DELUXE

THEATRE SOUND SYSTEMS

PG-140A TYPES PG-143A

PG-142A

SUBMITTED
FOR YOUR KIND CONSIDERATION

By_____ RCA PHOTOPHONE

RCA PHOTOPHONE DELUX

GUARANTEED PERFORMANCE
UNINTERRUPTED OPERATION
EASY ADAPTABILITY

Superlative guaranteed performance, uninterrupted trouble-free operation, and easy adaptability to future methods are outstanding qualities which commend RCA Photophone sound systems to all progressive theatre owners and projectionists.

Their remarkable performance and outstanding dependability result from knowledge gained through more than 40 years' experience in engineering and manufacturing apparatus for services where uninterrupted top-flight performance must be had if loss of time, money, or life is to be avoided. On land, on sea, and in the air, RCA apparatus engineered and manufactured by the same men who make RCA Photophone systems is proving its finer performance and superior reliability under the most trying conditions.

Continual forward-looking research in RCA Laboratories points the way to future trends. Knowledge of this work and what it holds for the future enables RCA Photophone engineers to provide in advance for adaptation of their apparatus.

Two years ago, RCA Photophone launched a particularly outstanding group of systems, the PG-140 series. Because they incorporated so many advanced ideas, theatre owners and projectionists were quick to recognize their superiority. And the record for dependable performance they have achieved has continually enhanced this high regard.

No art, however, stands still, particularly when persistent efforts are made to advance it. And apparatus to be truly modern and up to date must continue to improve as new engineering and manufacturing methods become available.

THEATRE SOUND SYSTEMS

With this foremost in their minds, RCA Photophone Engineers have continually studied all possible means for further improving these already outstanding systems. Especially careful consideration was given to the many worthwhile suggestions received through the large staff of RCA Photophone field engineers who are in daily contact with exhibitors and the men on whose shoulders falls the vital task of putting on the show—the projectionists. The results of this forward-looking and open-minded attitude are richly reflected in the latest PG-140 series systems described in this brochure. Of special importance to theatre owners is the fact that in addition to the usual warranty these systems are fully guaranteed with respect to their power output. This additional guarantee provides that each of these fine systems will deliver its full rated output, under the conditions specified by the Research Council of the Academy of Motion Picture Arts and Sciences.

This RCA guaranteed amplifier performance feature cuts straight through and sweeps aside all doubts and confusion created by extravagant unguaranteed claims. Coupled with the high efficiency of the RCA Photophone deluxe two-way loudspeaker system it enables any theatre owner to buy a sound system with complete assurance that it will deliver the full measure of smooth, undistorted sound output he has every right to expect. An RCA Photophone system selected in accordance with the seating capacity vs. amplifier power output data of the Academy is the best guarantee that the system chosen will be capable of reproducing modern movies as Hollywood intends they shall be—with lifelike realism.

Go over these fine systems carefully. Compare their features—many of which are exclusive—with those of other makes. Note their rugged construction, handsome appearance, remarkable accessibility of all parts and the many refinements which make them especially easy to install, simplest and easiest to operate, and extra efficient. Add to these advantages the value of guaranteed amplifier performance and you will see why one of these RCA Photophone Systems is a logical choice for your theatre.

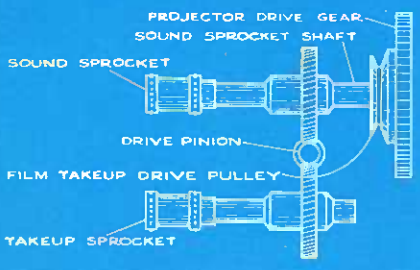
THE HEART OF THE WORLD'S FI

RCA DELUXE ROTARY STABILIZER SOUNDHEAD

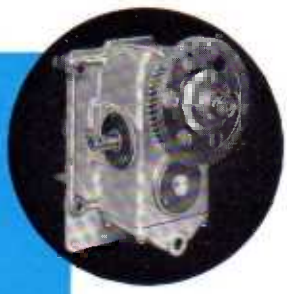
The sleek ultra-modern appearance of this deluxe RCA Rotary Stabilizer Soundhead is indicative of the many forward-looking features it incorporates. Nothing has been spared to make this soundhead tops in performance and ease of operation as well as appearance.

Projectionists call it the No. 1 soundhead because they know its extra exclusive features make it extra efficient, extra safe, easiest to install, easiest to operate, and easiest to keep clean and bright.

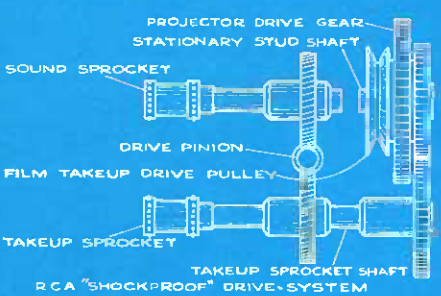
Unmatched reproduction results from teaming up the famous RCA Rotary Stabilizer with an exclusive new development, the RCA "Shock Proof" Drive. How this combination operates to produce unparalleled performance can be best understood by a look at the simple diagrams below.



CONVENTIONAL SOUNDHEAD GEAR SYSTEM



The diagram and picture at the left illustrate a conventional soundhead gear system. Here the sound sprocket shaft serves also as the main drive shaft to drive the projector mechanism and film takeup by means of the gear and pulley keyed to one end. It must supply power to jerky loads such as the intermittent movement and film takeup. These react to cause a somewhat irregular motion of the sound sprocket shaft. The result is slightly uneven film motion.



RCA "SHOCKPROOF" DRIVE SYSTEM

Here is illustrated the exclusive RCA "Shock Proof" drive system in which the takeup sprocket shaft serves as the main drive shaft. The jerky loads of the intermittent movement and film takeup are isolated from the sound sprocket shaft by the drive pinion which is direct connected to the powerful motor with its heavy flywheel. The smoother motion of the sound sprocket shaft means smoother film motion, hence less "flutter" distortion.

EST THEATRE SOUND SYSTEMS

ROTARY STABILIZER WITH HERMETICALLY SEALED CASE

This unmatched scanning device passes film smoothly and steadily past the light beam. No critical adjustments to get out of order. Easy to thread. No stationary surfaces to scratch film. Hermetically sealed construction keeps dirt out and oil in.

