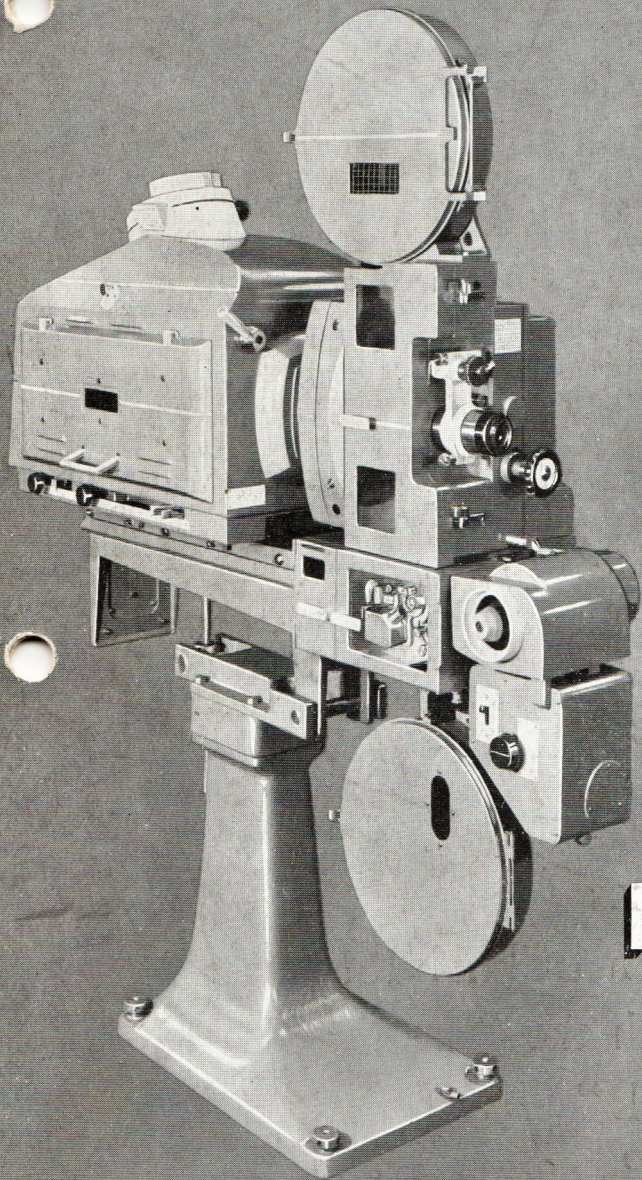


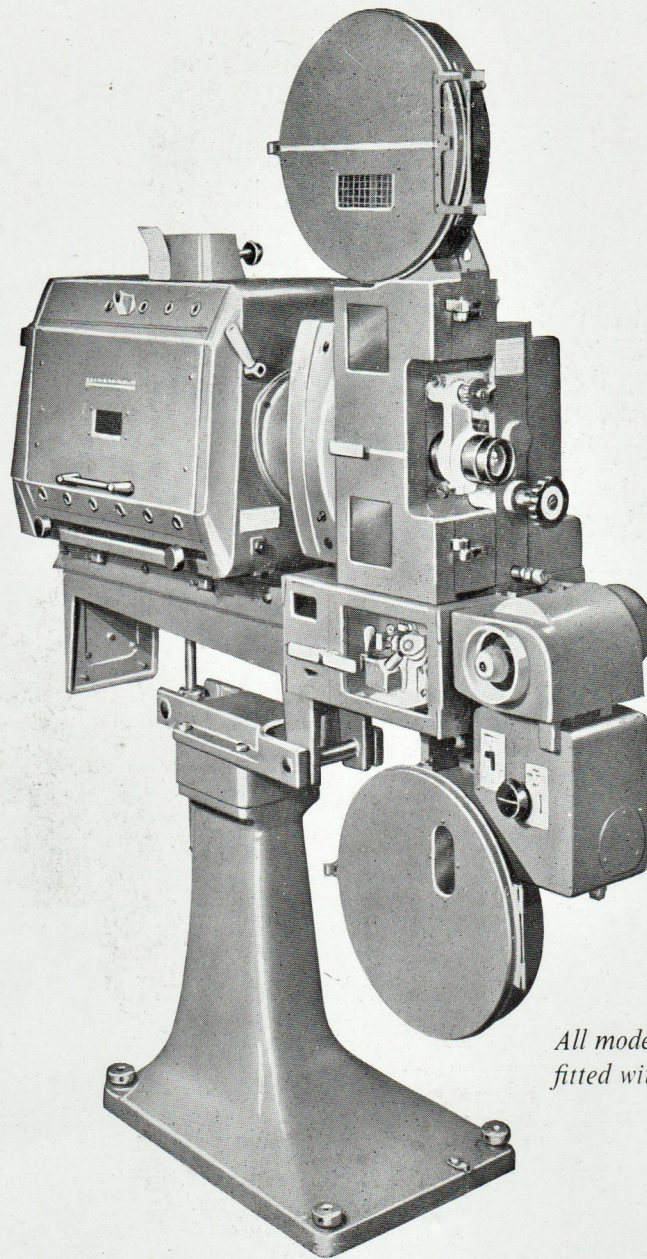
A
**GAUMONT-KALEE
PRODUCT**

GK 18



**PROJECTION & SOUND
EQUIPMENT**

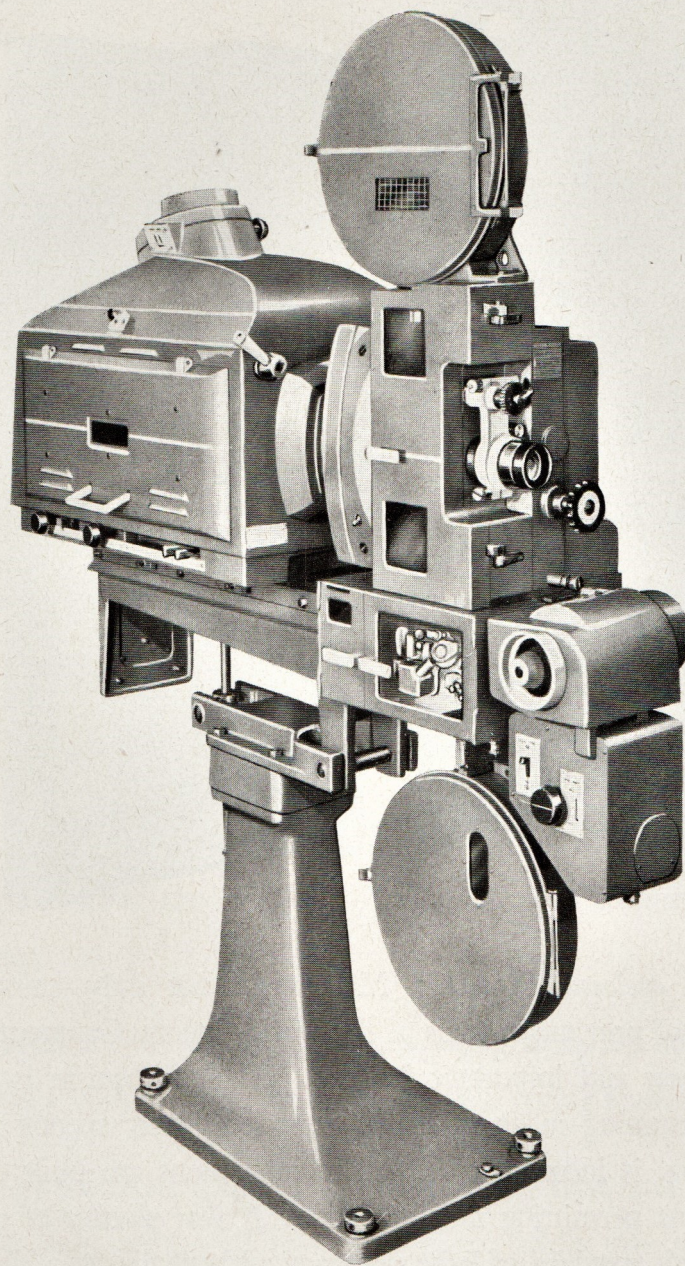
