

The Post-war
GAUMONT-KALEE "21"

Introducing the GAUMONT-KALEE "21"

THE WORLD'S MOST OUTSTANDING PROJECTION AND SOUND EQUIPMENT

Modern in every sense of the word. Revolutionary in thought and principle : boldly conceived in design, style and colouring, this complete sound and picture projector is a new conception in motion picture equipment that is destined to set the standard for a long time to come.

Totally enclosed, it presents a graceful, streamlined appearance, in striking contrast to any other equipment available : providing complete silence in operation with utmost fire protection, and ensuring greater cleanliness throughout.

Finished in an attractive cellulosed colour combination of beige, maroon and silver, with exposed parts chromium finished.

The GAUMONT-KALEE "21" is the highest example of what can be achieved by close collaboration between experts in the two fields of projection—sound and picture. Gaumont and Kalee scientists and designers have once more joined forces to produce an equipment which functions as a complete entity.

The considerable improvements incorporated in the new mechanical and optical design result in the highest attainable performance and faithfulness in picture and sound presentation, as well as that of reliability, efficiency and simplicity in operation.

To see the new GAUMONT-KALEE "21" in action is to acclaim it a veritable masterpiece of British motion-picture development, precision engineering and scientific skill.



GAUMONT-KALEE "21"

PROJECTOR

An amazing advance in design and performance over all previous world-famous Kalee projectors.

Designed to use the new wide-aperture Kalee 'bloomed' lens and large diameter arc lamp mirror.

Twin rear shutters to give the utmost light efficiency.

Totally enclosed for cleanliness and silence in operation. Lamps provided for internal illumination.

All mechanical parts running in an oil-bath: mechanical pump, distributor and filter ensure continuous distribution of clean oil. Quickly detachable intermittent movement.

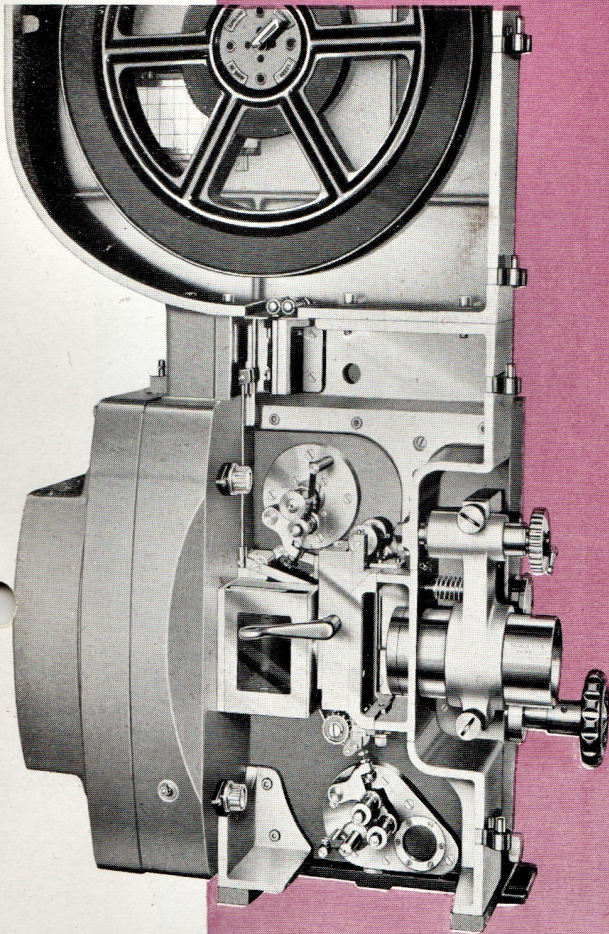
Pressure rollers self-sustained in open position. Detachable parallel gate.

Electrically operated change-over incorporated with fire shutter and arranged for remote control.

Provision for specially designed 'Pyrene' fire equipment integral with projector.

