension controls.
 List Price.....\$53.75

MULTI-RANGE TONE SWITCH WITH FOUR LABORATORY SELECTED RESPONSE CURVES — VIRTUALLY HUMLESS PERFORMANCE IN ANY TONE POSITION — PUSH-PULL OUTPUT.

SPECIFICATIONS

POWER OUTPUT: 10 watts at 5%.
 PEAK POWER: 14 watts.
 FREQUENCY RESPONSE: (Full Range) 40-15,000 cps ± 1 db.
 GAIN: 72 db.
 INPUT IMPEDANCE: (1) 500,000 ohms.

OUTPUT IMPEDANCE: 3.2 and 8 ohms.
 HUM: -80 db. (referred to rated output).
 POWER CONSUMPTION: 60 watts, 117 V, 60 cycles.
 TUBES: Total 4: 1-6SL7GT, 2-6V6GT, 1-5Y3GT.
 DIMENSIONS: 5" x 11" x 3" (overall height 6").



Model PH10

DUAL SPEED HIGH FIDELITY PORTABLE TRANSCRIPTION PLAYERS

MODEL LP16—For standard, transcription and long playing records and microphone.

MODEL UP16—For standard and transcription records and microphone.



Model LP16

Player is housed in sturdy 3 $\frac{3}{8}$ " plywood case, covered in heavy airplane cloth. Amplifier employs famous Bogen PH10 circuit. Jensen 10" speaker is mounted in removable cover. Two separate constant speed synchronous motors for 78 and 33 $\frac{1}{2}$ RPM. Record carrying compartment built-in. Model UP16 has single transcription arm with superb QT3-J cartridge. Model LP16 is equipped with two arms — transcription arm plus LP arm.

SPECIFICATIONS

POWER OUTPUT: 10 watts at less than 5%.
 PEAK POWER: 14 watts.
 FREQUENCY RESPONSE: 40-15,000 cps ± 1 db.
 GAIN: Phono channel: 68 db; Microphone channel: 115 db.
 HUM: Phono channel: -75 db (referred to rated output) in flat response. Microphone channel: -58 db.
 INPUT IMPEDANCE: Phono channel: 500,000 ohms. Microphone channel: 2 megohms.

OUTPUT IMPEDANCE: 8 ohms.
 POWER CONSUMPTION: 85 watts — 117 V 60 cycle AC (with motor).
 TUBES: Total 5: 1-6SJ7, 1-6SL76T, 2-6V6GT, 1-5Y3GT.
 DIMENSIONS: 20 $\frac{1}{4}$ " deep, 18 $\frac{1}{2}$ " wide, 12 $\frac{1}{4}$ " high.
 MODEL UP16—Complete with tubes, speaker.
 List Price.....\$160.00
 MODEL LP16—Complete with tubes, speaker.
 List Price.....\$175.00

WRITE FOR DESCRIPTIVE HIGH FIDELITY FOLDER LISTING ADDITIONAL UNITS.

PRICES IN ZONE 2 ARE APPROXIMATELY 5% HIGHER * ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

DAVID BOGEN CO., INC., NEW YORK 12, N. Y.

BOGEN CENTRALIZED SOUND SYSTEMS AND COMMUNO-PHONES

BOGEN CENTRALIZED SCHOOL SOUND SYSTEMS: The entirely new Bogen centralized school systems now make available to progressive educators an instructional tool for which they have long sought. Simple—yet versatile—the new systems provide for radio and record program transmission selectively to any or all classrooms. Skillful design, which embodies many exclusive features, enables the entire school body to participate in dramatic presentations, school debates and similar activities where the audience was previously limited to the seating capacity of the auditorium.

Bogen Centralized School Sound Systems are designed to meet every requirement of the modern educational institution, regardless of size. They comply fully with requirements of the U. S. Office of Education and the RMA. Simplicity of operation enables the administrator to reduce confusion and thus to assure efficient effective work in all departments. Versatility of the systems speed learning, provide instant communication for fire drills and supplement the general routine.

Write for Complete Descriptive Catalog C9-49S.

BOGEN CUSTOM DIVISION: The Custom Division of the David Bogen Co. is maintained for the express purpose of offering engineering consultation on custom built requirements. This technical service covers initial design and layout of electrical specifications of any sound installation, large or small.

Although the David Bogen Co. manufactures the largest and most complete line of standard and De Luxe sound equipment, very often a customer's problem requires the design and construction of special equipment to meet particular requirements.

We invite you to submit your sound problems, technical inquiries, or request for quotations on special equipment to our Custom Division. If no specifications are available for your particular problem, merely send a description and pencilled sketch of the intended installation to our Custom Division. Its Engineering Staff is equipped with the finest facilities in the country and they will be glad to aid you in the solution of your particular problem, without obligation.

NEW BOGEN DELUXE COMMUNO-PHONE SYSTEMS

THREE VERSATILE MODELS TO SOLVE EVERY INTERCOMMUNICATION PROBLEM

MODEL "X"—Universal Deluxe Series for 115V 60 cycle AC

1. **BOGEN MODEL "X" IS COMPLETELY UNIVERSAL.** The one model will serve installations requiring a single master and several remote stations — installations requiring several master stations — or installations requiring several master stations and several remote stations. Remote stations are available to permit selective initiation of calls to master stations.
2. **HAND-RUBBED FURNITURE-FINISHED CABINETS** to complement the furnishings of the nation's best offices.
3. **TYPEWRITER KEYBOARD ACTION** for push button selection of stations.
4. **TYPEWRITER BAR PRESS-TO-TALK SWITCH.**
5. **AUTOMATIC BUSY SIGNAL.**
6. **3 WATTS AUDIO OUTPUT** — reserve power to take noisy installations in stride.
7. **PROVISION FOR PLUG-IN CONNECTION OF HANDSETS** — permitting complete privacy of conversation, without need to operate the press-to-talk bar.
8. **PROVISION FOR QUICK DISCONNECT OF MASTER STATIONS** for ease of installation or transfer.
9. **BALANCED LINES: 50 ohms.**
10. **UNDERWRITERS' LABORATORIES APPROVED.**

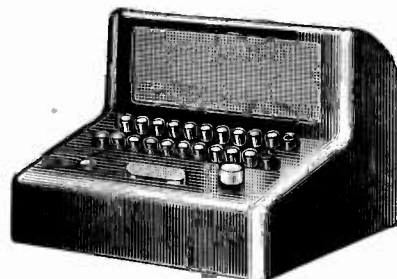
MODEL "U"—Universal Standard Series for 115V AC-DC

The new — completely universal Model "U" Communo-Phone is the AC-DC version of the Model "X." It incorporates most of the functional and style features of the deluxe unit. Hand-rubbed cabinets — typewriter keyboard action for push button station selection — typewriter bar press-to-talk switch — provision for plug-in handset — provision for quick disconnect of the master station — 50 ohm balanced lines — Output Power is 1½ watts — no busy signal — Underwriters' Laboratories approved.

MODEL "D"—Moderately Priced Dual-Function Units for 115V AC-DC

The new Model "D" Communo-Phone is designed to serve installations requiring either a single master and several remote stations or several master stations only. It will not serve systems requiring a combination of several master and several remote stations, and it operates on voice coil lines. In all other respects the Model "D" is the equivalent of the Model "U." Underwriters' Laboratories approved.

	List Price
MODEL 11X—MASTER can select up to 10 stations (masters or remotes in any combination)	\$ 94.50
MODEL 21X—MASTER can select up to 20 stations (masters or remotes in any combination)	118.10
MODEL 11U—MASTER can select up to 10 stations (masters or remotes in any combination)	78.75
MODEL 21U—MASTER can select up to 20 stations (masters or remotes in any combination)	103.75
MODEL RS50—REMOTE can reply when called by master and can also initiate calls to one X or U Master	21.75
MODEL RS30—REMOTE can reply when called by master and can also initiate calls to three X or U Masters	24.75
MODEL RS110—REMOTE can reply when called by master and can also initiate calls to ten X or U Masters	40.00
MODEL UX—HANDSET plugs into any X, U or D master	30.00
MODEL JU—JUNCTION BOX is used in all X, U or D systems	7.25
MODEL 11D—MASTER can select up to 10 stations (exclusively masters or remotes)	64.35
MODEL 21D—MASTER can select up to 20 stations (exclusively masters or remotes)	86.60
MODEL RS5—REMOTE can reply when called by master and can also initiate calls to master (for use with 11D or 21D masters)	18.50
MODEL UX—HANDSET plugs into any master	30.00
MODEL JU—JUNCTION BOX	7.25



Illustrated: Model 21X, 21U, 21D Master

PRICES APPROXIMATELY 5% HIGHER IN ZONE 2 * ASK FOR LATEST BOGEN COMMUNO-PHONE CATALOG

DAVID BOGEN CO., INC., NEW YORK 12, N. Y.

CHALLENGER SOUND EQUIPMENT



Model CC8

8 WATT AMPLIFIER

- Individual controls for microphone, phonograph, selectone.
- Plug in connection for speaker line.
- Inverse feedback for better response and regulation.

SPECIFICATIONS

Power Output: 8 watts.
Response: 80-12,000 c.p.s. ± 2 db.
Gain: Mic.: 108 db. Phono: 71 db.
Output Impedances: 4, 8 and 16 ohms.
Tone Control: SelectOne.

Tubes: 1—6SF5, 1—6SJ7, 1—6L6GA, 1—5Y3GT.
Dimensions (with cage): 11" Wide x 7" Deep x 7 $\frac{3}{8}$ " High.

MODEL CC8—8 watt amplifier with tubes, less cage.
List Price \$45.00

18 WATT UNIVERSAL 115V AC-6V DC AMPLIFIER

- Individual controls for microphone, phonograph, selectone.
- Inverse feedback for better response and regulation.
- Built-in constant speed phonograph.