The GAUMONT-KALEE 18



*All models are
fitted with $\frac{1}{4}$ h.p. motors.*

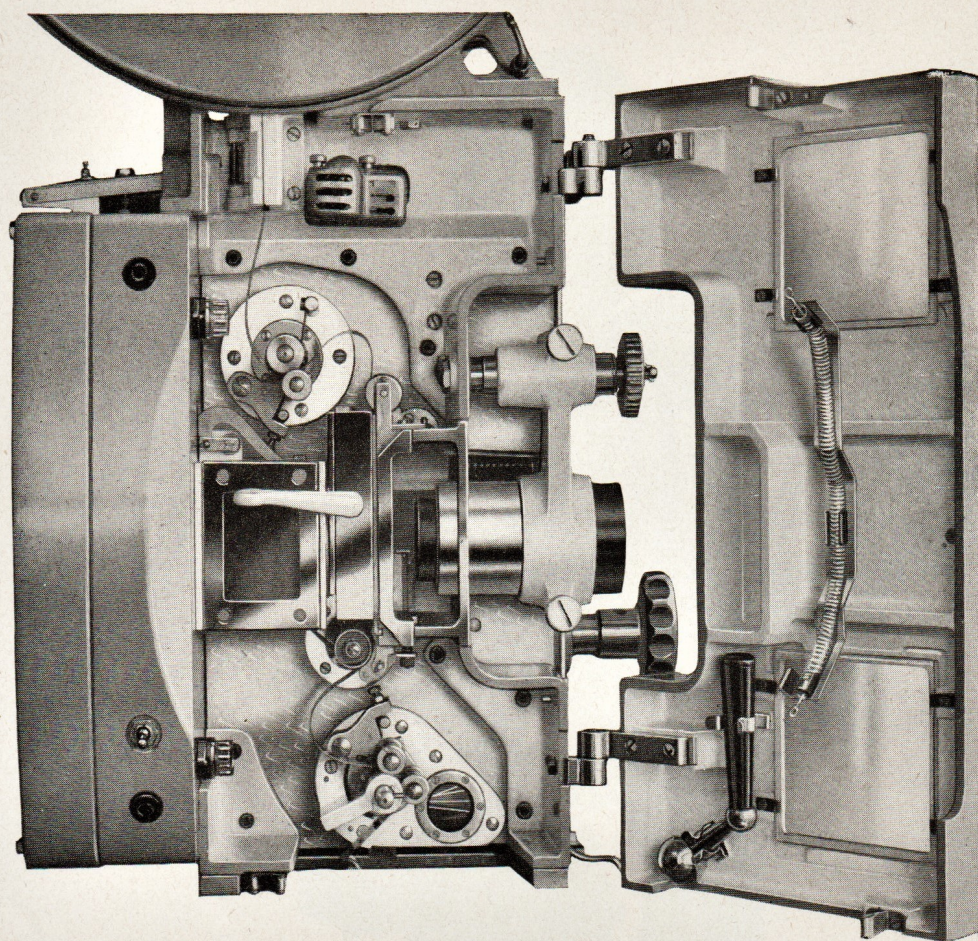
This Model has
TOTALLY ENCLOSED MECHANISM
and is fitted with the
“UNIVERSAL”
ARC LAMP