2,000 ft. spool box, $\frac{3}{8}$ " or $\frac{5}{16}$ " spindles incorporated as part of the design.

Every part readily accessible for servicing. All wiring for projector and arc lamp is totally enclosed.



ARC LAMP

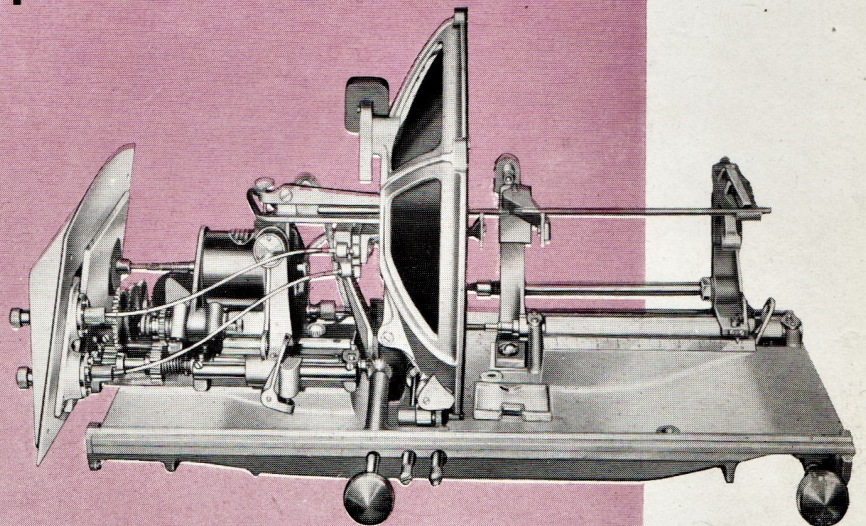
Incorporates a 16" diameter mirror, giving a greater light output than ever before attained, and requiring less critical focusing. Accommodates any D.C. carbon current combination up to 80 amp.

Streamlined lamphouse with enclosed dowser: flush doors expose full length of lamphouse when opened.

