

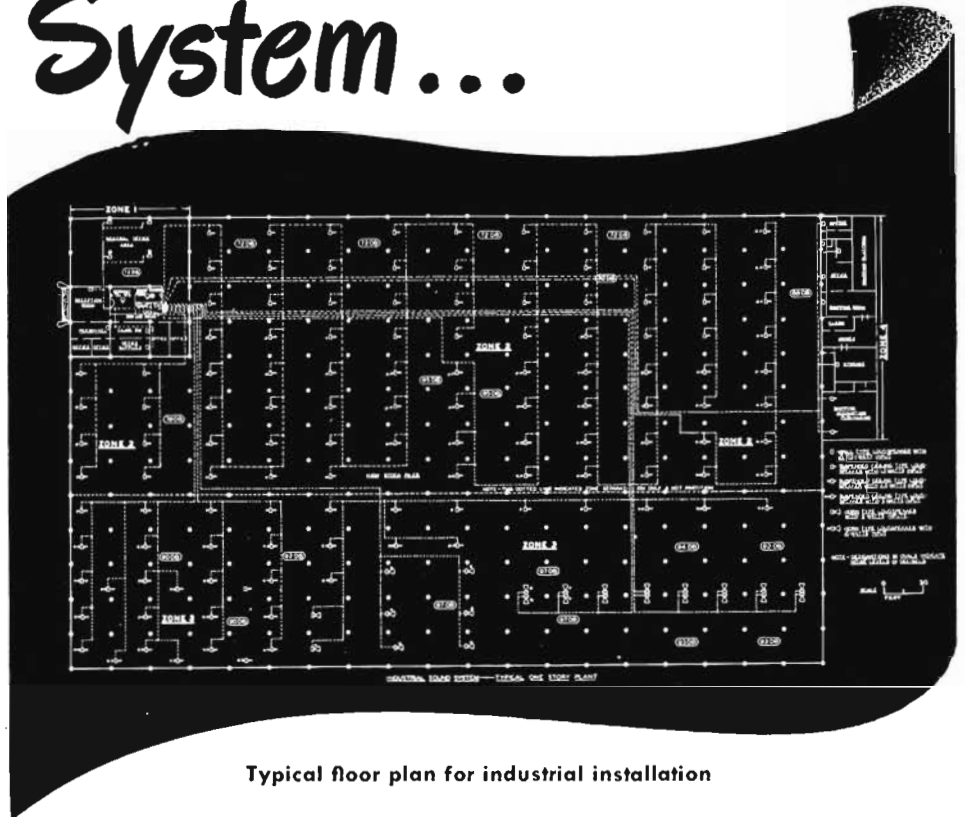
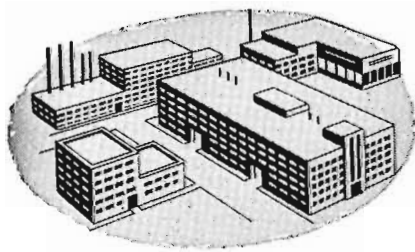
OTHER RCA PRODUCTS

In addition to products designed primarily for Broadcast applications, RCA also handles many other products which are frequently used in the Broadcast field. Some of these products are described in the following pages.

"Other RCA" Equipment items included in this section of the catalog carry different warranties from those applying to "Broadcast Equipment" items. For information regarding warranty, price or delivery on items in this section, contact your nearest RCA Distributor or write direct to Engineering Products Department, Camden, New Jersey.

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It's Easy to Install a Sound System...



Typical floor plan for industrial installation

—with time-saving RCA Engineering Service

YOU'LL FIND SOUND SYSTEMS easy to install when they are engineered by RCA. All units of an RCA Sound System are designed for easiest possible mounting. You'll save time because RCA Sound System layouts and specifications are easy to follow.

You gain a good reputation when your clients are enthusiastic with the results of your installations. You generate this kind of enthusiasm when you recommend or install an

RCA Sound System. That's because these sound systems are engineered to the requirements of your client's organization.

There is no ready-made "package" sound system that perfectly suits the noise level, type of buildings, needs of various types of plant and office layouts. Working with your nearest RCA Sound Products Distributor, you provide your clients with sound systems that give them the most for

their money.

No matter what size or type of sound system you are asked to bid on, RCA can help you plan and engineer a system that will best fit your customer's requirements.

Contact your nearest RCA Sound Products Distributor or write: Sound Products (Dept. 118-D), Radio Corporation of America, Camden, New Jersey.

----- Let RCA Help You Plan and Engineer Sound Systems For -----

OFFICE BUILDINGS
SCHOOLS
CHURCHES
HOSPITALS
INDUSTRIAL BUILDINGS

HOTELS
INSTITUTIONS
DEPARTMENT STORES
TRANSPORTATION TERMINALS
RECREATIONAL CENTERS

WAREHOUSES AND GARAGES

DO YOU HAVE A COPY?

The Architect's Manual of Engineered Sound Systems. The most authoritative work book and reference manual published on sound systems. Typical plans, and specifications for all types of buildings. 288 pages. Price \$5.00 (\$5.50 foreign).

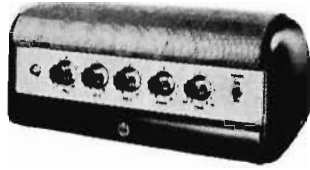


MICROPHONES

- Pressure
- Velocity
- Cardioid
- Varacoustic
- Hand Sets
- Sound Power Telephones
- Stands, Plugs, Cables and Connectors



AMPLIFIERS



- Pre-Amplifiers
- Line Amplifiers
- Voltage Amplifiers
- Power Amplifiers
- Remote Amplifiers

SPEAKERS



- Cone Type
- Horns and Drivers
- High-Fidelity Speakers
- Speaker Accessories

SPEAKER HOUSINGS



- Baffles, All Types
- Console Cabinets

INTERCOM SYSTEMS



- All Master Systems
- Master-Remote Systems
- Combination Systems

PORTABLE SOUND SYSTEMS



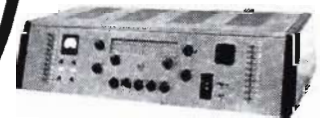
CUSTOM-BUILT EQUIPMENT



- Consoles
- Desks
- Turrets
- Cabinets



CONSOLETTES



- Single Channel
- Dual Channel
- Custom-Built

Why shop around?

It's easy to get the right equipment from RCA's full line of matched sound products

Buy your sound products the easy way. The wide variety of RCA Sound Products simplifies your problem of finding the right equipment for your sound jobs.

Every item in RCA's extensive sound line is electronically engineered with its own special characteristics to give top performance, dependable long-life service with quality appearance. Not only is the RCA Sound Products line built right, it is

also priced right to enable you to build a steady volume of profitable business.

You cash in on the popular acceptance of the RCA trade mark when you buy RCA. You save time, save money and save the trouble of shopping around, when you purchase your sound products from *one* source—RCA. No other manufacturer offers so extensive a line of "matched" sound products from the smallest "ballyhoo" system to the largest systems for industrial, educational, institutional, church, hotel, hospital or commercial users.

There Is An RCA Sound System That Meets The Needs Of Your School

Standard Single Channel System

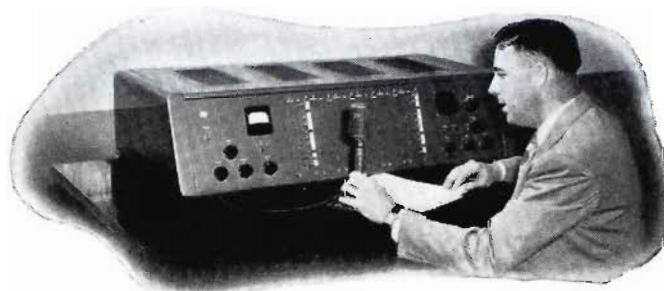
Here's a handsome low-cost Single Channel Program Console that distributes selected programs or administrative announcements to any or all locations equipped with loudspeakers in the school or grounds. Superb value, an exceptional buy for the medium-size elementary or junior high school working on a limited budget.



- 20 room or zone distribution switches with provision for installation of up to 20 more.
- 5 input circuits permit program pickup from any location.
- Built-in de luxe RCA radio with AM, FM and short-wave reception.
- Volume indicator meter.
- Provision for attaching separate record player or transcription turntable.
- Talk-back or two-way communication feature (optional equipment).
- Master emergency switch.

Standard Dual Channel System

Administrators, supervisors, teachers and the student body use this Dual Channel Program Console for a variety of instructive purposes and for administrative control. Provides for the distribution of teaching programs or announcements to selected classrooms over one channel while the second channel simultaneously permits intercommunication or distribution of an additional program to other classrooms or areas in the school or grounds. Priced within the budget of high, junior high or the larger elementary schools.



- 9 input circuits provide numerous possibilities for program pickups from radio, phonograph and microphones in auditorium and elsewhere.
- Volume indicator meter.
- Switches control loudspeakers for 20 to 60 classrooms or areas.
- Provision for attaching separate record player, transcription turntable and radio tuner.
- 2 high-quality 25-watt amplifiers.
- Two-way communication between classrooms and console.
- Master emergency switch.

De Luxe Dual Channel Equipment

Provides complete audio facilities for the larger high schools and colleges. Dual channel services for administrative broadcasts . . . teaching programs . . . radio listening . . . in-school program originations . . . record and transcription reproduction . . . independent two-way intercommunication (optional), unit-built from standardized frames and panels to allow numerous combinations of basic units. Gives you the advantage of a "custom-made" sound system within the price range of regular production equipment.



- De luxe studio-type control console.
- Individual loudspeaker selection for up to 120 rooms or areas.
- Provision for at least 10 program input circuits if desired.
- AM, FM and short-wave tuner (optional).
- Transcription or record player (optional).
- Master emergency switch.
- Provision for expansion or other features as required.
- Intercommunication (optional).

Portable Sound System

Model SP-15A



Exceptional tone quality and ease of operation are two of the features that make the new RCA Model SP-15A the outstanding portable sound system available. Matched microphone, amplifier, and loudspeaker insure faithful reproduction of voice and music, while the large, heavy duty, highly efficient Alnico Magnet speaker is capable of handling the maximum output of the 15 watt amplifier without distortion. The high efficiency of the speaker gives acoustical output equivalent to a conventional 30 watt portable sound system incorporating two average permanent magnet speakers.

The equipment is assembled in a handsome inlaid steel-band reinforced heavy plywood carrying case, finished in gray and black (two-tone) durable Du Pont Fabrikoid, and measuring 8" deep, 17" wide, and 21" high. Weight 45 lbs.

Phonograph jack permits playing of recorded music for musical programs or to furnish background for voice announcements.

The RCA SP-15A is truly the outstanding portable sound system, and is admirably suited for use in moderate size auditoriums, as well as such diversified places as bus terminals, night clubs, taverns, fairs, restaurants, auction rooms, bowling alleys, and numerous other places.

FEATURES

MICROPHONE

- Dynamic—Pressure type
- Rugged, light weight, small in size
- Shock absorbing mounting
- Built-in cable connector
- Detachable cable

AMPLIFIER

- Modernly styled
- Inverse feedback circuit—low distortions, high output
- Individual volume control for each input
- Power output—15 watts
- Frequency response—50 to 10,000 cycles
- Two lock-in type microphone plugs and receptacles
- Two standard shorting type phonograph jacks
- Balanced output

SPEAKER

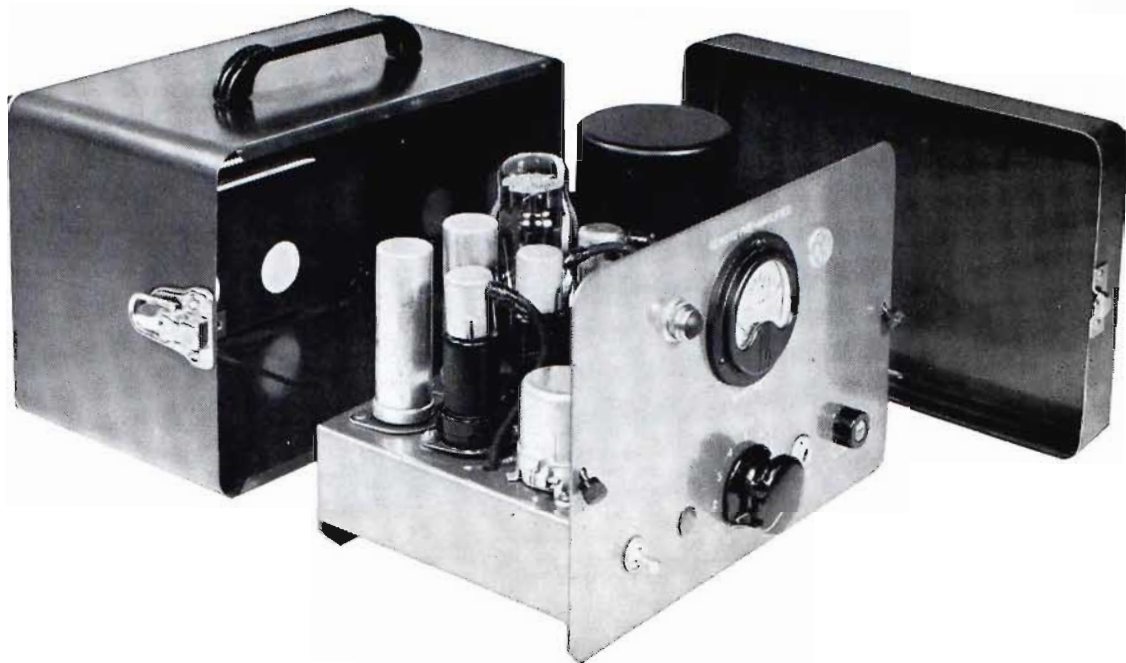
- Large heavy duty, highly efficient Alnico permanent magnet
- High power handling capacity—25 watts
- Moisture resistant
- 50 feet of speaker cable with polarized plug

CARRYING CASE

- Heavy plywood construction
- Durable Du Pont Fabrikoid two-tone covering—gray and black
- Cabinet by Belber*
- Inlaid steel band edge construction
- Conventional luggage size—easy to handle and carry
- Provision for mounting all components
- Handle will not rattle at full power reproduction

* One of the country's leading luggage manufacturers

Remote Pre-Amplifier MI-12242



Description

The MI-12242 pre-amplifier has been designed for portable use or for shelf mounting. The problem of remote pick-up has existed for a long time in sound work and this pre-amplifier fills the gap.