The **GAUMONT-KALEE 18**



This Model has
TOTALLY ENCLOSED MECHANISM
and is fitted with the
“PRESIDENT”
ARC LAMP

The GAUMONT-KALEE

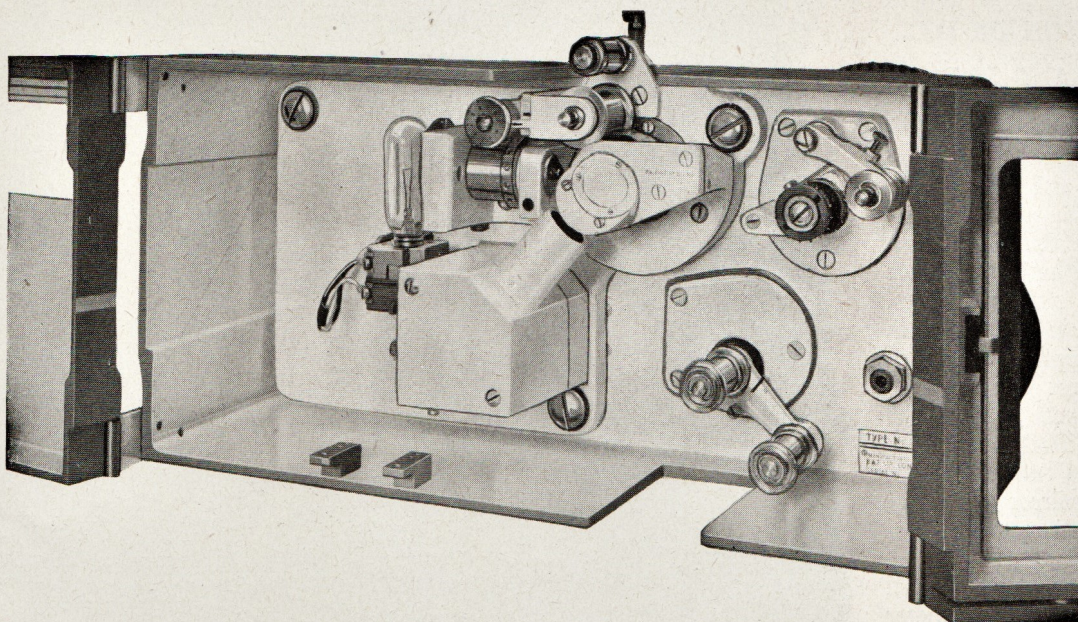


TOTALLY
ENCLOSED
PROJECTOR
MECHANISM

The Gaumont-Kalee *enclosed* Projector Mechanism not only embodies the main and proved characteristics of previous models of the world-famous Gaumont-Kalee machines, but incorporates several new and important features. The mechanism is totally enclosed with all mechanical parts running in an oil bath. A scientifically sprung parallel gate, quickly detachable for cleaning, is incorporated. All main sections are built on the unit principle, readily detachable, thus permitting indefinite life. A rear shutter of the two-blade pattern provides for a very high standard of light efficiency without flicker. The position of the gate in relation to shutter and lens has been arranged to make full use of the new wide aperture colour-corrected "bloomed" projection lens. The Gaumont-Kalee Lens is of the latest design, having an effective aperture of $f\ 1.9$, thereby passing the maximum amount of light, whilst the patented Gaumont-Kalee coating process ensures the correct rendering of high lights, shadows and half tones. Pressure rollers are self-sustaining in open position. Electrically operated picture changeover (optional), can be incorporated with fire shutter and arranged for remote control. There is provision for the specially designed automatic "Pryene" Fire Extinguishing Equipment as an integral part of the Projector when this optional equipment is ordered.

The

GAUMONT-KALEE SOUNDHEAD TYPE 543



The Gaumont-Kalee type 543 Soundhead employs drum scanning with fluid flywheel stabilizer ; the scanning unit is shock-absorber mounted. Micrometer adjustment of film guide roller is provided.

The film sprocket is isolated from disturbances originating from the bottom take-up, or from a bent bottom spool, by a cushioning roller mounted on a spring loaded jockey arm.

The optical system is of the front scanning or projected slit type, and the exciter lamp is of the standard 8-volt 4-amp. type. The exciter lamp holder has a quick acting height adjustment to cope with variations in individual exciter lamps.