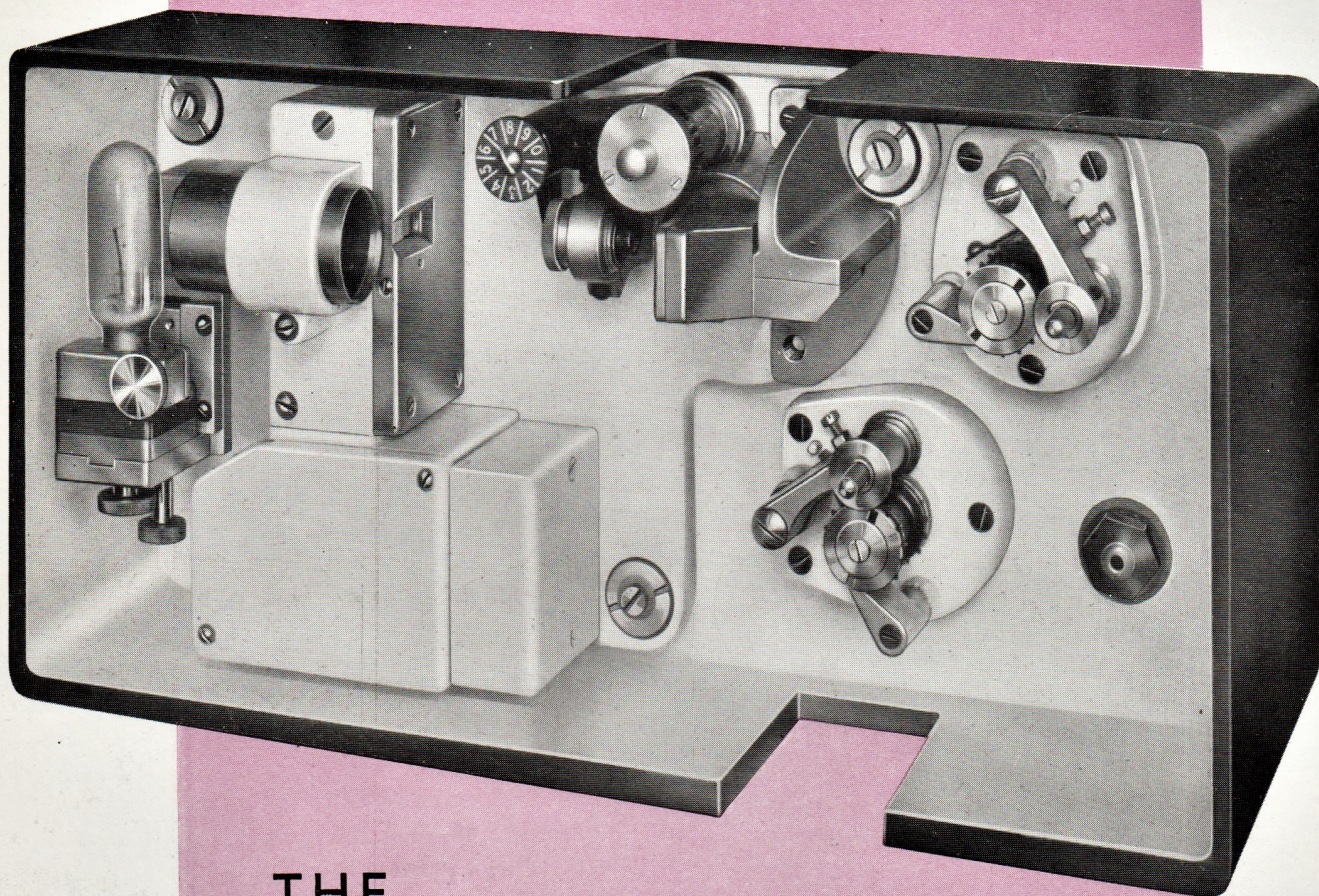
Working parts readily withdrawable as complete units for cleaning and adjustment.

Controls, conveniently grouped at back of lamphouse, include: twin knobs for adjustment of carbon alignment; switch for feed motor; potentiometer control of rate of feed with Tachometer showing actual feed; micrometer adjustment for positive-negative feed ratio; 'push-button' striker for arc.

Interior illumination provided and controlled by door-operated switch.



GAUMONT-KALEE "21"



THE SOUNDHEAD

The Soundhead is of an entirely new design, featuring a new optical assembly, all the lenses of which are 'bloomed' for increased light transmission and improved image definition.

The unique enlarged image, permits visual observation and focus checking.

Drum scanning is employed, with fluid flywheel stabiliser; the scanning unit is shock-absorber mounted.

Micrometer adjustment of film guide roller is provided.

Mechanical assemblies are standardised in interchangeable units, which avoids the necessity for part-fitting and simplifies maintenance.

Improved exciter lamp mounting, providing easy replacement and adjustment of lamps.

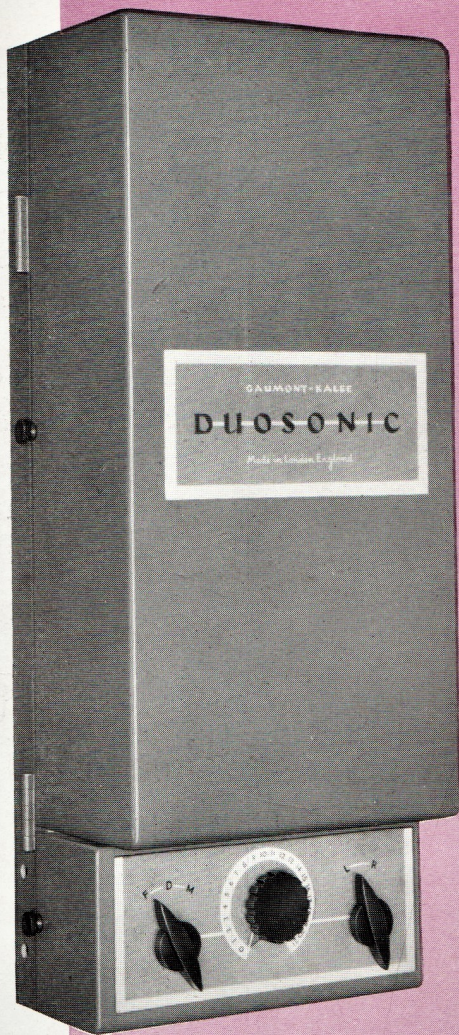
Mounting plate is practically universal for all projector mechanisms and extension bolt-holes are provided for increased adaptability.