Microphones may be used at considerable distance from the equipment located in a fixed position. For instance, a large assembly of people may be in an auditorium, park, church, school, railroad or airline waiting room, mill, factory, etc., and a program or message of interest is taking place in another building or remote location. With the aid of the remote pre-amplifier the program may be fed back to any of the above places that have a sound system, by means of telephone lines or by running a line from the pre-amplifier to the fixed equipment. The remote pick-up can be fed at zero level over telephone lines into pre-amplifiers or at short distances from the power amplifiers, it will drive them directly.

Balance frequency control is a unique feature of this model. This control compensates for both high and low frequencies simultaneously. A screwdriver adjusted control in the front panel shifts the response about a pivotal frequency of 800 CPS, which permits a rising or falling characteristic with a maximum variation of 15 db between lows and highs without any apparent change of volume, thus eliminating the disadvantages of the conventional separate high and low tone controls previously used for frequency compensation. This gives a flat response curve.

Two of these pre-amplifiers can be connected in parallel to feed a 250 ohm line while four can be connected into a series parallel arrangement to feed a 500 ohm line, by so doing from one to four microphones can be used at the remote pick-up point.

The pre-amplifier is designed to fit an attractively styled compact cabinet with a handle for easy carrying. It is mounted into a metal case which provides new style connections for the input and output, a phone jack for aural monitoring, a VI meter for visual monitoring and an a-c male receptacle. A gain control for riding gain, a pilot light and a-c switch are

also mounted in the front panel. An accessible one ampere fuse is provided for protection of the equipment. A removable cover clips over the front panel to prevent damage when not in use.

The entire unit may be removed from the case by removing the two thumb screws on the front panel. This facilitates quick service or the replacing of a tube.

Features

- Compact design.
- Light weight.
- Excellent frequency response ± 2 db 30 to 10,000 cycles.
- Balanced frequency response control.
- A portable shelf mounted.
- Light weight, easily handled.
- Built-in handle for easy carrying.
- Low impedance input and output.
- Good regulation between no load and full load.
- 77 db gain.
- Feedback for better frequency response.
- Low distortion and noise level.
- Two or more amplifiers can be used giving additional microphone locations.
- Low hum level.

Specification

Frequency Response _____ ± 2 db 30 to 10,000 cycles

Input _____ 3-prong female plug

Source Impedance _____ 250/500 ohms

Minimum Input Level _____ -67 dbm

Maximum Input Level _____ -35 dbm

Gain _____ 77 db

Output Load Impedance _____ 250/500 ohms

Rated Power Output
 $+18$ dbm with 1.5% distortion at 1000 cycles

Feedback _____ -12 db

Tubes _____ 3—RCA 6J7, 1—RCA 5Y3GT

Finish _____ Light umber gray hammeroid

Power Consumption _____ .109 amp. on 117 v. line
 (maximum) 12 watts

Fuse _____ 1 ampere

Height _____ $6\frac{3}{4}$ "

Width _____ 10"

Depth _____ 6"

Weight _____ 12 lbs.

Shipping Weight _____ 16 lbs.

Stock Identification:

105/125/210/250 volts, 50/60 cycles _____ MI-12242

105/125/210/250 volts, 25/60 cycles _____ MI-12247

Architects and Engineers Specifications

The pre-amplifier shall be designed for portable use or for shelf mounting. It shall be capable of operating with a microphone at a considerable distance from the pre-amplifiers. Its output shall be great enough to feed the power amplifiers

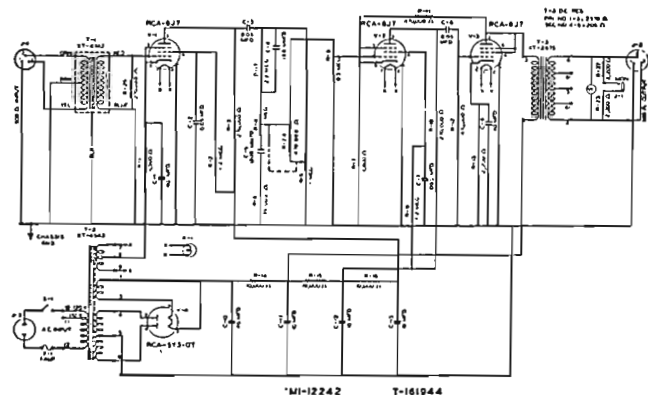
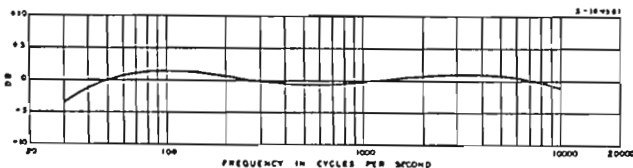
directly from a short distance. Balanced control shall be provided to control the response about a pivotal frequency of 800 CPS to permit a rising or falling characteristic with a maximum variation of 15 db between lows and highs without apparent change of volume, thus eliminating the disadvantages of the conventional separate high and low tone controls previously used for frequency compensation.

The pre-amplifier shall be compact and easy to handle. It shall be mounted in a metal case, which provides plugs for the input and output connections, one jack and an a-c male receptacle. The front panel of the equipment shall mount a db meter, a gain control and a monitor jack. A pilot light and a-c switch shall be provided in addition to an accessible one ampere fuse. A removable cover shall clip over the front panel to prevent damage when not in use. A handle shall be built into the side to allow easy carrying.

The unit shall be so constructed that it may be removed from the case by removing two thumb screws on the front of the panel.

The pre-amplifier shall be light in weight, have smart design and low hum level. It shall have a frequency response ± 2 db 30 to 10,000 cycles. It shall have a source impedance of 250/500 ohms with a maximum input -35 dbm and a minimum input of -67 dbm and a gain of 77 db. The output load impedance shall be 250/500 ohms and the rated output power shall be 18 dbm with 1.5% distortion at 1000 cycles. It shall have a feedback of -12 db. The power supply shall be 105/125 v. a-c, 50/60 cycles with power consumption of 0.109 amp. on 117 v. (maximum 12 watts).

The finish shall be light umber gray hammeroid. The height shall be $6\frac{3}{4}$ inches, width 10 inches, and depth 6 inches. It shall weigh 12 pounds.



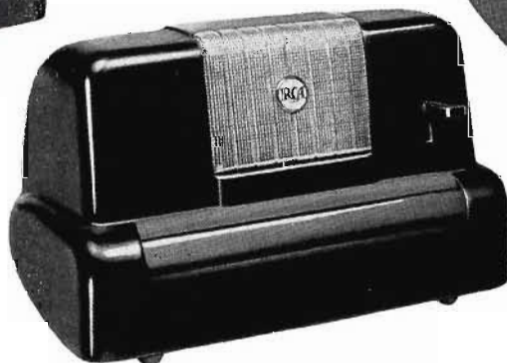
Intercom System



MI-12596-3 Master Station provides two-way communications with as many as twelve other Masters, twelve Remote Stations, or a wide combination of Masters and Remotes. Earphone for privacy optional.



MI-12592 2 Master Station permits connection with up to six other Masters, six Remote Stations, or a combination of Masters and Remotes in one system. Earphone for privacy optional.



MI-12595 Remote Stations. Can be used in connection with any of the Master Stations.

The RCA Intercom System offers wide application in offices, factories, retail stores, and many other enterprises where flexible, intelligible, two-way intercommunication is desired. It provides the same practical use and convenience for the two-office suite or the large manufacturing plant which covers many acres. In fact, it can be of service in any location of more than a single room.

The primary function of the RCA Intercom is to furnish amplified, two-way conversation between two or more points. Contact is direct, instantaneous, automatic and private. The voice is amplified so that it can be heard across a large room or the volume may be reduced to a whisper. Quality of reproduction is so true that the speaker's voice can be recognized instantly.

Use of the RCA Intercom System results in a more completely coordinated organization, fuller utilization of man-power through the elimination of delays, less office walking, fewer interruptions and more efficient service to customers.

Complete flexibility of the RCA Intercom System makes future expansion practical without affecting the original installation. All of the Master Stations have been designed to permit connection with other Master Stations, Remote Stations, or any combination of Masters and Remotes up to the selector key capacity

of the Master Station. Contact between a central location and a number of outlying points is accomplished through a Master Station connected with the necessary number of Remotes. Complete intercommunication, in which every Station can call and receive calls from all others, is attained through a requisite number of connected Master Stations. For a System requiring complete intercommunication among a number of locations and, at the same time, contacts from these locations to outlying points, a combination of Masters and Remotes can be connected in the one System to provide the service required at each location.

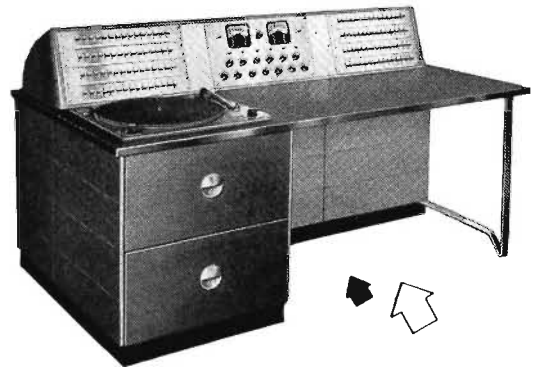
SPECIFICATIONS

- Cabinet—Matte black with satin chrome grille.
- Dimensions—10 $\frac{3}{8}$ " x 7 $\frac{1}{8}$ " x 5 $\frac{7}{8}$ ".
- Power Required— 105/125V. A.C.
50/60 cycles, 25 Watts
- Output Impedance—15 ohms.
- PM Speaker Impedance—15 ohms.
- Tubes—1 RCA-6SL7GT, 1 RCA-6V6GT,
1 RCA-6X5GT.
- Pilot Light—6.3 volt, bayonet socket, 250 M.A.
- Power Cord—8 ft.
- Inter-Station Wire Size—No. 22 or larger.
- Wiring Connections—Cable and Junction Box.
- Shipping Weight—10 $\frac{1}{2}$ lbs.

RCA'S UNIT-BUILT CONSTRUCTION SIMPLIFIES SOUND SYSTEM PLANNING



**MANY
COMBINATIONS
BY
FUNCTIONS**



JUST ONE SERIES OF MODELS . . . standardized in dimension, styling and function . . . RCA has included every sound service required in modern institutional and industrial buildings.

Flexibility is the keynote of the new RCA Master Sound control equipment. The completed control unit may contain only paging facilities in a single pedestal . . . or paging may be combined with record transcription turntables, microphone inputs, recorders, and radio unit. All included functions are assembled in basic units . . . occupying minimum building space . . . and arranged for easy, efficient operation.

Because of the standardized units and uniform modern styling, RCA's Unit-Built Sound Systems are high in favor with the designers who have already included them in new and modern buildings. They provide custom-built consoles within the price range of regular production equipment.

Three of the many possible combinations of RCA Unit-Built Master Sound Control Consoles are illustrated on this page. They range from a simple pedestal with paging facilities to loudspeakers in 16 zones, to a console capable of distributing announcements, music, radio, and interdepartmental communication to loudspeakers in 128 zones.

For additional information; contact your nearest RCA Sound Products Distributor.

Unit-built Master Sound Dual Channel Console, MI-14901



Features

- Attractively styled and finished in high quality contrasting light and dark umber gray, with the base in black.
- Compact and sturdy, welded all steel construction.
- Easily removable snap-on console panels.
- Frames accommodate standard rack mounted equipment in a 22" height.
- Console top is conventional desk height.
- Front of the two large corner sections supplied with bin type panels.
- Turret has a sloping front.
- Turret cover fastened with cowl fasteners and is easily removed.
- Top can accommodate two transcription turntables.
- Complete unit is easily assembled.

Uses

This console provides for three sections of panel space, two transcription turntables and four bin panels for a radio or other equipment. RCA plug-in type pre-amplifiers and RCA plug-in line amplifiers or similar equipment may be mounted inside the console.

Description

The console consists of a triple section turret mounted on a one-piece steel top which is supported by three small and two large welded steel angle frames with individual bases. The top has a black linoleum covering and a polished stainless steel trim around its edges. The console panels are made of light gauge sheet steel and are held to the frames with

snap spring catches which permit easy access to equipment mounted inside the console. The six side, one front and three rear panels are ribbed for styling, and are finished in light umber gray. The outer front panels are comprised of four bin type panels finished in dark umber gray. They open downward and are adapted to hold a radio or similar piece of equipment. A transcription turntable can be located on both sections of the top above the two large corner pieces. The turret is made up of aluminum end bells and center sections, steel tie parts and cover, with the outer surfaces finished in light umber gray. It has a sloping front and accommodates three 19" x 10 $\frac{1}{2}$ " panels or submultiples of 10 $\frac{1}{2}$ " in steps of 2 $\frac{5}{8}$ ". Each one of the center sections has space for a 4" x 10 $\frac{1}{2}$ " panel.

