No. 45

RIGIA

MANUFACTURERS

OF

SOUND EQUIPMENT

AND

ACCESSORIES

MARK SIMPSON MANUFACTURING COMPANY, Inc.

32-28 FORTY-NINTH STREET LONG ISLAND CITY 3, N. Y.



- 6L6GA Beam Power Output
- Three Input Channels
- Aero-Dynamic Design
- 24-Hour Operation
- Two Microphones and Phono Input
- Bass and Treble Tone Equalizers



- Output Tapped at 2-4-8-15-500 Ohms
- Inverse Feedback Stabilizer
- Electronic Mixing All Channels

MASCO DE LUXE 35 WATT AMPLIFIER RECORD CHANGER TOP EQUIPMENT

APPLICATION:-The MASCO Model MA-35RC has been designed to fill the "gap" between medium power and high power systems. Where true dependability is required this rugged combination will handle the most critical job. One of the outstanding features of the MA-35RC amplifier is the electronic bass and treble equalizers. Inverse feedback reduces harmonic distortion, stabilizing the amplifier and improving the wave form on overall response. Both microphones and phono may be used simultaneously through the use of separate controls. Multiple output allows for flexibility of speaker arrangement. All components have been designed for 75% overload safety factor. The record changer is a well made mechanism and will play either 10 in. or 12 in. records.

AMPLIFIER SPECIFICATIONS FOR MODEL MA-35RC

- Power Output: 35 Watts
 Gain: Microphone, 125 DB, Phono, 78 DB
 Controls—Five: Two microphones, Phono, Dual-Tone
 Separate on-off Switch
 Input—Three: Two Microphones, Phono
 Tubes: 4—7C7, 1—7N7, 2—6L6GA, 1—5U4G
 Output: Tapped—2-4-8-15-500 Ohms
 Power Consumption: 130 Watts
 Hum Level: Below zero level—20 DB
 Frequency Response: 50 to 10,000 cycles
 Changer Plays—10-12" or 12-10" records.
 Dimensions: 15" x 15" x 9"

MA-35RC amplifier with changer-top cover and mechanism, less tubes Kit of MATCHED TUBES

MASCO DE LUXE HIGH FIDELITY AMPLIFIER

FULL 25 WATTS OUTPUT ON ALL FREQUENCIES FROM 30 TO 15,000 C.P.S. AT LESS THAN 5% RMS HARMONIC CONTENT



Another MASCO first! The MASCO model MA-20HF is the first high fidelity professional amplifier offered in the medium price range.

The input circuit may be fed by either a high or low level pickup. Where the MA-20HF is needed for studio or special application it may be had with special high fidelity low impedance hum free input of 250 or 500 ohms balanced line. (State preference when ordering.)

Output is tapped at 4-8-250 and 500 ohms. This feature allows for flexible speaker matching to high fidelity speakers such as Jensen and other types.

The exclusive MASCO tone control system expressly designed for this amplifier is truly an outstanding development. Bass and Treble equalizers are independent and with both controls at zero center position (normal) the amplifier has an absolutely flat frequency response. Maximum low frequency boost and attenuation at 30 c.p.s. is 13 db. Variation available at high end is + 8 db. Boost to -12 db attenuation with little or no action at the middle register. Thus this well engineered tone control circuit makes it possible to correct for any acoustical condition.

Circuit:—The entire circuit is stabilized through use of negative feedback. All components are designed for 75% overload safety factor thus installation of the amplifier for long hour usage is assured.

The chassis has been designed so that the amplifier may be used for standard rack mounting, or cabinet installation.

Amplifier Specifications:

Power output: 25 watts

Gain: 77 db (1000 c.p.s.) Bass and treble equalizer at NORMAL

Controls: Three—Volume-Bass-Treble Separate on-off AC switch

Input: One-high impedance (low impedance optional)

Tubes: 2-6C5GT/G, 1-7N7, 2-6L6GA, 1-5U4G

Output: Voice coil-4 and 8 ohms

Line: 250 and 500 Ohms.

Frequency response: +11/2 db, 30 to 15,000 c.p.s. at 25 watts output

Hum level: 60 db below 25 watts output Power consumption: 120 Watts

Dimensions: 14" x 8" x 8"

MA-20HF amplifier with cover, with tubes.....

MA-20HF amplifier same as above with Low Impedance input of 250 or 500 Ohms Input (state preference).....

- Tapped Output, 2-4-8. 15-500 Ohms
- Beam Power Output 2-6L6GA
- Electronic Mixing Overall
- Aero-dynamic Design
- Full Range Controls
- Individual Controls
- Inverse Feedback
- 24 Hour Operation
- **Custom Made**



MAS-17 PORTABLE SOUND SYSTEM

MAF-17 PERMANENT INSTALLATION

Application: MASCO leads again! These custom made models are among the most popular systems ever offered. These systems are highly efficient and afford outstanding results to meet requirements for medium power installations. For coverage up to 175,000 cubic ft. these systems are unsurpassed. A greater dynamic range has been built into these models. Microphone and Phono may be used simultaneously through the use of separate controls. Hum and noise have been reduced to a negligible level through correct design and filter. The overall appearance and construction is another MASCO achievement in the sound industry.

Features: Establishing a new standard of design, MASCO offers another first. Ease of setup and operation, plus maximum output and excellent tonal quality are the salient features of these systems. The carrying case is styled after the finest aeroplane hand luggage with tweed facings and calf skin tan overall striping. The interior of the case is designed to hold the complete system and accessories. Amplifier is mounted on sliding panel for ease in removing from case when in use.

Amplifier Specifications for Model MA-17:

Power Output: 17 Watts. Gain: Microphone 118 DB, Phono 74 DB. Controls-Three: Microphone, Phono, Tone. Separate on-off AC Switch: Input-Two: Microphone and Phono. Tubes: 1-7C7, 1-7F7, 2-6L6GA, 1-5Y3G. Output: Tapped-2-4-8-15-500 Ohms. Power Consumption: 90 Watts. Hum Level: Below Zero Level -22 DB. Frequency Response: 50 to 10,000 cycles. Dimensions: 12" x 63/4 'x 73/4".

MASCO 17 WATT SOUND SYSTEMS

Dese custom made models Portable System: The MAS-17 complete portable systems tem consists of: Model MA-17 amplifier less tubes, mounted in carrying case. An Astatic IT-30 Microphone with 20' cable with connector, two 10" Permanent Magnet Speakers each with 25' cable plus plugs.

MAS-17 complete portable system as described
MA-17 amplifier less tubes, with streamline cover
Kit of MATCHED tubes
Model 304 portable amplifier case only
Case dimensions: 141/2" wide, 13" deep, 18" high
If Astatic JT-30 Microphone is not desired, deduct

Permanent Installation: Model MAF-17 system consists of: Model MA-17 amplifier with streamline cover. less tubes, with two 10" Permanent Magnet Speakers, each with 25' cable plus plugs, two No. 102-10" Walnut Speaker Cabinets, one Astatic JT-30 Microphone with 20 ft. cable. with connector.

MAF-17 complete permanent system as described.



- Output Tapped, 2-4-8,
 15-500 Ohms
- Two Microphones
 and Phone
- Electronic Mixing Overall
- Beam Power 6L6
 Output
- Undistorted 25 Watts
 Output
- Triple Channel Inputs
- Inverse Feedback
- 24 Hour Operation
- Custom Made

MAS-25 PORTABLE SOUND SYSTEM

MAF-25 PERMANENT INSTALLATION

MASCO 25 WATT SOUND SYSTEMS

Application: Representing a remarkable achievement in the sound field. The Models MAS-25 and MAF-25 are each a complete system capable of solving the majority of P. A. problems. Well adapted for use in auditoriums, churches, theatres, schools and other public gathering places, perfect reproduction for audiences up to 4000 is assured. Auditorium coverage of one million cubic feet obtained with either model.

Features: Here MASCO offers industrial streamlining extra refinement in circuit design, imperative in modern sound equipment. The Model MA-25 permits the use of two microphones and phono in a multiple mixing circuit. Output is tapped to match any speaker or speaker groups. Humless operation plus fine tonal quality at high level output are only a few of the outstanding features of this amplifier. The richly appointed carrying case covered with two-tone tan calf and tweed, has been styled after aeroplane hand luggage. Accessories are housed within the carrying case. Amplifier is mounted on sliding panel for ease in removing from case when in use.

Amplifier Specifications for Model MA-25:

Power Output: 25 Watts.
Gain: Microphone 125 DB, Phono 78 DB.
Controls—Four: Two Microphones, Phono, Tone.
Separate On-off Switch:
Input—Three: Two Microphones, Phono.
Tubes: 2-7B4, 1-7F7, 1-7N7, 2-6L6GA, 1-5U4G.
Output: Tapped—2-4-8-15-500 Ohms.
Power Consumption: 120 Watts.
Hum Level: —55 DB below 25 Watts.
Frequency Response: 50 to 10,000 Cycles.
Dimensions: 15" x 8" x 8".

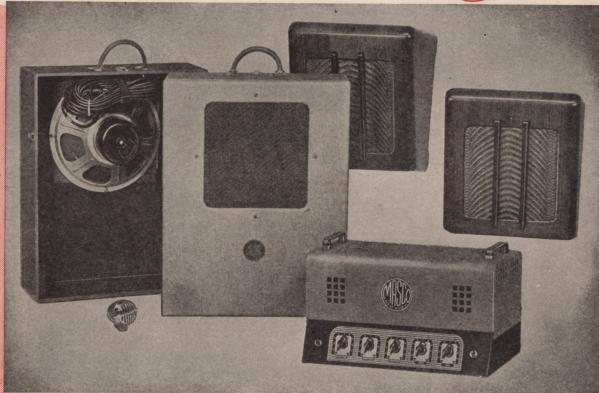
Portable System: The MAS-25 complete system consists of: Model MA-25 amplifier less tubes, mounted in carrying case as described. Astatic JT-30 Microphone with 20' cable with connector, two heavy duty 12" Permanent Magnet Speakers, each with 25' cable plus plugs.