The Soundhead is totally enclosed, ensuring utmost silence in operation.

Finished internally in hard porcelain white enamel, facilitating inspection and providing greater cleanliness.

GAUMONT-KALEE "21"

VOLTAGE AMPLIFIER



Consists of a steel frame for wall mounting, to which is hinged the amplifier chassis in its case. External connections are led in through the side of the frame to terminal blocks from which connection is made to the 3-stage amplifier.

Incorporated in the unit is the change-over panel carrying the main fader and switching for change-over from one sound-head to the other. The change-over is effected by switching the photo-cell of either sound-head to the voltage amplifier. Control is also provided for switching from film to disc, or

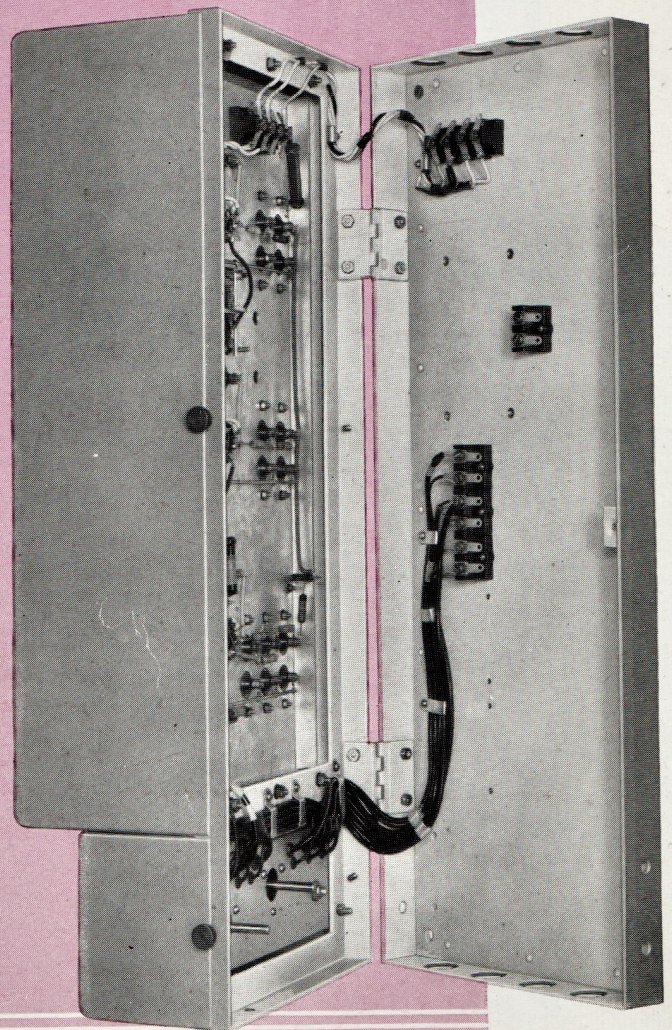
microphone. Independent bass and treble controls are provided, as well as voltage controls.

Accessibility. For inspection and maintenance the amplifier chassis is swung away from the frame on its hinges, giving easy accessibility to the under-chassis portion of the assembly.

The above-chassis components are reached by removing the covers.