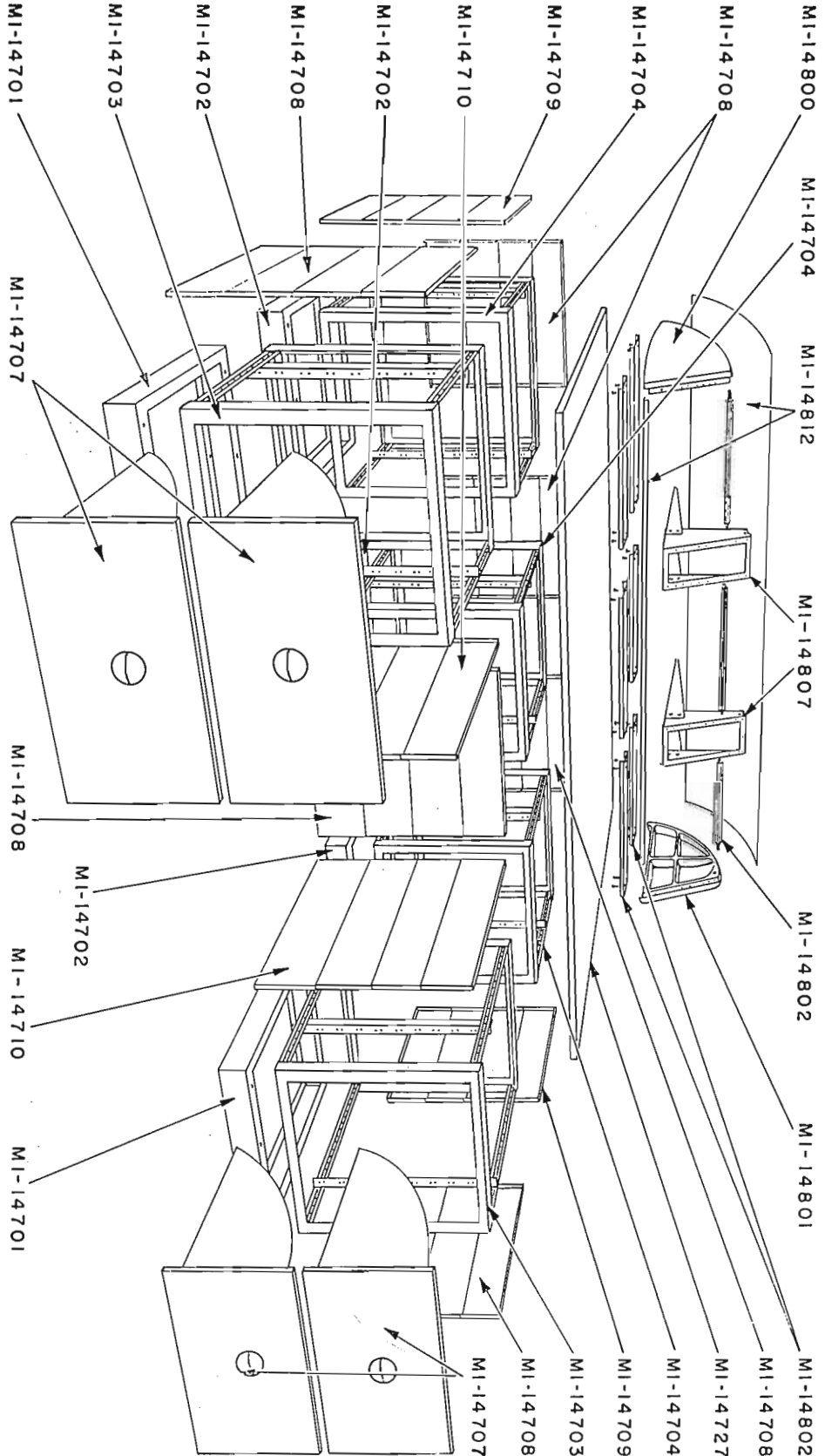
The panel mounting angles in the bottom sections of the console are tapped for universal mounting of standard panels and shelves, and can be shifted on the frames to accommodate equipment of different depths.

The complete unit is shipped "knocked-down" and includes all of the necessary hardware for assembly.

Specifications

Overall Height	39"
Height of Console Top	28"
Top Dimensions	71" x 40" x 1" thick
Blank Space on Top	71" x 22"
Console Dimensions (less top)	27" high, 70" wide, 39" deep
Open Space Under Top	22" wide, 23" deep
Turret Dimensions	11" high, 68" wide, 16" deep
Turret Panel Space:	
Main Panels	19" x 31 $\frac{1}{2}$ "
Center Panels	4" x 21"
Panel Space Inside Console	110"
Clear Inside Width per Frame	21"
Clear Inside Depth of Large Frame	22 $\frac{1}{2}$ "
Clear Inside Depth of Small Frame	14 $\frac{1}{4}$ "
Shipping Weight	552 $\frac{3}{4}$ lbs.

MI-14901 UNIT-BUILT MASTER SOUND - DUAL CHANNEL CONSOLE



Unit-built Master Sound Single Channel Console, MI-14902



Features

- Attractively styled and finished in high quality contrasting light and dark umber gray, with the base in black.
- Compact and sturdy, welded all steel construction.
- Easily removable snap-on console panels.
- Frames accommodate standard rack mounted equipment in a 22" height.
- Base drilled for leveling devices or casters.
- Console top is conventional desk height.
- Front of the large corner section supplied with two bin type panels.
- Turret has a sloping front.
- Turret cover fastened with cowl fasteners and is easily removed.
- Top can accommodate a transcription turntable.
- Complete unit is easily assembled.

Uses

This console provides for three sections of panel space, a transcription turntable and two bin panels for a radio or other equipment. RCA plug-in type pre-amplifiers and RCA plug-in line amplifiers or similar equipment may be mounted inside the console.

Description

The console consists of a triple section turret mounted on a one-piece steel top which is supported by three small and one large welded steel angle frame with individual bases. The top has a black linoleum covering and a polished stainless steel trim around its edges. The console panels are made of light gauge sheet steel and are held to the frames with snap spring catches which permit easy access to equipment mounted inside the console. The four side, three rear and two of the front panels are ribbed for styling, and are finished

in light umber gray. The front of the larger frame structure has two bin type panels finished in dark umber gray. They open downward and are adapted to hold a radio or similar piece of equipment. The top above the larger frame structure can accommodate a transcription turntable.

The turret is made up of aluminum end bells and center sections, steel tie parts and cover, with the outer surfaces finished in light umber gray. It has a sloping front and accommodates three 19" x 10½" panels or sub-multiples of 10½" in steps of 2⅝". Each one of the center sections has space for a 4" x 10½" panel. A desk leg of highly polished chromium plated finish supports one end of the console top.

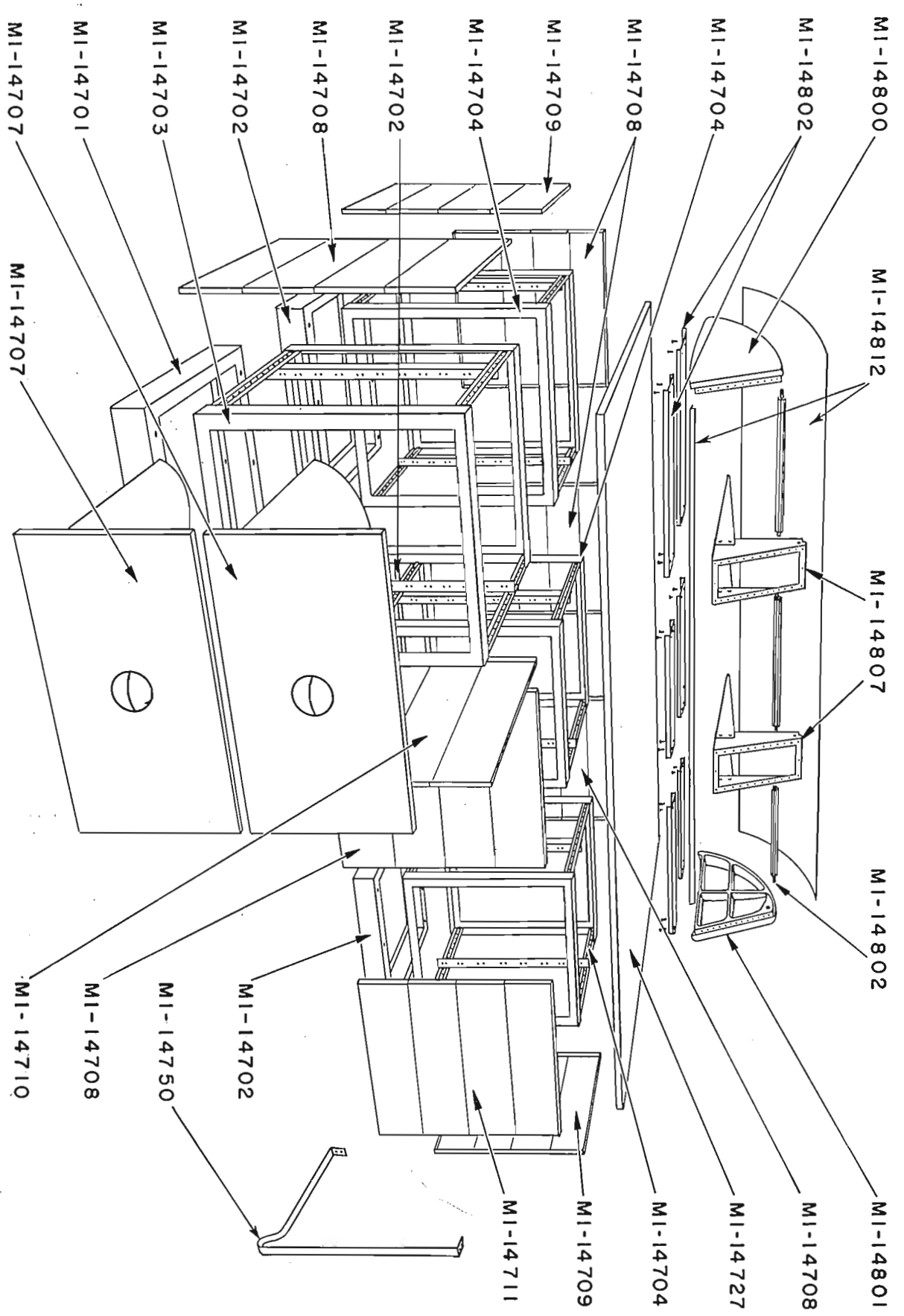
The panel mounting angles in the bottom sections of the console are tapped for universal mounting of standard panels and shelves, and can be shifted on the frames to accommodate equipment of different depths.

The complete unit is shipped "knocked-down" and includes all of the necessary hardware for assembly.

Specifications

Overall Height	39"
Height of Console	28"
Top Dimensions	71" x 40" x 1" thick
Blank Space on Top	71" x 22"
Console Dimensions (less top)	27" high, 70" wide, 39" deep
Open Space Under Top	41" wide, 23" deep
Turret Dimensions	11" high, 68" wide, 16" deep
Turret Panel Space:	
Main Panels	19" x 31½"
Center Panels	4" x 21"
Panel Space Inside Console	88"
Clear Inside Width per Frame	21"
Clear Inside Depth of Large Frame	22½"
Clear Inside Depth of Small Frame	14¼"
Shipping Weight	484¼ lbs.

SOUND EQUIP.



MI-14902 UNIT-BUILT MASTER SOUND-SINGLE CHANNEL CONSOLE

Unit-built Master Sound Dual Control Pedestal, MI-14904



Features

- Attractively styled and finished in high quality contrasting light and dark umber gray, with the base in black.
- Compact and light in weight.
- All steel, welded construction.
- Snap-on pedestal panels.
- Base drilled for leveling devices or casters.
- Pedestal accommodates standard rack mounted panels and shelves in a 22" height.
- Turret has a sloping front.
- Turret cover fastened with cowl fasteners and is easily removed.
- Complete unit is quickly assembled.

Uses

This control pedestal finds its usefulness in a system that requires two control or switching panels, thus making a double section turret necessary. RCA plug-in type pre-amplifiers and RCA plug-in line amplifiers or similar equipment may be mounted inside the pedestal.

Description

The pedestal consists of a double section turret mounted on a one-piece steel top which is supported by two welded steel angle frames with individual bases. The top has a black linoleum covering and a polished stainless steel trim around its edges. The pedestal panels are made of light gauge sheet steel and are held to the frames with snap spring catches

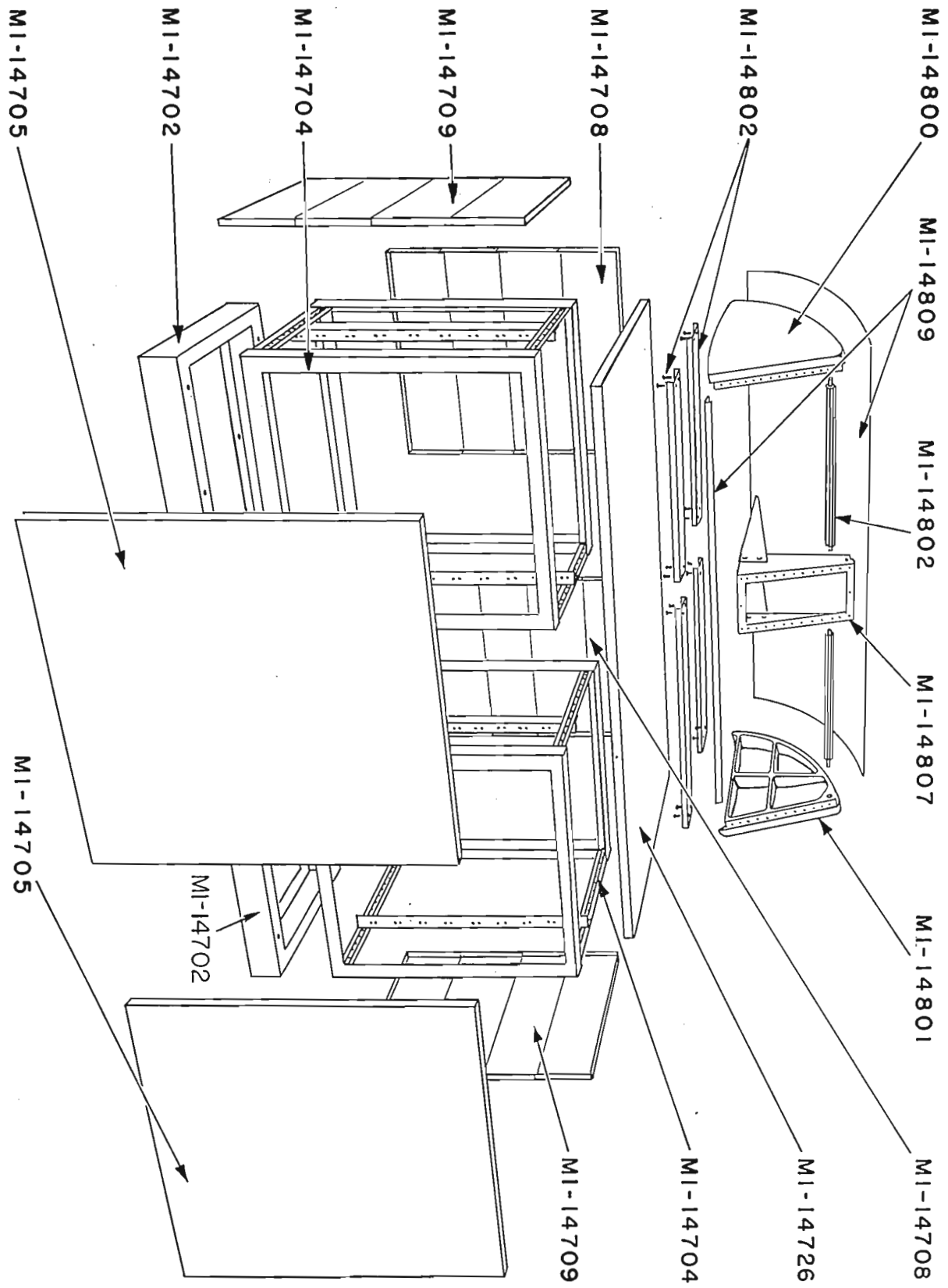
which permit easy access to equipment mounted within the enclosure. The side and two rear panels are ribbed for styling, and are finished in light umber gray, whereas the two front panels are plain and finished in dark umber gray. The extended 8" x 48" portion of the top provides a convenient support when operating the controls. The panel mounting angles in the pedestals are tapped for universal mounting of standard panels and shelves, and can be shifted on the frames to accommodate equipment of different depths.