BUILT-IN OIL COLLECTION AND DRAINAGE SYSTEM

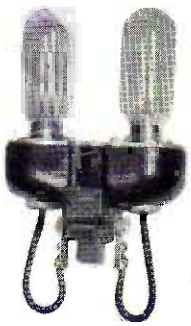
All soundhead surfaces and parts are designed so that oil seepage drains into detachable reservoir. Combination oil collection and projector mounting plate collects oil seepage from projector mechanism for transmission direct to reservoir. Result is extra cleanliness, less oil on film, and better reproduction.

HIGH-SPEED PROJECTOR MOUNTING SYSTEM WITH MICROMETRIC GEAR ADJUSTMENT

Projector removal and remounting easily and quickly accomplished through use of combination oil collection and projector mounting plate. Lateral position of picture head accurately maintained by guide pins operating in longitudinal slots. Accurate gear mesh rapidly obtained through micrometer type adjustment.

SUPER-SHIELDED PHOTOTUBE SYSTEM

Stray pickup prevented by built-in cast iron shielding of transformer compartment and phototube socket connection duct. Special light shield prevents generation of 96-cycle hum which results when stray light passes through sprocket holes to phototube.



TWIN-SOCKET PREFOCUSED EXCITER LAMP HOLDER

This outstanding emergency feature enables projectionist to speedily place spare lamp into service by simply reversing holder. Prefocused lamps eliminate all worry about lamp adjustment.

CUSHION-MOUNTED STABILIZER AND OPTICAL ASSEMBLY—Prevents microphonic vibration noises.

SEALED OIL-PROOF OPTICAL SYSTEM WITH NEW POSITIVE FOCUS ADJUSTMENT—Keeps oil out. System adjustable with split-hair precision.

INTERCHANGEABLE DRIVE MOTOR WITH HEAVY DYNAMICALLY BALANCED FLYWHEEL—Provides extra smooth starting. Saves wear and tear on projector mechanism.

DIRECT GEAR DRIVE SYSTEM WITH INTEGRAL ENCLOSED GEAR BOX—No drive belts or chains to break or adjust. Integral gear box makes it easier to inspect gears. Convenient sight gauge shows oil level in case.

HIGH-QUALITY PRECISION BALL BEARINGS THROUGHOUT—Makes for smoothest performance and minimum repair costs.

HOLD-BACK SPROCKET—Enables film to flow easily and smoothly over sound sprocket, thus making for smoother reproduction.

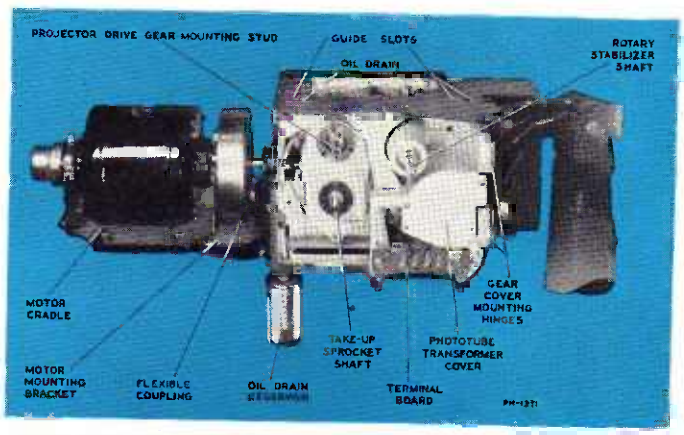
SCIENTIFICALLY DESIGNED FILM PATH—Makes for maximum efficiency of Rotary Stabilizer System.

EXTRA-ROOMY WHITE PAINTED INTERIOR—Facilitates threading and cleanliness.

POSITIVE ACTION PAD ROLLERS AND LARGE FILM STRIPPERS—Prevent film damage.

ADAPTABILITY—Roomy construction and forward-looking design features makes this soundhead especially adaptable for reproduction of push-pull and multiple track recordings.

COMPLETELY ENCLOSED—Hinged cover on drive side provides easy access to drive parts and electrical terminals. Streamlined motor hood provides outstanding appearance along with the ultimate in safety.



Drive side of soundhead with motor hood, gear cover, gears, rotary stabilizer wheel and projector mounting plate removed.

AMPLIFIER AND POWER SUPPLY

Its smooth modern lines, pleasing proportions, and rich two-tone finish make this rack a handsome addition for any booth.

RCA's vast experience in the design and building of dependable high-quality amplifiers and power supplies for broadcast stations, recording studios and theatres has made possible this fine system. Projectionists and theatre owners marvel at its performance, reliability, simplicity, ease of servicing and handsome appearance.

To assure uninterrupted top-quality performance, carefully selected and conservatively rated parts have been used throughout. The rack and cover design promotes upward draft of cooling air, thus further helping to keep operating temperatures at low, safe levels. And in addition, standard equipment includes a complete emergency amplifier which can instantly be switched into operation in place of the regular amplifiers by means of the built-in channel selector switch. Owners of RCA PG-140 series systems know their shows will always go on.

The design and arrangement of the amplifier units make this system unusually adaptable for expansion should future trends in film recording bring about such a need. Such forward-looking engineering makes for an exceptionally long-lived design.

At the left is a picture of the PG-140A Rack with the slip-on cover in place. In the picture at the right, the cover has been removed to show the unusual accessibility of all components. Go over its features one by one and you will see why experts say this system is easily tops in its field.

GUARANTEED PERFORMANCE—Large, heavily shielded audio and power transformers and advanced circuit designs provide high output with low distortion and freedom from noise and hum. Three-stage power amplifier uses 4 RCA 1622 beam-power Radiotrons in dual push-pull output stage.

Guaranteed to deliver not less than 25-watts undistorted output over frequency range of 50 to 5000 cycles under Academy method for rating. Liberal reserve provides substantially higher peak power with low distortion for "spectacle" sequences. Exceptionally low hum level of –55 db provides margin of 20 db over Academy recommendations.