Belt drive is employed between motor and soundhead, also for the take-up, and motors can be supplied for operation from 40, 50 or 60 cycle supplies, in the range 95-130 volts, or 190-260 volts. Mechanical assemblies are standardised in interchangeable units, thus avoiding the necessity for part fitting, and providing simplicity in maintenance.

The Soundhead is finished internally in mid-stone ; internal assemblies are finished in hard porcelain white enamel, which facilitates inspection and affords greater cleanliness.

The GAUMONT-KALEE

"UNIVERSAL" ARC LAMP

**ADAPTABLE FOR
OPERATION ON D.C.
HIGH AND LOW
INTENSITY, AND A.C.**

The front and rear of the lamp-house are castings, secured by the mechanism guide-bars and the door pivot rods. The side doors, which open to the full width of the lamphouse, are of formed sheet steel panels. The lamphouse contains the arc-burner mechanism, feed motor, and metal-backed elliptical mirror of 12" (305 mm.) diameter.

The rear control panel carries the potentiometer and switch for the feed-motor, arc inspection window, negative crutch and mirror tilt controls. The panel is readily detachable for access to wiring and lamp mechanism.

The mirror and light cut off are positively linked, and may be operated from either side of the lamp.

CARBONS

The following "SHIP" Carbon Combinations, voltages and amperages are recommended.

HIGH INTENSITY

	POS.	NEG.	Amps.	Arc Volts
Ship "CERELUX"	6 mm	5 mm	30-40	32-38
	7 mm	6 mm	40-50	33-41
	8 mm	7 mm	50-60	37-43
Ship "CERELUXA"	6 mm	5 mm	35-45	32-38
	7 mm	6 mm	45-55	34-41
	8 mm	7 mm	56-65	38-42

LOW INTENSITY

Ship "LUXO"	10 mm	7 mm	15-20	45-50
	11 mm	8 mm	20-25	48-52
	12 mm	9 mm	25-30	48-52
	13 mm	9 mm	30-35	48-52
	14 mm	10 mm	35-40	50-55

A.C. SUPPLY

Ship "ALTERNALUX"	7 mm	7 mm	65-75	25-26
	8 mm	8 mm	80-90	25-26
	9 mm	9 mm	95-105	26-28

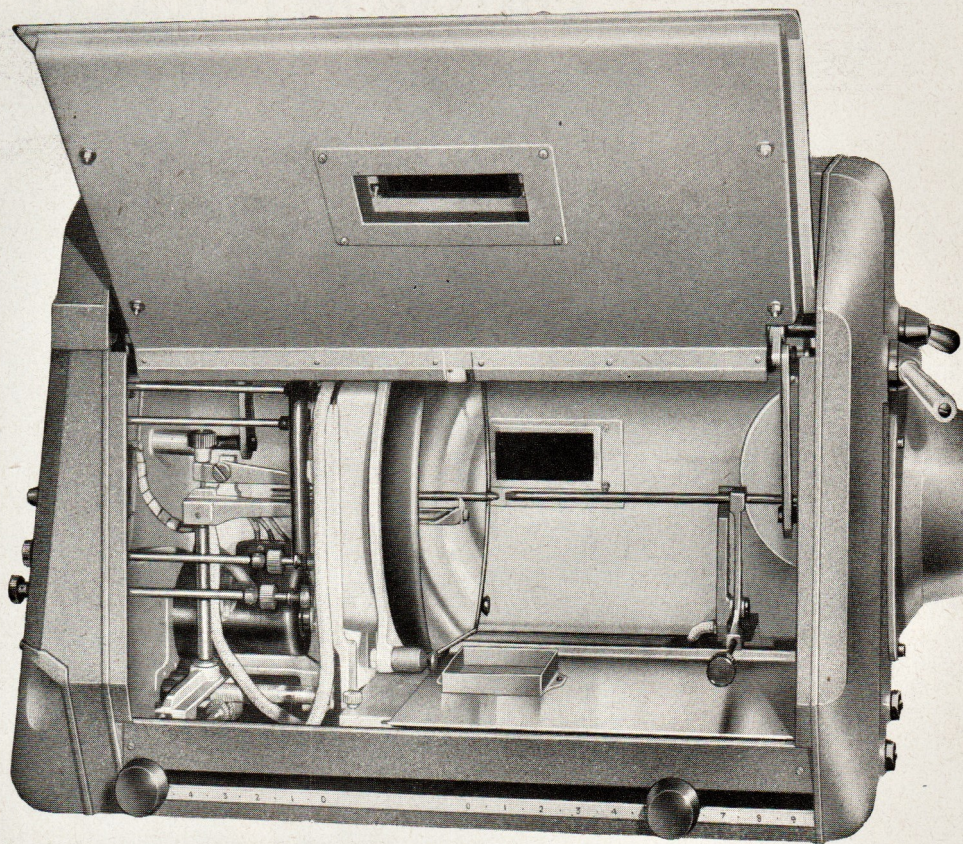
Installation wiring is facilitated by the terminal block, beneath the rear panel, at which all internal wiring terminates. The removal of the cover casting also exposes the gear train driving the mechanism, and alternative gears, for converting the lamp for use on high intensity, low intensity, or A.C., can be exchanged quickly. The driving motor, when the lamp is used on A.C., will require a source of D.C. supply, and a unit for this purpose is included in the standard Gaumont-Kalee Inductor; where the A.C. supply is taken from any other source it is recommended that the Gaumont-Kalee Motoverter be used for this purpose.