Permanent Installation: Model MAF-25 system consists of: Model MA-25 amplifier with streamline cover, less tubes, with two 12" Permanent Magnet Speakers, each with 25' cable plus plugs, two No. 101-12" Walnut Speaker Cabinets, one Astatic JT-30 Microphone with 20' cable with connector.

MAF-25 complete permanent system as described......



- 6L6 Beam Power Output
- . Three Input Channels
- Aero-Dynamic
 Design
- 24 Hour Operation
- Two Microphones
 and Phone
- Bass and Treble Tone Equalizers
- Output Tapped at 2-4-8-15-500 Ohms
- Inverse Feedback
 Stabilizer
- Electronic Mixing
 All Channels



MAS-35 PORTABLE SOUND SYSTEM

MAF-35 PERMANENT INSTALLATION

MASCO 35 WATT SOUND SYSTEMS

Application: The MA-35 has been designed to fill the "gap" between medium power and high power systems. Where true dependability is required this rugged system will handle the most critical job. One of the outstanding features of the MA-35 amplifier is the electronic bass and treble boost through separate controls. Inverse feedback reduces harmonic distortion stabilizing the amplifier and improving the wave form on overall response. Both microphones and phono may be used simultaneously through the use of separate controls. Multiple output allows for flexibility of speaker arrangement. All components have been designed for 75% overload safety factor.

Features: MASCO engineering has again recognized the problem of the P. A. man by offering this 35 Watt sound system. Amplifier is mounted on sliding panel which is removed from attractive two-tone calf and tweed carrying case. Quality plus performance above medium-power output is at last presented within the nominal price range.

Amplifier Specifications for Model MA-35:

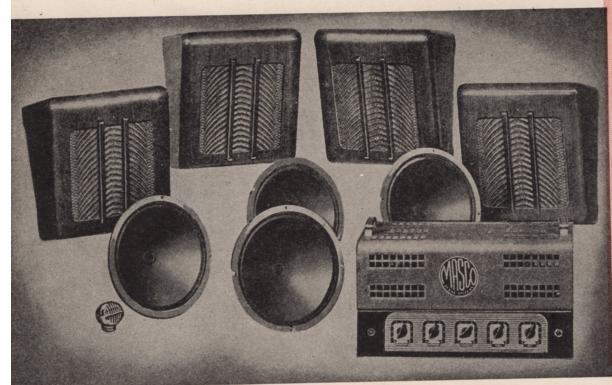
Power Output: 35 Watts.
Gain: Microphone 125 DB, Phono 78 DB.
Controls—Five: Two Microphones, Phono, Dual-Tone.
Separate on-off Switch:
Input—Three: Two Microphones, Phono.
Tubes: 2-7C7, 1-7B4, 1-7F7, 1-6V6GT, 2-6L6GA, 1-5U4G.
Output: Tapped—2-4-8-15-500 Ohms.
Power Consumption: 130 Watts.
Hum Level: Below zero level—20 DB.
Frequency Response: 50 to 10,000 cycles.
Dimension: 15" x 8" x 8".

Portable System: The MAS-35 complete portable system consists of: Model MA-35 amplifier, less tubes, mounted in carrying case as described, Astatic JT-30 Microphone with 20 ft. cable with connector, two heavy duty 12" Permanent Magnet Speakers, each with 25 ft. cable plus plugs.

MAS-35 complete portable system as described
MA-35 amplifier less tubes, with streamline cover
Kit of MATCHED tubes
Model 305 portable amplifier case
Case dimensions 23" high, 15" deep, 181/2" wide.
If Astatic IT-30 Microphone is not desired deduct

Permanent Installation: Model MAF-35 system consists of: Model MA-35 amplifier with streamline cover, less tubes, with two 12" Permanent Magnet Speakers, each with 25' cable plus plugs, two No. 101-12" Walnut Speaker Cabinets, one Astatic JT-30 Microphone with 20' cable with connector.

MAF-35 complete permanent system as described



- 50 Watts Undistorted
 Output
- Bass and Treble
 Equalizers
- Exclusive MASCO Circuit
- · Peak Output 64 Watts
- · Completely Fused
- Hum-Free Operation
- Inverse Feedback
- Universal Output
- . Four 6L6GA Tubes
- Custom Made
- · Full Electronic Mixing

MASCO 50 WATT SOUND SYSTEMS

MAS-50 PORTABLE SOUND SYSTEM

Amplifier Features: The MA-50 may be used with from 2 to 12 speakers without appreciable loss in volume. It has been designed to give high quality, high volume and long hour usage. Four 6L6GA are used in push-pull parallel. Output is tapped to match any impedance. Individual bass and treble attenuation, inverse feedback, ripple free operation, safety fuse protection and 75% overload safety factor are only a few of the many features incorporated in this amplifier.

Amplifier Specifications for Model MA-50:

Power Output: 50 Watts.
Gain: Microphone 130 DB, Phono 80 DB.
Controls—Five: Two Microphones, Phono, Dual-Tone.
Separate on-off Switch and fuse:
Input—Three: Two Microphones, Phono.
Tubes: 2-7C7, 1-7F7, 1-7N7, 4-6L6GA, 2-5U4G.
Output: Tapped at 2-4-8-15-500 Ohms.
Power Consumption: 240 Watts.
Hum Level: Below zero level—22 DB.
Frequency Response: 50 to 10,000 cycles ±2 D.B.
Dimensions: 16" x 10" x 10".

MAF-50 PERMANENT INSTALLATION

Permanent Installation: The MAF-50 complete permanent system consists of: Model MA-50 amplifier less tubes, Astatic JT-30 Microphone, 20 ft. cable, with connector, four heavy duty 12" Speakers each with 35' cable and plug, four No. 101-12" Walnut Speaker Baffles.

MAF-50 complete permanent system as described

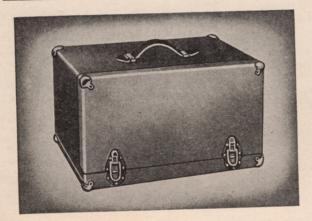
MA-50 amplifier with streamline cover, less tubes

Kit of MATCHED tubes

If Astatic JT-30 Microphone is not desired, deduct

Portable System: Consists of Model MA-50 amplifier with cover, less tubes mounted in portable amplifier case, covered in brown tweed. (Model 306 case, below.) Four 12" heavy duty speakers each with 35' of cable and plug, with two of the Model No. 307 de luxe dual speaker cases, two speakers mounted in each case. (See page 7 for specifications on dual speaker cases.) Cases covered same as amplifier case, an Astatic JT 30 microphone with 20 ft. of cable with connector.

MAS-50 complete portable system as described.....



PORTABLE AMPLIFIER CASE MODEL No. 306

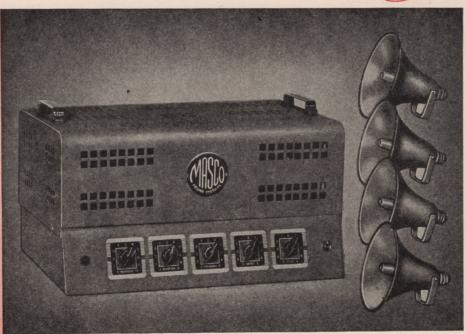
This De Luxe Amplifier Case is constructed of heavy plywood and reinforced throughout, covered in outstanding combination of tan and tweed. The cover is removable to permit free access to amplifier controls.

Inside dimensions: 18" long, 121/2" deep, 10" high.

SOUND ACCESSORIES



- 75 Watts Undistorted Output
- 125 Watts Peak Output
- Separate Bass and Treble Equalizers
- Full Electronic Mixing
- Exclusive MASCO Circuit
- 4-6L6GA Tubes
- Separate Bias and Screen Supply
- Designed for Long Hour Useage



NEW MASCO HIGH POWERED AMPLIFIER MODEL MA-75

APPLICATION: The MASCO 75 watt amplifier has been especially designed for use wherein high powered sound equipment is installed. Our engineers have developed the MA-75 expressly for heavy duty work. Its wide acceptance and use by the armed forces as well as numerous defense plants, has proven it the finest high powered amplifier on the market.

FEATURES: Tube compliment and types have been kept to a minimum. All fancy extraneous circuit creations have been eliminated — its performance sells it. A full WORKING 75 watts of power at only 4% distortion is obtained from 4.61.6GA tubes in push pull parallel AB-2. 2.6V6GT tubes in triode push pull are transformer coupled into the 4.61.6GA tubes. Separate fixed bias is obtained through a separate rectifier (5Y3G with its own power supply. The two microphone inputs and phonograph input are electronically mixed and individually controlled. The now famous MASCO separate bass and treble tone equalizing circuit is also incorporated, allowing for any tone range without affecting the normal amplifier response or introducing distortion or causing power loss. Truly a remarkable feature.