SPECIFICATIONS

Response: 80-12,000 c.p.s. ± 2 db.
Gain: Mic.: 118 db. Phono: 78 db.
Output Impedances: 4, 8, 15 ohms, 70 volts.
Tone Control: SelectOne.
Tubes: 2—6SF5, 1—6SL7GT, 2—6V6GT, 1—7Z4.

Dimensions: 15" Wide x 10" Deep x 10" High.
MODEL CC618—18 watt universal amplifier and tubes, Cage, AC and DC cable and built-in phono. top.
List Price \$132.50



Model CC618

MODEL CC18—18 WATT AMPLIFIER

Features individual controls for microphone, phono, SelectOne; inverse feedback for better regulation and frequency response; two speaker plug-in sockets: constant voltage output for easy speaker matching. Amplifier with tubes and Cage.

List Price \$67.00

SPECIFICATIONS

Power Output: 18 watts.
Response: 80-12,000 c.p.s. ± 2 db.
Gain: Mic.: 118 db. Phono: 78 db.
Output Impedances: 4, 8, 15 ohms, 70 volts.
Tone Control: SelectOne.
Tubes: 2—6SF5, 1—6SL7GT, 2—6V6GT, 1—5Y3GT.
Dimensions: 14" Wide x 8" Deep x 8" High.



Model CC30X

30 WATT AMPLIFIER

FEATURES

- Individual controls for two microphones, phonograph, selectone.
- Terminal strip and 2 speaker plug-in sockets for connection of speaker lines.
- Moulded bakelite sockets throughout.
- Inverse feedback for better response and regulation.
- Extractor type fuse. • Recessed carrying handles.

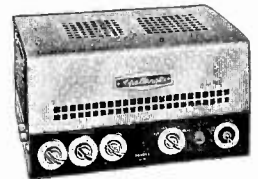
SPECIFICATIONS

Power Output: 30 watts.
Response: 80-12,000 c.p.s. ± 2 db.
Gain: Mic. No. 1: 118 db.
Mic. No. 2: 118 db.
Phono: 85 db.

Output Impedances: 4, 8, 15 ohms, 70 volts.
Tubes: 2-6SC7, 1-6SL7GT, 2-6L6G, 1-5U4G.
Tone Control: SelectOne.
Dimensions: CC30: 15" W. x 10" D. x 8" High.

MODEL CC30X—30 watt amplifier, tubes and built-in phono. top. List Price \$105.00

MODEL CC30X-P—Complete portable system containing 1-CC30X amplifier with tubes; 2-12" Alnico V PM speakers, each with 25 ft. cable and plug, mounted in split portable case which also carries amplifier; 1-Astatic JT30 microphone with handle, base, 15 ft. cable, plug. List Price \$181.00



Model CC30

MODEL CC30—30 watt amplifier, tubes and cage. List Price \$83.75

MODEL CC30P—Complete portable system containing 1-CC30 amplifier with tubes, cage; 2-12" Alnico V PM speakers, each with 25 ft. cable and plug, mounted in split portable case which also carries amplifier; 1-Astatic JT30 microphone with handle, base, 15 ft. cable, plug. List Price \$157.75

6 WATT MOBILE AMPLIFIER



- Universal mounting permits 4 alternate mounting positions.
- Remote control of standby to reduce current drain.
- Vibrator replaceable from front without dismantling amplifier or removing cage.
- Complete chassis, removable for service by removing 4 screws.
- Fused DC power cable built in.
- Primary power circuit physically isolated from high gain circuit for minimum hum.

SPECIFICATIONS

Power Output: 6 watts. Tubes: 2—6SF5, 1—6L6GA, 1—6X5GT.
Gain: 109 db. Dimensions: 3 $\frac{1}{4}$ " Wide x 8" Deep x 7" High.

Output Impedances: 4, 8, 15 ohms.
MODEL CD6—6 watt amplifier with tubes, cage and DC cable. List Price \$53.75

SELECTONE tone corrector is a unique feature of CHALLENGER amplifiers. Four distinctive frequency responses, judged best by critical audience preference tests, are instantly available: "Deep Bass"—ideal for old records; "Mellow"—useful for tuners; "Crisp"—best for speech; "Brilliant"—for hi-fidelity.

60 WATT AMPLIFIER

FEATURES

- 2 Micro., 1 phono. input.
- PP 807 output.
- Inverse feedback.
- Two oil filled filter capacitors.
- Constant voltage output.

SPECIFICATIONS

Response: 80-12,000 c.p.s. ± 2 db.
Gain: Mic. 1: 120 db; Mic. 2: 120 db; Phono: 85 db.
Output Impedances: 4, 8, 15 ohms, 70 volt, 140 volt.
Tubes: 2—6SL7GT, 1—6V6GT, 2—807, 1—5Y3GT, 1—5R4GY.
Dimensions: 17" Wide x 11 $\frac{1}{2}$ " Deep x 9 $\frac{1}{4}$ " High.

MODEL CC60—60 watt amplifier, tubes. List Price \$135.00



Model CC60

COMPLETE SYSTEMS—CHALLENGER amplifiers may be purchased as part of complete systems consisting of amplifier, one or more speakers (in baffles for indoor use—trumpets for outdoors), speaker cables and plugs, microphone (with handle, interlocking base and cable), portable carrying case. Write for Catalog No. C1048.

CHALLENGER INTERCOMM SYSTEMS



CHALLENGER 200 is a complete system—a master, a remote station and 50 ft. of cable. Operates 117V. AC-DC. Dual-Duty volume control keeps remote "alive" or permits master to silence it. Excellent for nursery, restaurant, business use.

CHALLENGER 200 SYSTEM—Complete with 50 ft. of cable and plugs. List Price \$39.95

CHALLENGER 600 Master may be used in one of two systems: (1) A single master with up to five remote stations; (2) An all master system of six stations. Operates 117 V AC-DC. In sturdy beautiful polystyrene cabinet. Remote can initiate calls also.

CHALLENGER 600 MASTER with tubes. List Price \$33.75
CHALLENGER 60R REMOTE STATION. List Price \$11.25



For further information on CHALLENGER Amplifiers, Systems and Intercomms, ask for latest CHALLENGER catalog. PRICES APPROXIMATELY 5% HIGHER IN ZONE 2.

CHALLENGER AMPLIFIER CO., NEW YORK 12, N. Y.

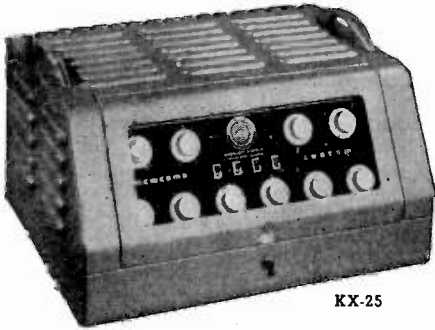
Newcomb

CUSTOM

K

SERIES AMPLIFIERS

Designed and Built To The Very Highest Standards of Quality In The Entire Industry



KX-25



KX-50



KX-6A



K-50B

Without equal at any price. The best examples why the name Newcomb is so revered by Engineers and Owners alike. Will improve any system. A must when using the new 2-way wide range speakers. Check these important features and specifications.

- ★ 20—20,000 cycles ± 1 db
- ★ Less than 3% distortion
- ★ 90% of rating at less than 1%
- ★ Full power any output tap
- ★ Audio bandwidth selectors
- ★ Hum and noise level—80 db.

- ★ Remote control provision—all inputs
- ★ U/L approved
- ★ Continuous duty—longer life parts
- ★ Key locked control cover
- ★ Sensitive volume and overload indicators
- ★ Wired for plug-in input transformers

Full audio power, 50 to 5000 cycles (region of all major power requirements) within ± 1/4 db, less than 5% distortion. Separate tone controls for Bass and Treble Boost or Attenuation of advanced design for better curve shape, greater range. Feedback controlled, 2 stage mike pre-amplifiers. Hum balancing control, all models but booster. Linear mixer frequency response. All but Pre-Amplifier have output impedance of 4, 8, 16, 250, 500 ohms, PLUS a 70 volt "constant voltage" tap, with convenient, simple, impedance selector. Multistage inverse feedback. Large, heavy duty power and output transformers thoroughly impregnated against moisture. Rear connections avoid unsightly wires, simplify rack installation. A. C. convenience outlet in rear, all models except booster. Cabinets: Heavy gauge welded steel beautifully styled. Finish: Silver Grey Hammertone Baked Enamel. Panels: Etched metal, illuminated. Knobs: Round, large, skirted type, for easy operation. Additional specifications given under specific model numbers.

KX-25 POWER OUTPUT: 25 watts design center rating, 30 watts max. at less than 3% distortion any output tap. **PEAK POWER:** 40 watts design center, 48 watts max. **INPUTS (6):** 5 mike (2 meg.), gain 123 db; 1 phono either Magnetic input gain 99 db based on 27,000 ohm input, bass equalization + 10 db or Crystal input 1/2 meg. gain 90 db **REMOTE CONTROL:** Use RC-6 remote control unit. **BASS TONE CONTROL:** Range -16 to +25 db. **TREBLE TONE CONTROL:** Range -30 to +20 db. **HUM:** -80 db controls off, -75 db crystal phono, -65 db mike

and magnetic pickup inputs (Referred to rated output). **CONTROLS (15):** 5 mike, 1 phono, 1 bass, 1 treble, 4 bandwidth, 1 master, 1 volume indicator (all under keylocked control cover) A.C. power switch. **TUBES (15):** 6-6SC7, 2-6J5, 1-6J7, 1-6SQ7, 1-6SN7, 2-6L6G, 1-6AF6G, 1-5U4G. **POWER CONSUMPTION:** 135 watts, 117 volts 60 cycles A.C. Max. Input 129 volts. **DIMENSIONS:** 9 3/8" x 17 3/4" x 14 3/4". **SHIPPING WEIGHT:** 40 lbs. **LIST:** (with tubes) \$325.00. **Plug Kit:** \$5.68.

