PHILIPS

FP 3 Projector

99363

Principal features:

- Utmost reliability.
- Brilliant picture.
- Suitable for normal, CinemaScope and Wide-Screen projection.
- True-to-life sound reproduction.
- Simple operation.
- Easy maintenance.
- Suitable for use under tropical conditions.
- Suitable for A.C. mains of 110 V, 50 and 60 c/s.

Specially designed for:

- smaller theatres,
- ship cinemas,
- pre-view rooms.

Cinema

FP 3 Projector

PHILIPS

3922 980 442 41

General description

The FP 3 projector comprises:

- a fully enclosed film path,
- a 1000 W incandescent projection lamp,
- a twin spool box for either 2000 ft, 4000 ft or 6000 ft (600, 1200 or 1800 m) of film.

It can easily be fitted with the necessary mask and lens assembly for the projection of Wide-Screen and of CinemaScope films with optical sound.

Furthermore, the projector can be equipped with a device for the projection of lantern slides.

Two FP 3 projectors and an amplifier are all that is required for the complete projection-room equipment, the bulky arc lamps and their rectifiers being superfluous.

Utmost reliability

As a result of its simple construction, the high-quality materials used for the various parts and their high-precision manufacture, this projector is perfectly reliable and has a very long life.

Maximum protection against fire is ensured. The projection lamp cannot burn when the film speed drops below 20 frames/sec or as long as the projector door, the spool-box door, or the pad rollers, have not been closed. The film-rupture device switches off the motor and the projection lamp as soon as the upper film loop becomes too large or too small; upon the projector door being closed, the switch returns automatically to its initial position. The large ventilating rear shutter reduces heating of the film to a minimum.

Film-rupture switch.

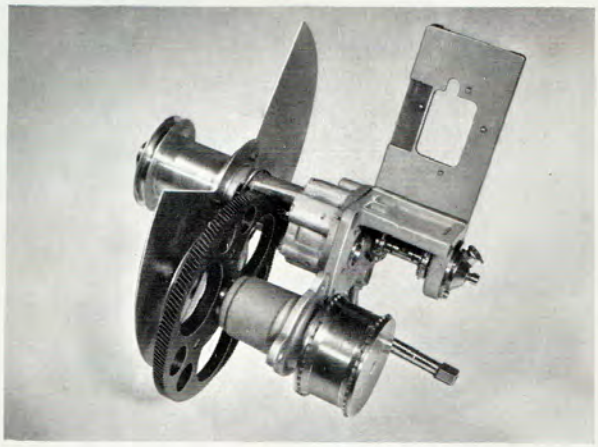
Film damage is precluded. All the rollers and guide-plates are profiled so that neither the frames nor the sound-track on the film, whether on the emulsion surface or on the glossy side, can come into contact with these parts.

As a result of the self-adjusting friction couplings of the spools, practically no stress is exerted on the film.

Driving mechanism

The mechanism comprises only one gear-wheel transmission and two belt transmissions, one for driving the cam shaft of the intermittent unit and the other for driving the take-up friction.

The large flat shutter mounted on the cam shaft functions at the same time as a flywheel for the intermittent unit. Mounted on this shaft is also a small gear, driving a large Novotext gear on the shaft of the 40-tooth sprocket which acts both as a feed and a take-up sprocket.



Intermittent unit, 40-tooth sprocket, Novotext gear wheel and shutter.

This simple construction was made possible by the use of a special framing device.

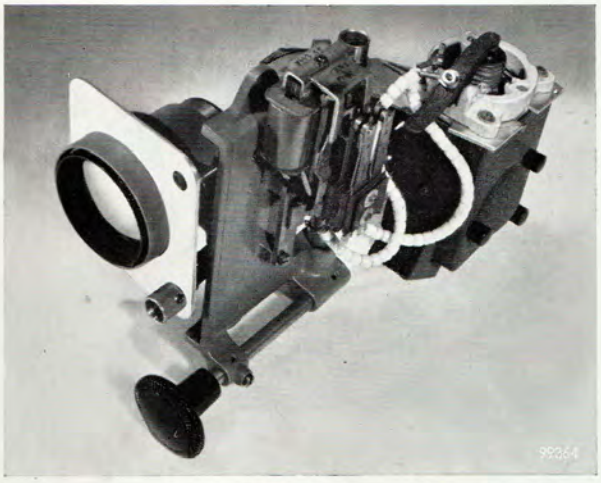
Framing device

When framing, the entire light path, consisting of the projection lamp, the condensers, the reflector, the mask and the projection lens, is shifted with respect to the optical axis. Consequently, in this projector the film transport mechanism is independent of the framing device, hence the position of the shutter need not be corrected during framing, and the sizes of the upper and lower film loops remain unchanged.