Manual controls are provided for carbon-adjustment without interference with the automatic drive, and for rapid resetting when carbons are changed. An external scale indicates the available length of carbon.

The heat-resisting carbon holders, of simple screw clamp type, accept any appropriate size of carbons.

The Magnetic Arc Flame control adjusts its own field strength automatically to the arc current, for correct arc formation with maximum stability.

An enlarged image of the arc is projected to a convenient viewing position at the base of the chimney.



The GAUMONT-KALEE

"PRESIDENT" ARC LAMP



The clean-cut streamlined exterior of the "President" gives an indication of a completely new departure in arc lamp design. One new and outstanding feature is the employment of twin motors to ensure accurate automatic feed with any H.I. carbon combination, over a range of 30-65 amps. Accommodates up to 18" (457 mm.) positive carbon. Every detail has been appropriately designed and tested—even to the lamphouse chimney which is tiled at 15° to allow for easy connection of vents at all operating rakes. This care

of detail combined with precision manufacture, simplicity of operation, and adequate cleaning facilities, ensures many years of trouble-free service.

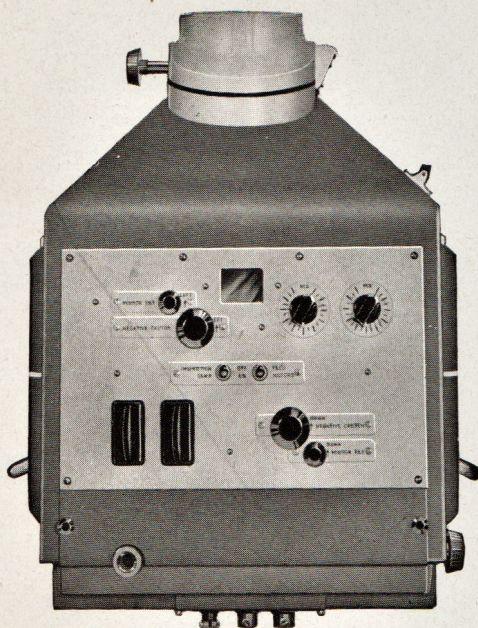
SPECIFICATION.

The Gaumont-Kalee "PRESIDENT" High Intensity Arc Lamp complete with 14" (355 mm.) diameter elliptical metal backed mirror, twin motor drive, potentiometer controls, external carbon scale, scissors-type striker, flame control, interior inspection lamp, arc periscope fitted in streamlined lamphouse with control panel at rear, and finished in mid-stone, maroon, and white; ready for use on D.C. supply.

CARBONS

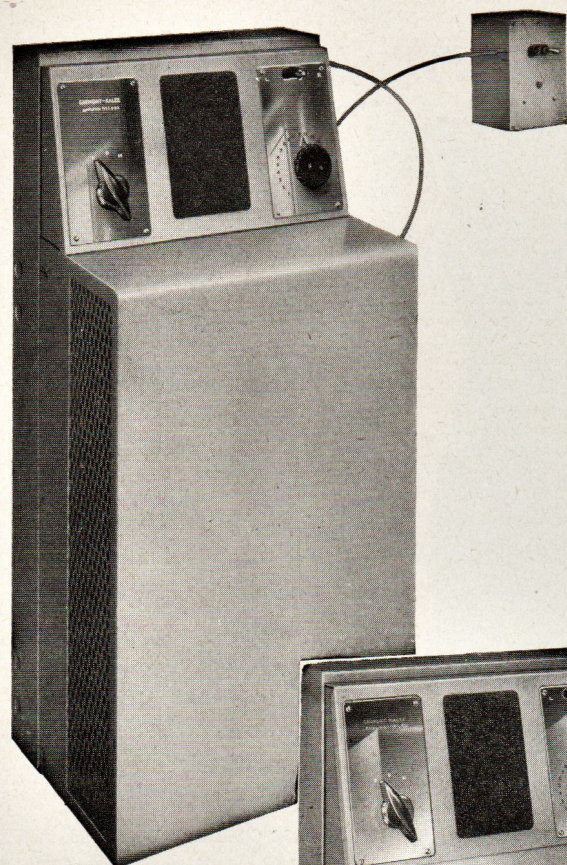
The following "SHIP" carbon combinations, voltages and amperages are recommended.

POS.	NEG.	"Cerelux"		"Cereluxa"	
		Amps	Arc Volts	Amps	Arc Volts
6 mm	5 mm	30-40	32-38	35-45	32-38
7 mm	6 mm	40-50	33-41	45-55	34-41
8 mm	7 mm	50-60	37-43	56-65	38-42



Rear view of the "President" Arc Lamp showing control panel.