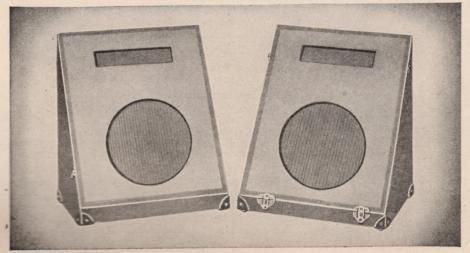
Amplifier specifications for MA-75:
Power output: 75 watts (less than 4% distortion),
Gain; microphone: 125 DB. Phono: 95 DB.
Controls: (5) 2-microphone, 1-phono, 2-tone.

Separate plate switch.

Separate ON-OFF switch and protective fuse.
Inputs: (3), 2-microphone, 1-phono
Tubes: 13, 2-7C, 2-7F7, 2-6V6GT, 4-6L6GA, 2-83V, 1-5Y3G.
Output: Tapped at 4-8-125-250-500 Ohms.
Power Consumption: 275 Watts.
Hum Level:—40DB
Frequency Response: ±2 DB 50 to 10,000 cycles.

MAF-75—Indoor System: Consists of the model MA-75 amplifier with cover less tubes, 4 heavy duty PM 12" speakers each with 35' cable and plugs, 4 Model 101 de luxe walnut speaker baffles, 1-Astatic JT-30 microphone with cable, with plug.

MCO-75—Outdoor System: Consists of model MA-75 amplifier with cover less tubes, 4-25 watt Masco heavy duty PM driver units, 4 Masco 4½ ft. reflex projectors, 4-35 ft. lengths speaker cable with plugs attached, 1-Astatic JT-30 microphone with cable, with plug.



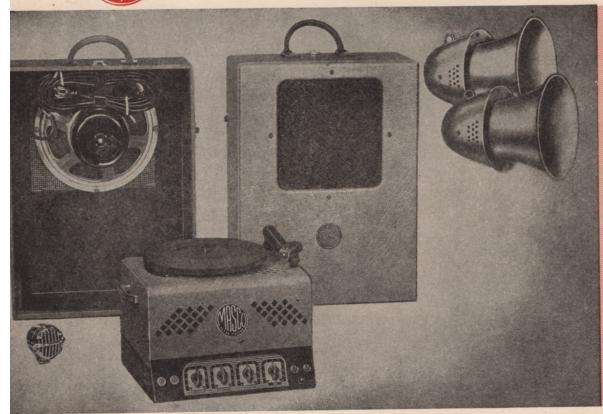
DE LUXE 12" SPEAKER CASE Model No. 307

This De Luxe Dual Speaker Case is completely enclosed and acts as infinite baffle.

The special grille vent eliminates boominess and assures good tone quality. The Baffle panels are covered to match the outside covering of case. This case is styled after the latest type hand luggage and MASCO brings something different into the P. A. field.

Case is solidly constructed with strong leather handles. Case divides into two sections. Each section will accommodate a 12" speaker with provision for housing speaker cable. Metal corners and bumper feet protect against abuse and

prevent wear.
Dimensions: 22½" high, 18" wide, 12½" deep, closed.



- Self contained power supplies
- "Stand-by" battery
- Extra heavy duty vibrator.
- Full output AC or DC operation
- · Ripple-free operation
- Ruggedly constructed

25 Watt Universal Phono-Top Mobile Systems for Battery and 115 Volt AC Operation

APPLICATION: The Model MAC-25P is a 25 Watt complete system for 6 volt DC and 115 volt AC operation, and marks another engineering advancement in mobile equipment. Depending upon the power output required, this model is especially adaptable for all sound car installations and outdoor requirements.

AMPLIFIER FEATURES: Where real power is required, the Model MC-25P 6 volt DC and 115 volt AC amplifier is a high-powered De Luxe Unit that is applicable to all uses for outdoor sound. Provisions for two microphones and phono-input with independent controls along with universal speaker matching of 2-4-8-15 and 500 Ohms, add to its value. The MASCO battery saver "stand-by" switch is also incorporated. The extra-heavy duty vibrator assures a 75% overload safety factor, and through its use steady voltage and frequency is maintained. A primary feature is the Ripple-Free operation.

Amplifier Specifications for Model MC-25P:

Power Output: 25 Watts.
Gain: Microphone, 125 DB; Phono, 78 DB.
Controls—Four: Two Microphones, Phono, Tone.
Switches: On-Off AC, On-Off Phono Motor, Stand-by Battery Saver switch.
Input—Two: Microphone and Phono.

Portable System: The Model MAC-25P complete portable system consists of: Model MC-25P Phono-top amplifier less tubes, mounted in carrying case of attractive two-tone tan and brown. One Astatic JT-30 Microphone with 20' ft. cable and connector, two heavy-duty 12" Permanent Magnet Speakers with 25 ft. cable and plugs.

MAC-25P complete portable system as described

MC-25P 6 volt DC and 115 volt AC phono-top amplifier less tubes.

MC-25 6 volt DC and 115 volt AC amplifier less tubes, with plain cover

Kit of MATCHED tubes

Model 305 portable amplifier case.

Case dimensions: 23" high, 15" deep ,181/2" wide

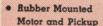
Tubes: 2-7B4, 1-7F7, 1-7N7, 2-6L6GA, 1-5U4G.
Output: Tapped—2-4-8-15-500Ohms.
Power Consumption: AC 120 Watts, 6 Volts DC 22 Amps.
Hum Level: Ripple-Free on Battery—55 DB below 25 Watts.
Frequency Response: 50 to 10,000 cycles.
Dimensions: 12" x 10" x 8".

Outdoor System, Model MCO-25P:

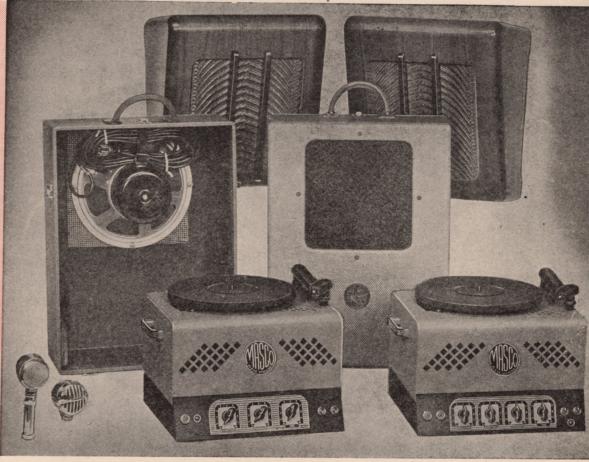
Model MCO-25P system consists of Model MC-25P 6 volt DC and 115 volt AC phono-top amplifier, less tubes with two 12" Permanent Magnet speakers, each with 25 ft. cable plus plugs, two 12" all steel non-resonant baffles, finished in attractive gray crackle, one Astatic JT-30 Microphone with 20 ft. cable with connector.

MCO-25P complete outdoor system as described
Model 402—12" all steel non-resonant baffle
If Astatic JT-30 Microphone is not desired, deduct
NOTE: If amplifier with plain cover is desired with above system, deduct





- Tangent Arm Crystal Pickup
- Noiseless Self-Starting Motor
- · Plug-In Phono-Top
- Plays 10" and 12" Records
- Self Contained Phono-top Unit
- Custom Made



17 Watt Model

25 Watt Model

DE LUXE PHONO-TOP P. A. EQUIPMENT (AC)

Features and Application: Another MASCO first is presented here with everything that is desirable in portable systems. Now for the first time, complete portability in P. A. is attained. Especially adaptable where combined P. A. and recorded music is essential. The MAS-17P and MAS-25P are leaders in their respective fields. Both equipped with a 78 R.P.M. constant speed motor, and modern Astatic tangent head crystal pickup.

MODEL MAS-17P SYSTEM

Amplifier Specifications: Chassis size for Model MA-17P, 12" x 10" x 8". All other specifications same as Model MA-17. (See Page 3 for specifications.)

PORTABLE SYSTEM: The MAS-17P complete portable system consists of the following: Model MA-17P phono-top amplifier, less tubes, mounted in carrying case, an Astatic JT-30 Microphone with 20 ft. cable with connector, two heavy duty 10" Permanent Magnet Speakers, each with 25' cable plus plugs.

MAS-17P complete portable system as described. MA-17P amplifier with phono-top cover, less tubes..... Kit of MATCHED tubes. Model 304 portable amplifier case...

Case dimensions: 141/2" wide, 13" deep, 18" high If Astatic JT-30 Microphone is not desired, deduct....

Permanent Installation: NOTE: If Model MA-17P Phono-Top amplifier is desired as a permanent system. (See Page 3 under MAF-17 listing) deduct list price of MA-17 amplifier from system and add list price of MA-17P amplifier.

MODEL MAS-25P SYSTEM

Amplifier Specifications: Chassis size for Model MA-25P, 12" x 10" x 8". All other specifications same as Model MA-25. (See Page 4 for specifications.)

Portable System: The Model MAS-25P complete portable system consists of: The Model MA-25P phono-top amplifier less tubes, mounted in carrying case, an Astatic JT-30 Microphone with 20' cable with connector, two heavy duty 12" Permanent Magnet Speakers, each with 25' of cables with plugs.

MAS-25P complete portable system as described... MA-25P amplifier with phono-top cover, less tubes. Kit of MATCHED tubes... Model 305 portable amplifier case... Case dimensions: 23" high, 15" deep, 181/2" wide

If Astatic JT-30 Microphone is not desired, deduct....

Permanent Installation: NOTE: If Model MA-25P phono-top amplifier is desired as a permanent system, (See page 4 under MAF-25 listing) deduct list 'price of MA-25 amplifier from system and add list price of MA-25P amplifier.