RELIABILITY—Careful construction, oversized components, built-in standby amplifier channel, and other important safeguards give its owners exceptional security against outages.

RACK FOR PG·140 SERIES SYSTEMS

EASIEST TO INSTALL—Single rack construction with transformer coupling makes it easiest of all to install. Heavy main terminal board with rugged screw-type terminals makes connecting easy.

EASIEST TO OPERATE AND SERVICE—All switches and controls quickly accessible through hinged door. A slight lift of the sturdy cover and off it comes. No screws to remove. Hinged construction and front-of-panel wiring makes all components quickly accessible for inspection.

EASILY ADJUSTABLE COMPENSATOR PANEL—Insertion in transformer coupled link circuit follows best broadcast and recording studio practice. Enables rapid and precise adjustment of system to Academy standards and unusual film conditions. Results not affected by amplifier tube changes.

BUILT-IN TESTING METER WITH SELECTOR SWITCH—Makes it easy to check and match tubes. Switch selects any power amplifier tube for individual test. Also tests voltage amplifier tubes.

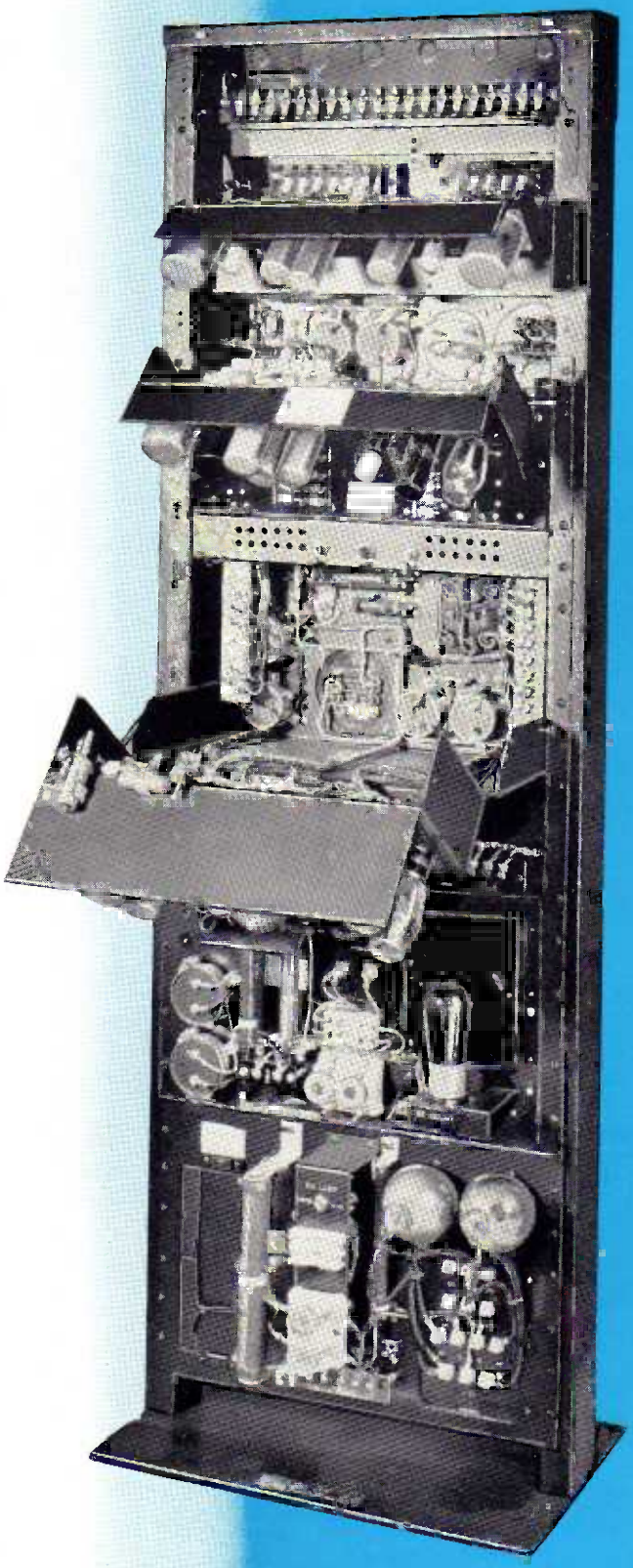
HIGH-FIDELITY STANDBY AND MONITOR AMPLIFIER—A combination voltage and power amplifier complete with phototube voltage supply. A turn of the channel selector switch makes it substitute for the regular voltage and power amplifiers to carry on the show.

STABILITY—Liberal application of inverse feedback and automatic regulation of phototube voltage counteract effects of line-voltage fluctuations to stabilize amplification.

LOUDSPEAKER NETWORK AND CONTROL PANEL—Air-core reactors prevent crossover frequency drift with changes in output level. "ON-OFF" switch permits testing amplifiers without disturbing audience. Emergency switch facilitates horn testing and enables operation on low-frequency loudspeakers alone if necessary. 250-ohm coupling circuit to stage follows best engineering practice . . . results in 94% less transmission loss than conventional low-impedance coupling.

OVERSIZE D. C. EXCITER LAMP SUPPLY—Lights both lamps at all times with hum-free D. C. current. No worry whether lamp will light on changeover. Eliminates preheating. Oversized components make for uniform output . . . minimize effects of line-voltage variation. Transformer provides low-voltage A. C. for exciter lamps in emergency.