KX-50 POWER OUTPUT: 50 watts design center rating, 60 watts max. at less than 3% distortion any output tap. **PEAK POWER:** 80 watts design center, 90 watts, max. **BOOSTER COUPLING JACK** for connecting K50B Boosters for 100 watts or more. All other characteristics identical with KX-25 except gains, which are all 3 db higher than KX-25.

TUBES (18): 6-6SC7, 2-6J5, 1-6SQ7, 1-6J7, 1-6SN7, 4-6L6G, 1-6AF6G, 2-5U4G. **POWER CONSUMPTION:** 235 watts, 117 volts 60 cycles A.C. Max. Input 129 volts. **DIMENSIONS:** 9 3/8" x 17 3/4" x 14 3/4". **SHIPPING WEIGHT:** 49 lbs. **LIST:** (with tubes) \$395.00. **Plug Kit:** \$5.76.

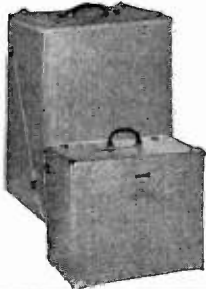
KX-6A: A 6 channel mixer pre-amplifier designed to feed broadcast lines or boosters for finest quality. **OUTPUT:** +31 VU, less than 3% distortion, +30 VU at less than 1%. Has built in power supply and genuine VU meter with meter range extension switch. **INPUTS** for 5 mikes (2 meg.) gain 97 db and 1 phono either crystal (1/2 meg.) gain 64 db or magnetic (27,000 ohms) gain 73 db. Requires RC-6 Remote Control Unit. Includes Master Volume Control and same fine Dual Tone Controls and Audio Bandwidth Selectors as in KX-25 and KX-50. **BASS TONE CONTROL:** Range

-16 to +25 db. **TREBLE TONE CONTROL:** Range -30 to +20 db. **HUM:** -80 db controls off, -80 db crystal -75 db mike and magnetic. **CONTROLS (12):** 5 mike, 1 phono, 1 bass, 1 treble, 1 master, 1 four position bandwidth (all under key locked cover), 1 A.C. power switch, 1 VU meter range switch (in rear). **TUBES (12):** 6-6SC7, 4-6J5, 1-6J7, 1-6X5. **POWER CONSUMPTION** 35 WATTS, 117 volts 60 cycles A.C. Max. Input 129 volts. **DIMENSIONS:** 9 3/8" x 17 3/4" x 14 3/4". **SHIPPING WEIGHT:** 32 lbs. **LIST:** (with tubes) \$295.00. **Plug Kit:** \$4.34.

K50B: Booster Amplifier. Performance, power and output impedance same as KX-50 with but one input of 1/2 meg. impedance, gain 71 db. Provision for plug-in bridging or low impedance transformer. Built for continuous duty with long life parts, separate plate, and filament power transformers, individually fused, permits dependable plate power switching. Includes volume

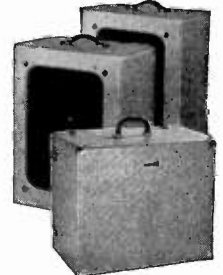
and overload indicators as in KX-50. Ample multistage feedback to minimize effects of speaker load variations. Etched metal panel. **TUBES (10):** 1-6SJ7, 1-6SN7, 1-6SQ7, 4-6L6G, 1-6AF6G, 2-5U4G. **POWER CONSTRUCTION:** 230 watts 117 volts 60 cycles. 129 volts max. **DIMENSIONS:** 9 3/8" x 17 3/4" x 12 1/4". **SHIPPING WEIGHT:** 45 lbs. **LIST:** (with tubes) \$179.50. **Plug Kit:** \$2.05.

NEWCOMB CUSTOM PORTABLE SYSTEMS



KX-2512N: Portable Sound System with KX-25 amplifier and two heavy duty, extremely efficient, speakers—each with 50 ft. of cable. System is carried in two cases, one for amplifier and one for two speakers as illustrated. Speakers face inside for maximum protection when carried. Mikes or mountings not included in price as requirements vary. **SHIPPING WEIGHT:** 98 lbs. **LIST:** (with tubes and plugs) \$512.85.

KX-25R12N: Portable System identical to KX-2512N but is carried in three cases. Each speaker is mounted in an individual portable reflex baffle for utmost tone quality. Mikes or mountings not included. **SHIPPING WEIGHT:** 125 lbs. **LIST:** (with tubes and plugs) \$586.85.



A-25 Amplifier case only. Fits all "K" Series model amplifiers. **SIZE:** 19" x 11 1/4" x 16 7/8". **SHIPPING WEIGHT:** 15 lbs. **LIST:** \$27.50.

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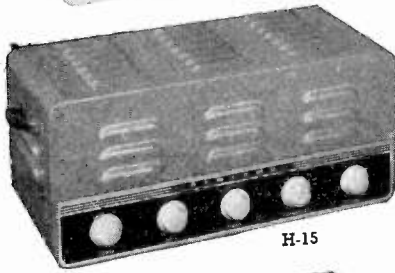
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DELUXE

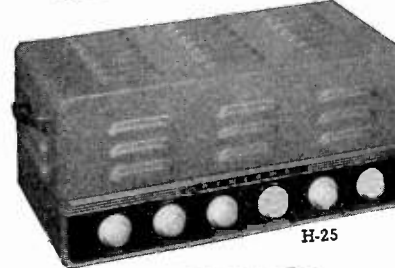
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SERIES AMPLIFIERS

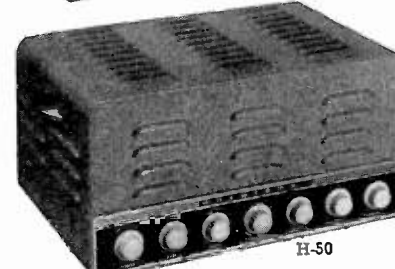
Compare These Deluxe Amplifiers with Any Other Brand at Any Price



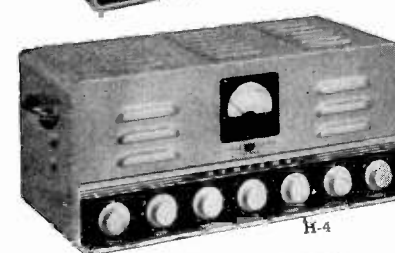
H-15



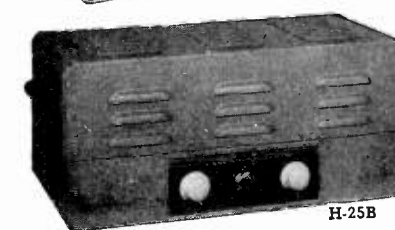
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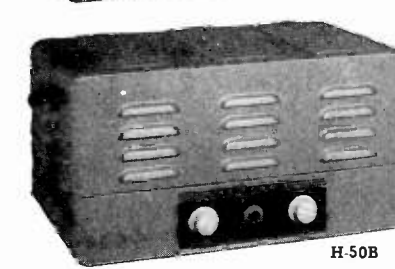
H-50



H-4



H-25B



H-50B

For Performance, Dependability and Value check these features and specifications:

- ★ 20-20,000 cycles \pm 2 db
- ★ Full Power any output tap
- ★ Less than 5% distortion
- ★ 90% of rated power at less than 2%
- ★ Remote Control provision—all mikes
- ★ U/L approval
- ★ Continuous duty—longer life parts
- ★ Wired for plug-in input transformers

Full Audio Power, 50 to 5000 cycles (region of all major power requirements) within \pm 1/2 db, less than 5% distortion. Individual boost and attenuate type bass and treble tone controls in new distortion free circuit. Linear mixer frequency response. All models but pre-amplifier have output impedances of 4, 8, 16, 250, and 500 ohms PLUS a 70 volt "constant voltage" tap, with easily-operated impedance selector. Multi-stage inverse feedback. Large heavy duty power and output transformers thoroughly impregnated against moisture. Rear connections avoid unsightly wires, simplify rack installations. A. C. convenience outlet in rear, all models except boosters. Cabinets: Heavy gauge welded steel beautifully styled in modern functional simplicity that endures. Finish: Silver Grey Hammertone Baked Enamel. Panel: Etched metal, illuminated. Knobs: large, round, skirted type, for ease of operation. Additional specifications under specific model numbers.

H-15 POWER OUTPUT: 17 watts design center rating, 20 watts max. at less than 5% distortion, any output tap. **PEAK POWER:** 26 watts design center, 31 watts max. **INPUTS (3):** 2 mike (2 meg.), gain 120 db; 1 phonograph (1/2 meg.), gain 80 db. **BASS TONE CONTROL:** Range -16 to +14 db. **TREBLE TONE CONTROL:** -34 to +13 db. **HUM:** -72 db phono input, -62 db mike inputs (referred to rated output). **CONTROLS**

H-25 POWER OUTPUT: 25 watts design center rating, 30 watts max. at less than 5% distortion, any output tap. **PEAK POWER:** 40 watts design center, 48 watts maximum. **INPUTS (4):** 3 mike (2 meg.), gain 124 db; 1 phonograph (1/2 meg.), gain 80 db. **BASS TONE CONTROL:** -18 to +15 db. **TREBLE TONE CONTROL:** Range -27 to +10 db. **HUM:** -72 db phono input, -62 db mike inputs (referred to rated output). **CONTROLS**

H-50 POWER OUTPUT: 50 watts design center rating, 60 watts max. at less than 5% distortion, any output tap. **PEAK POWER:** 80 watts design center, 90 watts max. **INPUTS (5):** 4 mike (2 meg.), gain 124 db; 1 phono (1/2 meg.), gain 81 db. **BOOSTER COUPLING JACK** for connecting H-25B or H-50B Boosters for 75 to 100 watts or more. **BASS TONE CONTROL:** Range -21 to +16 db. **TREBLE TONE CONTROL:** Range -27 to +10 db. **HUM:** -72 db phono input, -62

H-4 Mixer Pre-Amplifier with built-in power supply. Extremely low hum. Suitable for feeding telephone lines or booster amplifiers such as the H-25B or H-50B. Output +22 db at less than 5% distortion. +21 db at less than 2%. **INPUTS** for three mikes (2 meg.), gain 90 db. 1 phono (1/2 meg.), gain 51 db. **HUM:** Better than, -80 db from phono input or -75 db, mike inputs. Requires RC-3 remote control unit. Includes master control and genuine VU meter with

H-25B Booster Amplifier — Performance Power and Output Impedances same as H-25 with but one input of 1/2 meg. impedance, gain 68 db. Provision for plug-in bridging or low impedance transformer. Etched metal panel with pilot light, A.C. power switch and volume control. Ideal for use

H50B Booster Amplifier — Performance, Power and Output Impedances are same as H-50 with but one input of 1/2 meg. impedance, gain 71 db. Provision for plug-in bridging or low impedance transformer. Etched metal panel with pilot light, A.C. switch and volume control. Built for long

Newcomb Deluxe Portable Systems

H-1512S Portable sound system with H-15 amp. and two 12" speakers, each with 50 ft. cables, in split case 11 1/8" x 20 1/2" x 21" of sturdy plywood covered with airplane type fabric. Kickproof grills protect speakers. Mikes or mountings not included as requirements vary. **SHIPPING WEIGHT:** 54 lbs. **LIST:** (with tubes and plugs) \$222.00.