"INDUSTRIAL BROADCASTING SYSTEMS" FEATURING: MASCO CUSTOM BUILT RACK EQUIPMENT



tems plays 10-12 inch records or 12-10 inch

MASCO engineering and design makes it possible to obtain all types and combinations of sound equipment particularly for installation where music distribution and voice paging is required.

We have designed and manufactured many types of special amplifying systems for the armed forces and particularly for industrial plants. The MASCO "Industrial Broadcasting Systems" are to be seen everywhere. Especially valuable to increase the efficiency of workers, and boosting employee morale, through specially chosen recorded music or directly from radio programs. The microphone paging system contacts employees and executives saving time. Announcements and news of special interest is also broadcast through these systems. The picture illustrated here shows only one suggested installation, and was chosen for reproduction since it depicts a system made to cover a large factory where forty speakers were installed both inside and out. The mixing panel was designed so that either voice or music could be "channeled" either all over the plant or to only certain locations. Since some speakers were located outdoors this feature was essential.

Microphone used is relay operated. When the switch is pressed the "B" power of the entire system is activated. Thus during periods of idleness the system draws little current assuring longer life for both tubes and component parts. By merely pressing the switch on the

microphone, or the switch on the control panel (if music is to be used) the entire system is instantly ready for operation.

Radio tuner may be incorporated in all systems and the unit shown here is an FM-AM combination which assures at all times selection of radio programs from dance music to opera.

Record Changer incorporated in industrial systems plays 10-12 inch records or 12-10 inch records. This feature allows for selection and pre-determination of selections to be played. In the illustrated system are four model MB-100 Booster Amplifiers each specially made with individual master volume "T" pad controls. This feature was necessary for controlling individually each channel. Each Booster Amplifier has its own AC on-off switch and pilot light indicator. The four MB-100 Boosters occupy the four lower shelves of the rack.

The driver amplifier is the model MBD-8 shown on page 11. This is mounted on the shelf between the record player and the radio tuner, where it becomes a part of the entire control panel. Provision has been made for the mixing of two high impedance microphones, phonograph and radio. A master gain control is also included as are bass and treble tone equalizers.

The net result is a powerful 400 watt system having combined music distribution (phono-radio) and microphone for paging and an additional microphone for special plant broadcast purposes. This microphone is located away from the paging microphone. Masco engineers through their vast experience in designing and building all types of sound equipment are in an excellent position to aid in solving industrial sound problems. We have designed and constructed a great many "Industrial Broadcasting Systems" ranging in power from 50 to 1000 watts. The majority of installations require varied system and rack set-ups, therefore, we cannot offer one standard system for all applica-

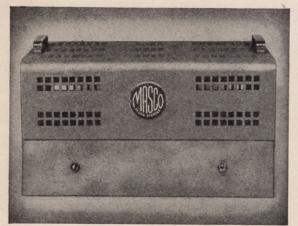
Write in to our engineering department outlining briefly the type of system you believe is required. If possible, send a sketch or idea of the proposed installation so that we can assist in your ultimate quotation to your customer—no obligation of course.

Additional features:—All components used are designed for 75% overload safety factor. Special attention is given to layout with an eye to facilitate removal or addition of units for changes or expansion of the system. Relay operated circuits are the low voltage type (6.5 volts AC approximately). This allows for running of low potential lines needing no conduit. Racks follow the "transmitter type" of styling and are of standard dimensions. Multiple line matching is simple since, as will be noted, the booster amplifier outputs are provided with voice coil taps of 4-8 and 15 ohms and line taps of 125-250 and 500 ohms. Terminals and receptacles are conveniently located at rear of chassis for ease of connection.



MASCO 50 AND 100 WATT BOOSTER AMPLIFIERS

Through the use of either the MB-50 or MB-100, Masco now makes it possible for readily available high power output with the average small P.A. system.



Another important feature is the physical construction of both of these amplifiers in that they are designed for use either in or out of a rack. Component parts are designed to assure a 75% overall safety factor. models are provided with an input transformer tapped at 15, 50, 250 and 500 ohms, and an output tapped at 4, 8, 125, 250 and 500 ohms. Convenient terminal strips are provided and connections are at REAR of chassis.

Since the boosters require only 2 watts of driving power for full output, we point out that several boosters (either size) may be tied in with a common low powered driver amplifier. (See rack systems). While most smaller powered amplifiers may be used for this, we recommend our model MBD-8 (see below) which has been expressly designed for the purpose.

Specifications MB-50 Booster

Output: 50 watts, peak 65 watts
Tubes: 4-6L6GA, 2-5U4G
Input: 15, 50, 250, 500 ohms
Output: 4, 8, 125, 250, 500 ohms
Frequency response: ± 2 DB 50 to
10,000 cycles
Controls: Master ON-OFF switch
Gain: Overall 17 DB
Current drain: 240 watts
Operating voltage: 115 volts 60 cycles
Dimensions: 16"x10"x10"

Specifications MB-100 Booster

Output: 100 watts, peak 125 watts
Tubes: 48L6GA, 2-83V, 1-5Y3G
Input: 15, 50, 250, 500 ohms
Output: 4, 8, 125, 250, 500 ohms
Frequency response: ± 2 DB 50 to
10,000 cycles
Controls: Master ON-OFF switch
Gain: Overall 17 DB
Current drain 300 watts
Operating voltage: 115 volts 60 cycles
Dimensions: 16"x10"x10"

MB-50 booster amplifier less tubes, less streamline cover
Streamline cover for MB-50 amplifier
Kit of tubes for MB-50 amplifier
MB-100 booster amplifier less tubes, less streamline cover
Streamline cover for MB-100 amplifier
Kit of tubes for MB-100 amplifier

Note: Either of the above models will fit any standard rack.

MASCO MODEL MBD-8 DRIVER AMPLIFIER

The versatility of MASCO sound equipment is again emphasized by the addition of the MBD-8 driver amplifier. This unit is expressly designed for use with the models MB-50 and MB-100 booster amplifiers. The standard model as illustrated is provided with two high impedance inputs. One for microphone, 117 DB, and the other for phonograph pickup or similar device, 73 DB. These two inputs have separate controls, and may be electronically mixed. Tone control is the high cut type, and also controls ON-OFF AC. The output transformer is tapped at 15 and 500 ohms. Chassis finish is baked gray shrivel. For convenience in rack mounting, all connections are made for terminal strips at rear of chassis.

The model MBD-8 may be had with up to four independently controlled high impedance inputs for microphone and one high impedance input for phonograph pickup.

Specifications for MBD-8 Driver Amplifier

Output: 6 watts

Tubes: 1-7C7, 1-7B4, 1-6L6GA, 1-5Y3G

Inputs: high impedance. 1-microphone, 1-phono.

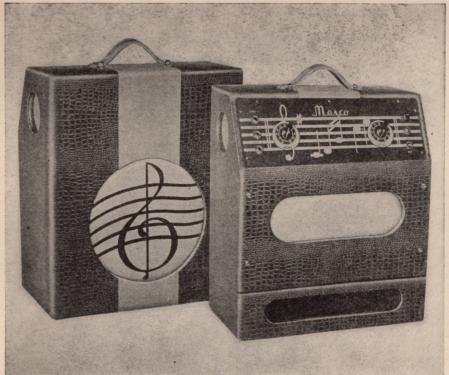
Output: Tapped; 15 and 500 ohms Frequency response: 40 to 9000 cycles Controls: 1-microphone, 1-phono, 1-tone Gain: microphone: 117 DB, phono: 73 DB

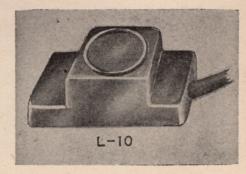
Current drain: 44 watts Operation: 115 volts 60 cycles

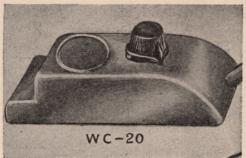
MBD-8 amplifier less tubes, less streamline cover. Streamline cover for amplifier. Kit of matched tubes for amplifier



Note: If more than six watts of driving power is desired, see our MA-17 amplifier listed on page 3.







MODEL MAP-15

MASCO MUSICAL INSTRUMENT AMPLIFYING SYSTEM

Model MAP-15 musical amplifying system. For high fidelity reproduction of reed, string and percussion instruments.

Application: The MAP-15 (15 watt system) is ideally adapted for use with one or more instruments, providing the musician with full tone instrument amplification. Whether the system is used for solo work or with an orchestra, the full range and tone of the instruments to be amplified are accurately reproduced.

Features: For realistic reproduction through amplification, the Model MAP-15 musical instrument amplifier is unsurpassed. Here it is possible to utilize the full 15 watts of power or the very lowest of volume without fear of distortion or overload. The case is of modern design and is of one piece construction with slope front control panel plate attractively designed, adding to the overall beauty of the unit. There are three inputs, allowing for three instruments together or one microphone and two instruments. Within the case is a specially designed 15 watt amplifier and an extra heavy duty 12" electrodynamic speaker. Internal construction of the case eliminates poor accoustics. Other noteworthy features of the MAP-15 are: Safety Fuse, Separate Volume and Tone Controls, On-Off Switch and Pilot Light Indicator.

Amplifier Specifications:

Power Output: 15 Watts.
Controls—Two: Master Volume, Tone.
Switches: On-Off A.C.
Tubes: 2-7F, 2-6L6GA, 1-5Y3G.
Lipputs—Three: One Microphone Two I

Inputs-Three: One Microphone, Two Instruments.

Power Consumption: 95 Watts.

Frequency Response: 30 to 12,000 cycles.

Model MAP-15 complete system as described.