The turret is made up of aluminum end bells and a center section, steel tie parts and cover, with the outer surfaces finished in light umber gray. It has a sloping front and accommodates two 19" x 10½" panels or submultiples of 10½" in steps of 2⅝". The center section allows for a 4" x 10½" panel.

The complete unit is shipped "knocked-down" and includes all of the necessary hardware for assembly.

Specifications

Overall Height	39"
Top Dimensions	48" x 25" x 1" thick
Pedestal Dimensions (less top)	27" high, 47" wide, 16" deep
Turret Dimensions	11" high, 45" wide, 16" deep
Turret Panel Space:	
Main Panels	19" x 21"
Center Panel	4" x 10½"
Panel Space Inside Pedestal	44"
Clear Inside Width per Pedestal	21"
Clear Inside Depth per Pedestal	14¼"
Shipping Weight	249¾ lbs.



MI-14904 UNIT-BUILT MASTER SOUND - DUAL CONTROL PEDESTAL

Unit-built Master Sound Control Pedestal, MI-14905



Features

- Attractively styled to harmonize with any decorative scheme.
- Turret and panels finished in high quality contrasting light and dark umber gray, with the base in black.
- Compact, light weight and sturdy welded steel construction.
- Snap-on pedestal panels provide easy access to interior.
- Pedestal accommodates standard rack mounted panels and shelves in a 22" height.
- Base drilled for leveling devices or casters.
- Turret has a sloping front.
- Turret cover fastened with cowl fasteners and is easily removed.
- Complete unit is quickly assembled.

Uses

The pedestal is designed for use where a small control or switching system is desired. RCA plug-in type pre-amplifiers and RCA plug-in line amplifiers or similar equipment may be mounted inside the pedestal.

Description

This pedestal consists of a single section turret mounted on a one-piece steel top which is supported on a welded steel angle frame with separate base. The top has a black linoleum covering and a polished stainless steel trim around its edges.

The pedestal panels are made of light gauge sheet steel and are held to the frame with snap spring catches which permit

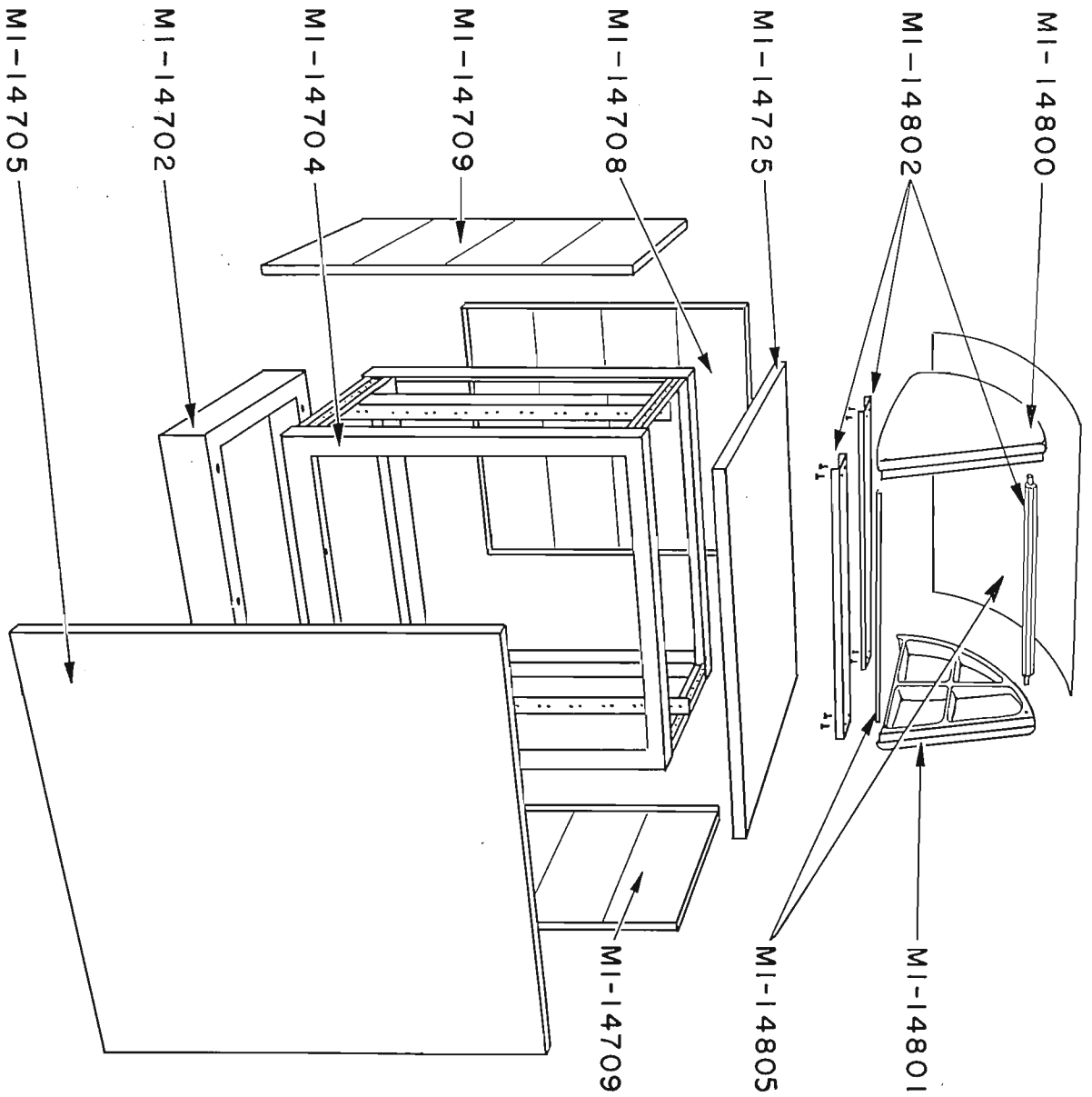
easy access to equipment mounted within the enclosure. The side and rear panels are ribbed for styling and are finished in light umber gray, whereas the front panel is plain and finished in dark umber gray. The extended 8" x 25" portion of the top provides a convenient support when operating the controls. The panel mounting angles in the pedestal are tapped for universal mounting of standard panels and shelves, and can be shifted on the frame to accommodate equipment of different depths.

The turret is made up of aluminum end bells and steel tie parts and cover, with the outer surfaces finished in light umber gray. It has a sloping front and accommodates a 19" x 10½" panel or submultiples of 10½" in steps of 2⅝".

The complete unit is shipped "knocked-down" and includes all of the necessary hardware for assembly.

Specifications

Overall Height	39"
Top Dimensions	25" x 25" x 1" thick
Pedestal Dimensions (less top)	27" high, 24" wide, 16" deep
Turret Dimensions	11" high, 22" wide, 16" deep
Turret Panel Space	19" x 10½"
Panel Space Inside Pedestal	22"
Clear Inside Width	21"
Clear Inside Depth	14¼"
Shipping Weight	121½ lbs.



MI-14905 UNIT-BUILT MASTER SOUND - CONTROL PEDESTAL

Unit-built Master Sound Transcription Pedestal, MI-14906



Features

- Styled to harmonize with any decorative scheme.
- Compact, light weight, sturdy, welded steel construction.
- Top can accommodate a 16" transcription turntable.
- Easily removable snap-on panels.
- Space of 22" available for standard rack mounted panels and shelves.
- Pedestal panels have high quality finish in two-tone light and dark umber gray.
- Front panels are bin type with adjustable opening.
- Base drilled for leveling devices or casters.
- Top, frame and base fastened together to form a complete unit.
- Overall height of unit is 28".
- Convertible to larger units at a minimum cost.

Uses

This pedestal is designed for transcription purposes. A transcription turntable can be mounted on the top. RCA plug-in type pre-amplifiers and small general purpose amplifiers may be mounted inside the pedestal.

Description

The pedestal consists of a welded steel angle frame finished in dark umber gray, mounted on a steel channel base finished in black and a steel top which has a black linoleum covering and a polished stainless steel trim around the edges. These three parts when fastened together, form a sturdy and light weight unit. The side and rear panels are formed of light gauge sheet steel and are held to the frame with snap spring catches, which permit easy access to the interior for installing or servicing equipment. These panels are finished in light umber gray. The front panels are two bin type panels which open downward and are adapted to hold a radio or similar piece of equipment. These two panels are finished in dark umber gray.

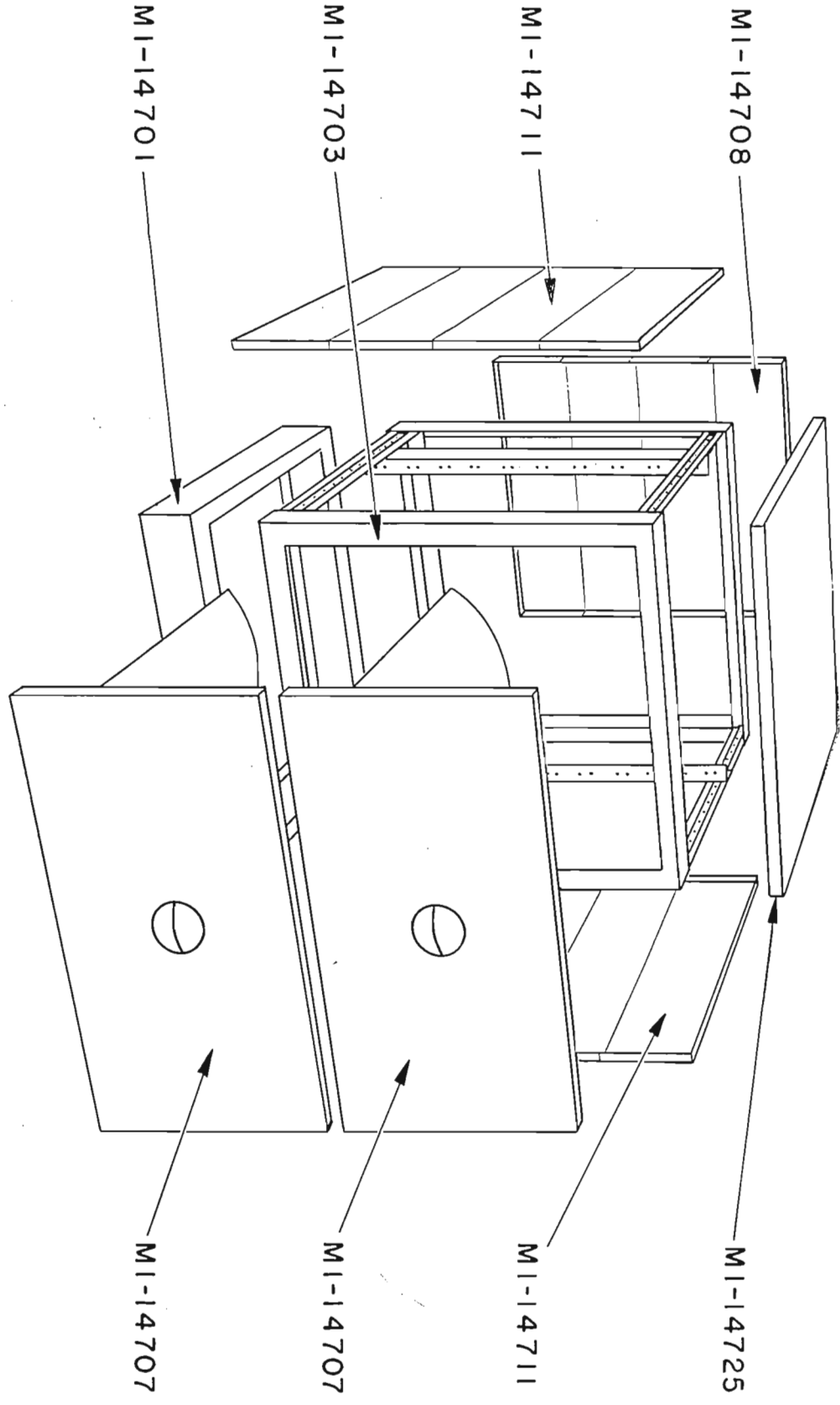
The panel mounting angles are $\frac{1}{8}$ " steel, accurately drilled and tapped for universal mounting of standard 19" panels and shelves, and are finished in dark umber gray. These angles can be shifted on the frame to accommodate equipment of different depths.

The unit is shipped "knocked down" with all necessary hardware for assembly.

Specifications

Overall Dimensions	28" high, 25" wide, 25" deep
Panel Space Inside Pedestal	22"
Clear Inside Width	21"
Clear Inside Depth	22 $\frac{1}{2}$ "
Shipping Weight	117 $\frac{3}{8}$ lbs.

MI-14906 UNIT-BUILT MASTER SOUND - TRANSCRIPTION PEDESTAL



AM-FM Radio Tuner, MI-6787

Features

- Broadcast and frequency modulation reception.
- Good selectivity.
- Compact and light in weight.
- Excellent sensitivity.

Description

The AM-FM Radio Tuner MI-6787 is intended for use in schools, hotels or other applications where a central radio receiver is to be used with a sound distribution system. The unit is designed for rack mounting with the MI-12388 Panel and Shelf Assembly which provides three suitable control knobs and a panel with the switch positions stenciled on the panel. A four-prong socket and associated plug are provided at the rear of the chassis to furnish power to a preamplifier for variable-reluctance phonograph pickups, or for any additional pilot lights which might be desirable.

The MI-6787 receiver is designed to operate on AM signals in the 535 to 1620 kilocycle band and FM signals in the 88 to 108 megacycle band. This unit also operates between a standard AM antenna or a 300-ohm FM dipole and a 500/600 ohm line.

As an AM receiver, the tube complement consists of a 6BA6 in a tuned RF stage, a 6BE6 mixer, 6J6 oscillator, 6BA6 1st IF amplifier, 6BA6 2nd detector, 6AU6 audio amplifier.

As an FM receiver, the tube complement consists of a 6BA6 RF amplifier, 6BE6 mixer, 6J6 oscillator and reactance modulator, 6BA6 1st IF amplifier, 6BA6 2nd IF amplifier, 6AU6 1st limiter, 6AU6 2nd limiter, 6AL5 discriminator and 6AU6 audio amplifier.