H-2512Q Portable sound system with H-25 amp. and two heavy duty 12" speakers, each with 50 ft. cable, in split case 11 1/8" x 20 1/2" x 21" of sturdy plywood covered with airplane type fabric. Kickproof grill protects speakers. Mikes or mountings not included. **SHIPPING WEIGHT:** 61 lbs. **LIST:** (with tubes and plugs) \$275.25.

(5): 1 mike-phonograph, 1 mike, 1 bass, 1 treble, 1 A.C. power switch. **REMOTE CONTROL:** Use RC-2 remote control unit. **TUBES (7):** 2-6SF5, 1-6SJ7, 1-6SN7, 2-6L6G, 1-5Z4. **POWER CONSUMPTION:** 85 watts, 117 volts 60 cycles A.C. Max. input 129 volts. **DIMENSIONS:** 8 1/4" x 19" x 10 1/8". **SHIPPING WEIGHT:** 23 lbs. **LIST:** (with tubes) \$129.50. **Plug Kit:** \$3.36.

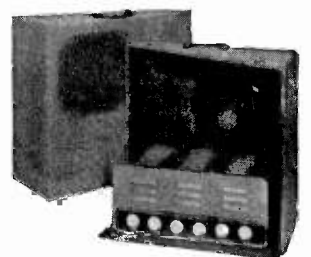
(6): 2 mike, 1 mike-phonograph, 1 bass, 1 treble, 1 A.C. power switch. **REMOTE CONTROL:** Use RC-3 remote control unit. **TUBES (8):** 3-6SF5, 1-6SJ7, 1-6SN7, 2-6L6G, 1-5U6G. **POWER CONSUMPTION:** 125 watts, 117 volts 60 cycles A.C. Max. Input 129 volts. **DIMENSIONS:** 8 1/2" x 19" x 10 1/8". **SHIPPING WEIGHT:** 27 lbs. **LIST:** (with tubes) \$159.50. **Plug Kit:** \$4.12.

db mike inputs (referred to rated output). **CONTROLS (7):** 3 mike, 1 mike-phonograph, 1 bass, 1 treble, 1 A.C. power switch. **REMOTE CONTROL:** Use RC-4 remote control. **TUBES (12):** 4-6SF5, 1-6SJ7, 1-6SN7, 4-6L6G, 2-5U4G. **POWER CONSUMPTION:** 225 watts, 117 volts 60 cycles A.C. Max. Input 129 volts. **DIMENSIONS:** 9 1/4" x 19" x 12 1/2". **SHIPPING WEIGHT:** 42 lbs. **LIST:** (with tubes) \$215.00. **Plug Kit:** \$5.00.

meter range extension switch. **BASS TONE CONTROL:** Range -16 to +14 db. **TREBLE TONE CONTROL:** Range -27 to +13 db. **TUBES (7):** 3-6SF5, 1-6SJ7, 1-6SN7, 1-6J5, 1-6X5. **POWER CONSUMPTION:** 30 watts, 117 volts 60 cycles A.C. Max. Input 129 volts. **DIMENSIONS:** 8 1/8" x 19" x 10 1/8". **SHIPPING WEIGHT:** 21 lbs. **LIST:** (with tubes) \$129.50. **With VU Meter Cover:** \$165.00. **Plug Kit:** \$2.82.

with H-4 Pre-amplifier. Built for long life. **TUBES (5):** 1-6SJ7, 1-6J5, 2-6L6G, 1-5U4G. **POWER CONSUMPTION:** 120 watts, 117 volts, 60 cycles A.C. Max. Input 129 volts. **DIMENSIONS:** 8 1/8" x 19" x 10 1/8". **SHIPPING WEIGHT:** 25 lbs. **LIST:** (with tubes) \$109.50. **Plug Kit:** \$1.39.

life. Ideal for use with H-4 Pre-Amp. **TUBES (8)** 1-6SJ7, 1-6J5, 4-6L6G, 2-5U4G. **POWER CONSUMPTION:** 220 watts, 117 volts, 60 cycles A.C. Max. Input 129 volts. **DIMENSIONS:** 9 1/4" x 19" x 12 1/2". **SHIPPING WEIGHT:** 38 lbs. **LIST:** (with tubes) \$139.50. **Plug Kit:** \$1.39.



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SERIES AMPLIFIERS

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The same fine workmanship and materials as the incomparable KX- and H-Series. Designed to lead the low-price field. For performance, dependability and economy the E-Series is today's best combination of high quality and low cost. All models U/L approved.

E-10 AMPLIFIER . . . Delivers full 10 watts from push-pull 6V6 tubes. Inputs for mike and phono. **SPECIFICATIONS** . . . POWER OUTPUT: 10 watts at less than 5% distortion. FREQUENCY RESPONSE: 40 to 15,000 cycles ±2 db. Inputs (2): 1 mike (2 meg.), gain 116 db; 1 phono (1/2 meg.), gain 77 db. TONE CONTROL: Range 0 to -24 db. MULTI-STAGE INVERSE FEEDBACK CIRCUIT. OUTPUT IMPEDANCES: 4, 8 and 16

ohms to octal socket. TUBES (5): 1-6SC7, 1-6SF5, 2-6V6GT and 1-6X5GT. FINISH: Two-tone gray hammertone baked enamel. PANEL: Genuine etched metal. DIMENSIONS (Incl. cover): 5 3/4" x 10 3/8" x 6 3/4" high. POWER CONSUMPTION: 60 watts at 117 volts; 60 cycles A.C. SHIPPING WEIGHT: Amplifier only, less cover, 9 lbs. Including cover, 10 1/2 lbs. LIST: (with tubes) \$49.50. Cover: \$4.50. Plug Kit: \$1.35.

E-17 AMPLIFIER . . . For medium power applications, 17 watts of undistorted audio to easily selected impedances for matching various speakers. Mixer controls for one mike and a phono input. **SPECIFICATIONS** . . . POWER OUTPUT: 17 watts at less than 5% distortion. FREQUENCY RESPONSE: ±2 db, 40 to 15,000 cycles. INPUTS: 1 mike (2 meg.) gain 117 db; 1 phono (1/2 meg.), gain 79 db. TONE CONTROL: Range 0 to -29 db. OUTPUT IMPEDANCES: 4, 8, 16 and 500

ohms. MULTI-STAGE INVERSE FEEDBACK CIRCUIT. TUBES (5): 1-6SC7, 1-6SJ7, 2-6L6G, 1-5Z4. PANEL: Etched metal, illuminated. FINISH: Two-tone gray hammertone baked enamel. DIMENSIONS: (Incl. cover): 8 3/8" x 14 1/8" x 8" high. POWER CONSUMPTION: 75 watts at 117 volts, 60 cycles A.C. SHIPPING Wt. 18 lbs. LIST (with tubes less cover) \$74.00. Cover \$5.50. Phono Cover \$28.50*. Changer Cover \$75.00*. Plug Kit: \$1.80. (*Plus Excise Tax.)

E-25 AMPLIFIER . . . Delivers a full 25 watts. Multi-stage inverse feedback assures low distortion. Provision for two mikes to be mixed together, or one mike and one phono, with easy matching to various speakers. **SPECIFICATIONS** . . . POWER OUTPUT: 25 watts at less than 5% distortion. FREQUENCY RESPONSE: ±2 db, 40 to 15,000 cycles. INPUTS (3): 2 mike (2 meg.), gain 119 db; and 1 phono (1/2 meg.), gain 78 db. TONE CONTROL: Range 0 to -30 db. OUT-

PUT IMPEDANCES: 4, 8, 16 and 500 ohms. TUBES (6): 1-6SJ7, 1-6SC7, 1-6J5, 2-6L6G and 1-5Z4. FINISH: Two-tone hammertone baked enamel. PANEL: Etched metal, illuminated. POWER CONSUMPTION: 90 watts at 117 volts; 60 cycles A.C. SHIPPING WEIGHT: 19 lbs. LIST (with tubes less cover) \$94.00. Cover \$5.50. Phono Cover \$28.50*. Changer Cover \$75.00*. Plug Kit: \$2.56. (*Plus Excise Tax.)

E-50 . . . AMPLIFIER . . . The 50 watt leader in its price class. Multi-stage inverse feedback and push-pull paralleled 6L6 tubes assure low distortion. Two mikes may be mixed, or one mike and one phono. Impedance selector simplifies speaker matching. **SPECIFICATIONS** . . . same as E-25 except as following: POWER OUTPUT: 50 watts at

less than 5% distortion. Mike gain 122 db.; phono gain 81 db. OUTPUT IMPEDANCES: 4, 8, 16 and 250 ohms. TUBES (6): 1-6SJ7, 1-6SC7, 1-6J5, 4-6L6G and 2-5Z4. DIMENSIONS (including cover): 11 1/4" x 14 3/4". POWER CONSUMPTION: 170 watts at 117 volts; 60 cycles A.C. SHIPPING WT.: 31 lbs. LIST: (with tubes) \$154.50. Plug Kit: \$2.56.