Kit of MATCHED tubes.....

MUSICAL CONTACT MICROPHONES

- Operates With All Makes of Amplifiers
- Mellow Rounded Tone
- Will Not Mar Surfaces
- Ease of Installation
- Operates With All Instruments
- Operates With Most Modern Radios

The "MASCO" Musical Microphones are primarily designed for use with ANY musical instrument. They operate by being placed in contact with the body of the instrument and receiving vibrations from the instrument when it is played. The brilliance of tone resulting from the use of these pickups, far exceeds the power of the instrument alone. The MASCO MUSICAL MICROPHONES may be slipped on or off the instrument in a moment, and require no special strings or instrument changes.

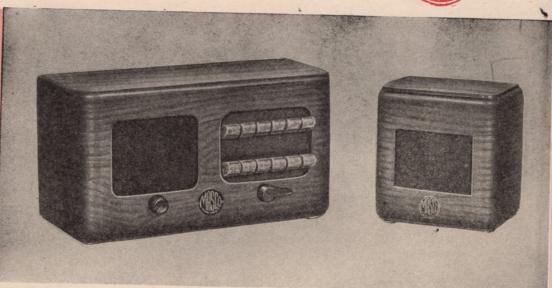
The Models No. WC-20 and L-10

Features: Twelve model L-10 less volume control, with 8' of cable each, may be connected in parallel and plugged into one input, while five model No. WC-20 with volume control and 8' of cable each, may be paralleled and connected to one input. Both models are ideal for use as a pickup for disc and film recording. Use of them in this manner eliminate background noises usually encountered with regulation microphones. They are also well adapted for use as vibration testers for machinery, mechanical devices, etc.

NOTE: The MAP-15 Musical Instrument Amplifier is highly recommended for use with the Models L-10 and WC-20 pick-up units.



- Exclusive circuit design
- "Feather-touch" station selection
- Beautiful streamlined
 cabinets
- Master-to-Remote stations
- Permanent dictate position
- Output 2.5 watts
- Master-to-Master
- Balanced line
- AC-DC operation
- Optional earphone
- Noise free operation



MASCO Intercommunication Equipment Executive Series

The MASCO Executive Series of inter-office communicating systems are styled and designed for use by the Executive. They offer the utmost in flexibility, adaptability and simplicity of operation. Cabinets are beautiful hand-rubbed walnut, streamlined to enhance the appearance of the Executive desk. The "Feather-Touch" station selection is one of the salient points of operation. Each Master is equipped with wired junction box and on-off indicating light. Line impedance of thirteen ohms allows for longer cable runs than found in the average intercommunicating equipment.

MASTER-TO-REMOTE SYSTEMS

Model 76 — Master station with tubes provides instant communication between it and up to five remote stations

Model 711 — Master station with tubes provides instant communication between it and eleven remote stations

NOTE — Models 76 and 711 are internally wired for use with either or both the RS and RS-1 remote stations. Circuit is designed so that Masters can converse with all remote stations simultaneously or can select any group or individual remote station.

REMOTE STATIONS

May be used with either the Model 76 or 711 Master Stations

Model RS-Permits two way conversation, less switch...

Model RS-1—May be used same as model RS but includes press-to-talk switch which allows RS-1 to originate call to Master station if desired......

MASTER-TO-MASTER SYSTEMS

The Models 86 and 811 are six and twelve station "All Master" units. Through the use of balanced line cross talk is eliminated. Each model controls the volume of the incoming signal thereby allowing a set volume level for each station, thus eliminating outside station interference. Numerous other exclusive features have been incorporated into these units making them a top value in intercommunicating equipment.

Model 86—Master station with tubes. Provides communication between it and five additional Masters....

Model 811—Master station with tubes. Provides for communication between it and up to eleven additional Masters

Models 86 and 811 must use six and twelve twisted pair cable respectively for wiring from Master to Master to insure balanced line. Model 76 and 711 may use either twisted or parallel cable to each remote station.

CABLE NOTE—Cable lengths for installation purposes not available.

NOTE:—Master models herein described may be had with earphone attached. Additional

Models 86 and 811 Masters may also use the RS remote stations as a one-way paging system.

Dimensions of Master station: 125% x 53/4 x 61/2 inches.

MASCO PORTABLE AUTOMATIC RECORD CHANGER MODEL RC-1

The model RC-1 is a modernized, well built, automatic record changer housed in all wood portable case covered with durable Du Pont fabric. Cover is removable for convenience when playing. Changer plays either 12-10" records or 10-12" records. Low pressure Astatic pickup has a high fidelity cartridge with permanent sapphire stylus. Changer is mounted on spring shock absorbers, and all controls are incorporated on one switch. Includes 6 feet of shielded cable and 6 feet of line cord.

The Model RC-1 is the ideal unit for addition to existing public address equipment, commercial sound, and industrial installations, where recorded music reproduction is desired.

It is suitable for use with all standard amplifiers.

Operation: 105-120 volts, 60 cycles

Dimensions: 16 x 15 x 9\frac{3}{4} inches.



ALL ELECTRIC PHONOGRAPH REPRODUCER

The model MPA-3 portable phonograph is designed for excellent tone quality and durability.

Its many features include:

- 3 Tube amplifier
- 2.5 Watts power output
- Separate volume and tone controls
- 5" Heavy duty P.M. speaker
- Excellent tone quality
- Acoustically built cabinet
- Sturdy constant speed motor
- Astatic crystal pickup
- Covered needle cup
- Rugged handsomely covered carrying case
- Plays 10" or 12" records with cover closed
- 115 Volt a.c. operation

SIZE: 141/4" x 171/4" x 7" WEIGHT: 13 Pounds Net

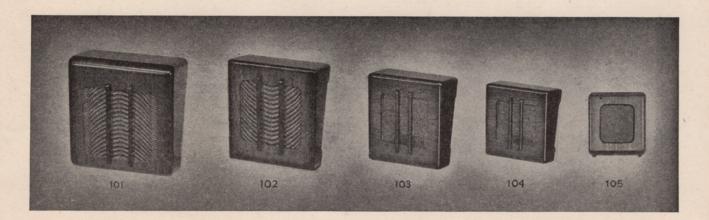
The MPA-3 is supplied, packed in air cushioned carton and comes complete with wiring diagram and instructions



SOUND ACCESSORIES



DE LUXE WALNUT SPEAKER CABINETS



Uniformity throughout has been the keynote of our design in bringing you the new "MASCO" DE LUXE line of walnut speaker cabinets. Ranging in size from 5" to 12". All "MASCO" cabinets are designed primarily from the standpoint of acoustical efficiency, however, one loook at the STURDY CONSTRUCTION, will convince you that in endeavoring to attain the highest acoustical standard we did not SACRIFICE BEAUTY. We call your attention to the GROOVED back on all cabinets which releases air pressure or back lash. These cabinets will not resonate or rattle at high volume due to their STURDY CONSTRUCTION.

12" Model No. 101

MASCO DE LUXE WALNUT SPEAKER CABINET

Made to accommodate a 12" speaker.

Beautiful WALNUT finish.

Constructed to permit correct release of speaker pressure.

Slope front and attractive raised grille bars.

Size: 14" wide, 151/2" high, 91/2" deep.

10" Model No. 102

MASCO SUPERIOR QUALITY WALNUT SPEAKER CABINET

For installation where the finest type of equipment is required.

Has slope front with raised grille bars.

Made to accommodate a 10" speaker.

Size: 12" wide, 131/2" high, 71/2" deep.

8" Model No. 103

MASCO STANDARD WALL CABINET

To house 8" or 9" speakers. Handsome WALNUT finish. Raised grille bars.

Slope front.

Size: 10" wide, 111/2" high, 71/4" deep.

6" Model No. 104

ALL PURPOSE WALL CABINET

To house 5" and 6" speakers.

WALNUT finish.

Slope front with raised grille bars.

Size: 71/2" wide, 9" high, 51/2" deep.

5" Model No. 105

MASCO GENERAL PURPOSE WALNUT CABINET

Front and back grilles, finished in two tone walnut and black trim.

Made to fit any standard 5" speaker.

Used in PA or Inter-Office communication.

Rubber bumpers are supplied at base of cabinet to prevent marring.

Size: 61/4" wide, 61/2" high, 4" deep.



MASCO PERMANENT MAGNET HORN UNITS

All Permanent Magnet units use the finest grade of Alnico steel magnets and Armco iron throughout. All steel parts cadmium-plated to prevent corrosion. Inside of magnet structure contains an additional means for maintaining air gap and a preventative against filings and dust from entering same. Units are magnetized, using an electromagnetic cutout which gives the maximum flux density obtainable in the gap. All magnets are measured for flux density and each unit is tested with special machines for power handling capacity as well as 300 volt ground-test, making for uniform ability to stand all types of service. Voice coil impedance 15 ohms.



SUPER GIANT

Permanent Magnet Horn Unit

Operating capacity 250 cycles 25 watts Operating capacity at 110 cycles. 10-12 watts

130 oz. Alnico Magnet. Flux density...15,000 gausses per sq. cm. Total weight17 pounds Code: REVUM

GIANT

Permanent Magnet Horn Unit

Operating capacity 250 cycles 25 watts Operating capacity at 100 cycles... 10-12 watts

104 oz. Alnico Magnet. Flux density...14,000 gausses per sq. cm. Total weight 13 pounds

Code: REVUX.