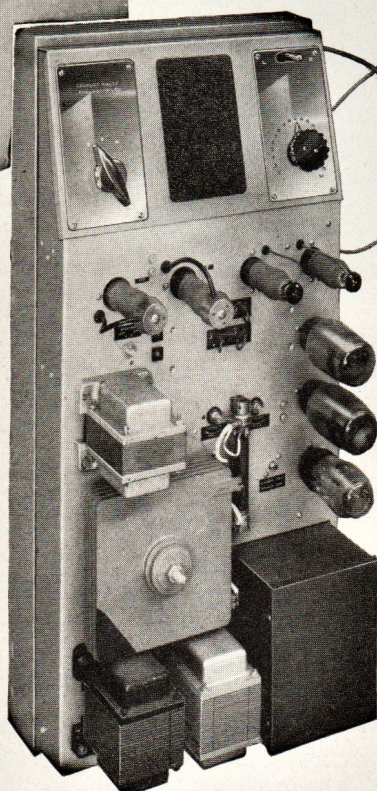
GAUMONT-KALEE 18 WATT AMPLIFIER



The Amplifier is an entirely new design, in one self-contained unit, comprising the complete amplifier chain from photocell input to power output for speakers, the Westinghouse metal rectifier circuit for exciter lamp supply; the main Volume Control; the Sound Changeover Switch; the "film-disc-microphone" Switch; and the Monitor Speaker.

The Amplifier circuit has an output stage comprising two 6L6G tubes in push-pull, giving 18 speech watts output with not more than $1\frac{1}{2}$ per cent. total harmonic distortion. Of this 18 watts, a maximum of 3 watts may be absorbed by the monitor speaker, leaving a minimum of 15 watts for the auditorium speaker. The built-in Monitor Speaker has a stud-contact volume control, and there is provision for switching off the auditorium speaker.

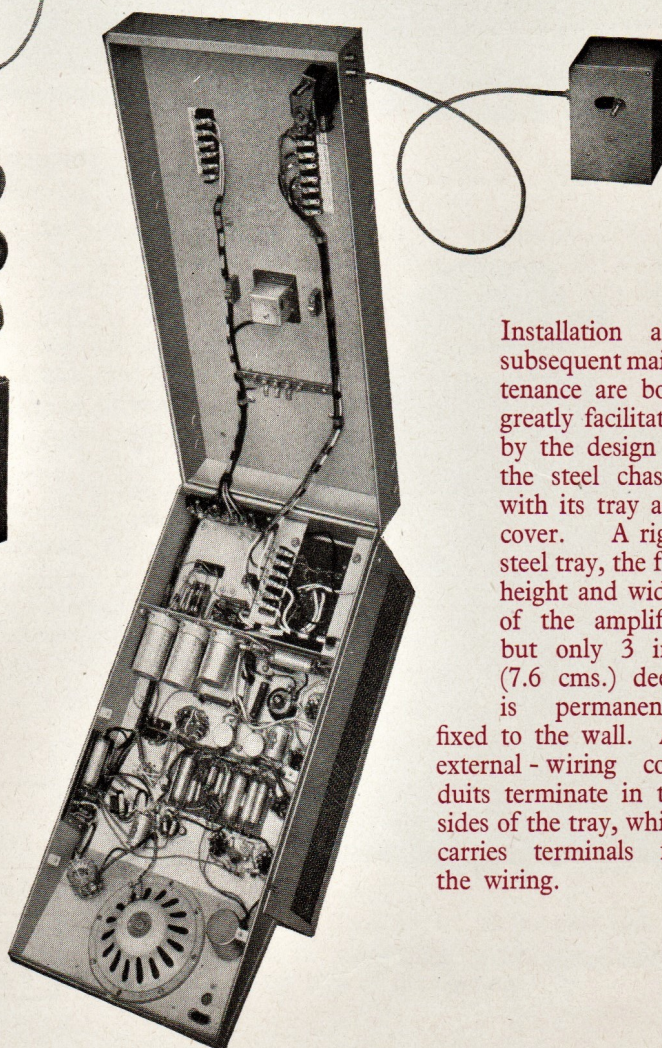
Sound changeover from one machine to the other is effected by switching the exciter lamps. Remote control of the changeover from the operating side of the right-hand machine is by a separate lever, housed in a small steel wall-mounted case, and mechanically coupled to the actuating lever on the amplifier by a flexible push-pull cable. Operating of either the control on the amplifier or of the remote control moves both.



The amplifier chassis is secured to the tray by a quick release hinge at the bottom, and by two screws at the top. For inspection, the two top securing screws are removed, when the chassis swings forward on its hinge to a horizontal position, where it is held by a stay, and all back-of-chassis components and wiring are accessible for immediate attention. The functioning of the amplifier is not disturbed by this action, so that an intermittent fault can be traced whilst the amplifier is working.