Bright picture

The light source is a 1000 W incandescent lamp of special construction. Because of the exceptionally

high light output of this lamp, the high-speed coated projection lens and the efficient rear shutter, bright pictures up to 10′ x 13′ (3 m x 4 m) can be obtained with normal film (aspect ratio 1 : 1,37). Pictures with the same height and with a width of max. 23′ (7 m) for CinemaScope (1 : 2,34) and of max. 18½′ (5½ m) for Wide-Screen (1 : 1,85) are possible, provided that a Perlux or an equivalent screen is used.

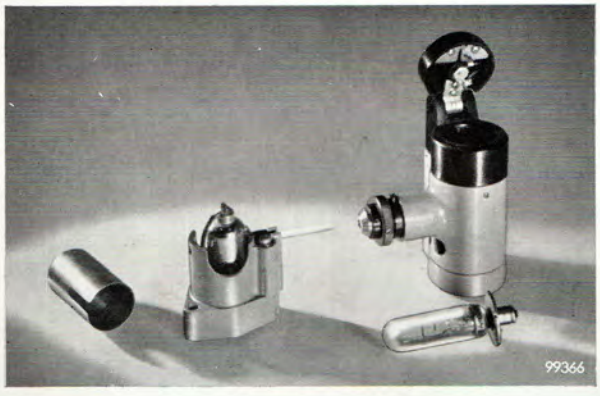


Projection system with framing knob.

True-to-life sound

The sound is completely free from wow and flutter, uniform film speed at the scanning spot being guaranteed by the smoothly rotating sound-drum with resilient pressure roller.

The sound-scanning unit comprises the well-known optical system with slit; it is provided with separate controls for focus and azimuth adjustments. The light passing through the sound track is thrown on to the end of a quartz rod which transmits the light by total reflection—i.e. without loss—to the photocell.



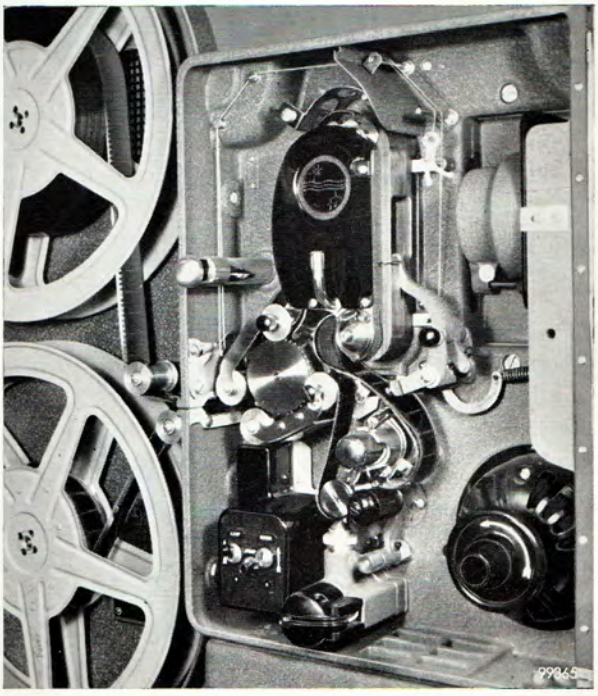
Sound-scanning unit, dismantled.

Simple operation

The projector is so simple that it can be operated by laymen. The film path comprises only two sprockets, viz. the 40-tooth feed/take-up sprocket and a 16-tooth intermittent sprocket. The gate door, which acts also as a pressure skate and as a pad roller for the intermittent sprocket, opens wide. The friction couplings of the supply and take-up spools are self-adjusting. The projection lamp and the exciter lamp are pre-focused and can thus be replaced in a few seconds.