MASTER Permanent Magnet Horn Unit

Operating capacity: 250 cycles 25 watts At 100 cycles... 60 oz. Alnico Magnet. Flux density 12,000 gausses per sq. cm. 9 pounds

Total weight Code: REVUE

JUNIOR Permanent Magnet Horn Unit

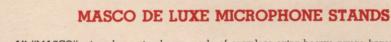
.10 watts

Operating capacity 250 cycles 25 watts Operating capacity 100 cycles 8 watts 46 oz. Alnico Magnet.

Code: REVAT

BABY Permanent Magnet Horn Unit

Operating capacity 300 cycles 25 watts 17 oz. Alnico Magnet. Flux density......8,000 gausses per sq. cm. Total weight 3 pounds Code: REVEL



All "MASCO" microphone stands are made of seamless extra heavy gauge brass tubing throughout. Assuring dependability and service, also eliminating rust and corrosion. These stands are heavily chrome plated to insure long and lasting wear.

The "EVER SILENT" friction clutch will never wear out due to the exclusive MASCO hardened fibre bushing, which is incorporated into both the clutch and telescope section of the 1/6" tube. Easily adjusted with one hand and stays "PUT".

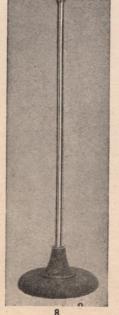
MASCO'S NEW GRIP TIGHT, STAY-FAST LOCKING CLUTCH prevents disturbing adjustment noise when amplifier is working.

MASCO DE LUXE stands have standard 5% x 27 thread, for all types and makes of microphones. Standard height: 35" to 68".



Model No.	Base Fi Black	inish Crackle	Tube Fire Chromit		Base Diameter 10"		oight to 68"	Weight Lbs.	
Model No.	Type	Base F		Tube Fi		Base Diameter	Height	Weight Lbs.	
3	Fixed		Crackle	Chromi		6"	9"	21/2	

NOTE: Models Nos. 3 and 8 have felt screwed in bumpers to prevent marring of surfaces.



50UND ACCESSORIES



MASCO RE-ENTRANT TRUMPETS

ALL MASCO RE-ENTRANT SPEAKERS have base and inside tone arm Center reflecting section of special ACOUSTIC material to prevent resonant effects prevalent in all metal reflecting surfaces. Sturdy construction makes them practically abuse-proof.

Swivel ratchet mounting bracket supplied without charge. Can be attached to 1/2" or 11/4" pipe.

Equipped with loose couplings for easy unit attachment.

A compact trumpet of the double re-entrant type, made to occupy a small space yet has a long air column, delivering highly concentrated sound with the greatest efficiency over long distances.

Standard P.M. Units can be used, from the Baby size to the Giant.



NEW MOUNTING BRACKET

Fits any standard speaker Crow's foot type. Made of bronze with 6" pipe and swivel

Code: RAMG

6 FT. RE-ENTRANT

Bell Dio	meter	2	51/2"
Overall	Length		28"
Weight		20	lbs.

Code: REMOL—Base and tone arm aluminum-outside bell aluminum.

41/2 FT. RE-ENTRANT

Bell Dic	meter	241	15"
Overall	Length	 241	12"
Weight		 11 1	bs

Code: REMOM—Base and tone orm aluminum-outside bell aluminum.



31/2 FT. RE-ENTRANT

	14		
Bell Dia	meter .		18"
Overall	Length		16"
Weight		7 1	bs.

Code: REMOX-Base and tone arm aluminum-outside bell aluminum.

2½ FT. RE-ENTRANT

Bell Dia	meter	 1	23/4"
Overall	Length	 	.16"
Weight		 43/4	lbs.

Code REMOD-Base and tone arm aluminum—outside bell aluminum.

"MARINE SPEAKERS"

Approved by the Bureau of Marine Inspection and Navigation, Department of Commerce, for all Emergency Loudspeaker Systems on ships, under the 53rd Supplement of the Bureau, after tests made by the Bureau of Standards, Washington, D. C.

The latest speaker in Marine Practice! A double re-entrant type of horn, 14" in diameter, 10" deep—having a base of heavy aluminum casting and heavy aluminum spinning. Uses a Master Unit. The driving Unit and connections are all enclosed, making a completely waterproof speaker not affected by temperature or weather, including use on sea even during storms!

This Marine Speaker is used both as a **Loudspeaker** and as a **Microphone.** It will pick up sound outdoors from distances up to 100 feet with very small amplifying gain, and will deliver 100 DB of sound 10 feet from the horn with an input of approximately one watt! Cut-off 250 cycles.

Makes an ideal speaker not only for Marine work but also for general P.A. use, where a highly concentrated sound for great distance is required.

Code: REDIX—Complete with unit; weight 25 lbs. Special non-corrosive Aluminum castings; Baked Chromatic Undercoat Finish plus outside lacquer finish.



MIDGET MARINE SPEAKER

Approved by the Bureau of Marine Inspection & Navigation, Approved by the bureau of Marine Inspection a Navigation, Dept. of Commerce, for ship use. A double re-entrant type horn, 91/4" diameter, 63/4" deep. Uses a Masco Junior P.M. unit. Built as sturdily as the regular Marine speaker but smaller in size. A highly efficient and directional P.A. speaker. Cut-off 350 cycles.

Code: RASOM-Marine Speakers, complete with Junior unit;

weight 10½ lbs., made of aluminum.

Code: RASOB—Marine Speaker, complete with baby unit; weight 7½ lbs., made of aluminum.

MINIATURE MARINE SPEAKER

Approved by the Bureau of Marine Inspection & Navigation, Dept. of Commerce, for ship use A miniature re-entrant type of horn, similar in design to the Marine speakers. Bell diameter 61/4", depth 43/4". Uses a Masco Baby Unit. Ideal where a highly efficient and directional speaker is required to occupy a small space and where voice reproduction must overcome high noise levels. Cut-off 500 cycles.

Code: REDUP-Miniature Marine Speaker, complete with unit; weight 51/4 lbs., made of aluminum.

RADIAL HORN SPEAKER

A 31/2 foot re-entrant type horn designed to project sound over a complete circumference of 360°, distributing the sound with an even intensity. For all sound installations where complete coverage is desired.

Made of special ACOUSTIC material to prevent all resonant effects. Material storm-proofed and guaranteed against all weather conditions. Brass loose couplings for easy unit connection.

Uses standard MASCO Units. Width17"—Height 15"—Weight 7 lbs.

Code: RADAK—Base and tone arm aluminum—outside bell aluminum.





MASCO FOR AUDIO Jensen

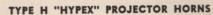
HYPEX PROJECTORS

These new Jensen "Hypex" Projectors consist of a Type H "Hypex" Horn and Type U "Annular" Driver Unit. Two horn sizes give nominal cut-off values of 165 cps. and 140 cps., either of which can be used with Type U "Annular" Driver Unit below.

Type U "Annual" Driver Units employ the exclusive Jensen "Annular" principle

in which the dural diaphragm is clamped at periphery and center.

"Hypex" Projectors are especially suitable for speech reproduction, since response extends from the vicinity of acoustic cut-off to the 5,000 cycle region with greatest emphasis on middle highs that add "punch" and "carrying power." Sturdy steel encased unit, plus reflex horn construction insures dependable operation indoors and out, under all weather conditions. Finish is durable baked twotone gray lacquer. (For transformers see page 22.)



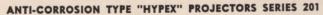
H-20. "Hypex" Horn only. Bell diameter, 2034". Depth, 1638". Acoustical length, 4 feet. Nominal acoustic cut-off, 165 cps. Stand coupling flange tapped for 34" pipe thread. Net wt. 111/4 lbs. Shpg. wt., 181/4 lbs.

H-24. "Hypex" Horn only. Bell diameter, 243/4". Depth, 201/8". Acoustical length, 5 feet. Nominal acoustic cut-off, 140 cps. Net wt., 143/4 lbs. Shpg. wt., 213/4 lbs.

STANDS AND SUPPORTS

EA-6. Adjustable Stand. Horizontal and vertical adjustment

EA-7. Adjustable Support. Provides adjustment when projector is mounted on pipe mast. 3/4 inch pipe thread both ends.



The use of 201 Series Anti-corrosion Projectors is specifically indicated under all severe operating conditions, particularly where there is exposure to atmospheric and climatic conditions typical of the seaboard, tropics, semi-tropics or in any location where the effects of weather

exposure must be effectively minimized.

When separately tested, each complete projector, horn, driver unit and diaphragm assembly are guaranteed to withstand the effects of a 100 hour salt spray test without showing signs of corrosion or failure. All parts are provided with suitable drains to remove condensate or water seepage when projector is mounted in proper position. Dimensions, weights, electrical and acoustical characteristics are the same as those described above for Model U-20, H-20, EA-6 and EA-7.

Type U-201. Anti-corrosion "Annular" Driver Unit only, permanent magnet type, supplied in two colors.

Order No. C-4125A for Olive Drab (Army) color, Order No. C-4125B for Medium Gray (Navy) color.

Type H-201. "Hypex" Anti-corrosion type Horn only, supplied in two colors.

Order No. C-4124A for Olive Drab (Army) color. Order No. 4124B for Medium Gray (Navy) Color.

Type EA-61. Adjustable Stand, supplied in two colors. Order No. C-4123A for Olive Drab (Army) Color. Order No. C-4123B for Medium Gray (Navy) Color.

Type EA-71. Adjustable Stand, supplied in two colors. Order No. C-4129A for Olive Drab (Army) color. Order No. C-4129B for Medium Gray (Navy) color.