The voltage amplifier and the control unit are equally accessible.

The pleasing standard colour scheme of the Gaumont-Kalee "21" equipment is carried throughout this unit.



MAIN AMPLIFIER GROUP

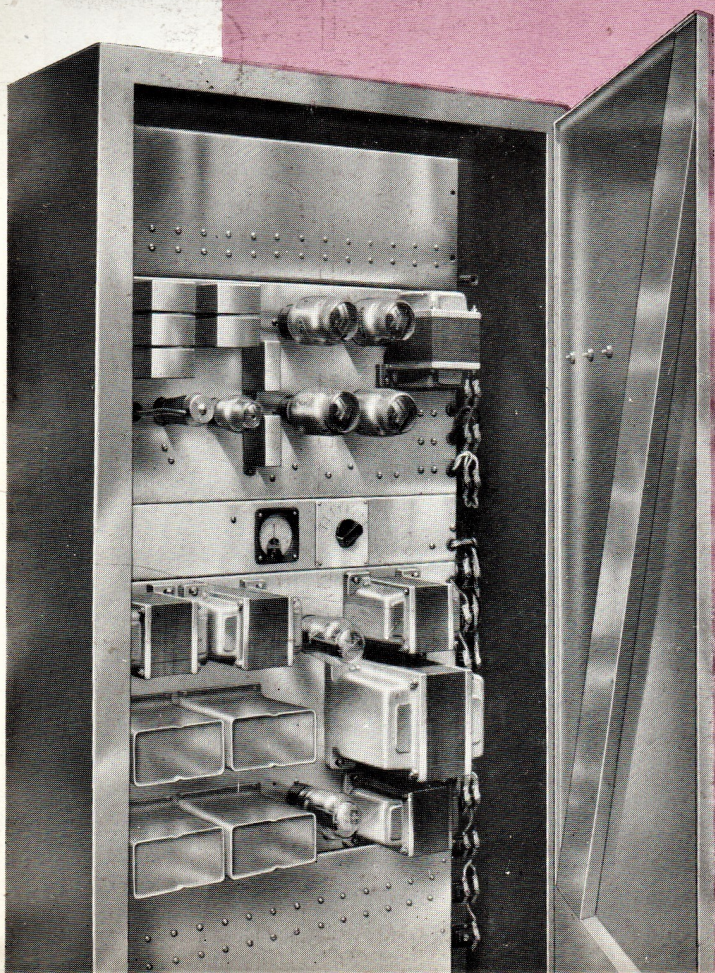
The Main Amplifier group is contained in a steel cabinet, externally styled and coloured in conformity with the new Gaumont-Kalee "21" standard. The Main Amplifier is a 3-stage power amplifier with features ensuring supreme reliability coupled with reproduction quality of the highest order.

The cabinet contains :—

- (a) the terminal panel,
- (b) the main amplifier of 30 watts undistorted output, with parallel push-pull output stage using negative feedback,
- (c) power supply unit for all amplifiers,
- (d) exciter lamp supply units,
- (e) frequency dividing network for "Duosonic" speakers,
- (f) standard check-metering panel with meter and selector switch.

Permanent cable-form wiring is employed, colour coded and ready for connection to standard terminal blocks.

The chassis components of all units and the terminal connection blocks are immediately accessible on opening the door of the cabinet. Access to the under-chassis components is obtained by removing the back of the cabinet, but for normal maintenance any unit may be instantly and independently removed.