As an FM receiver, the oscillator reactance modulator 6J6 is under the control of the discriminator which corrects the oscillator frequency to maintain a 10.7 megacycle beat between the oscillator frequency and the incoming signal effectively eliminating the drift encountered in many FM receivers.

The automatic frequency control circuit is effective over a range of approximately 500 kilocycles at 98 megacycles.

A four-prong plug, PRE-AMP, has been provided on which 6.3 volts a-c and 150 volts d-c are available for operation of a preamplifier and/or additional pilot lights. Between pins #1 and #2, 6.3 volts a-c are available; pin #1 is grounded. Between pins #1 and #3, 150 volts d-c are available; pin #4 is open.

The input receptacles A and B, the third and fourth positions for the selector switch as marked on the panel are high impedance inputs, 500,000 ohms each, into the one-stage audio amplifier. The response is flat from 50-15,000 cycles ± 2 db. The voltage gain in each input, measured from the 500,000-ohm input to the 500/600-ohm output, is four. A phonograph, television audio or any signal source providing approximately 1 volt of signal may be plugged into either of these two inputs. The output of preamplifiers such as, MI-4117, MI-4118 or MI-4263 may be plugged into these inputs, and power for the operation of these preamplifiers may be obtained from the four-prong socket provided on the tuner.



MI-6787

Technical Data

Power Supply _____ 105-125 volts, 60 cycles a-c

Power Consumption _____ 100 watts

Intermediate Frequency:

AM _____ 455 kc

FM _____ 10.7 mc

Audio Frequency Response _____ Within 2 db from 50 to 15,000 cycles

Output Impedance _____ 500/600 ohms ungrounded

Sensitivity:

AM _____ 5 microvolts

FM _____ 10 microvolts

Output:

1.73 volts _____ Less than 1.5% distortion

7.5 volts _____ Less than 5% distortion

Audio Noise Level _____ 60 db below 0 level (1.73 volts) minimum with output ungrounded

Tuning Range:

AM _____ 535 kc to 1620 kc

FM _____ 88 mc to 108 mc

Limiter Action _____ 20 db of quieting with output signal of 12 microvolts

Pilot Lamps _____ #44 Mazda lamp (2) 6-8 volts, 0.15 amp., bayonet

Antenna:

AM _____ RMA standard input

FM _____ 300-ohm folded dipole

Tube Complement:

3 6BA6 1 6AL5

1 6BE6 3 6AU6

1 6J6 1 5Y3-GT

Dimensions and Weight:

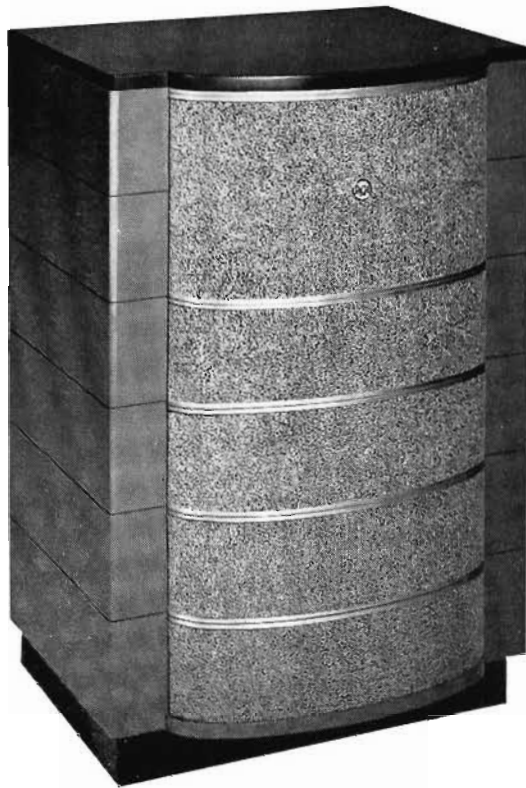
Length _____ 15 3/8"

Height _____ 7"

Depth _____ 9" (rear chassis to dial)

Weight _____ 13 1/2 lbs.

Two Way Loudspeaker, MI-12499



Features

- Unusually fine frequency response.
- Low distortion.
- High efficiency.
- Large power handling capacity.
- Wide angle distribution.
- Alnico magnets in separate low frequency and high frequency units.
- Attractive styling and modern appearance.

Uses

The RCA MI-12499 Two Way Loudspeaker has been designed to meet the long felt need of the particularly discriminating listener for unusually faithful and distortionless reproduction. It is suitable for studio monitoring, transcription and phonograph playback, and reproduction of AM-FM radio programs in hotel lobbies, broadcast studios, finely-appointed offices, and other locations where a reproducing unit of unusual fidelity, low distortion, high power-handling capacity, and truly fine appearance is desired.

Description

The MI-12499 Two Way Loudspeaker is made up of the following units:
 MI-12424 Cabinet, Cross-over Network, High Frequency Horn
 MI-12431 High Frequency Horn Driver
 MI-12432 Low Frequency Speaker

This assembly is a console type loudspeaker of unusually wide frequency range, low distortion and with great power handling ability. It has wide angle distribution. The input impedance characteristic is essentially flat throughout the operating range, rising somewhat at frequencies below 100 cycles. The cabinet is of wood, attractively styled, with a two-tone gray finish, giving it a distinctively modern appearance.

Specifications

Frequency Response	50 to 13,000 cycles
Power Capacity	20 watts
Impedance	15 ohms
Axial Sensitivity	95 db at 4 ft. with 1 watt input
Distribution	100° at 1000 cycles
Height	37 $\frac{1}{8}$ "
Width	24 $\frac{1}{2}$ "
Depth	20 19/32"
Cabinet	Wood
Finish	Two-tone gray
Cross-over Frequency	800 cycles

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The Two Way Speaker shall be a console type assembly housing separate low frequency and high frequency units, together with a crossover network. The frequency response of the assembly shall be from 50 to 13,000 cycles. The input impedance shall be 15 ohms, and the axial sensitivity at 4 feet with 1 watt input shall be 95 db. The distribution angle shall be 100° at 1000 cycles. The power handling capacity shall be 20 watts. The crossover frequency shall be 800 cycles. The cabinet shall be 37 $\frac{1}{8}$ " high, 24 $\frac{1}{2}$ " wide, and 20 19/32" deep, made of wood; and shall be finished in two-tone gray. The cabinet styling shall be modern and attractive.

Extended Range Loudspeaker Type LC-4A

Features

- Natural life-like reproduction of music and speech—employs two high quality loudspeaker mechanisms. (Low frequency and high frequency.)
- High power handling capacity—20 watts peak. (Music and speech.)
- High efficiency (twice that of an average PM loudspeaker)—high grade Alnico permanent magnets.
- Conservatively styled cabinet in natural wood or walnut finish.
- Floor or wall mounting—base feet are removable.

Uses

The LC-4A loudspeaker fulfills the need for an inexpensive, wide range loudspeaker of small compact size for Commercial Sound applications. It will be a welcomed addition to any club, bar, restaurant, hotel, school or other places where superior reproduction of live or transcribed music is demanded. Because of its well balanced overall response, obtained by extending the high frequency range in correct proportion to the low frequency cut off, reproduced music will take on a new color heretofore lost in the conventional single diaphragm loudspeaker.

Description

This loudspeaker assembly consists of an MI-6333-C low frequency mechanism, an MI-12459 high frequency horn driver, an MI-12448 loudspeaker cabinet, MI-12449 cabinet feet and an MI-12451 high frequency kit. The kit is used in conjunction with the high frequency horn driver and includes a 2 microfarad capacitor and the necessary wiring and hardware for installing these components.

The cabinet which is 22" wide, 25" high (excluding mounting feet) and 12" deep has an inside volume of approximately 5000 cubic inches. The low frequency mechanism is mounted near the center of the front face with the high frequency unit mounted above it at the top of the cabinet. Bass boost reflex principle is used to enhance the low frequencies below 150 cycles/sec. Special acoustically tested grille cloth covers the openings and provides a pleasing front to this modernly styled cabinet.

The frequency range from 75 to 6500 cycles/sec. is handled superbly by the MI-6333-C loudspeaker mechanism. At the point where the high end of this mechanism begins to fall off, the MI-12459 high frequency driver takes over with the result that the entire range of 75 to 12,000 cycles/sec. is beautifully reproduced. The voice coils of the 2 units are isolated by a capacitor in order to keep the low frequencies out of the high frequency unit. The two voice coils are combined to provide a nominal impedance of 7½ ohms.



Specifications

Frequency Range	75 to 12,000 cycles/sec.
Power Handling Capacity	20 watts peak (complex wave)
Voice Coil Impedance (nominal):	
Low Frequency Unit (MI-6333-C)	6 ohms
High Frequency Unit (MI-12459)	15 ohms
	(Voice coils are combined for 7½ ohms impedance)
Axial Sensitivity	95 db at 4 feet with 1 watt
Gap Flux Density:	
Low Frequency Unit (MI-6333-C)	9500 gauss
High Frequency Unit (MI-12459)	9500 gauss
Magnet Material	Alnico II
Magnet Weight:	
Low Frequency Unit (MI-6333-C)	2½ lbs.
High Frequency Unit (MI-12459)	1 lb. 9 oz.
Weight (fully assembled but unpacked)	43¼ lbs.
LC-4A Loudspeaker complete with cabinet, base mounting feet, low frequency mechanism, high frequency horn driver and high frequency kit	MI-12448, MI-12449, MI-6333-C, MI-12459, MI-12451
LC-4A Cabinet (natural wood finish)	MI-12448
LC-4A Cabinet (walnut finish)	MI-12448-A
LC-4A Cabinet Mounting Feet	MI-12449
LC-4A Low Frequency Mechanism	MI-6333-C
LC-4A High Frequency Horn Driver	MI-12459
LC-4A High Frequency Kit	MI-12451

RCA 400 "Senior" 16mm Projector

A Two Case Projector



Features

- Sixteen tooth, double size sprockets.
- Cushion action sprocket shoes.
- Hinged film gate—opens wide.
- Theatrical framing.
- Precision sound speed stabilizer and scanning system.
- Four stage, ten watt amplifier with public address facilities.
- Vernier tilt control.
- Efficient cooling system for 1000 watt lamp.
- Easy portability.
- Sound and silent film speeds.

Uses

The RCA 400 "Senior" is designed with greatly diversified applications in industry for institutional and sales presentations, indoctrination programs, conferences, and for shop training programs. It may be used to advantage in school lecture halls, classrooms, or by churches, lodges, clubs, community centers and private homes.

Description

The RCA 400 16mm projector is a portable equipment contained in two matching carrying cases. One case contains the projector-amplifier unit. The other contains the speaker, and is also used for carrying the reels, reel arms, speaker cable, power cable and spares. Both of these cases are made of durable plywood, covered with tough, heavy, elephant-gray, coated fabric. This fabric is moisture and scuff resistant, and

will withstand hard usage. The cases are further reinforced by external hardware finished in highly polished nickel.

The projector is beautifully styled and finished in a blue-green Hammertone with polished chrome and aluminum metal parts. The reflector is made of heavily silver plated, heat resistant glass. It is factory aligned and readily accessible. The projection lamp is contained in a scientifically designed lamp shield, affording maximum ventilation of the heat source with a minimum of heat-conducting stray light hitting any area of the lamphouse walls. The shield opening permits only usable light to pass. A newly designed cooling system provides a high rate of ventilation for a 1000 watt lamp at either silent or sound speeds. The blower speed is constant, and independent of the mechanism speed. This exclusive RCA feature, together with the lamp shield, results in a cool running projector regardless of the length of the show.

The condensing lens system has an aspheric element and is instantly removable for cleaning. The projection lens is the RCA deluxe series "A", two inch, F1.6 "coated" lens which provides brilliant illumination, excellent contrast and a sharp picture. Lenses of other focal lengths are readily interchangeable. Both vernier and rapid lens focusing are provided with a positive lens lock.

The picture gate is the wide opening type which permits easy threading and cleaning of the aperture plate and film shoe. The film shoe is made of solid stainless steel. The sprockets of the RCA 400 "Senior" are sixteen-tooth, double size, slow speed sprockets with steel teeth and contoured polished hubs

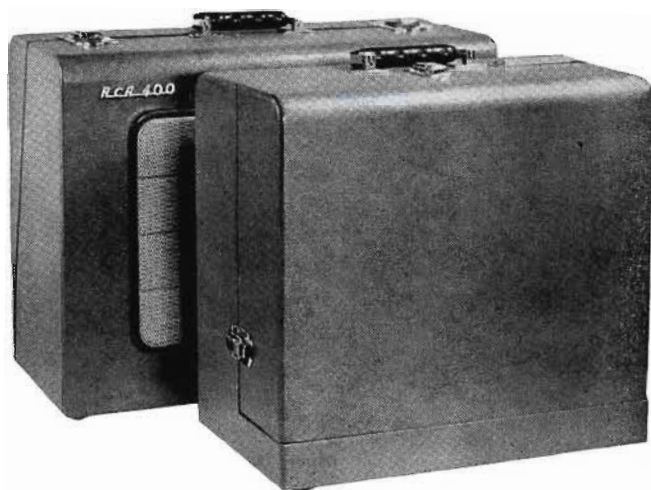
RCA 400 "Senior" 16mm Projector (Continued)

These exclusively RCA sprockets have twice the life of the standard eight-tooth sprockets, and reduce film wear to a minimum. Threading is amazingly easy. The cushion action, finger-tip control, sprocket shoes permit poor splices or badly warped film to pass freely over the sprockets without additional damage. The RCA 400 "Senior" permits instant finger-tip adjustment of either film loop while the machine is in operation. This exclusive feature permits an uninterrupted show even if both upper and lower loops are lost due to damaged film. Corrections to loop threading to synchronize the sound properly with the picture can also be made instantly. Film rewind of the RCA 400 "Senior" is rapid, automatic and convenient, and may be done without removing or interchanging reels. An improved automatic, even-tension film take-up assures proper film tension regardless of film reel size.

The RCA 400 "Senior" is designed for two-speed operation for use with either sound or silent films. A finger-tip selector knob permits instant selection of one or the other speed (16 frames or 24 frames), without change of motor speed. An automatic motor governor controls both the sound and silent speeds. A newly designed sound roller assembly assures smooth and constant film speed at the point of sound take-off, maintaining reproduction at recording pitch. At no point of the projector film path does the sound track or picture area of the film come in contact with a stationary surface. The RCA 400 "Senior" is provided with a tilting mechanism permitting rapid or vernier action, and which is amazingly easy to operate.