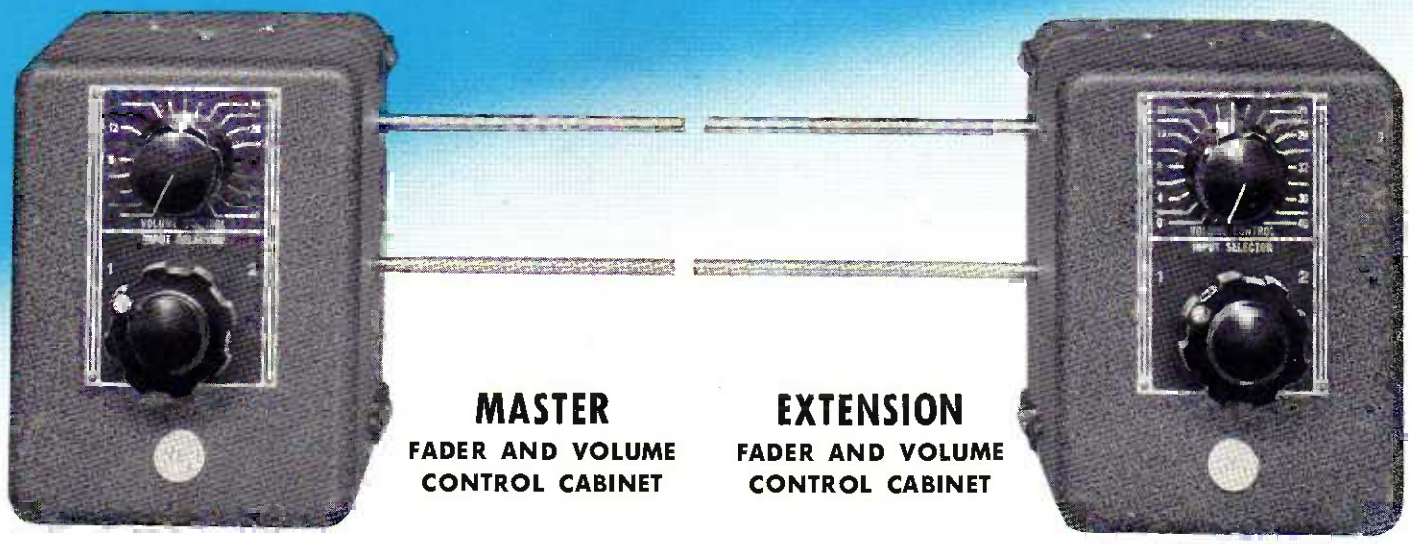
CHOICE OF LOUDSPEAKER FIELD SUPPLY UNIT—Heavy-duty unit of PG-140A systems employs full-wave mercury vapor rectifier capable of supplying field current to as many as eight mechanisms. Unit for PG-140B system employs three RCA Radiotron rectifiers and accommodates three mechanisms.



Rack for PG-140A with cover removed to illustrate ease of accessibility to all units, components, and terminals.

FADER AND VOLUME

FOR PG·140



MASTER
FADER AND VOLUME CONTROL CABINET

EXTENSION
FADER AND VOLUME CONTROL CABINET

In every way—reliability, convenience, accessibility and appearance—this fader and volume control system matches the deluxe standards of the other apparatus units of the RCA PG-140 series Photophone Systems. Their superior operating features delight all projectionists who operate these fine systems.

Standard equipment includes a Master Control Cabinet and one Extension Control Cabinet. An additional extension control may be added if a third projector and soundhead are installed.

FADING—An exclusive RCA Photophone feature is the use of sealed mercury switches making for positive trouble-free fading . . . and freedom from wear and corrosion. Fading always accomplished from any control station by means of mechanically interlocked three-position controls using large sure-grip knobs. Because these rotate either direction, the system may be faded from any one position directly to either of the other two without having to pass through the remaining position.

VOLUME CONTROL— A heavy-duty "T"-type attenuator connected into the link circuit between the voltage and power amplifiers is instantly controllable from any fader and volume control cabinet. Control is graduated in 2 db steps in accordance with Academy recommendations. Noise-free operation results from approved broadcast and recording studio practice of locating control in high-level link circuit (a three-stage feedback-type amplifier precedes the control point). Silvered contacts guard against corrosive action of booth and atmospheric gases. Large dial plates with big numerals and non-glare finish make settings easily read from any angle. Large hand-contoured knobs make for easy operation.

ONTROL CABINETS

ERIES SYSTEMS

EASY TO INSTALL

Their compact construction requires a minimum of front wall space for installation. Each unit only 10⅛ inches high, 7⅝ inches wide, 7⅜ inches deep.

ACCESSIBILITY

The ultimate in accessibility of all parts and terminals is provided by the ingenious hinged construction. To open, merely depress latch at top and front half tips forward. No knobs to take off, no screws to remove. Makes components and terminals instantly accessible for inspection without interrupting performance. Heavy terminal boards with sturdy screw-type terminals make connections easy.

PHOTOTUBE BALANCING CONTROLS

Each cabinet contains balancing control for phototube of associated soundhead. Provisions for control of push-pull phototube are incorporated.

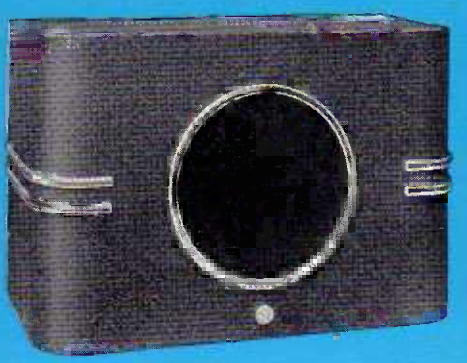
MICROPHONE AND RECORD PLAYER INPUT

The third position of the fader controls provides convenient means for switching microphone or record player into amplifier system.

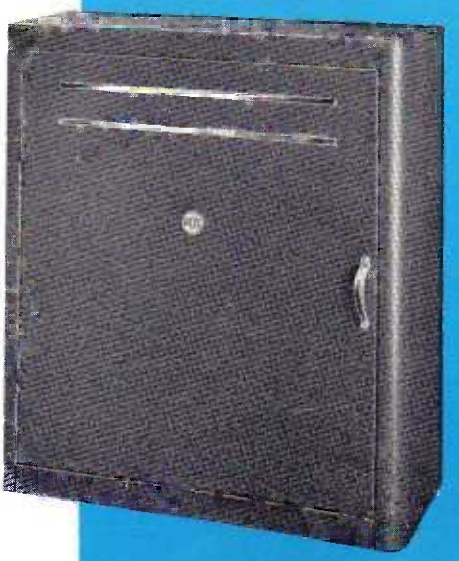
VOLUME PRESET

Because system output can always be regulated from all control stations regardless of which projector is in operation, volume preset is considered to lack practical advantage excepting for limited number of installations where special operating requirements prevail. For these, a volume preset feature is available as an accessory. When installed, the volume level of the incoming machine may be preset, yet the system level always remains controllable from all stations. Preset controls install in lower section of control cabinet and include matching dial plate.