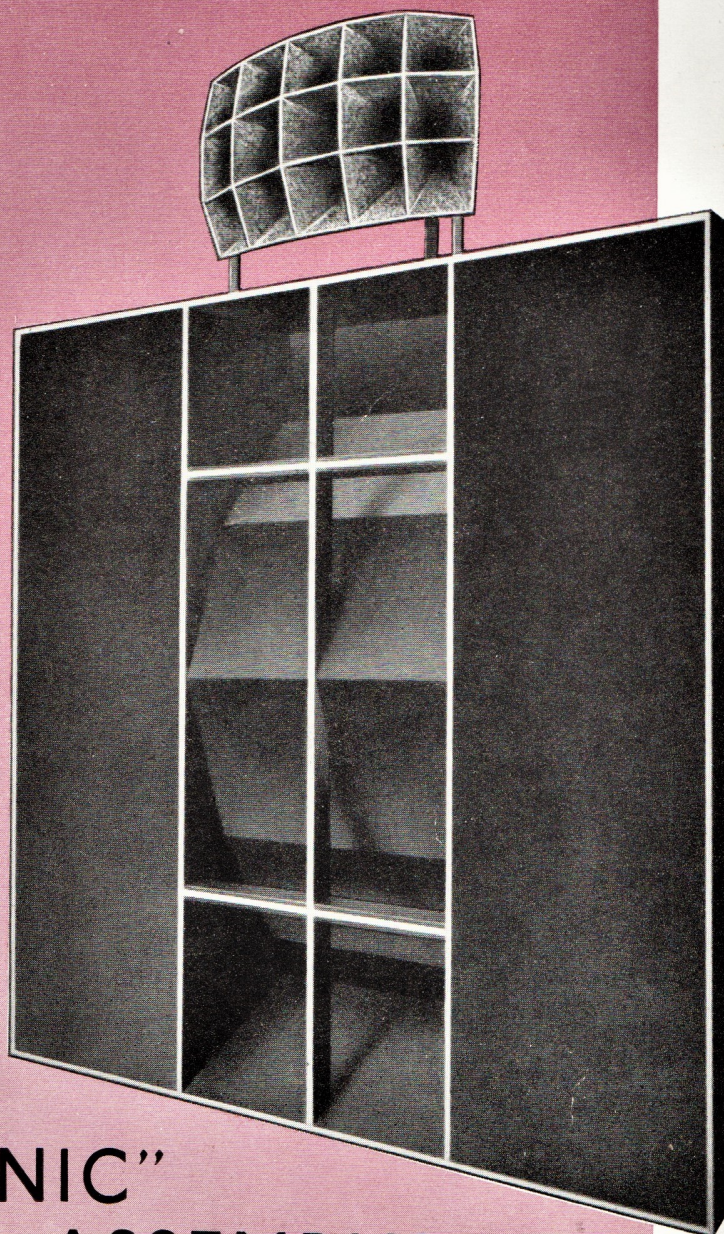


The mains distribution unit contains the switching and fusing for all mains circuits.

The equipment is designed throughout to work from 230 volts A.C. 50 cycles, single phase.

In the mains distribution unit is an auto-transformer designed to accept any local voltage of A.C. and adjust it to 230 volts ; thus only one voltage adjustment is required for the entire equipment.

GAUMONT-KALEE "21"