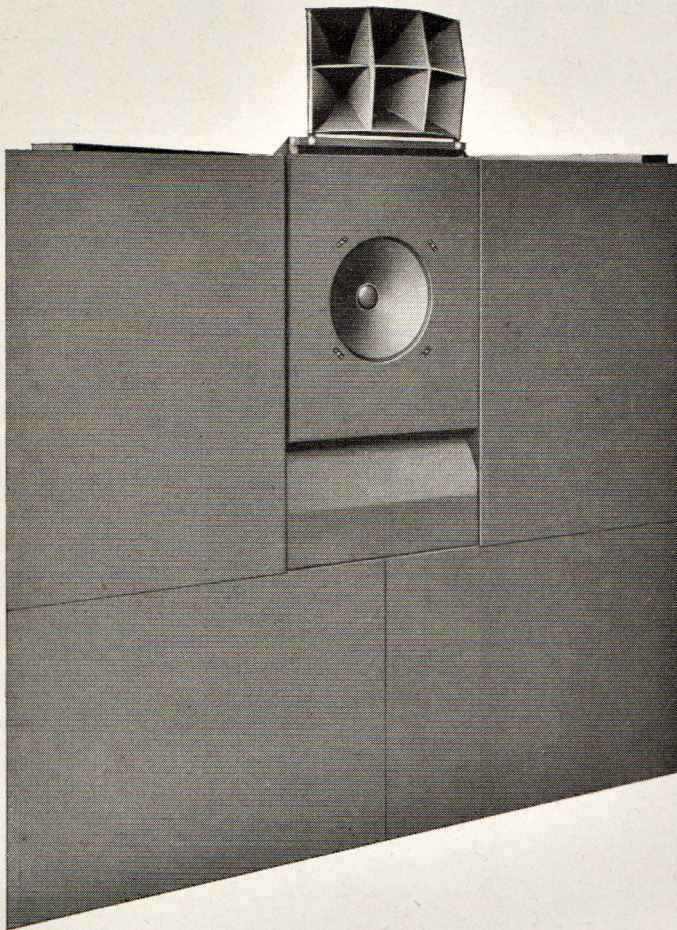
Removal of the front cover gives instant access to the valves and above-chassis components.

Externally, the amplifier unit is of very attractive appearance, and is finished in the Gaumont-Kalee standard mid-stone colour.



Installation and subsequent maintenance are both greatly facilitated by the design of the steel chassis with its tray and cover. A rigid steel tray, the full height and width of the amplifier but only 3 ins. (7.6 cms.) deep, is permanently fixed to the wall. All external - wiring conduits terminate in the sides of the tray, which carries terminals for the wiring.

DUOSONIC LOUD-SPEAKERS

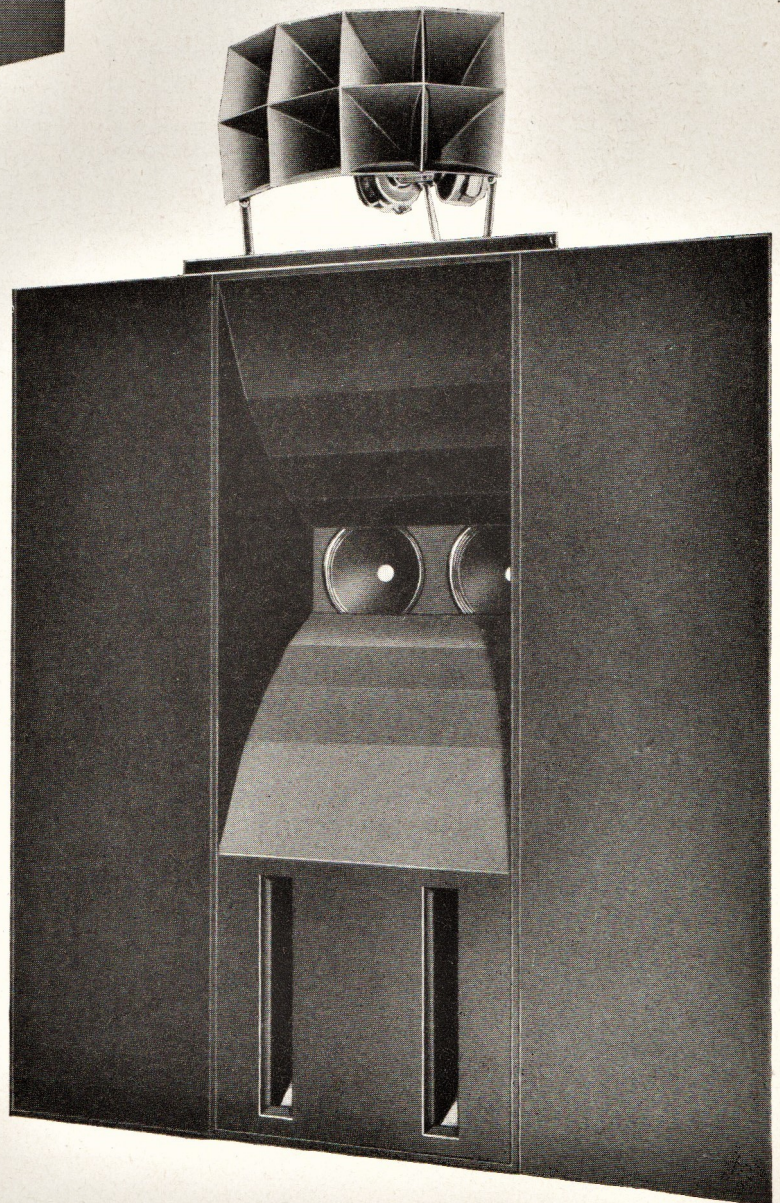


The Gaumont-Kalee '18' Sound Equipment is offered with various sizes of Duosonic Speaker assemblies. For small cinemas No. "0" is used, for average size cinemas No. "1" is used, and for cinemas of above average size, or difficult acoustic conditions, either No. "2" "3" or "4" (not illustrated) is used. The selection of the correct size of speaker depends on the shape as well as the size of the auditorium, and survey of the hall or examination of plans, and no general recommendation can be given as to the speakers needed for the theatre of a given seating capacity.