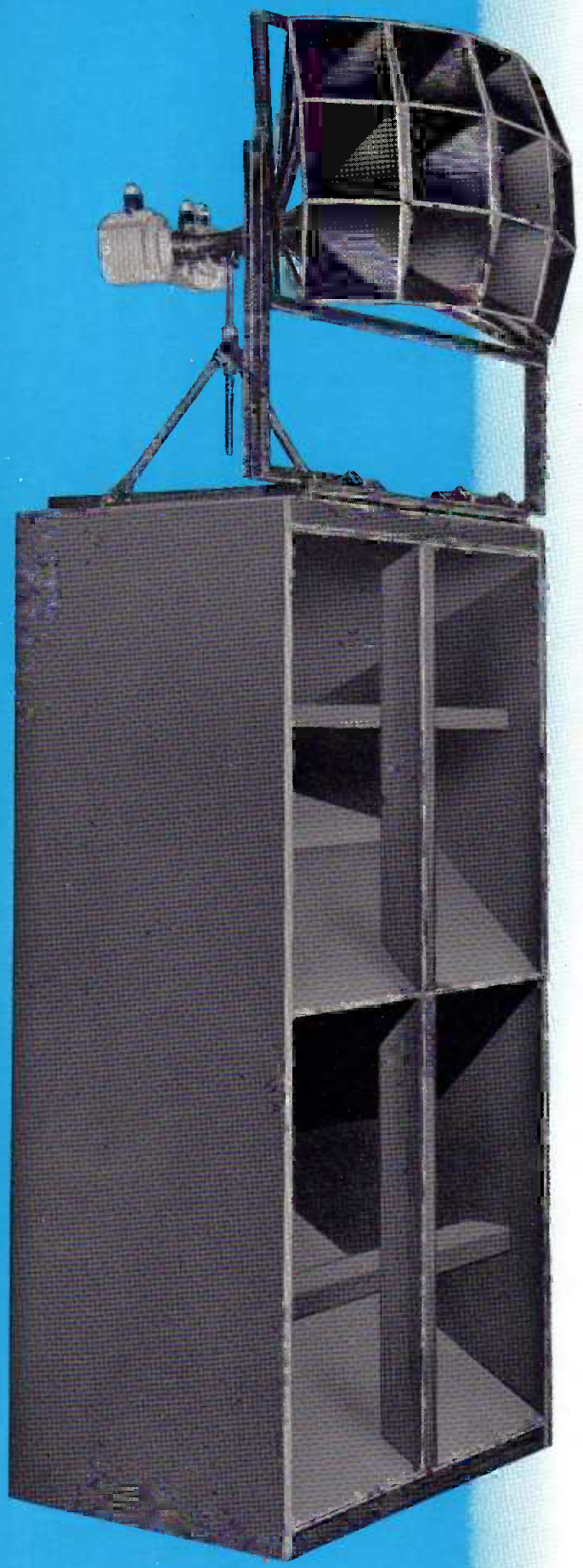
Master fader and volume control cabinet with hinged cover partially open. Note sturdy construction and easy accessibility of all parts and terminals.



The monitor loudspeaker employs an efficient dynamic cone mechanism housed in a large attractive metal cabinet. Ample proportions and acoustic design enable well-balanced reproduction. Operates from combination standby and monitor amplifier.



This streamlined cabinet supplied with each PG-140 series system provides convenient storage place for spare tubes and parts furnished with equipment.



DELUX

TWO • WAY LOUD

FOR PG

All PG-140 series systems are supplied with the same modern RCA Photophone two-way loudspeaker systems which have established an enviable record for themselves in more than 2,000 theatres all over the world. They provide clear, lifelike reproduction of both speech and music for all parts of the theatre auditorium.

They employ scientifically designed multicell high-frequency horn loudspeakers and massive directional-baffle low-frequency loudspeakers of the folded type which give maximum efficiency with a minimum of rear screen depth. A crossover frequency of 400 cycles is used in all cases. Deluxe heavy-duty mechanisms are used throughout regardless of size of system. The number of mechanisms may be varied to match the power output of the amplifier system selected by the theatre. In all cases the mechanisms operate well below their maximum power-handling ability.

Lifelike reproduction and the ability to continually handle the tremendous powers required for proper reproduction of modern films with "spectacle" sequences have won for these loudspeakers the respect and praise of theatres everywhere.

At the left is shown the big two-way deluxe loudspeaker system furnished as standard equipment with all PG-140A systems. That furnished with PG-140B systems is identical excepting it has one high-frequency loudspeaker mechanism and a slightly different high-frequency horn mounting bracket.

SPEAKER SYSTEMS • 140 EQUIPMENTS

HIGH-FREQUENCY LOUDSPEAKER

The horn consists of a cluster of small, scientifically correct straight-axis horns coupled to a common throat. Choice of 12-, 15-, or 18-cell construction minimizes acoustic troubles by enabling selection of horn to fit auditorium shape. Constructed of sturdy non-resonant fibrous material. Light weight makes for easy handling and minimizes problem of flying.

The high efficiency, fine performance and ruggedness of the high-frequency loudspeaker mechanism match the other components of RCA PG-140 series Photophone systems. Its extremely light but very tough plastic diaphragm enables smooth response and tremendous power handling without rattles or failures. Employs highly efficient DC energized field construction. Conservatively rated at 30 watts.

HIGH-FREQUENCY HORN MOUNTING BRACKET

Easily adjustable bracket makes it easy to adjust horn tilt for best coverage. Maintains correct relationship between mouths of high and low frequency loudspeakers for all angles of tilt, thus preventing response irregularities when tilt is changed.

LOW-FREQUENCY LOUDSPEAKER

A massive directional baffle of the folded type provides smooth well-rounded bass reproduction with a minimum of rear screen depth. Scientifically correct slow rate of taper and enormous mouth opening enable it to reproduce even the very lowest pitched tones with remarkable efficiency. Made of heavy plywood and well braced to prevent buzzes and rattles. Employs two heavy-duty loudspeaker mechanisms.