E-10M MOBILE AMPLIFIER . . . The Model E-10-M is a particularly rugged, dependable, low cost 10 watt mobile amplifier, designed for use on 6 V.D.C. or 117 volts, 60 cycles A.C. power. Features push-pull beam power output tubes with inverse feedback for low distortion; Standby battery saver switch; New freedom from vibrator hash; Special mounting to simplify removal of chassis for servicing; Inputs for mike and phono; Sturdy Jones connectors for battery and A.C. cables. **SPECIFICATIONS** . . .

POWER OUTPUT: 10 watts at less than 5% distortion. FREQUENCY RESPONSE: 50 to 15,000 cycles ±2 db. Mike Input (2 megs.), gain 115 db; Phono Input (1/2 meg.), gain 75 db. OUTPUT IMPEDANCES: 4, 8, and 16 ohms. Jewelled pilot lamp. Etched metal panel. Two-toned gray, baked enamel hammertone finish. TUBES (5): 1-6SC7, 1-6SF5, 2-6V6GT, 1-6X5GT. POWER CONSUMPTION: 60 watts at 117 volts A.C. 8 amps at 6 V.D.C. SHIPPING WEIGHT: 13 1/2 lbs. LIST: (with tubes) \$69.50. Plug Kit: \$1.10.

E-25MP PHONO TOP MOBILE AMPLIFIER . . . A full 25 watts from either 6 V. Storage Battery or 117 V. A.C. at new low price. Ideal for sound trucks, political gatherings, picnics, missionary work, camps, resorts, beaches, carnivals, parades, etc. Ruggedly built to stand hard usage. Consumes least possible current per watt output. "Standby" switch reduces battery consumption, keeps tubes warm for instant use. Separate A.C. power and turntable switches. Heavy duty Jones plugs and receptacles provide dependable connections to battery or A.C. power source. **SPECIFICATIONS** . . . POWER OUTPUT: A full 25 watts at less than 5% distortion from either 117 volts A.C. or 6-volt storage battery. RESPONSE: ±2 db, 50-15,000 cycles. INPUTS for two mikes (2 meg.) gain 119 db; and one phono (1/2 meg.), gain 78 db. HIGH FREQUENCY ATTENUATOR

range, 28 db. CIRCUIT FEATURES: Multi-stage inverse feedback, resistance capacity coupling, phase correction for phono motor, 2000 volt Hermetically sealed oil buffer condenser. OUTPUT IMPEDANCES: 4, 8, 16 and 500 ohms to two octal speaker sockets and impedance selector. PHONOGRAPH MOTOR: Constant speed 78 R.P.M. PICKUP: Crystal. TUBES (7): 1-6SC7, 1-6SJ7, 1-6J5, 2-6L6, 2-6X5GT. POWER CONSUMPTION: 107 watts at 117 volts, 60 cycles A.C. or 20.5 amps. including phono motor from 6-volt storage battery. FINISH: Two-tone gray hammertone baked enamel. PANEL: Etched metal, illuminated. DIMENSIONS (including cover): 8 3/4" x 14 1/8" x 10" high overall. SHIPPING WT.: 30 lbs. LIST: (with tubes and phono cover) \$169.50. Plug Kit: \$2.50 (Excise Tax on cover).

E-25M . . . Same as E-25MP, Mobile Amplifier, with cover, tubes, less phono unit. Power consumption: 91 watts A.C. or 17 amps. from 6 V.D.C. Dimensions: 8 3/8" x 14 1/8" x 8" high. SHIPPING WT.: 27 lbs. LIST: (with tubes and plain cover) \$154.50. Plug Kit: \$2.56.

NEWCOMB UTILITY PORTABLE SYSTEMS

E-1010S . . . 10-watt basic port. system with 10" speaker, 25 ft. cable and plug; and 1 E-10 Amplifier. Mike and stand not included in price as requirements vary. Size: 12 1/4" x 15 3/4" x 8 3/4". Shipping Wt.: 25 lbs. LIST: \$99.95

E-1712S . . . 17-watt dual 12" speaker port. system with 2 efficient speakers, each with 25 ft. cable and plug; and 1 E-17 amplifier. Mikes and stands not incl. Size: 12 1/2" x 17 3/4" x 13". Shipping Wt.: 48 lbs. LIST: \$163.00

E-2512Q . . . 25-watt basic port. system with two heavy duty 12" speakers, each with 25 ft. cable and plug and 1 E-25 amplifier. Mikes and stand not included. Size: 21 1/2" x 17 1/2" x 13". Shipping Wt.: 58 lbs. LIST: \$206.00

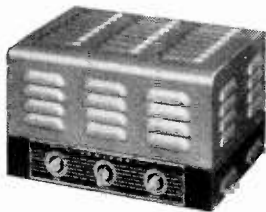
E-2512S . . . 25-watt dual speaker basic port. system, similar to E-2512Q, but with medium weight speakers. Shipping Wt.: 49 lbs. LIST: \$183.60



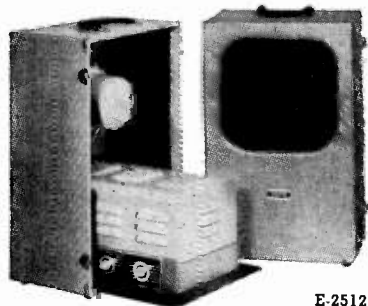
E-1010S



E-17 E-25



E-50



E-2512S E-1712S E-2512Q



E-10M



E-25MP

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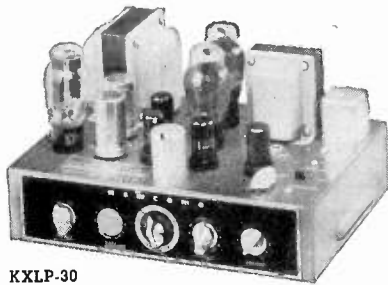
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PHONO AMPLIFIERS

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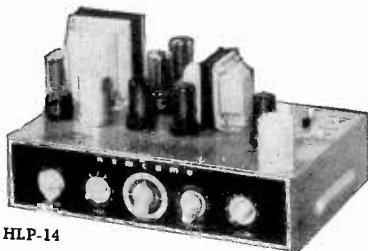


KXLP-30

KXLP-30 A phonograph amplifier unsurpassed by any other in the field, regardless of price. Ample power permits use of KX Series dual tone control circuit. Provides tonal range and balance unattainable in less costly circuits, and controlled emphasis of desirable but power-consuming fundamental bass tones, avoiding emphasis of harmonic bass—the "Boomy" or one-tone bass so unacceptable to true music lovers; U/L approved. Features "Magic Red Knob" Record Condition Compensator and built in magnetic pick-up pre-amplifier.

SPECIFICATIONS: POWER OUTPUT: 30 watts at less than 5% distortion with flat power output versus frequency curve. FREQUENCY RESPONSE: 20 to 20,000 cycles \pm 1 db. Response of magnetic and variable reluctance inputs corrected for requirements of these pickups. INPUTS: For radio and choice of crystal or variable reluctance pickup inputs. GAIN: Crystal input, 90 db. at 1/2 meg. input impedance. Magnetic or

variable reluctance input, 112 db. at 1/2 meg., input impedance of 95 db. at 10,000 ohms. Signal required at radio input for full output is 6.6 volts. BASS TONE CONTROL: 0 to +22 db. with special curve shape for maximum emphasis of fundamental bass tones and minimum emphasis of harmonic bass. TREBLE TONE CONTROL: -25 db. to +25 db. RECORD CONDITION COMPENSATOR: Five positions: #1, radio #2, records, condition "A" (Perfect); #3, records, condition "B"; #4, records, condition "C"; #5, records, condition "D" (badly worn, very noisy). HUM BALANCER CONTROL: To correct variation in tubes. OUTPUT IMPEDANCES: 3, 4, 6, 8, 16 and 500 ohms to octal socket. POWER CONSUMPTION: 150 watts, 129 volts, 60 cycles A.C. for use on 105-129 volts. TUBES (7): 1-6SC7, 3-6J5, 2-6L6G, 1-5U4G. DIMENSIONS: Chassis: 13 1/2" x 9 1/2" x 3". Height overall, 7 7/8". SHIPPING WEIGHT: 26 lbs. LIST: (with tubes) \$225.00. Plug Kit: \$68.



HLP-14

HLP-14 Brings to music lovers new listening pleasure in a unit less expensive than the KXLP-30. It, too, features the "Magic Red Knob" record condition compensator. Built-in pre-amplification and equalization, required for new low level pickups, make the HLP-14 ideal for the lower cost home installation. Exceptional tonal balance at whisper volumes is an outstanding feature. U/L approved.

SPECIFICATIONS: POWER OUTPUT: 14 watts at less than 5% distortion with wide flat power output versus frequency curve. PEAK POWER OUTPUT: 19 watts. FREQUENCY RESPONSE: 30 to 15,000 cycles \pm 1 db for crystal pickup and radio inputs. Magnetic and variable reluctance inputs have response adjusted to requirements of

these pickups. INPUTS: Same as KXLP-30. GAIN: Crystal input 90 db. at 1/2 meg. input impedance. Magnetic or variable reluctance input 109 db. at 1/2 meg. or 92 db. at 10,000 ohms impedance. Signal from radio required for full output is 4.2 volts. Variable. BASS TONE CONTROL: 0 to +16 db. TREBLE TONE CONTROL: -29 db. to +12.5 db. RECORD CONDITION COMPENSATOR: (Same as KXLP-30). OUTPUT IMPEDANCES: 3, 4, 6, 8, 16 and 500. POWER CONSUMPTION: 75 watts, 129 volts, 60 cycles A.C. for use on 105-129 volts. TUBES (6): 1-6SC7, 1-6S7, 1-6J5, 2-6V6GT and 1-5Y3LT. DIMENSIONS: Chassis, 13 1/8" x 8 1/2" x 3". Height overall, 6 3/4". SHIPPING WEIGHT: 14 1/2 lbs. LIST: (with tubes) \$139.50. Plug Kit: \$68.