A powerful four stage high gain amplifier is incorporated into the RCA 400 "Senior." This amplifier utilizes the "inverse feedback" principle to assure natural tone amplification. The amplifier provides means for connection of a microphone or phonograph pickup. This permits announcer comment or the use of recorded music when running silent films. Likewise, the RCA 400 "Senior" may be used as a complete public address system.

The exciter lamp is lighted with an a-c voltage of supersonic frequency so as to assure high fidelity and freedom from hum. The tone control is "equalized" thereby preventing variation in volume when the tone control is changed. RCA "preferred type" tubes are used throughout, assuring low cost, and immediate availability for replacement.



RCA 400 "Senior" is contained in two matching carrying cases

Specifications

PROJECTOR

Projection Lamp—Up to 1000-watt, standard medium prefocused
 Projection Lens—RCA, 2-inch F1.6, coated
 Film Capacity—2000 ft., 16mm film
 Operating Speed—24 frames (sound), 16 frames (silent) per second
 Motor Speed—Constant, within 2% from 105 to 125 volts

AMPLIFIER

Gain:
 Phototube Input—115 db
 Microphone Input (40,000 ohms)—112 db
 Power Output—10 watts at less than 5% distortion

Tubes:

1 RCA-6J7	3 RCA-6V6GT
1 RCA-921	1 RCA-6SN7GT
1 RCA-6J5	1 RCA-5Y3GT

SPEAKER

Voice Coil Impedance—6.0 ohms
 Field—Alnico, permanent magnet
 Sensitivity—97 db at 4 ft. with 1 watt input (ref. level 10⁻¹⁶ watts/sq. cm.)
 A-c Power Requirements (with 1000-watt lamp)
 1275 watts (105-125 v., 50/60 cycles)
 (D-c operation possible with amplifier on inverter)

Cables:

Speaker—50 ft., two cond. #18 rubber covered cable, with a 2 contact connector
 Power—15 ft., cable, moulded plugs, 2-cond. #16

Net Weight:

Projector-Amplifier Case—38 lbs.
 Speaker Case—26 lbs.

Shipping Weight:

Projector-Amplifier Case—50 lbs.
 Speaker Case—32 lbs.

Dimensions:

Projector-Amplifier Case—15⁹/₁₆" long, 14¹/₈" high, 9¹/₈" deep
 Speaker Case—19⁵/₈" long, 15¹/₈" high, 9" deep

Finish—Heavy grained, elephant-gray coated fabric

Stock Identification:

Projector-Amplifier in Carrying Case
 (Sound and Silent Speeds)—MI-1305-1
 Speaker and Accessories in Carrying Case—MI-1306-1

RCA 400 "Junior" 16mm Projector

A Single Case Projector



Features

- Sixteen tooth, double size sprockets.
- Cushion action sprocket shoes.
- Hinged film gate—opens wide.
- Theatrical framing.
- Precision sound speed stabilizer and scanning system.
- Four stage, ten watt amplifier with public address facilities.
- Vernier tilt control.
- Efficient cooling system for 1000 watt lamp.
- Easy portability—single case.
- Sound and silent film speeds.

Uses

The RCA 400 "Junior" is designed with greatly diversified applications in industry for institutional and sales presentations, indoctrination programs, conferences, and for shop training programs. It may be used to advantage in school lecture halls, classrooms, or by churches, lodges, clubs, community centers and private homes.

Description

The RCA 400 "Junior" 16mm projector is a portable equipment contained in a single case. The cover of the case houses the speaker, and is used as carrying space for the reels, reel arms, speaker cable, power cable and spares. The case is made of durable plywood, covered with tough, heavy, elephant-gray, coated fabric. This fabric is moisture and scuff resistant, and will withstand hard usage. The case is further reinforced by external hardware finished in highly polished nickel.

The projector is beautifully styled and finished in a blue-green Hammertone with polished chrome and aluminum metal parts. The reflector is made of heavily silver plated, heat resistant glass. It is factory aligned and readily accessible. The projection lamp is contained in a scientifically designed lamp shield, affording maximum ventilation of the heat source with a minimum of heat-conducting stray light hitting any area of the lamphouse walls. The shield opening permits only usable light to pass. A newly designed cooling system provides a high rate of ventilation for a 1000 watt lamp at either silent or sound speeds. The blower speed is constant, and independent of the mechanism speed. This exclusive RCA feature, together with the lamp shield, results in a cool running projector regardless of the length of the show.

The condensing lens system has an aspheric element and is instantly removable for cleaning. The projection lens is the RCA deluxe series "A", two inch, F1.6 "coated" lens which provides brilliant illumination, excellent contrast and a sharp picture. Lenses of other focal lengths are readily interchangeable. Both vernier and rapid lens focusing are provided with a positive lens lock.

The picture gate is the wide opening type which permits easy threading and cleaning of the aperture plate and film shoe. The film shoe is made of solid stainless steel. The sprockets of the RCA 400 "Junior" are sixteen-tooth, double size, slow speed sprockets with steel teeth and contoured polished hubs. These exclusively RCA sprockets have twice the life of the standard eight-tooth sprockets, and reduce film wear to a minimum. Threading is amazingly easy. The cushion action, finger-tip control, sprocket shoes permit poor splices or

RCA 400 "Junior" 16mm Projector (Continued)

badly warped film to pass freely over the sprockets without additional damage. The RCA 400 "Junior" permits instant finger-tip adjustment of either film loop while the machine is in operation. This exclusive feature permits an uninterrupted show even if both upper and lower loops are lost due to damaged film. Corrections to loop threading to synchronize the sound properly with the picture can also be made instantly. Film rewind of the RCA 400 "Junior" is rapid, automatic, and convenient, and may be done without removing or interchanging reels. An improved, automatic, even-tension film take-up assures proper film tension regardless of film reel size.

The RCA 400 "Junior" is designed for two-speed operation for use with either sound or silent films. A finger-tip selector knob permits instant selection of one or the other speed (16 frames or 24 frames), without change of motor speed. An automatic motor governor controls both the sound and silent speeds. A newly designed sound roller assembly assures smooth and constant film speed at the point of sound take-off, maintaining reproduction at recording pitch. At no point of the projector film path does the sound track or picture area of the film come in contact with a stationary surface. The RCA 400 "Junior" is provided with a tilting mechanism permitting rapid or vernier action, and which is amazingly easy to operate.

A powerful four stage high gain amplifier is incorporated into the RCA 400 "Junior." This amplifier utilizes the "inverse feedback" principle to assure natural tone amplification. The amplifier provides a connection for a microphone or phonograph pickup. This permits announcer comment or the use of recorded music when running silent films. Likewise, the RCA 400 "Junior" may be used as a complete public address system.

The exciter lamp is lighted with an a-c voltage of supersonic frequency so as to assure high fidelity and freedom from hum. The tone control is "equalized" thereby preventing variation in volume when the tone control is changed. RCA "preferred type" tubes are used throughout, assuring low cost, and immediate availability for replacement.



RCA 400 "Junior" is portable and contained in a single case



This sturdily built speaker case houses the 8" PM speaker and accessories

Specifications

PROJECTOR

Projection Lamp—Up to 1000-watt, standard medium prefocused
 Projection Lens—RCA, 2-inch F1.6, coated
 Film Capacity—2000 ft., 16mm film
 Operating Speed—24 frames (sound), 16 frames (silent)
 per second
 Motor Speed—Constant, within 2% from 105 to 125 volts

AMPLIFIER

Gain:

Phototube Input—115 db
 Microphone Input (40,000 ohms)—112 db
 Power Output—10 watts at less than 5% distortion

Tubes:

1 RCA-6J7	3 RCA-6V6GT
1 RCA-921	1 RCA-6SN7GT
1 RCA-6J5	1 RCA-5Y3GT

SPEAKER

Voice Coil Impedance—3.2 ohms
 Field—Alnico, permanent magnet
 Sensitivity—93 db at 4 ft. with 1 watt input
 (ref. level 10⁻¹⁰ watts/sq. cm.)
 A-c Power Requirements (with 1000-watt lamp)
 1275 watts (105-125 v., 50/60 cycles)
 (D-c operation possible with amplifier on inverter)

Cables:

Speaker—50 ft., two cond. #18 rubber covered cable,
 with a 2 contact connector
 Power—15 ft., cable, moulded plugs, 2-cond. #16
 Net Weight—45 lbs.
 Shipping Weight—57 lbs.
 Dimensions—15²/₁₆" long, 14¹¹/₁₆" high, 11¹/₂" deep
 Finish—Heavy grained, elephant-gray, coated fabric
 Stock Identification—MI-1313

You'll Attract and Hold Patrons

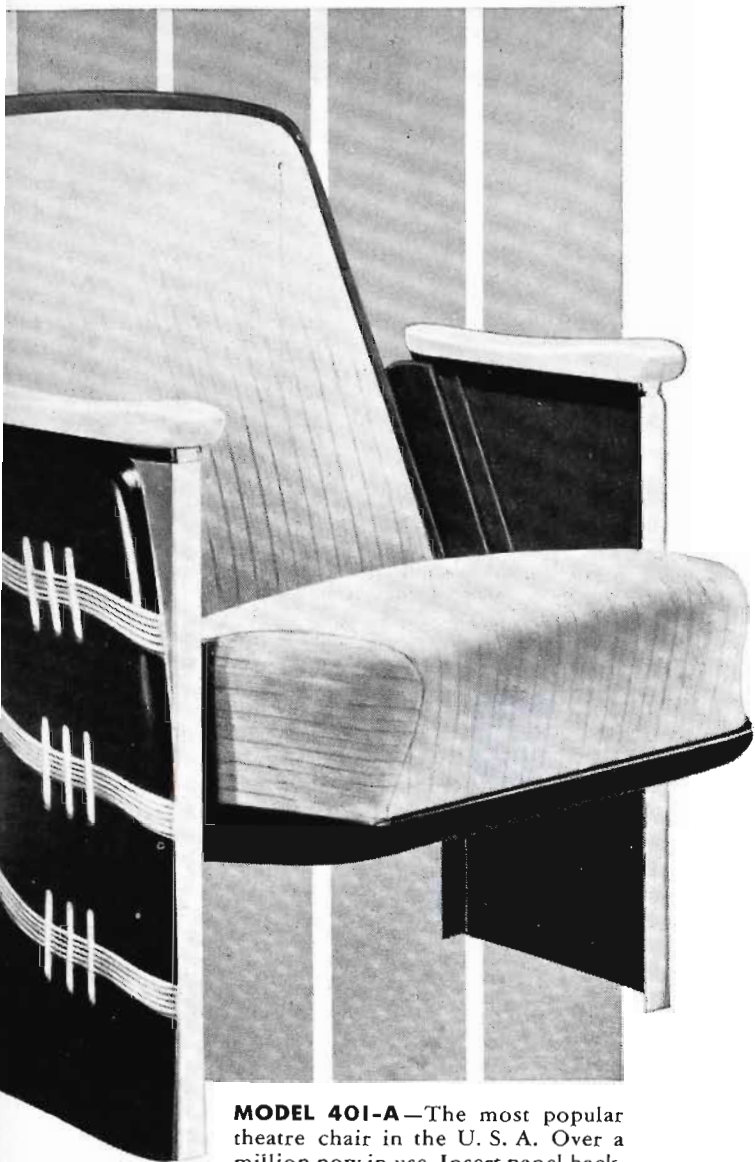
with the seating comfort of

INTERNATIONAL CHAIRS

Patrons will enjoy your shows more . . . come back more often—when your theatre seating induces them to relax, to see the screen with the utmost comfort. INTERNATIONAL CHAIRS are designed to assure luxurious comfort, rest and relaxation.

Patron-appeal is only one of many reasons why INTERNATIONAL is your best buy in theatre seating. You will find INTERNATIONAL'S superior construction and mechanical features mean longer lasting, trouble-free service with minimum maintenance.

Your Independent RCA Theatre Supply Dealer will gladly demonstrate the complete line of smart looking INTERNATIONAL CHAIRS.



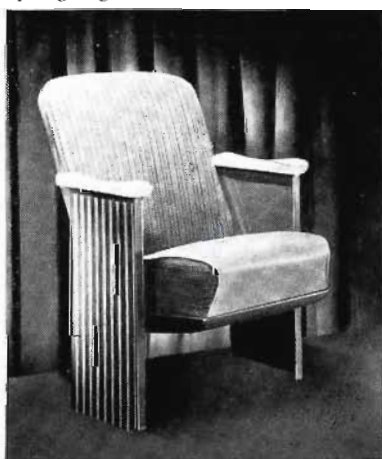
MODEL 401-A—The most popular theatre chair in the U. S. A. Over a million now in use. Insert panel back.

Upholstery fully protected at top by metal rim. Full-coil, spring-edge seat cushions. Hingeless seat suspension. Built of steel. No exposed bolts, nuts or screws.

MODEL 1000—Wider and deeper seats with the exclusive, new "Comfort Cushion." Form fitting, padded steel insert panel back. "Wire-on" back and seat covers.



MODEL 350-AH—An excellent investment for patron comfort. Padded, welted back. "Wire-on" back cover. Full spring-edge cushion. All steel.



MODEL 301-A—Famous for comfort and durability. "Wire-on" back cover. Hingeless seat suspension. Full upholstered back. Full spring-edge cushion of coil type. Unit construction.



The RCA Carfone

152-174 Mc. Mobile Communication Equipment Type CMV-1A



Features

- Wide choice of mounting locations.
- "31 Circuit" selectivity.
- Grounded-Grid input for higher sensitivity.
- Small size.
- Low spurious emission.
- Low spurious response.
- Extended frequency range.
- Transducer modulation control.
- Single cable from Transmitter Receiver.
- Simplified control unit.

Uses

The CARFONE is a two-way mobile communication equipment designed for practically every mobile application in the 152-174 mc band. This includes police, fire, taxis, trucks, forestry vehicles, public utilities or any other services licensed to operate in this part of the spectrum. It also includes the frequencies of 162-174 mc which have been allocated for the use of departments of the federal government. The CARFONE is especially suitable for limited space installations or locations where the equipment must be mounted on a vertical surface.

Description

The design of the CARFONE was directed toward combining the best possible solutions to the most important problems of the mobile communications service. Outstanding features of the CARFONE are its great mounting versatility, its "31 Circuit" Selectivity, and the revolutionary Transducer Modulation Control.