TYPE U "ANNULAR" DRIVER UNITS

U-20. "Annular" Driver Unit. Permanent Magnet type. Rated at 15 watts average, 25 watts max., with normal voice or music input. 16-ohm voice coil. Internal screw terminals. Dustproof, screened sound chamber. Diam., 61/8". Depth, 37/8". Shpg. wt., 11 lbs. Specify ST-63C



These Projectors are complete assemblies of specially designed Driver Speaker and acoustic system utilizing the Peridynamic principle and correctly designed projector horn. Unusually good response is obtained in the 100-cycle region and high frequency response at good efficiency is maintained to 5500 cycles, thus especially qualifying these projectors for applications emphasizing music reproduction and naturalness in speech quality. Except for opening into horn, projector is completely weatherproofed, suitable for use indoors and out. Power rating is 15 watts average, 25 watts max., with normal voice or music input. Voice coil impedance, 8 ohms. Bell diameter, 24½". Overall length, 30". Shipping weight, 30 lbs. Complete with plugs for voice coil. (For transformers see page 22.)

SPH-81: Projector, complete. PM Type. ST-633

Above Projector is complete with Driver Speaker, but less stand.

Adjustable Stand. EA-5.

ST-570. Weatherproof Cover. For projector bell.

Driver Speaker only. PM design. ST-563. PAH-8.





JENSEN FOR SOUND Jensen

JENSEN ENCLOSURES

BASS REFLEX - PERI-DYNAMIC



The BASS REFLEX principle introduced four years ago by JENSEN is now a byword in the industry. For those who desire the maximum performance from a loudspeaker we recommend these cabinets employing BASS REFLEX.
Through the use of this principle extra octaves of low frequency performance are available to an extent not possible even with an infinite baffle. A 'BR" enclosure will improve the performance of any loudspeaker. For maximum value, however, we always recommend that the speaker be de-

signed for Bass Reflex use. All Jensen Concert Special Speakers are designed so that they may be used in Bass Reflex enclosures.

TYPE BR ENCLOSURES (UNASSEMBLED)

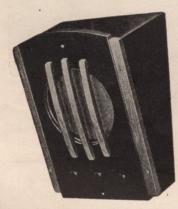


We think an unusually effective We think an unusually effective compromise has been made between appearance model BR Bass Belley enclosures. Durably constructed of plywood, finished in the Brown lacquer with contrasting trim. Shipped knocked-down for economy, but easy to assemble.

Model	Size	Dimensions 1	
BR-81	8" 1	71/4"x233/8"x11"	
BR-101	10" 2	11/2"x28" x121/8"	
BR-121	12" 2	31/4"x301/8"x125/8"	
BR-151	15" 2	25" x331/4"x135/8"	

For

WALL MOUNTING CABINETS



Model 3000 Cabinets are heavily built of hardwood panels finished in ebony black lacquer with natural walnut trim. They are designed for surface mounting on a wall and are recommended for school room, hotel room and extension speaker use. Will accommodate an 8" speaker.
The front panel is equipped with three knock-out buttons so that volume controls and selector switches as required may be installed if desired.

Model	For Speaker Size	Dimensions	
3000	8"	12½"x16½"x 8"	

TYPE CA CABINETS

Type CA cabinets are arresting in distinctive beauty of form and finish. Beautifully-grained genuine striped walnut paneling, and attractive styling, make these cabinets suitable for practically any environment in studio, home, or institution. The Jensen Bass Reflex principle is of course employed. Two sizes are offered to accommodate twelve-inch and fifteen-inch speakers. CA cabinets are an ideal choice for housing high-performance speakers such as the new extended-range high-fidelity coaxial units. They can of course be used for single radiator speakers with outstanding results.

Model	For Speaker Size	Dimensions	
CA-12	12"	273/4"x311/2"x12"	
CA-15	15"	273/4"x311/2"x14"	



TYPE VO ENCLOSURES (UNASSEMBLED)

In these enclosures the low frequency response has been purposely attenuated since they are intended primarily for the reproduction of speech. Thy are accordingly recommended for paging, announcing, and any application involving principally voice reproduction. Construced of plywood and finished in neutral gray lacquer. Shipped knocked down in the interests of economy.

Model	For Speaker Size	Dimensions	
VO-8	8"	93/4"x117/8"x61/2"	

New "SECTOR-SPEAKER" . . a Modern, Multi-Purpose High Fidelity Reproducer



Because it is functionally designed to fit into corners . . . the new, modern "Sector Speaker" provides wider latitude, new convenience in installation. The "Sector Speaker" has the form of a quarter cylinder requiring less than 1 square foot of floor space. Mounted horizontally, sound is projected downward at 45 degrees. Two units combined form semi-cylinder, blend attractively into wall and provide wide angle sound distribution. It incorporates the famous PM8-CT extended-range highfidelity speakers which, in the "Sector" Bass Reflex enclosure, effectively reproduce the full 50 to 10,000-cycle range. Suitable for broadcast monitoring and other applications requiring moderate level extended-range reproduction. Plywood

construction,, finished in two-tone brown lacquer. Height, 28". Radius, 13". Power input rating, 6 watts. 6-ohm voice coil.

AB-20. "Sector Speaker." PM type. ST-615.



MASCO FOR AUDIO Jensen Equipment

TYPE "CR" REPRODUCERS

Type "CR" Reproducers combine arresting beauty and distinction with outstanding performance at moderate cost. They are ideal for broadcast and recording monitoring and audition on FM or AM, for FM-AM revironment, and are well constructed of beautiful walnut



Model JAP-60 Speaker ST-600 Speaker Size 15" with "Roll-off" High-Frequency Control

Choice of types is available, with performance in accordance with descriptive data on speakers, each having provided the ideal acoustic environment in a beautiful properly designed Bass Reflex Cabinet. Coaxial reproducers are equipped with high frequency control knob on right side of cabinet. CA-15 cabinet is 273/4" wide, 311/2" high, 14" deep. CA-12 is 273/4" wide, 31½ high, 12" deep. (For Transformers, see page 22.)

SUGGESTED APPLICATIONS

Professional model, recommended for FM-AM broadcast monitoring, transcription playback, reference standard for laboratory use, etc.

SPECIFICATIONS

Frequency Range: 50 to 12,000-15,000 cps. Max. Input: 14-15 watts. Efficiency: 3 db higher than other 15" models. Field: Permanent Magnet. Input Impedance: 500 ohms. Network: Integral two-channel type.

H.F. Control: Integral "Roll-off" type with 4-point switch.



Model CRJ-60 Reproducer ST-610 CA-15 Cabinet only



Model JHP-52 Speaker ST-601 Speaker Size 15" with "Roll-off" High-Frequency Control

SUGGESTED APPLICATIONS

Unqualifiedly recommended for all general applications such as: FM and AM broadcast receivers, professional type receivers, phonographs, broadcast and recording monitoring, etc.

SPECIFICATIONS

Frequency Range: 50 to 12,000-15,000 cps. Max Input: 12-14 watts. Field: PM. Input Impedance: 500 ohms. Network: Integral two channel type. H.F. Control: Integral "Roll-off" type with 4-point switch.



Model CRI-52 Reproducer ST-609 CA-15 Cabinet only



Model JCP-40 Speaker ST-603 Speaker Size 12" "Shelving" H.F. Control (ST-606) may be added by Purchaser.

SUGGESTED APPLICATIONS

Where minimum space is an important factor. Excellent modernizing unit for replacement of 12" speakers in radio receivers, phonographs, combinations, etc. (Can be mounted behind baffle opening for 10" speaker.)

SPECIFICATIONS

Frequency Range: 50 to 10,000-12,000 cps. Max. Input: 8-10 watts. Field: PM. Input Impedance: 6 ohms.

Network: Simplified bridging type.

H.F. Control: Not included with speaker. "Shelving" type control (ST-606) may be added by purchaser if desired. (Complete Reproducers have con-



Model CRJ-40 Reproducer ST-607 CA-15 Cabinet only

PAGE 20

H.F. CONTROL FOR JCP-40

A simplified H.F. Control for JCP-40 Speaker. Consists of continuously variable resistance network, easily connected to terminals provided for this purpose on the speaker. Permits adjustment of level contributed by H.F. Speaker. Can also be used as general purpose 16-ohm 15-watt level control. 3/8" bushing, 1" long. Complete with antique bronze escutcheon and brown bakelite knob.

ST-606 H. F.Control



JENSEN FOR SOUND

Jensen Equipment

"STANDARD" SPEAKERS



4 inch

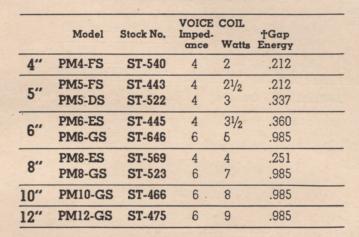
Exceptionally good speakers for use in radio receivers, low power public address and the like. Not to be confused with many cheaply made inefficient speakers. All speakers are completely dust-proofed and all are supplied less transformer but with facilities permitting easy attachment of the transformers listed on page 22. Mounting dimensions are standard R.M.A.

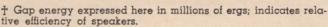
WITH PERMANENT MAGNET

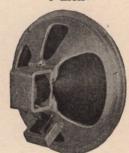
8 inch



5 inch







10 inch



12 inch



6 inch

CONCERT SPEAKERS

These are heavy-duty highly efficient speakers and REFLEX Enclosures and Cabinets. are widely used for Public Address and high quality Radio and Phonograph applications. All speakers are designed so that they may be used in the Jensen BASS plied without transformers attached.