P-10

MODEL P10 This remarkable new amplifier has a frequency response with \pm 1 db from 30 to 15,000 cycles and delivers a full clean 10 watts. Includes distortion free, individual bass and treble tone controls for bass boost and treble boost for any three of the following: Standard Crystal Pick-up Long Playing Crystal Pick-up, Magnetic Pick-up Pre-Amplifier Output, A.M. Radio, F.M. Radio, or Television, without need of special switching; PLUS a power socket for connection of a G.E. or similar Pre-Amplifier if desired. All connections are clearly marked. Circuit includes multi-stage inverse feedback. The low hum level achieved is of utmost importance

when used with modern efficient speakers in bass reflex cabinets operated in quiet rooms. The low price makes it the truly outstanding buy in the field. U/L Approved. **SPECIFICATIONS:** INPUTS: (3 1/2 meg.; Gain, 75 db. Bass tone control range 0 to +16 db. Treble tone control range: -25 db. to +15 db. Output Impedances: 4, 8 and 16 ohms. Etched metal panel, grey baked enamel hammertone finish. TUBES (5): 1-6SC7, 1-6SF5, 2-6V6GT and 1-6X5GT. Dimensions: 11 1/8" x 6 1/4" x 5 3/4" high. Power consumption: 60 watts at 117 volts, 60 cycles A.C. Shipping Weight: 10 1/2 lbs. LIST: (with tubes) \$59.50. Plug Kit: \$90.



PROFESSIONAL MUSICAL INSTRUMENT AMPLIFIER

G-12 Gives full, clear true tones at any desired volume. Lightness and beautiful appearance. Plus exceptional ruggedness and dependability characterize the Model G-12. There are three inputs with ample gain for Musical Instruments, plus an additional higher gain input for a microphone. Entire unit weighs only 20 1/2 lbs. for easy carrying. The amplifier frequency response is 30 to 15,000 cycles. Special circuit designed for musical instruments, provides a full 12 watts power at less than 5% distortion (over 90% of full output at less than 2% distortion). Exceptionally efficient big full 12" Alnico V permanent magnet speaker in an acoustically designed enclosure. A kickproof grill gives real

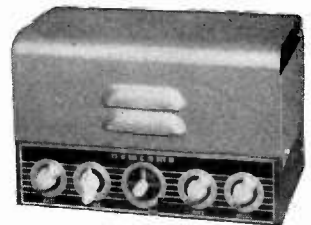
protection for speaker. Case construction gives needed rigidity for best tone and freedom from rattles and strength necessary to stand the abuse of constant traveling. Amplifier mounting screws enter into metal inserts. The case is covered in durable, washable, airplane type fabric. Truly a professional instrument. Built for years of trouble free service under the most rugged conditions. U/L Approved.

SPECIFICATIONS: Power Consumption: 65 watts at 117 volts, 60 cycles A.C. Tubes (5): 1-6SC7, 1-6SF5, 2-6V6GT, and 1-5Y3GT. Size: 9 1/4" deep x 14 7/8" x 18 3/8" high. SHIPPING WEIGHT: 25 lbs. LIST: (with tubes) \$99.50.

RESTAURANT AMPLIFIER

PM-10 PM-10 differs from usual phono or P.A. Amplifiers in that a switch on the panel cuts music and selects area to be paged. When paging, tonal adjustments set for music are automatically cut and flat response is substituted for proper voice quality. Paging Switch returns to music and music response when released. Operator has choice of paging "All" or a selected area. Bass boost tone control and separate high frequency tone control for boost or attenuation give desired response for music. Ideal for use with Long Playing Microgroove Changers for good music at lowest cost with added feature of paging. U/L Approved.

SPECIFICATIONS: POWER OUTPUT: 10 watts at less than 5% distortion. Frequency Response: \pm 1 db., 40 to 15,000 cycles. Mike Input (2 meg.) gain 105 db. Phono Input (1/2 meg.) gain 77 db. Bass tone control range: 0 to +14 db. Treble Tone Control Range: +15 db. to -22 db. Output Impedances: .7, 1.4, 4, 8, and 16 ohms. Etched metal illuminated panel. Two-toned, grey, baked enamel hammertone finish. Tubes (5): 1-6SC7, 1-6SN7, 2-6V6GT, 1-6X5GT. Dimensions: 11 1/8" x 6 1/4" x 6 5/8" high. Shipping Weight: 12 lbs. LIST: (with tubes and cover) \$79.50. Plug Kit: \$1.63.



Newcomb

AUDIO PRODUCTS COMPANY

6824 LEXINGTON AVENUE • LOS ANGELES 38, CALIFORNIA

Newcomb

COMBINATION TRANSCRIPTION PLAYERS—P. A. SYSTEMS

Never Before has so Much Distortion-Free Volume, Quality of Tone, Ruggedness and Versatility Been Built into Such Convenient Units

The NEWCOMB TR-16 Series sets new standards in the field of portable record-playing. They are truly economical, yet characteristically Newcomb in quality of workmanship, performance and fresh originality of design. Also they serve as splendid P.A. systems when microphones are attached to inputs provided for the purpose. . . . Every attempt has been made to make these units foolproof in operation, with emphasis on rugged dependability, tone quality, light weight and serviceability.

These features, applying to all models of the TR-16 Series, indicate the unsurpassed value of Newcomb built Transcription Players.

All models play standard 78 RPM records as well as 33 $\frac{1}{3}$ RPM transcriptions. "A" models also play LP Microgroove records.

POWER: 10 full watts, from push-pull 6V6's, inverse feedback, low distortion amplifier. Response within ± 2 db. from 50 to 10,000 cycles. More actual distortion-free volume of sound than ever before available in a unit this size.



TR-16AM
TR-16A



TR-16BM
TR-16B



TR-16M
TR-16

VARIABLE SPEED: (Except TR-16B and BM MODELS which use a constant speed motor). Handy vernier speed adjustment lever varies basic speed to meet pitch or tempo requirements. Heavy General Industries governor controlled, two-speed motor. EXTRA LARGE SPEAKER: Fine quality 12" Alnico V permanent magnet dynamic speaker with 25 foot cable for convenient placing and best coverage. FLEXIBILITY: Separate mike and phono volume controls permit mixing of speech with records. Individual record bass boost tone control and separate high frequency tone control give effective control of all tonal requirements. Special circuit avoids bass emphasis of voice when bass is emphasized on records. Retains excellent bass even at low volumes. RUGGEDNESS: Kick-proof punched metal grill protects speaker. Sturdy plywood case, finished in airplane type fabricoid, features metal corners and glue blocks for extra strength. Heavy gauge welded steel chassis panel and motor board. All models U/L approved. POWER CONSUMPTION: 60 watts, 117 volts, 60 cycles A.C. SIZE: 16 $\frac{1}{4}$ " x 16 $\frac{1}{4}$ " x 12". SHIPPING WEIGHT: 44 lbs.

TR-16AM This deluxe, dual-speed portable transcription player and P.A. system plays 33 $\frac{1}{3}$ RPM LP-Microgroove Records as well as 78 RPM Standard Records and 33 $\frac{1}{3}$ RPM Electrical Transcriptions up to 17 $\frac{1}{4}$ " in diameter. Utilizes to the utmost the splendid reproducing qualities of the new variable reluctance type magnetic pickups. Incorporates an effective scratch suppressor. Unlike other attempts to play both LP Microgroove Records and the large Transcriptions, the TR-16AM plays

LP Records on a standard size arm, thus achieving a definite saving in space and weight and with less tendency to groove skipping. The LP Arm may simply be depressed out of the way when not in use. Placing LP Arm in operation automatically corrects response as necessary for best reproduction of LP Records. Input for microphone permits mixing of speech and records. Weighs only 38 $\frac{1}{2}$ lbs. TUBES (6): 2-6SC7, 1-6SJ7, 2-6V6GT, 1-6X5GT. LIST: \$199.50.

TR-16A This is a Crystal Pickup version of the TR-16AM for those desiring a unit of somewhat lower cost without a scratch suppressor. Identical in all other essential respects to the TR-16AM, this Model TR-16A utilizes the latest Featherweight Crys-

tal Pickups with Semi-Permanent, easily replaceable needles of new design eliminate direct needle talk, avoid nuisance of constant needle replacement, and lengthen life of records. TUBES (5): 1-6SC7, 1-6SJ7, 2-6V6GT, 1-6X5GT. LIST: \$174.50.

TR-16BM A deluxe 3-speed portable player which combines for the first time in one device the ability to play all types of records. Plays 45 RPM, 33 $\frac{1}{3}$ LP Microgroove Records, 33 $\frac{1}{3}$ Broadcast Type Transcriptions up to 17 $\frac{1}{4}$ " in diameter, plus regular 78 RPM Standard Recordings. Incorporates a constant speed rim drive motor for wow free performance with simple speed

change lever. Exclusive depressable arm feature used in TR-16A and TR-16AM models give best results with each type of record and reduces space requirements. Includes variable reluctance pickup-scratch filter, microphone input, bass and treble tone controls, A.C. power receptacle and radio input jack. Weight only 34 lbs. LIST: \$179.50.

TR-16B This is a crystal pickup version of the TR-16BM for those desiring a similar unit at somewhat lower cost without special scratch suppressor. Identical in all other respects to TR-16BM, this model

utilizes Featherweight crystal pickups with semi-permanent easily replaceable needles similar to TR-16A. An outstanding value. Weight only 34 lbs. LIST: \$159.50.