Tremendous power-handling ability, high efficiency and smooth response make the RCA Photophone Deluxe low-frequency mechanism outstanding in its field. Employs highly efficient DC energized field construction. Conservatively rated at 30 watts.

COUPLING TRANSFORMERS

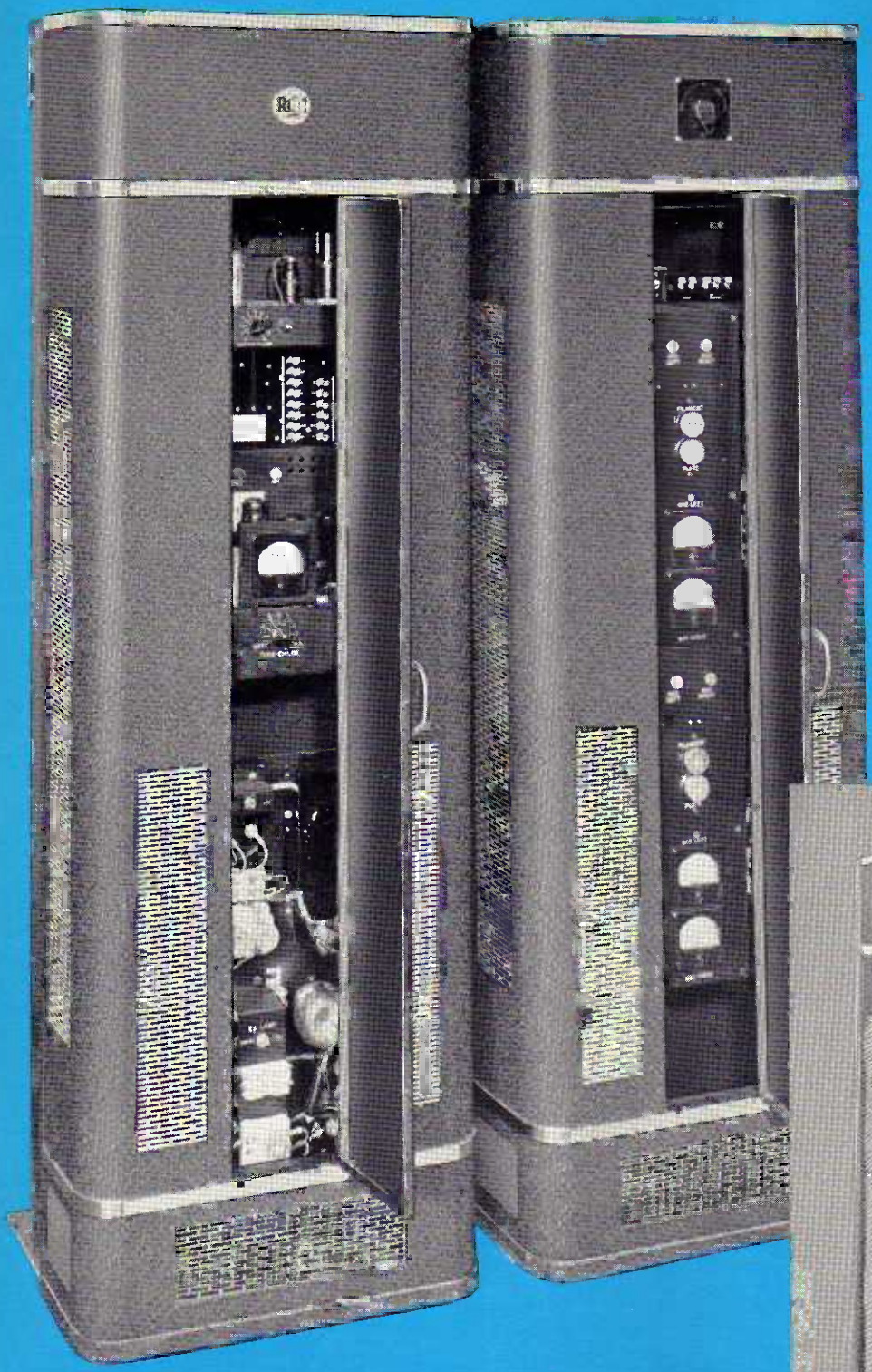
Efficient loudspeaker coupling transformers enable precise matching to low-loss 250-ohm transmission line without use of power-wasting resistors.

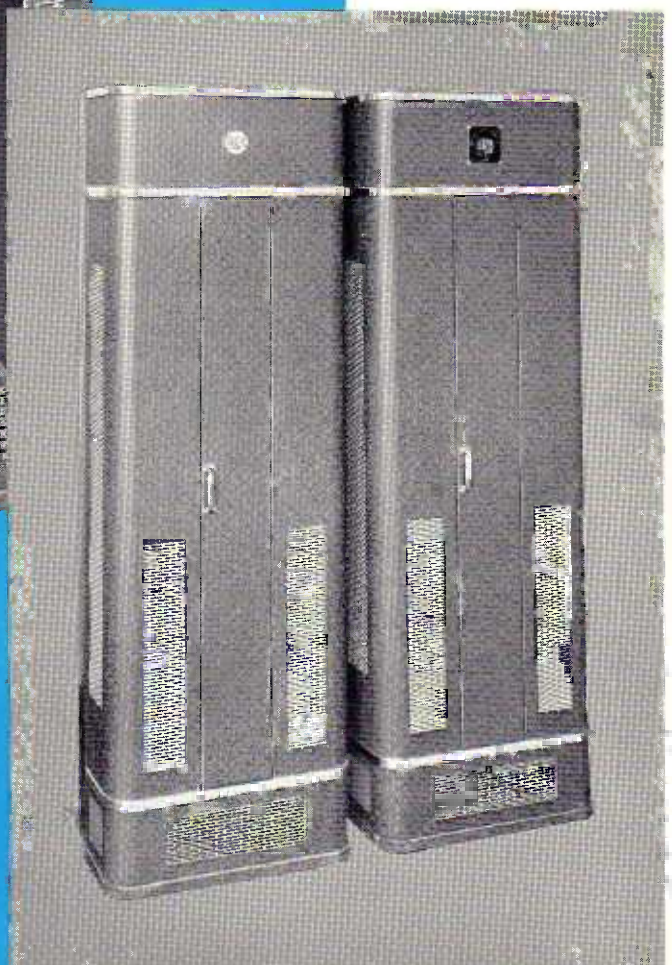
LOUDSPEAKER CONTROL SWITCHES

An "ON-OFF" switch on horn control and crossover panel of amplifier rack in projection booth permits silencing loudspeakers for testing amplifiers without disturbing theatre patrons.