In both the speaker assemblies referred to, the speaker units are of the permanent magnet type. These two speakers give the utmost fidelity of reproduction. They utilise all metal multi-cellular treble horns driven by units having all metal diaphragms, thereby ensuring even distribution of sound over the entire auditorium. These horns are of the direct flare type with no rear emanation.

"PYRENE" FIRE EXTINGUISHER EQUIPMENT

This is an optional accessory, at an extra charge, which is built into the equipment when specifically required. It comprises a CO₂ cylinder, striker mechanism and automatic cut-off switches for the motor and arc lamp. In the event of a fire occurring in any part of the film track, it has been proved by exhaustive tests that this extinguisher equipment will put out the fire instantaneously. The insertion of a fresh CO₂ cylinder and the resetting of the striker mechanism can be completed in a matter of seconds, with the result that the performance can proceed almost immediately on the same machine.



Technical drawings of the I-1802-49 instrument, showing top, side, and base views with dimensions in inches and millimeters.

Top View:

- Overall width: 59" (1498 mm)
- Overall height: 21" (534 mm)
- Width of base: 16 3/4" (425 mm)

Side View:

- Overall width: 39" (991 mm)
- Height of upper section: 74 1/4" (886 mm) MIN, 83 3/4" (2115 mm) MAX
- Height of lower section: 46 1/2" (1181 mm) MIN, 55 1/2" (1410 mm) MAX
- Height of base: 24 3/8" (624 mm) MIN, 33 3/8" (853 mm) MAX
- Overall base width: 27" (686 mm)
- Top diameter: 5" DIA (152 mm)

Base View:

- Overall width: 27" (686 mm)
- Overall height: 18" (457 mm)
- Width of base: 24 1/2" (622 mm)
- Height of base: 15 1/2" (394 mm)
- Width of base: 1 1/4" (32 mm)
- Height of base: 1 1/4" (32 mm)

Other Views:

- Distance 'C':** CLEARANCE BETWEEN MOTOR COVER OR SPOOLBOX AND WALL WHICHEVER IS NEARER
- Rake Angle:** POSITIVE +, NEGATIVE -
- Centre of Porthole:** 'D' TO CENTRE OF PORTHOLE
- 4 Levelling Screws:** Indicated on the base view.

OVERALL DIMENSIONS OF BASE

I-1802-49

PORTHOLE HEIGHTS OF STAND FOR $52 \frac{1}{2}$ " (1333 M/M) LEVEL OPTICAL CENTRE

3"(76 M/M) HIGHER - ADD 3"(76 M/M) TO 'D' ABOVE
 3"(76 M/M) LOWER - SUBTRACT 3"(76 M/M) FROM 'D' ABOVE
 6"(152 M/M) " " 6"(152 M/M) " " "

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PRODUCT

Distributed throughout the World by



G.B.-KALEE LTD

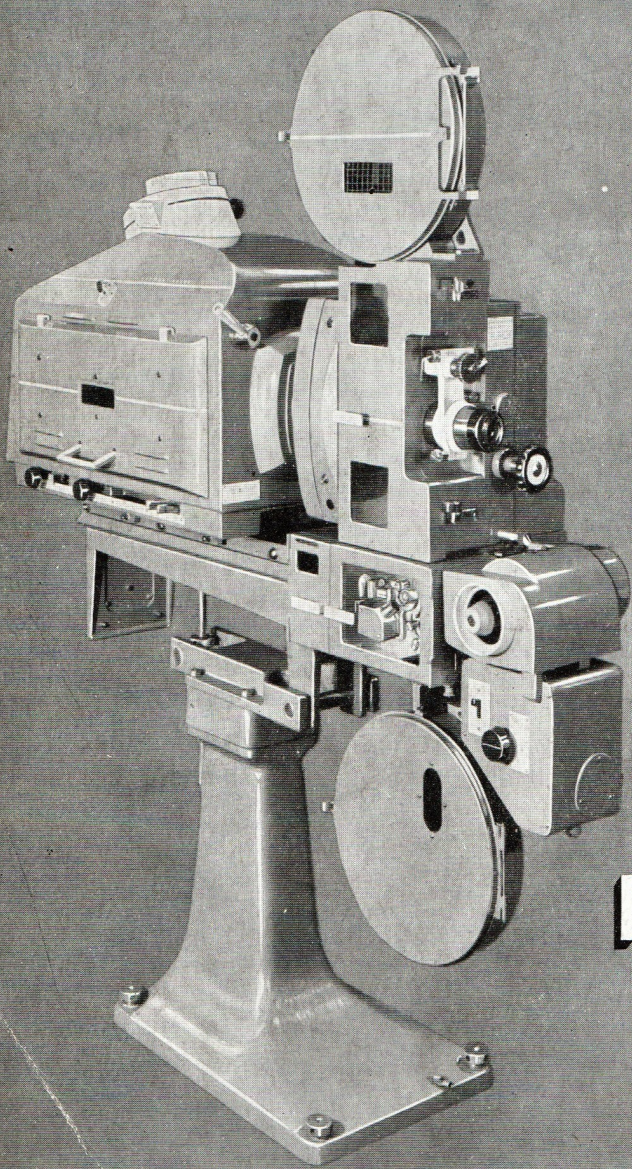
HEAD OFFICE:
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**PROJECTION & SOUND
EQUIPMENT**