TR-16M When LP records are no consideration, the TR-16M is unequalled for performance and long term dependability. It plays standard records and electrical transcriptions up to 17 $\frac{1}{4}$ " in diameter, and includes the variable reluctance magnetic pickup, and desirable scratch suppressor, which can be cut in or out at will. Featuring the same added microphone input as the other models, the

TR-16M can be used with the greatest efficiency by lecturers, teachers, dancing instructors, for community square dancing groups and in a host of other applications requiring best tone quality and performance. Rubber pad protects pickup if accidentally dropped. Weighs 38 lbs. TUBES: (Same as Model TR-16AM). LIST: \$179.50.

TR-16 This is one of the most popular players ever offered the trade. Identical in all essential respects to the TR-16M but utilizes a fine quality Featherweight Crystal Pickup for those desiring a lower cost unit than the TR-16M without scratch suppressor. New Semi-Permanent, easily replaceable needle of new design prevents

direct needle talk and assures long record life and low distortion. A popular favorite with educators throughout the nation for utility applications where economy in initial cost and maintenance is important. Weighs only 38 lbs. TUBES: (Same as TR-16A). LIST: \$159.50.

(ALL Transcription Players Subject to Excise Tax)

Newcomb

AUDIO PRODUCTS COMPANY

6824 LEXINGTON AVENUE • LOS ANGELES 38, CALIFORNIA

TRANSFORMERS

INDUSTRIAL SOUND SYSTEM



TR-91: A distinct contribution to high quality P.A. systems. Features sextuple alloy and copper shielding for quiet operation right in amp. proper; alloy core and specially designed windings for extended frequency response from 20 to 20,000 cycles; plug base for easy installation without tools in any H or K series Newcomb amp. For use between 30-50 or 200-250 ohm mikes and grid. Shipping weight, 1 1/4 lbs. LIST: \$23.50.

TR-92: Input impedance 5,000 ohms to grid for bridging a 500-600 ohm line. Alloy shielded for minimum hum. When plugged into the socket provided on K50B, H50B, H25B, it converts these amps for use as bridging amps. Shipping weight, 1 1/4 lbs. LIST: \$19.50.

TR-100: Identical to TR-91 but designed for use between 125-150 or 500-600 ohm microphone and grid. LIST: \$23.50.



LS-2: (not shown) High Power Impedance matching auto-transformer having 28 impedance from 580 ohms to 1.21 ohms. Capacity 100 watts. Shipping weight, 5 1/4 lbs. LIST: \$19.50.

LS-4 LS-5

LS-4: Multi-winding general purpose transformer. Range of impedance from 3,000 to 18,000 ohms in steps of 1,500 ohms. Capacity 8 watts. LIST: \$8.50.

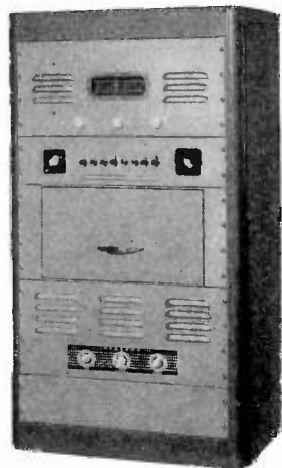


LS-5: Transformer: Similar to LS-4 with range of impedances from 500 to 3,000 ohms in steps of 250 ohms. Capacity 20 watts. LIST: \$10.50.

TC

TC: Weatherproof housing for use with all three transformers. Box size: 3 1/4" x 4" x 5 3/4". LIST: \$5.00.

MODEL 4151: Designed to furnish phonograph, A.M. Radio, or Wired Music, plus paging facilities to 6 selected areas. A 50 watt amplifier supplies ample power for the majority of applications. Operating controls include a monitor key, monitor volume control, an "all" key, and a program selector. Provides inputs for two microphones. Construction is by individual panels permitting future modifications to fit changing needs. Phono is enclosed in a ball bearing slide drawer. Radio is a dependable, full A.C., A.M. Radio. For detailed amplifier specifications refer to Model E-50. Special sockets permit use of plug-in type input transformers for low impedance mike input and balanced line wired music input when desired. Includes a monitor speaker wired to permit checking of program before connecting to various areas. Amplifier plate supply is relay operated. Model 4151-C same as above but wired for intercom.



RCT-6 remote control turret and adapter panel for 4151 system permits selection of any one or all of six areas from a remote point. Remote turret settings take precedence over 4151 panel keys. Contains 2 pilot lamps, one for main power and the other indicating microphone is "on." LIST: Model 4151 (with Tubes and Plugs) \$695.00. Model 4151C \$745.00. (Subject to excise tax.)



REMOTE CONTROL UNITS

Permit mixing and fading from a remote point all "H" Series microphone inputs. On "K" Series, all microphone inputs PLUS phonograph may be controlled. Up to 2000 ft. cable may be used. No inductive pickup. Models required for various amplifiers as follows:

RC-2 for H-15 amp. Requires ordinary 3 wire cable. Dimensions: 2 3/4" x 6" x 2 1/8". Shipping weight: 1 lb. LIST: \$9.00.

RC-3 for H-25 or H-4 amplifiers. Requires ordinary 4 wire cable. Dimensions: 2 3/4" x 6" x 2 1/8". Shipping weight: 1 lb. LIST: \$13.50.

RC-4 for H-50 amp. Requires ordinary 5 wire cable. Dimensions: 2 3/4" x 7 5/8" x 2 1/8". Shipping weight: 1 1/4 lbs. LIST: \$17.00.

RC-6 for KX-25, KX-50, KX-6A amplifiers. Requires ordinary 7 wire cable. Dimensions: 2 3/4" x 11 1/4" x 2 1/8". Shipping weight: 2 lbs. LIST: \$24.00.



RC-2

RC-3



RC-4



RC-6



RACK ASSEMBLIES

For all the varied sound applications of schools, industry, churches, fairs, stadiums, Newcomb offers the basic elements for custom cabinet type rack systems. Designed for flexibility, the Newcomb rack equipment enables the engineer to assemble and install public address equipment of the highest quality, tailored to each customer's exact needs. Write for literature.

LP-1 SCRATCH FILTER

Another contribution by Newcomb to improved record response for the most critical and demanding listener. Simple to install in commercial or professional systems or home phonographs. Can be connected easily by any serviceman. Wired between a crystal pickup and an amplifier, it greatly improves the response of the pickup and provides a remarkably effective control of needle scratch. Unlike other methods the LP-1 retains excellent brilliance of response. Four steps of adjustment provide adequate control for all records, regardless of quality. LIST: \$25.00.



MA-1 MAGNETIC PICKUP ADAPTER

MA-1 provides an inexpensive means of connecting variable reluctance pickups such as the new G.E., to any mike input. Added feature is incorporation of an effective scratch filter which may be cut in or out with a convenient switch. Initial wiring is for G.E. Pickup. Simple jumper change quickly adapts the MA-1 for others such as Pickering, Lear, Astatic, etc. Size: 3" x 3 1/4" x 1 1/4". Shipping weight: 1 lb. LIST: \$5.00.



AUDIO PRODUCTS COMPANY

6824 LEXINGTON AVENUE • LOS ANGELES 38, CALIFORNIA

TALK-A-PHONE

The World's Most Complete Line of
INTER-COMMUNICATION
Has Everything

"Elsie"

(LC-2)

"Has Everything"

**TWO-STATION
INTER-
COMMUNICATION
SYSTEM**



Complete with tubes, easy to follow instructions and 50 ft of cable.

List Price each system complete

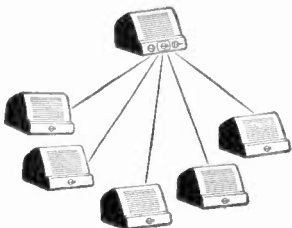
\$39⁹⁵

"Take It Easy—Tell It to 'Elsie'"

- "Elsie" carries messages with the speed of sound.
- An eager little helper that gives and gets information quicker than you can say "scat."
- Always ready to serve you instantly.
- Works willingly for a fraction of a cent a day.

- Simple to install — As easy as hanging a picture.
- "Elsie's" house is a handsome Bakelite cabinet of walnut hue, streamlined with that stunning "new look."
- Guaranteed by the makers of the world's most complete and highly perfected line of inter-communication.

Perfect for the home, office, farm, store, etc.—wherever two-way communication is needed between two points. Consists of one Master unit and one Sub-Station. System can be used either "Privately" or "Non-Privately." If "Non-Privately," the Talk-Listen control is not required to be used by persons at Sub-Station, and they are permitted to answer from distances even up to forty feet. Ideal for the nursery—you can keep tuned to baby's slightest move—no more getting up to see if baby is all right. Smartly styled matching cabinets of molded walnut Bakelite. Operates **universally** on 110-115 volts, AC or DC. The Sub-Station does not consume current and can be installed most anywhere. Cabinets measure 8 $\frac{1}{4}$ " x 6 $\frac{1}{4}$ " x 7 $\frac{1}{2}$ ". Weight packed, 12 lbs.



LM-5; LM-10 MASTER SELECTIVE SYSTEMS

Consists of one Master Unit which can be connected with one or more (up to ten) Sub-Stations. The Master Station can talk "privately" to any one of the Sub-Stations or to all at one time. Sub-Stations can be connected "privately" or "non-privately". Has the TALK-A-PHONE "Silent Feature". Sub-Stations, whether connected "privately" or "non-privately", can originate calls to the Master Station. The Sub-Stations can be at considerable distances from the Master unit. Once a conversation has been initiated, with a "non-private" system, persons at Sub-Station locations need operate no controls and can reply from a distance. The Sub-Stations do not consume electric current and can be installed most anywhere. Cabinets measure 8 $\frac{1}{4}$ " x 6 $\frac{1}{4}$ " x 7 $\frac{1}{2}$ ". Weight packed — Master, 8 lbs., Sub-Stations, 5 lbs. Master Station operates universally on 110-115 volts, AC-DC.