A "REGULAR-EMERGENCY" switch also on crossover panel facilitates loudspeaker testing and also enables reproduction of both high and low frequency ranges by the low-frequency loudspeaker alone.

AMPLIFIER AND POW





These photographs illustrate the striking appearance of the rack assemblies and the easy accessibility to all meters and controls. The No. 2 rack at the right is the high-power rack of the PG-143A system.

ER SUPPLY RACKS FOR PG • 142A AND PG • 143A SYSTEMS

Besides being exceptionally powerful, these big systems incorporate many other features vitally important to larger theatres.

Both systems employ as a nucleus the deluxe soundheads, faders, amplifier and power supply rack, and accessories of the PG-140A system whose features have been described on previous pages. Their tremendous power outputs are secured by adding to the basic PG-140A system a second high-power rack having one (for the PG-142A) or two (for the PG-143A) deluxe 60-watt single stage power amplifiers. These are highest quality Class "A" Amplifiers employing two transmitter-type RCA-845 triode power amplifiers in push-pull and supplied with plate power by a built-in rectifier system using two RCA-866A shielded-cathode mercury vapor rectifier tubes.

Engineers and projectionists prefer these high-power amplifiers for securing the extraordinary power outputs required by large theatres. They minimize the number of amplifier units and make for simpler, more efficient operation.

GUARANTEED PERFORMANCE

Each output amplifier carries the guarantee that when operated in conjunction with the regular voltage and driver amplifiers of the PG-140 series systems it will deliver a full 60 watts undistorted output under the Academy of Motion Picture Arts and Sciences' method for rating.

COMPLETE EMERGENCY FEATURES

Complete emergency features assure continuity of performance and make it possible to isolate amplifier units for test while the show continues.

For example, should the projectionist wish to replace a tube in the 60-watt amplifier of the type PG-142A system, he can transfer the stage loudspeaker load to the 25-watt driving amplifier by the turn of a single switch on the high-power rack. He can then shut down the 60-watt amplifier without interrupting the performance.

Or, if he should wish to replace a tube in either the voltage or the driver amplifier, he turns the channel selector switch on the No. 1 rack and the combination monitor and standby amplifier picks up the job of amplifying the phototube output and driving the 60-watt amplifier. This flexible arrangement with simple foolproof switching assures owners of uninterrupted performances.

ACCESSIBILITY

Hinged doors in the rack covers provide quick access to all controls and meters. No screws to remove when taking off covers for servicing. A slight lift of the No. 1 rack cover and off it comes. Likewise the No. 2 rack cover comes off the same easy way after the knob of the special power switch has been removed by pushing it slightly towards the back and giving it a few turns.

Advanced construction employing hinged units and front-of-panel wiring makes all components easily accessible for inspection.

Perforated screens top and bottom of each 60-watt amplifier unit prevent accidental contact with tubes or power terminals when hinged door of rack cover is opened. A safety switch automatically shuts off plate voltage when cover is removed.