All the controls are accessible when the door of the projector is closed.

For the projection of new film prints the steel runners of the gate can quickly be replaced by velvet-covered ones, so that these prints need not be waxed.



Interior view showing the film path.

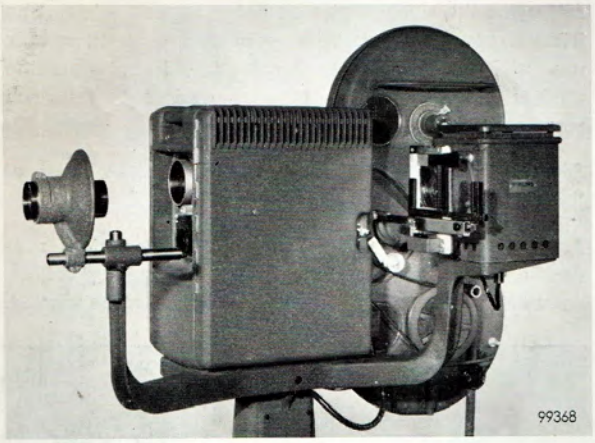
Easy maintenance

The maintenance of the projector has been reduced to a minimum. The intermittent unit runs in a completely enclosed oil bath equipped with the well-known Philips magnetic oil filter. This filter holds back all steel and iron particles in the oil and thus reduces wear of the mechanism to a minimum. The oil in the bath need only be renewed every 50 working hours.
All the other shafts run in ball-bearings.

All the guide plates and pad rollers open wide, so that the entire film path can be easily cleaned.

Slide attachment

On request the projector can be equipped with a device for the projection of either 3¼" x 3¼" or 3¼" x 4" (83 x 83 mm or 83 x 100 mm) lantern slides.



FP 3 projector with slide attachment.

Type numbers of the lamps

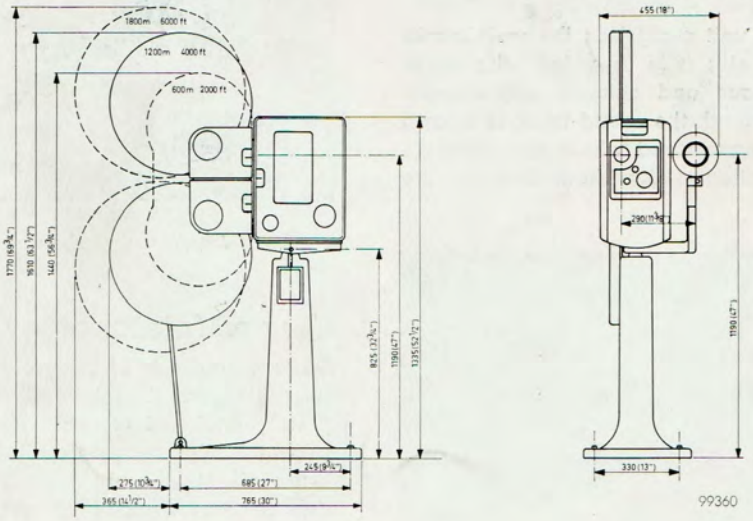
Projection lamp	7240 C
Lamp for slide projection	437E/01
Exciter lamp 6 V, 1.48 A	3874 C
or 5 V, 4 A	7251 C
Photocell	3538
Inspection lamps, 6 V, 0.5 A	8002 N

Power supply

The apparatus can be connected to single-phase A.C. mains of 110 V, 50 or 60 c/s. For voltages between 103 V and 253 V, a Type 3852 transformer can be supplied, suitable for equipment consisting of two projectors and one amplifier. A 2 kVA converter has to be used for connecting this equipment to D.C. mains, and a 2 kVA petrol-driven A.C. generating set when there is no mains supply available.

Order numbers and weights

Description	Type	Net weight lbs ozs	Net weight kg
FP 3 Projector	8710/05	67 4	30.5
2000-ft (600 m) spool box	8711/00	26 7	12
4000-ft (1200 m) spool box	8713/00	56 —	25.5
6000-ft (1800 m) spool box	8714/00	64 —	29
Mounting table and pedestal, complete with wiring	8731/01	92 4	42
Slide attachment	8727/05	19 6	8.8



Data subject to change without notice

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