MOUNTING VERSATILITY

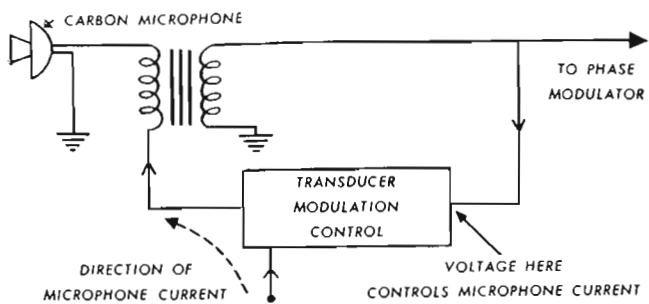
The CARFONE transmitter/receiver is housed in a single compact case approximately 5½" x 9" x 16". The chassis and cover are constructed in such a way as to permit installation in practically any position on the floor, sides or back of the automobile trunk,—thus leaving the maximum amount of space for luggage, tools, packages, or other material. In addition, the CARFONE may be installed on the floor between the front seat passengers, or the fire wall, or (in many vehicles) on the shelf behind the back seat. For use in trucks, the CARFONE lends itself well to mounting on the wall of the driver's compartment, in the freight section or in many cases (as in public utility vehicles and fire engines) inside the side-mounted lockers. Many other possibilities will present themselves where some other space is most appropriate for the installation.

"31 CIRCUIT" SELECTIVITY

One of the objectives of the CARFONE design was to make adjacent channel operation a practical possibility. This required that the receiver be capable of a new high degree of selectivity. The CARFONE has 31 tuned circuits, which contribute to the receiver selectivity. Of these, 18 are in the important low frequency i-f section. This greater number of tuned circuits has resulted in the required greater selectivity necessary for adjacent channel operation.

TRANSDUCER MODULATION CONTROL

The Transducer Modulation Control is the perfect companion (on the transmitter side) to "31 Circuit" Selectivity for assuring maximum channel conservation. Loud shouting into the microphone cannot cause deviation into adjacent channels—nor will the signal become distorted or lose intelligibility. Likewise, a weak voice or a message spoken at some distance

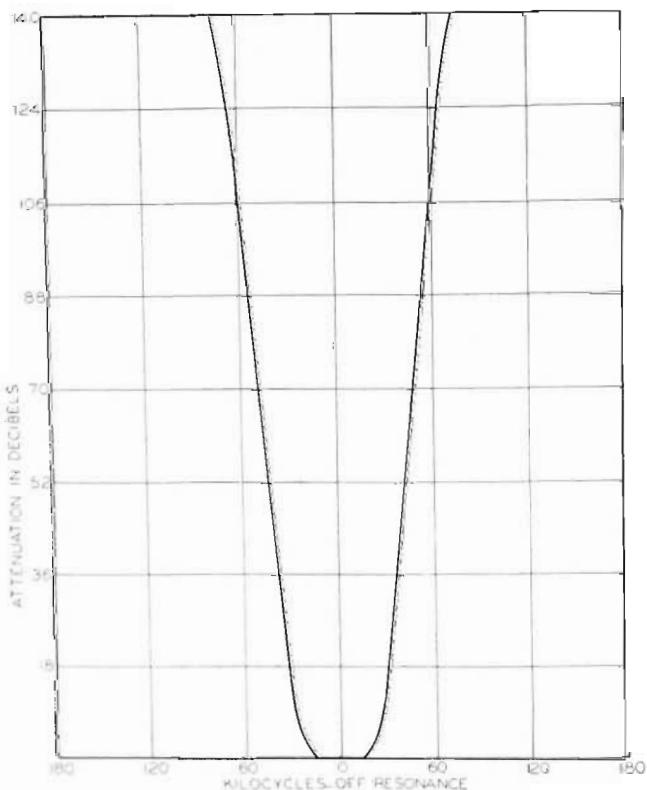


Simplified diagram of the Transducer Modulation Control. Note that the signal does not pass THROUGH the Transducer Modulation Control. It merely acts as a valve on the microphone current.

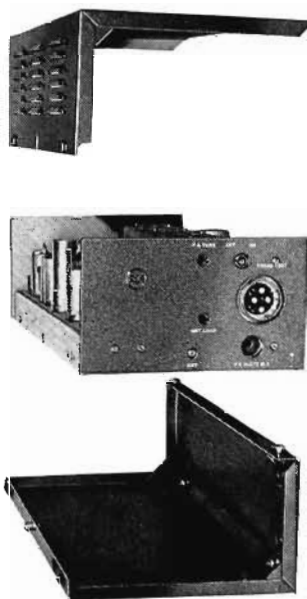
from the microphone is boosted up to come through loud and clear. The operation of the TRANS-DUCER MODULATION CONTROL is the essence of simplicity. The signal itself does not pass through the TRANS-DUCER MODULATION CONTROL, therefore, no microphonic noise or distortion is introduced. Instead, the circuit automatically reduces the microphone output when it approaches the level of 100% modulation. Actually, it is the microphone itself which is the source of the control. For CARFONE users this basic simplicity assures greater dependability in use.

LOW SPURIOUS EMISSION AND RESPONSE

Spurious emission is not only annoying to other mobile stations but also may require expensive modification to existing equipment in order to correct it. In the CARFONE, all spurious emissions are attenuated at least 60 db. This includes the especially bothersome 2nd and 3rd harmonics of the carrier. Spurious responses in the receiver are attenuated more than



Selectivity curve of the CARFONE. "31 Circuit" Selectivity attenuates adjacent channel signals (± 60 kc) by more than 100 db.



Accordion view showing construction of chassis and covers. Unique construction permits mounting on either right or left side.

85 db. In addition, the CARFONE has a much lower susceptibility to intermodulation interference.

NO DETAILS OVERLOOKED

In every detail, the emphasis of the CARFONE is on performance. At no point is there a compromise with quality. Yet seemingly minor items have been given the same careful consideration. For example: the A line fuses are installed at the battery end of the cable to insure against the possibility of fire in case of a cable shorted to the car frame. In addition, there is but a single cable from the Transmitter/Receiver to the control unit and battery. The antenna may be installed from outside the car, without disturbing the headlining.

Specifications

- Frequency Range _____ 152-174 megacycles
- Dimensions:
 - Transmitter/Receiver _____ 5½" x 9" x 16"
 - Control Unit _____ 7½" x 4" x 5¾"
 - Cable Length _____ 16' 8"
- Weight:
 - Transmitter/Receiver _____ 28 lbs.
 - Control Unit _____ 1¾ lbs.
- Battery Drain _____ (At 6.3 volts) 8.4 amperes, standby
20.6 amperes, transmitting
- Power Output _____ 11-13 watts, 152-162 mc
8-11 watts, 162-174 mc
- Sensitivity _____ Better than 0.8 mv with 20 db of quieting
- Selectivity _____ 100 db, ± 60 kc
- Spurious Emission _____ All attenuated more than - 60 db
- Spurious Response _____ All attenuated more than - 85 db
- Temperature Limits _____ 25° to 140° Fahrenheit
- Transmitter Frequency Deviation _____ ± 15 kc for 100% modulation
- Frequency Stability (either transmitter or receiver) _____ Within .003% over entire temperature range
- Audio Distortion:
 - Transmitter _____ Less than 5%
 - Receiver _____ Less than 10%

The RCA Fleetfone

30-50 mc. Mobile Communication Equipment, Type CMV-2A



Features

- Mounting flexibility.
- 30 or 60 watts output.
- 6 or 12 volt operation.
- "Canyon-Curve" selectivity.
- Transducer modulation control.
- High receiver sensitivity.
- Provision for two-frequency operation.
- Low spurious emission and response.

Uses

The FLEETFONE is a two-way mobile communication equipment designed for practically every mobile application in the 30-50 mc. band. This includes such important services as police, fire, trucks, forestry, public utilities, transportation, the petroleum industry, and departments of the federal government.

Description

In the FLEETFONE, RCA has incorporated advanced features of special value to users of mobile communication equipment who operate in the 30-50 mc. band. The FLEETFONE represents a radical departure from earlier equipment design and introduces a new high standard of performance, economy and operating convenience.

MOUNTING FLEXIBILITY

The FLEETFONE transmitter/receiver is housed in a single, compact case approximately $7\frac{3}{8}$ " x $11\frac{1}{4}$ " x $16\frac{1}{4}$ ". The chassis, with front and back panels, is constructed so as to be inserted into the bottom half of the cover from either the right or left side. The top cover is then slid into place and secured by means of four quarter-turn locking screws. This ingenious construction makes possible installation under the widest variety of circumstances. It mounts easily on either the bottom, side, or on a vertical surface. In automobile trunks, it may be installed in just about any desired location. It fits in out-of-the-way places, and may be so located as to leave the maximum amount of space for luggage, tools, packages or other material. In trucks it may be mounted in the drivers' cab, in the freight compartment, in a side-mounted locker, or any of a number of other locations.

"CANYON-CURVE" SELECTIVITY

One of the greatest problems of users of mobile communication equipment is the matter of interference between channels. The best protection against interference is high receiver selectivity. The FLEETFONE provides that protection with "Canyon-Curve" Selectivity. The steep-sided curve of the FLEETFONE effectively discriminates against interference from adjacent or alternate channels. The flat bottom of the curve assures clear, understandable reception of the desired signal.

CHOICE OF 30 OR 60 WATTS OUTPUT

Frequency assignments in the 30-50 megacycle band are generally made to services which operate over relatively large areas. The power output requirements of the mobile transmitters are based upon the distance to be covered and the character of the surrounding terrain. For many installations, entirely satisfactory performance can be obtained with a 30 watt mobile transmitter. In other cases, circumstances will demand 60 watts. The RCA FLEETFONE is available for either type of installation. In both cases, it's the same size single-package unit.

6 OR 12 VOLT OPERATION

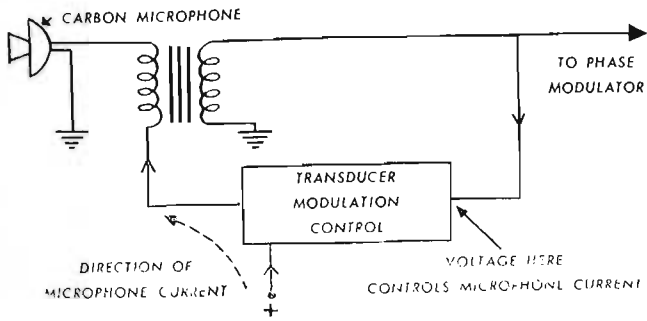
This added convenience is just another of the advantages of the FLEETFONE. Many mobile vehicles such as trucks, fire-engines, etc., use a 12 volt battery. In these vehicles, the 12 volt FLEETFONE eliminates the need for power-wasting, voltage-dropping resistors, or the necessity to impose too heavy a drain on half of the battery. The 6 volt FLEETFONE is the standard equipment for general-purpose application.

THE TRANSDUCER MODULATION CONTROL

The Transducer Modulation Control is the perfect companion (on the transmitter side) to "Canyon-Curve" Selectivity, for assuring maximum channel conservation:

Loud shouting into the microphone cannot cause deviation into adjacent channels—nor will the signal become distorted or lose intelligibility. Likewise, a weak voice or a message spoken at some distance from the microphone is boosted up to come through loud and clear.

The operation of the Transducer Modulation Control is the essence of simplicity. The signal itself does not pass through the Transducer Modulation Control, therefore no microphonic

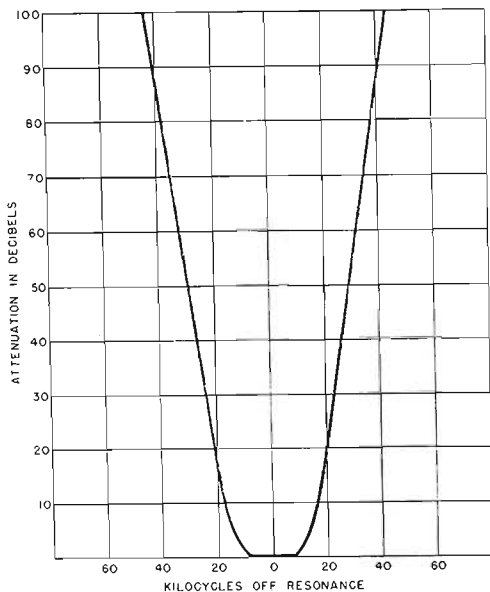


Simplified diagram of the Transducer Modulation Control. Note that the signal does not pass THROUGH the Transducer Modulation Control. It merely acts as a valve on the microphone current

noise or distortion is introduced. Instead, the circuit automatically reduces the microphone output when it approaches the level of 100% modulation. Actually, it is the microphone itself which is the source of the control. For CARFONE users this basic simplicity assures greater dependability in use.

EXTRA FEATURES

The FLEETFONE has provision for either single-frequency or two-frequency operation. Where two-frequency operation is provided, there is a switch on the control unit to permit instant change of the mobile transmitter frequency. Under this arrangement, the mobile vehicle may communicate with either the control station or the other mobile units in a two frequency system. An adjustable squelch control permits accurate adjustment of the degree of noise quieting necessary for varying conditions. For the highest reliability and the greatest efficiency the FLEETFONE is equipped with a dynamotor power supply for the mobile transmitter. The dynamotor is self-contained within the single-unit FLEETFONE case. No external wiring is required. There is but a single cable from the transmitter/receiver to the control unit and the battery. The antenna is of the universal mounting type with spring mount and stainless steel rod. It may be mounted on the outside of the vehicle in any desired position.

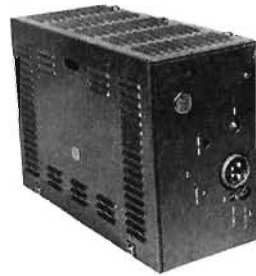


"Canyon-Curve" Selectivity provides best assurance against interference from other channels

The FLEETFONE Mounts Easily:



On the bottom



On the side, or on a vertical surface

Specifications

Frequency Range _____ 30-50 mc.

Dimensions:

Transmitter/Receiver _____ 7³/₈" x 11¹/₄" x 16¹/₄"
 Control Unit _____ 7¹/₄" x 4" x 5³/₄"
 Cable Length _____ 16' 8"

Weight:

Transmitter/Receiver _____ 45 lbs.
 Control Unit _____ 1³/₄ lbs.

Standby Battery Drain:

	6 Volt	12 Volt
30 watt	8.2 amps.	4.4 amps.
60 watt	9.1 amps.	

Transmitting Battery Drain:

30 watt	40 amps.	20 amps.
60 watt	60 amps.	

Power Output _____ 30 watts, 60 watts

Sensitivity _____ Better than 0.3 microvolt with 20 db quieting

Selectivity _____ At least 85 db down at ±40 kc (adjacent channel)

Spurious Radiation _____ Down 60 db everywhere.
 80 db 30-50 mc band

Spurious Response _____ All attenuated more than 85 db.
 Image 100 db

Temperature Limits _____ -22° to 140° Fahrenheit

Two Frequency Separation _____ 120 kc max.