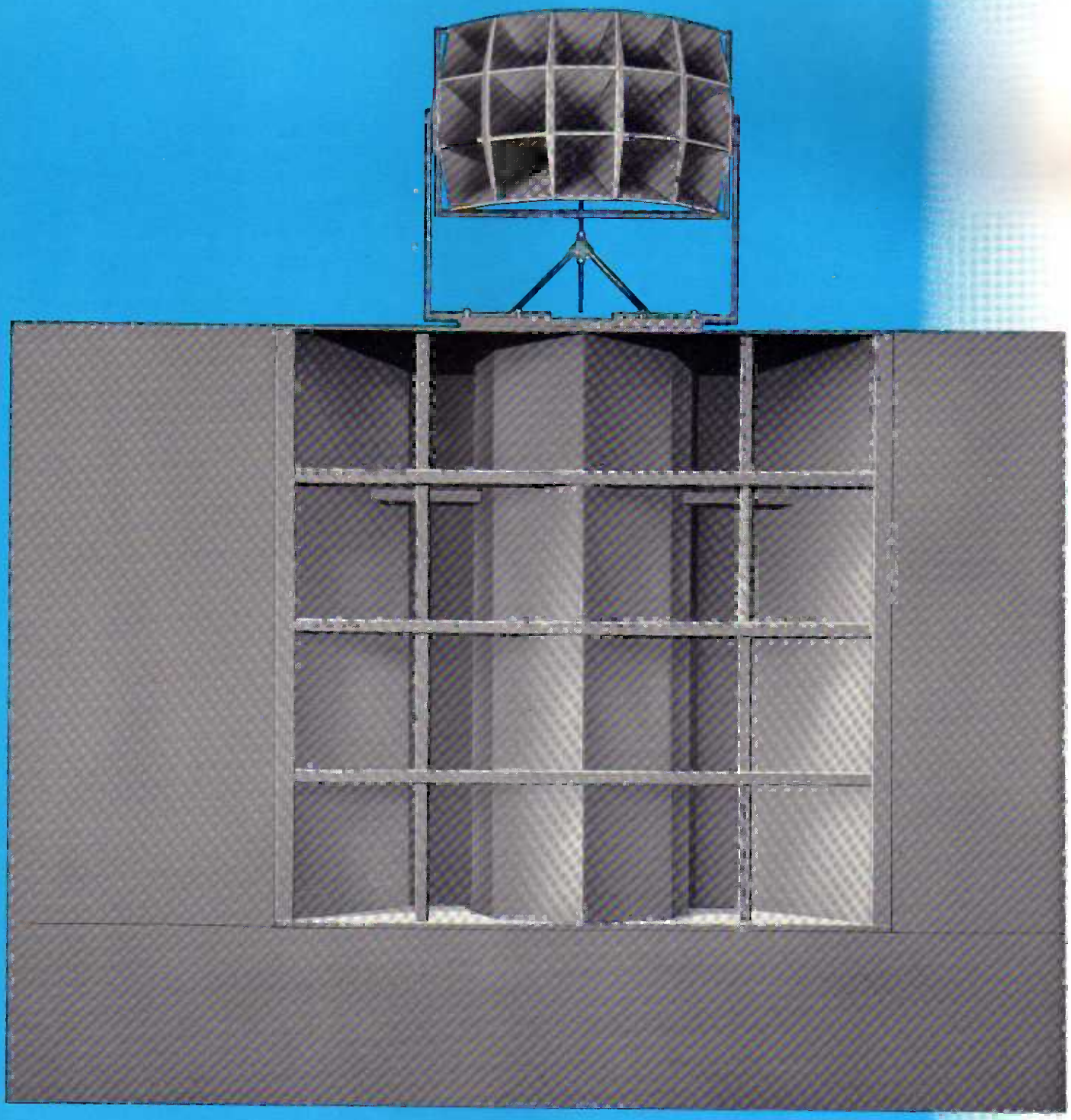
LIBERAL DRIVING POWER

The big 60-watt amplifiers of PG-142A and PG-143A systems are driven by the regular 25-watt power output amplifier of the basic PG-140A system rack. This provides a liberal reserve of driving power. It permits driving the 60-watt amplifiers to the topmost limit of their output without danger that preceding stages will overload and thus limit the power made available to the stage loudspeakers. Peak power outputs as high as 120 watts may be obtained from each rated 60-watt amplifier under these conditions.

BUILT-IN DUAL TUBE TESTING METERS

Each 60-watt amplifier has two built-in meters which continually indicate the plate currents of the two amplifier tubes. These meters are completely independent of the built-in tube testing meter and switch of the No. 1 rack.

DELUXE TWO-WAY LOUD



The deluxe RCA Photophone Loudspeaker Mechanisms, Horns and Baffles described on previous pages are utilized to make up the big loudspeakers of the types PG-142A and PG-143A systems.

The high-quality construction, scientific design, and liberal power-handling capacities of these loudspeaker systems make for unexcelled life-like reproduction of both dialogue and music.

SPEAKER SYSTEMS FOR PG•142A AND PG•143A

LOW-FREQUENCY LOUDSPEAKER

Two large directional baffles equipped with four efficient heavy-duty (30 watt) mechanisms and a three-sided extension baffle make up the massive low-frequency loudspeaker assembly supplied with these systems. Thick, laminated panels, sturdy bracing, and the use of an asymmetrically proportioned baffle extension aid this low-frequency loudspeaker assembly to reproduce the smooth, solid bass tones that delight theatre patrons.

HIGH-FREQUENCY LOUDSPEAKER

The genuine cellular horn supplied with these systems is fully described on a previous page. Choice of 12-, 15-, or 18-cell construction enables selection to suit house shape . . . minimizes acoustic troubles. Cells are of the scientifically correct straight-axis type. Non-resonant fibrous construction makes for smoothest response and lightest weight.

For PG-142A systems, a two-unit throat and two heavy-duty (30 watt) high-frequency mechanisms are furnished.

For PG-143A systems, a four-unit throat and four heavy-duty high-frequency mechanisms are supplied as standard equipment.

COUPLING TRANSFORMERS

Highly efficient coupling transformers enable precise matching of the loudspeakers to the low-loss 250-ohm transmission line without use of power-wasting resistors.

LOUDSPEAKER CONTROL SWITCHES

An "ON-OFF" switch on crossover and horn control panel on amplifier rack permits silencing loudspeakers for testing amplifiers without disturbing patrons.

A "REGULAR-EMERGENCY" switch on crossover panel facilitates loudspeaker testing and also enables reproduction of both high and low frequency ranges by the low-frequency loudspeaker alone in an emergency.

RCA PHOTOPHONE SYSTEMS ARE BACKED BY:

The great RCA Engineering Laboratories

RCA's tremendous specialized sound equipment manufacturing facilities

The Industry's leading field service organization

Guaranteed Amplifier Output Performance
and
Full approval of the National Board of Fire Underwriters

All RCA Photophone Systems carry the label which assures you and your patrons that your theatre will be equipped with sound apparatus constructed in accordance with the highest standards for protection against fire hazards.

HOW TO DETERMINE THE AMOUNT OF POWER YOUR THEATRE REQUIRES

For your guidance in selecting a system having sufficient power to comply with the latest recommendations of the Research Council of the Academy of Motion Picture Arts and Sciences, we reprint below the revised table of seating capacities versus power outputs as given in the Academy's Bulletin dated June 19, 1940. These values should not be confused with an earlier table which this revised table has supplanted.

NUMBER OF SEATS	MINIMUM POWER REQUIREMENTS	NUMBER OF SEATS	MINIMUM POWER REQUIREMENTS
Up to 400	10 watts	From 3001-3250	70 watts
From 400-600	13 watts	3251-3500	76 watts
601-750	15 watts	3501-3750	82 watts
751-1000	20 watts	3751-4000	88 watts
1001-1250	26 watts	4001-4250	93 watts
1251-1500	32 watts	4251-4500	98 watts
1501-1750	37 watts	4501-4750	104 watts
1751-2000	43 watts	4751-5000	110 watts
2001-2250	48 watts	5001-5250	115 watts
2251-2500	53 watts	5251-5500	121 watts
2501-2750	59 watts	5501-5750	126 watts
2751-3000	65 watts	5751-6000	132 watts

The figures under the heading "Minimum Power Requirements" are based only on amplifier systems which comply with the following Academy requirement "at its rated output the amplifier shall not generate more than 2% total harmonic in the frequency range from 50 to 5000 cycles per second."

Only by buying a sound system with guaranteed amplifier output performance and equipped with loudspeakers as efficient as those used in arriving at the Academy's power recommendations are you assured of equipment which meets fully the Academy's recommendations.

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