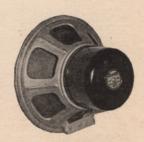
Facilities are provided for easily attaching any of the transformers listed on page 22. Speakers are sup-

WITH PERMANENT MAGNET



PM8-C

	Model	Stock No.	VOICE Imped- ance	COIL Watts	†Gap Energy
8"	PM8-C	ST-230	6	8	1.36
10"	PM10-C	ST-246	6	9	1.36
12"	PM12-C PM12-H A12-PM	ST-250 ST-476 ST-257	6 8 8	10 12 15	1.36 2.54 7.75



A12-PM



MASCO FOR AUDIO



Transformers for Jensen Speakers

ADJUSTABLE IMPEDANCE TRANSFORMERS
All Jensen Speakers are carried in our stock for immediate shipment less transformers. All speakers and transformers are arranged so that you can easily complete the assembly.

MODEL "X"

These transformers are for matching conventional "plate" impedance values. See illustration at right and observe how easily the adjustments are made with flexible lead and pin tip jack. Impedance values are voice coil, 4,500, 7,000, 10,000 and 14,000 ohms and all except voice coil may be center tapped for push pull tubes.

Stock No. ZX1004 ZX1005	Size 3/4 x 3/4 7/8 x 7/8 x 7/8	0	PM8C, PM12C, PM12GS
ZX1012	7/8x7/8	6	PM8CT, PM12C1, M18 Sector Speaker, jor 18, 2011

MODEL "Y"

Model Y is the same as Model "X" except it is for matching "line" impedance values; 500, 1000, 1500, 2000, and voice coil, see illustration at right.

000, 1000,		Voice Coil	For Use on Model
Stock No. ZY2001	Size 3/4 x 3/4	6	PM8C, PM12C, PM12GS
ZY2002	3/4×3/4	8	PAH8, SPH81
ZY2003 ZY2008	7/8×7/8 5/8×3/4	6	PMINGS PMAGS PMAGS
ZY2009	7/8×7/4 7/9×7/9	6	PM8CT,, PM12CT, MT8 Sector Speakers, JCP-40, MT12

MODEL "P" and "L"

These transformers have somewhat less convenient method for making adjustments in the terminal board since a soldering iron is required. But they are lower priced than Models "X" and "Y" and when used in proper application are perfectly satisfactory. Center tap is provided on Types ZP-1021 and ZP-1022, not on others. ZP-1020 and ZL-2020 illustrated at right.

Stock No. ZP1020 ZP1022	Size 1/2 x 1/2 5/8 x 3/4	Voice Coil 4 6 4	For Use on Model F8RS, PM4FS, PM5FS, PM6ES, PM8ES PM10GS, PM6GS, PM8GS PM4FS, PM5FS, PM6ES, PM8ES
	5/8 x 3/4 1/2 x 1/2		PM10GS, PM6GS, PM8GS PM4FS, PM5FS, PM6ES, PM8ES

FIXED IMPEDANCE TRANSFORMERS

It is easy to select the proper fixed impedance transformer for any Jensen speaker from the list below. If a design is required not included in the list give complete information regarding primary and voice coil impedance plus the size transformer wanted. Increase list price of transformer 25% for special designs.

Stock Ohms For Speaker No. Impedance Model	Stock Ohms For Speaker No. Impedance Model
Size 1/2x1/2 Z2359	Size 3/4x3/4 Z2800500 to 8 Z1520500 to 6 Z2209*3000 to 6 Z23824500 to 6 Z1643*4500 to 6 Z16427000 to 6 Z1680*10000 to 6 Z1582*14000 to 6
Z2256	Z2666
Z23741500 to 6 Z23752500 to 6 Z23764500 to 6 Z23774500 to 6 Z237910000 to 6 Z2380*10000 to 6 Z238125000 to 6	Size 7/s×7/s Z1882
	†23097 500 to 16 Hypex Size 11/4x11/4 †22731 500 to 8 Hypex or 16 Hypex

*Oenter Tapped.

+ Encased in Metal can; will not mount directly on speaker.

HIGH QUALITY OUTPUT TRANSFORMERS

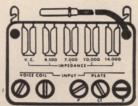
These transformers are designed to match push-pull output tubes to 500 ohms (JAP-60 and JHP-52). No voice coil taps provided. Output is plus or minus 1 db from 30 to 15,000 c.p.s. Encased in metal can; will not mount directly on speakers.

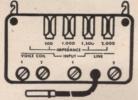
Z 3155 (3,000 C.T. to 500); Z 3156 (5,000 C.T. to 500); Z 3157 (10,000 C.T. to 500)

Type X and Type Y Adjustable Impedance **Transformer**



MODEL "X" and "Y



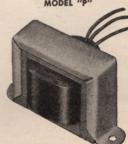


MODEL "P" and "L"

COMMON	900	1000	1500	2000
0	0	0	0	0

MODEL "L"

MODEL "P"





JENSEN FOR SOUND Jensen



MODEL AP-10

HIGH FIDELITY SPEAKERS AND REPRODUCERS

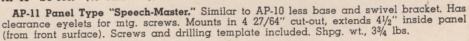
5-Watt "AP-10, 11" for DESK and PANEL

The truly remarkable performance of these new "Speech Masters" is due to the Peri-Dynamic principle and special radiating system. Normal room level requires less than 0.5 watt input; maximum rating of 5 watts on speech insures dependability. Speech reproduction is especially clear, crisp, intelligible . . . yet if required, music can be reproduced with better quality than than of the average "midget" radio.

Extra-sturdy construction, overall mechanical protection, double dust-proofing, beautiful streamlined design, exceptional acoustic performance...all these combine to set AP-10 and AP-11 "Speech Masters" entirely apart from conventional speakers.

AP-10 Desk Type "Speech-Master." Permanent Magnet design. For desk or wall mounting. Complete with "tilt" adjustment and base. Double dust-proofed, fully enclosed and protected. Internal mounting bracket for $\frac{1}{2}$ " x $\frac{1}{2}$ " transformer. R.C. cord 36" long. Height 63/4"; depth $\frac{51}{8}$ "; diameter 5". Shpg. wt., $\frac{51}{4}$ lbs. Attractive Hammered Gray finish with Satin Chrome trim.

AP-10 ST-590. (4 ohm v.c.). AP-10 ST-591. (45 ohm v.c.).



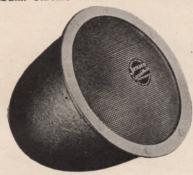
AP-11 ST-592. (4 ohm v.c.). AP-11 ST-593. (45 ohm v.c.).

Phone Communication: For amateur, commercial, police, aviation, as separate unit or integral equipment.

C W Telegraph: Aids selectivity, helps signals over-ride QRM and QRN. Husky voicecoil to withstand keying transients.

Intercom and PA: For modern Intercom, Paging and PA at moderate levels. Good "talkback" performance.

Short-Wave Listening: Better than your regular speaker. Can be used on any receiver.



AP-11

JENSEN SPEECH MASTER REPRODUCERS

PM8-CT SPEAKER

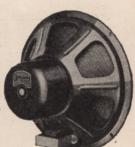


PM8-CT

PM8-CT is a Permanent Magnet extended range high fidelity speaker with unusually high performance for a single direct radiator device. In a Bass-Reflex enclosure, it provides an unusual combination of extreme compactness with high quality reproduction. Max. power input, 5 watts. Voice coil impedance, 6 ohms. ST-560. ·

PM12-CT SPEAKER

A high performance twelve-inch speaker for high fidelity extended range applications. Excellent replacement and modernizing unit for FM receivers, radio phonograph combinations and the like in cases where the cost of the ICP-40 coaxial is prohibitive. Maximum power input, 7 watts. Voice Coil impedance, 6 ohms. ST-572.



PM12-CT

TYPE "MT" REPRODUCERS

Type "MT" Reproducers give performance in every way equivalent to that of more expensive corresponding types. Cabinets are durably constructed of plywood and finished in two-tone brown lacquer. Reproducers incorporate speakers answering every demand for the finest performance in attractive but unpretentious cabinetry.

MT-8C Reproducer. The most economical Jensen High Fidelity Reproducer. Small, compact "utility" type Bass Reflex enclosure incorporating the well known high-performance PM8-CT Permanent Magnet Speaker. Rated max. input, 5 watts. Voice coil impedance 6 ohms. Two tone brown lacquer finish. Dimensions: 171/4" by 23%" by 11". ST-559.

MT-12C Reproducer. Employs PM12CT 12-inch Permanent Magnet Speaker in "utility" type Bass Reflex enclosure for outstanding high fidelity performance. Rated max. input, 7 watts. Voice coil impedance, 6 ohms. Two tone brown lacquer finish. Dimensions: 231/4" by 301/8" by 125/8". ST-571.



PAGE 23





MODEL MA-25 25 Watt Amplifier



MODEL MA-35 35 Watt Amplifier



MODEL MA-75 75 Watt Amplifier



MODEL MA-50 50 Watt Amplifier



MODEL MC-25P 6 Volt D.C., 117 Volt A.C. Amplifier

NOTE THESE FEATURES:-True output ratings, three channel electronic mixing (2 microphone, 1 phono) variable output from 2 to 500 ohms, separate bass and treble equalizers, hum-free operation; adaptability for either rack mounting or portable use.

Amplifiers licensed under U. S. patents of Western Electric Company, Incorporated and American Telephone & Telegraph Company.

PLEASE NOTE: When desiring combination of equipment other than listed herein, write for further details. All specifications, prices, etc., mentioned herein are subject to change without notice.

Mark Simpson Manufacturing Company, Inc., 32-28 Forty-Ninth St., Long Island City 3, N. Y. Telephone RAvenswood 8-5810-1-2-3-4