Frequency Stability (either transmitter or receiver)
 Within .003% over entire temperature range

Transmitter Frequency Deviation _____ ±15 kc for 100% modulation

Audio Distortion _____ Less than 10% at ±15 kc

Audio Output _____ 1 watt

Transmitter Power Supply _____ Dynamotor

Receiver Power Supply _____ Vibrator

Rating _____ Intermittent 5 minutes on, 15 minutes off or
 10 seconds on, 20 seconds off

Stock Identification:

6 Volt, 30 Watt _____	CMV-2A
12 Volt, 30 Watt _____	CMV-2C
6 Volt, 60 Watt _____	CMV-3A

250 Watt Station Transmitter

Type CT-4c, 30-50mc, Fleetfone Station Equipment

Features

- Superior audio quality establishes new standard.
- Positive threshold modulation limiter.
- Low spurious emission.
- Improved phase modulator requires no tuning.
- Excellent stability over wide temperature range.
- Adjustable to exact specified frequency.
- All tuning adjustments from front of transmitter.
- Exciter is standard unit.
- Provision for local or remote control.
- Provides space to mount additional receivers.

Uses

This transmitter is designed for Emergency Communication Service where coverage of large area is involved. The transmitter design incorporates the latest circuit refinements. It can be used either at a remote location to obtain the benefit of a good site or installed near the operator.

Description

The Type CT-4c Transmitter is housed in an attractively styled, new type cabinet rack which is 84 inches high. It has adequate space for receivers. The cabinet has locks on the front and rear doors. All tuning can be accomplished from the front of the transmitter. The front door is not electrically interlocked as no high voltage is exposed when this door is open. The r-f circuit of the Type CT-4c Transmitter consists of a 6SJ7 crystal oscillator, a 6SJ7 as a new type phase modulator, a 6SJ7 as first tripler, a 6SJ7 as second tripler, a 6V6 doubler, two 807's as an intermediate amplifier and two 8005's as a final power amplifier. The audio circuit consists of a 6SG7 audio amplifier and a 6SL7 threshold modulation limiter.

Two power supplies are provided, one for the exciter and one for the final amplifier. These are conventional rectifier and filter units using two 5R4-GY and two 866A's. All units are designed to fit a cabinet rack and consist of two 12¼ inch panels, one 10½ inch panel and one 7 inch panel. A special panel of four meters is provided so that the operation may be observed with the cabinet door closed. For remote operation, a control unit is provided to give transmitter and receiver operation over a single pair of telephone lines. The equipment is of rugged construction and conservatively rated to give maximum performance over a wide range of ambient temperatures.



Specifications

Panel Space and Weights:

Power Amplifier	12¼", 30 lbs.
Exciter	10½", 16 lbs.
Amplifier Power Supply	12¼", 97 lbs.
Exciter Power Supply	7", 51 lbs.

Accessories Included _____ Handset and stand, meter panel

Frequency Range _____ 30 to 44 megacycles

Audio Characteristic _____ 15 db. rise from 300 to 3000 cycles with rapid cut off after 3000 cycles

Modulation _____ ±15 kc for 100% modulation

Rating _____ Continuous at +50° C.

Power Output _____ 250 watts

Frequency Stability _____ Within .003% from -30° to +50° C.

Distortion _____ Less than 10% at 500 cycles with ±15 kc. swing

Threshold Modulation Limiter _____ 20 db. control

Spurious Emission _____ At least 70 db. down everywhere, including harmonics of carrier

Standby Power Input _____ 140 watts at 115 volts a-c

Total Power Input _____ 880 watts at 115 volts a-c

Meters _____ Final amplifier cathode current
 _____ Final amplifier grid current
 _____ Final amplifier plate voltage
 _____ Final amplifier r-f current

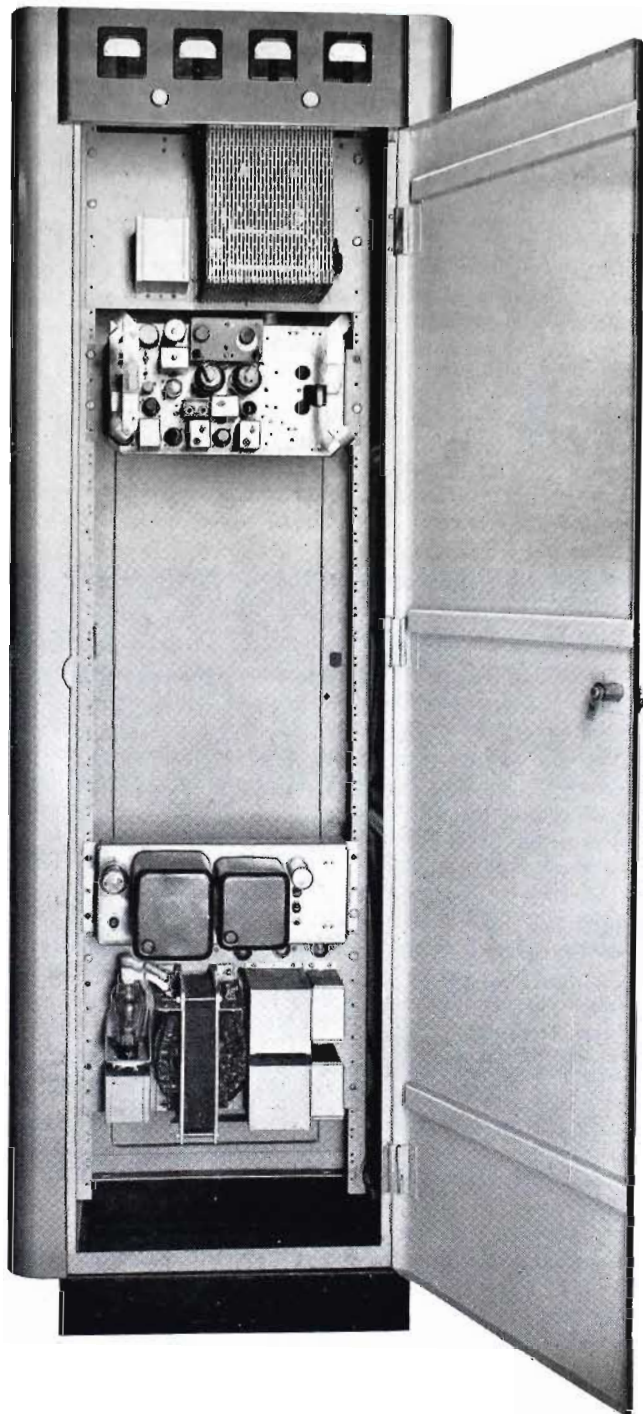
Metering Jacks _____ Provided to measure:
 _____ Second tripler grid current
 _____ Doubler grid current
 _____ Intermediate amplifier grid current
 _____ Intermediate amplifier cathode current

Antenna Relay _____ Built in for send-receive operation

TUBE COMPLEMENT

Oscillator	1 RCA 6SJ7
Phase Modulator	1 RCA 6SJ7
1st Tripler	1 RCA 6SJ7
2nd Tripler	1 RCA 6SJ7
Doubler	1 RCA 6V6
Intermediate Amplifier	2 RCA 807
Limiter	1 RCA 6SL7-GT
Audio Amplifier	1 RCA 6SG7

Power Amplifier	2 RCA 8005
Rectifier	2 RCA 5R4-GY
Rectifier	2 RCA 866A



250 Watt Station Transmitter Type CT-6C

152-174 Mc, Carfone Station Equipment

Features

- Excellent frequency stability.
- Attractive 84 inch cabinet rack.
- Interlock switch insures safety.
- Thermostatically controlled exhaust fan.
- Space provided for receivers.
- Remote control equipment available.
- Rack mounted—simplifies periodic inspections.

Uses

RCA's Type CT-6C 250 Watt FM Transmitter is designed to meet the demands of those stations authorized to operate in the 152-162 mc. frequency range. This high power transmitter is ideally suited to areas needing a full 250 watt output.

Description

The Type CT-6C Frequency-Modulated Transmitter consists of a 45-watt exciter unit, and its associated power supply plus a 250-watt power amplifier and its power supply. The 45-watt exciter unit is employed as a driver for the power amplifier unit. The combined equipment is capable of a power output of 250 watts at frequencies between the limits of 152 and 162 megacycles.

All units of the transmitter are installed in an attractive, rugged cabinet rack 84 inches in height, which allows adequate space for mounting receivers. Access to the units is afforded by front and rear doors, which are provided with locks to prevent unauthorized personnel from tampering with the equipment. An interlock switch is provided which removes high voltage from the equipment when the rear door is opened. All tuning is accomplished from the front of the transmitter, but there is no interlock here since no high voltage is exposed when this door is opened. A thermostatically controlled exhaust fan is mounted in the top of the cabinet to expell any excessive heat which may be created by the operation of the transmitter. A special panel of four meters is provided so the operation of the transmitter may be readily observed even though the cabinet door is closed.

The power amplifier incorporates a pair of 4-125A/4D21 tubes in a push-pull, class "C" circuit. Link coupling is employed at both input and output. The grid tank circuit consists of an open-ended line tuned by sliding a fixed capacitor along the line. The plate tank circuit has a shorted line tuned by a variable capacitor. Grid bias is obtained by a fixed voltage from the power supply and grid leak bias arrangement. The 4-125A/4D21 tubes are neutralized by series-resonating their screen grid lead inductance. Voltage is applied to the screens through the shunt r-f chokes in the circuit. The power supply incorporates a pair of RCA 866-A mercury vapor rectifier tubes connected in a single phase, full wave circuit.

RCA's remote control unit CC-1A is available for remote control operation of the type CT-6C FM transmitter. Through the use of this unit it is possible to transmit and receive from a remote operating point up to ten miles away.



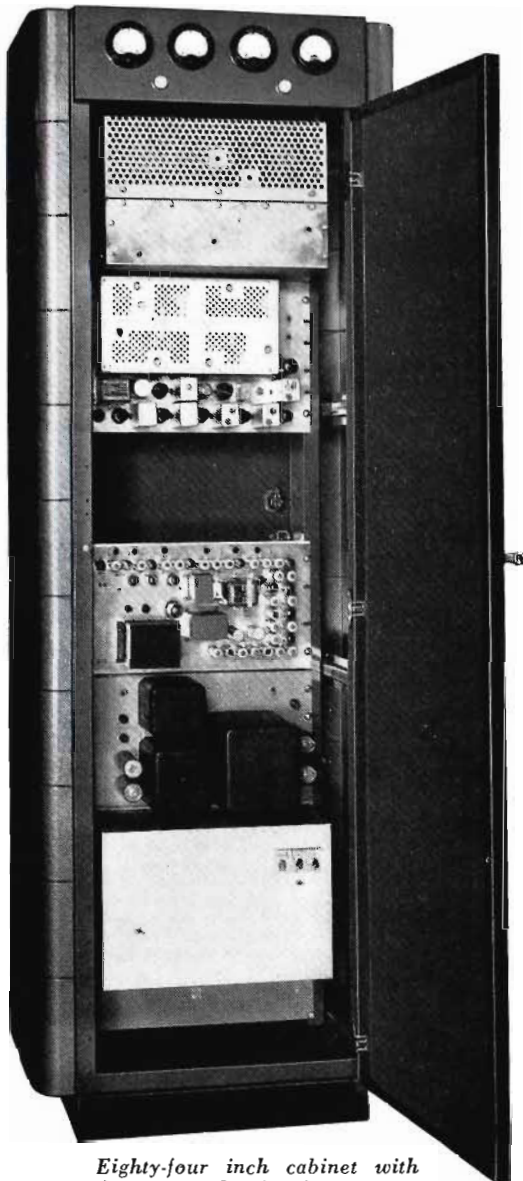
Specifications

Dimensions:

Power Amplifier	_____19" Rack Panel 12 7/32" wide
Exciter	_____19" Rack Panel 10 15/32" wide
Amplifier Power Supply	_____19" Rack Panel 12 7/32" wide
Exciter Power Supply	_____19" Rack Panel 10 15/32" wide
Standard Cabinet	_____Length, 84 1/4", Width 28", Depth 20 1/2"

Weight:

Power Amplifier	_____31 lbs.
Exciter (MI-31515)	_____29 lbs.
Amplifier Power Supply	_____126 lbs.
Exciter Power Supply (MI-31524)	_____40 lbs.
Cabinet (complete with above listed units)	_____507 lbs.



Eighty-four inch cabinet with door open showing from top to bottom: CT-6C Power Amplifier, Exciter, CR-9A Receiver, and Transmitter Power Supply.

Frequency Range	152-174 mc
Crystal Frequency Range	2111-2250 kc
Crystal Frequency Multiplication	72 times
Frequency Stability	$\pm 0.002\%$
Spurious Emission	At least 70 db down everywhere including carrier harmonics
Modulation (phase)	± 15 kc for 100% modulation
Distortion	Less than 5% at 500 cycles with 15 kc swing
Audio Characteristic	15 db rise from 500 to 3000 cycles
Modulation Threshold Limiter	20 db control
Input Volts	115 volts, 50-60 cycles
Temperature Range of Operation	30° C to 55° C
Duty	Continuous in maximum ambient temperature of 55° C
Power Consumption:	
R.F. Power Output	250 watts
Standby Power Input	200 watts
Total Power Input	1000 watts
Plate Power Supply	Full wave rectifier
Meters	
	PA Grid Current
	PA Plate Current
	PA Plate Voltage
	Line Voltage
Metering Jacks—Provided to measure	
	Power Amplifier Cathode Current
	Power Amplifier Grid Current
	Tripler Cathode Current
	Tripler Grid Current
	Doubler Cathode Current
Tube Complement:	
45 Watt Driver	
Audio Amplifier	1 RCA-6SG7
Limiter	1 RCA-6SL7
Oscillator	1 RCA-6SJ7
Phase Modulator	1 RCA-6SJ7
1st Tripler	1 RCA-6SJ7
1st Doubler	1 RCA-6SJ7
2nd Doubler	1 RCA-6V6
3rd Doubler	1 RCA-1614
2nd Tripler	1 RCA-829-B
Amplifier	1 RCA-829-B
250 Watt Power Amplifier	
Power Amplifier	2 RCA-4-125-A/4D21
Low Voltage Supply	
Rectifier	2 RCA-5R5-GY
High Voltage Supply	
Rectifier	2 RCA-866-A