

Marconi Slide Projector Type B 3442

Modern telecine requirements for a 2 in. × 2 in. (5 × 5 cm) automatic slide projector are fully met by the Type B 3442 which is expressly designed for television use.

Colour and black and white slides are ideally displayed and the projector is fast and flexible in operation.

FEATURES

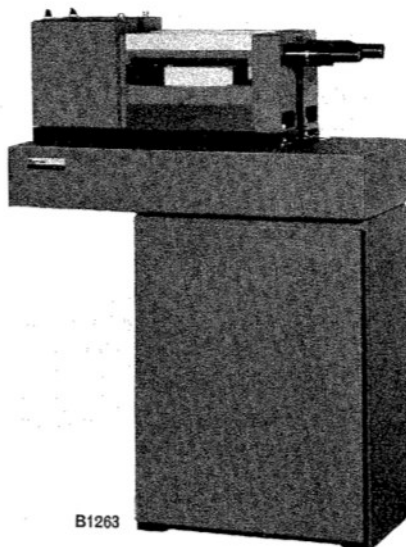
- Sequential or random selection.
- 2 removable magazines, each holding 30 slides.
- Automatic lamp changeover.
- Remote light control with no shift of colour temperature.
- Low voltage tungsten-halogen lamps, of standard type.
- Integral cooling fan.

Construction

The Type B 3442 consists of two identical projectors mounted side-by-side on a specially designed pedestal. The pedestal is used to house the 24 volt, plug-in, power supply unit and the logic circuits. The pedestal is styled to match other units in the Marconi Type B 3402 Telecine System.

Sixty slides may be loaded into two moulded plastic magazines. Each magazine is provided with a transparent lid and an index sheet, thus a set of captions and/or other slides may be assembled and kept together throughout rehearsals and transmission.

Each magazine is loaded onto a carriage which moves backwards and forwards to locate the required slide under the gate. When located, a plunger lifts the slide into the gate which has V grooved guides to locate the slide in the focal plane. As the slide approaches its final position it is located by plungers to register it about the edges opposite the 'thumb mark'. Each slide is therefore accurately located and will register again in the same position. The slides are held in holders conforming to the standard specification must be used, but in practice this permits a wide range of choice. Information is provided by the Marconi lamphouse which is of advanced design. Each lamphouse contains two 24 volt, 150 watt tungsten-halogen lamps of a widely used standard type. In the event of lamp failure the supply is immediately transferred to the standby lamp and a mirror moves to ensure that the full light output from the lamp is supplied to the optical system. A red warning light indicates that the reserve lamp



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is in use and the burned out lamp may be changed whilst the projector is on air.

The two projector mechanisms are mounted compactly, with only 5½ in. (14 cm) between their optical centres, and the optical centres are 48 in. (122 cm) above the level of the mounting surface. A special Marconi feature is the use of floor frames for telecine equipment. The floor frame is cast into the floor in the required position and the projector pedestal clamped to the frame. A small amount of adjustment of projector position is available after the floor frame has been fixed into the floor, to facilitate accurate alignment.

Control System

A Local Control Panel is fitted to the rear of the pedestal, this accommodates controls for:

Mains	Reset
Show	Load A
Off	Load B
Forward Change	Sequential
Reverse Change	Auto

The Reset control is a momentary-touch push-button which returns the magazines to the condition where slides Nos. 1A and 1B are ready.

The Load A and Load B controls enable either magazine to be changed whilst a slide from the other is on-air. There is therefore no practicable limit to the number of slides which may be shown sequentially.

The Auto condition enables changes to be controlled by signals from, for example, the cue track of a sound tape recorder.

The Remote Control Panel may be one of two types. For sequential operation, the controls are:

Show	Reset
Off	Auto
Forward Change	Sequential
Reverse Change	

For random selection, the control panel obviously has to be more complex, and it includes two rows of buttons which enable any slide to be chosen with illuminated readouts to identify the slide selected for each projector, and a CUT button to complete the change.

DATA SUMMARY

Change times:

(a) Between slides in A and B projectors, depends on multiplexer, with Marconi B 3414 is approximately $\frac{1}{20}$ second.

(b) Between adjacent slides on one projector 1 second.

(c) Longest path random change on one projector 2.5 seconds.

Power: 100-125 or 200-250 volts 50/60 Hz, consumption about 500 VA.

Lamps: 4 per B 3442 projector, 2 on and 2 standby; all 150 watt 24 volt standard 2 pin tungsten-halogen.

Magazines: 2, each holding 30 slides, 2 × 2 in. (5 × 5 cm).

Gate Size: 1.125 × 0.843 in. (28.58 × 21.44 mm) transmitted area (American and British Standard Specifications).

Dimensions: Spacing between optical centres, 5½ in. (14.0 cm). Height above floor, optical centres 48 in. ±½ in. (122 cm ±1.25 cm).

Overall Height: 52 in. (132 cm).

Overall Width: 14 in. (35.6 cm).

Overall Length: 40.5 in. (103 cm).

Length of base: 26 in. (66 cm).

All-up weight: 350 lb (159 kg) (approx).

Note that dimensions may vary slightly from those stated above.

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