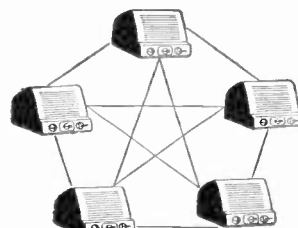
Ordering LM-5; LM-10 Master Selective Systems

MODEL LM-5 Master Selective Station for five Sub-Stations, complete with tubes and easy-to-follow instructions. List Price ea. \$38.00

MODEL LM-10 Master Selective Station for ten Sub-Stations, complete with tubes and easy-to-follow instructions. List Price ea. \$51.00

MODEL LR-3 Sub-Station unit for LM-5 or LM-10 Master Station. List Price ea. \$12.75

No. 5303 (three-conductor) Cable. For use between each LR-3 Sub-Station and the LM-5 or LM-10 Master unit. List Price per foot 5c



LS-5; LS-10 SUPER SELECTIVE SYSTEMS

Consists of all Master units. Extreme flexibility of inter-communication whereby any station in the system can call any other and carry on a two-way conversation. You can begin with two Masters and add up to a total of five in the case of the LS-5 units, or up to a total of ten in the case of the LS-10 units. As many as five private two-way conversations can be held at the same time with ten LS-10 Masters. Two private two-way conversations can be accommodated at the same time with the LS-5 system. All Master Stations are private. Stations cannot listen in on each other, nor can a third unit listen in on a conversation of two others. Variable volume, adjustable at each unit, provides for the incoming voice to be adjusted from a bare whisper to full volume that can be heard easily at a considerable distance. Stations can be located even 1000 or 2000 feet apart. Six-conductor cable providing for a total of five units is used with the LS-5 system and is run from the first unit to the second only, from the second to the third only, etc., until the last unit in the system is reached. Similarly, an eleven-conductor cable, providing for a total of ten units, is used for inter-connecting the LS-10 system. It is not necessary to run cable between the first and last units in the system. Cabinets measure 8 $\frac{1}{4}$ " x 6 $\frac{1}{4}$ " x 7 $\frac{1}{2}$ ". Weight packed, 8 lbs. Operates Universally on 110-115 volts, AC-DC.

Ordering LS-5; LS-10 Super Selective Systems

MODEL LS-5 Super Selective unit for five stations, complete with tubes and easy-to-follow instructions. List Price ea. \$38.00

MODEL LS-10 Super Selective unit for ten stations, complete with tubes and easy-to-follow instructions. List Price ea. \$51.00

No. 5506 (six-conductor) Cable. For inter-connecting LS-5 units as outlined above. List Price per foot 17c

No. 9911 (eleven-conductor) Cable. For inter-connecting LS-10 units as outlined above. List Price per foot 34c

HOW TO DETERMINE CABLE NEEDS: (A) For Master Selective Systems: Measure from Master to each Sub-Station to determine total cable needed. (B) For Super Selective Systems: Measure from first Master to second, to third, etc. Six-conductor cable is required for five-station system and eleven-conductor cable for ten-station system. (C) For two-station (LC-2) system use three-conductor cable.

Prices and Specifications Subject to Change Without Notice

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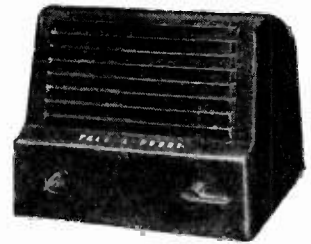
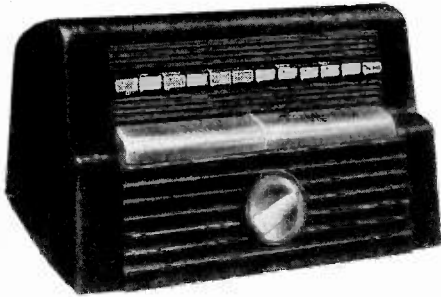
TALK-A-PHONE CO.

ILLINOIS

TALK-A-PHONE

"Chief Forty Niner"
DOES EVERYTHING—HAS EVERYTHING
THE FINEST IN INTER-COMMUNICATION

Work faster, more efficiently, more economically — use the "Chief Forty-Niner." Eliminate "getting up and down," "going through" a busy switchboard, "waiting" to see your man. Touch of button gives you instant and direct two-way communication with sales, engineering, stockroom, shipping — without anyone leaving work. Direct that non-productive effort into productive results — add 20% to your day.



ONE MODEL DOES EVERYTHING

TALK-A-PHONE's patented, exclusive "DYNASONIC" features gives you one model that "Does Everything." The same unit can be used for every type of application, whether it be as all Master Stations, or a Master and Staff Stations, or a number of Masters inter-mixed with Staff Stations. The Master Stations may talk with any other Master in the system as well as with all Staff Stations. Six, twelve, twenty and thirty capacity Master Stations can be used within the same system. The Staff Station may answer Master Stations and originate calls to one, two or six Master Stations, depending on its capacity. Staff Stations converse with Master Stations only. Staff Stations are not connected to electrical outlet.

Through its "DIFFERENTIAL STAFF" feature, TALK-A-PHONE permits any Staff Station to be used as either "Private" or "Non-Private", and also permits some Staff Stations to be "Private" and others "Non-Private" in the same system. "Private" Staff Stations have complete privacy, and no other station can "listen-in". Persons at "Non-Private" Staff Stations can answer from a distance up to 50 feet from the unit without leaving work. All Master and Staff Stations are assured of privacy, except where by choice, Staff Stations are designated as "Non-Private", in which case the Master Station can "listen-in" on the "Non-Private" Staff Stations.

BEAUTIFULLY STYLED: The Bakelite walnut cabinet of the "CHIEF FORTY-NINER" is unsurpassed in simplicity of design and appearance.

TRANSLUCENT LIGHTING further enhances its beauty as well as indicating whether the unit is "on" or "off."

MULTI-MATIC SELECTOR: A patented exclusive TALK-A-PHONE feature. Twelve, twenty, thirty station capacity in SAME BEAUTIFUL CABINET with only TWELVE PUSH BUTTONS. Six-station Master has six push buttons.

HOLD-A-MATIC CONFERENCE CONTROL: TALK-A-PHONE "HOLD-A-MATIC" feature ALLOWS CONFERENCE between THREE or a GROUP OF STATIONS by merely selecting desired buttons.

UNI-TRANS: Gives you "DICTATION CONTROL."

VOICE RANGE POWER: The powerful, rugged amplifier gives you amazing, brilliant "voice range" power. Stations may be up to 3000 feet apart.

DEPENDABILITY: PROVED IN BILLIONS OF HOURS OF ACTUAL USE.

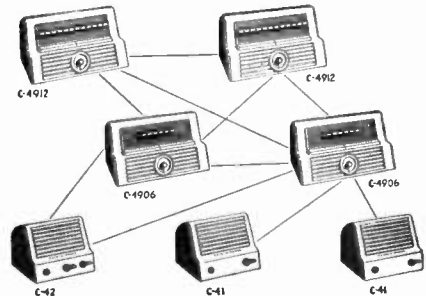
PRIVACY EARPHONE: Optional equipment on Master Stations. Provides listening privacy; and conversation with other Masters without continuous operation of touch bar.

POWER PAGING: Optional Booster for high power paging. May be added at any time.

UNIVERSAL UNFAILING OPERATION: Designed to withstand continuous day and night use. Operates anywhere on 110-120 volts, alternating current, 60, 50, 40 and 25 cycles; and 110-120 volts, direct current, at a cost of but a fraction of a cent a day.

UNDERWRITERS' LABORATORIES APPROVED!

COMPLETE PACKAGE UNIT: The "CHIEF FORTY-NINER" is complete with junction box — ready to plug in. Easy-to-follow instructions permit "anybody" to install TALK-A-PHONE.



All Master Stations and C-46 Staff Stations — 12" W x 9" D x 7" H.
C-41 and C-42 Staff Stations — 8 1/4" W x 7 1/2" D x 6 1/4" H.

C-4906 Push button Master for six-station capacity, complete with tubes, junction box, and easy-to-follow instructions. Wt. 13 lbs. **List Price ea. \$72.50**
6212 CABLE — For inter-connecting C-4906. **List Price per foot 30c**

C-4912 Push button Master for twelve-station capacity, complete with tubes, junction box, and easy-to-follow instructions. Wt. 13 lbs. **List Price ea. \$89.50**

C-4912X Same as C-4912 except equipped with privacy earphone. Wt. 13 lbs. **List Price ea. \$109.50**

6224 CABLE — For inter-connecting C-4912; C-4920; and C-4930. **List Price per foot 60c**

C-41 Staff Station for origination of call to one Master. Wt. 5 lbs. **List Price ea. \$18.70**

C-42 Staff Station for origination of calls to two Masters. Wt. 5 lbs. **List Price ea. \$28.00**

C-46 Push button Staff Station for origination of calls to six Masters. Wt. 9 lbs. **List Price ea. \$51.00**

6204 CABLE — For connecting C-41, C-42 and C-46 Staff Stations. **List Price per foot 10c**

Master Stations also available for twenty and thirty station capacities. Write for full details.

HOW TO DETERMINE CABLE REQUIREMENTS: To interconnect Master Stations, measure from first Master to second Master only, from second to third Master only, etc., and total. For C-4920 use two lengths of 6224 Cable, and for C-4930 use three lengths of 6224 Cable. To connect C-41 Staff Station, measure from Staff Station to the one Master to which Staff Station originates calls. To connect C-42 and C-46 Staff Stations, measure a separate length of cable from Staff Station to each Master Station to which Staff Station originates calls (for each C-42 or C-46, follow same procedure).

Manufactured under exclusive TALK-A-PHONE Patents. Licensed under U. S. Patents of A. T. & T. Co. and Western Electric Co. Inc.

Prices and Specifications Subject to Change Without Notice

CHICAGO

TALK-A-PHONE CO.

ILLINOIS