"DUOSONIC" SPEAKER ASSEMBLY

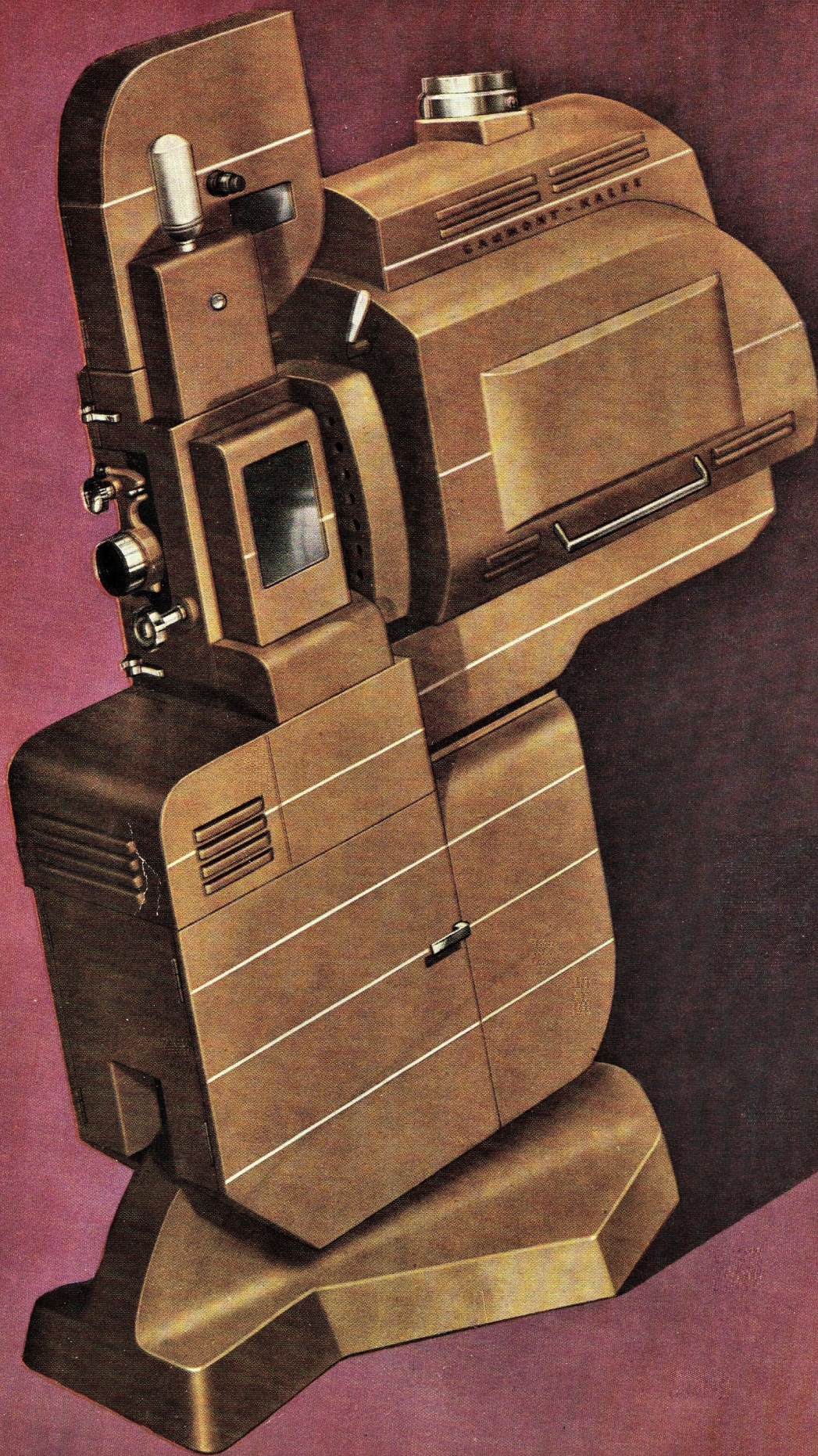
The "Duosonic" Speaker Assembly renders the utmost fidelity in reproduction, and with its associated frequency-dividing network, gives a conversion efficiency of the order of 50 per cent., an extraordinarily high figure. The frequency response range exceeds that of the medium film or disc, upon which the sound is recorded, and the assembly is, therefore, well suited to the faithful rendering of the output of the system as a whole.

Various models of the "Duosonic" Speaker Assembly are available in combinations of treble and bass horns, adapted to the size of the theatre auditorium. The model illustrated above is sufficient for a theatre up to 1,000 seats.

The bass horn is constructed of fire-proofed timber, complete with baffle surround.

MONITORING. Two Monitor Speakers may be provided, each with its own on/off switch. The volume of sound output from each is adjusted at the time of installation to be representative of the sound volume in the auditorium. This unique feature secures true monitoring, as distinct from a mere aural indication that the system is in operation.

In very large installations a separate amplifier of 10 watts undistorted output is provided for monitoring leaving the main amplifier free to serve the auditorium.



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