



16 mm Film Recording Channel Type B 3510

FOR making permanent records of television programmes, Type B 3510 produces a high-quality 16 mm film recording when supplied with a standard vision signal and driving pulses. The channel consists of the recording channel stand (which carries the camera, control desk, monitor and power units) plus two 6 ft cabinets housing recording, monitoring, switching and synchronizing equipment.

Features

- Fast pull-down camera causes frames to be pulled down during the blanking period and is available for 50 or 60 c/s operation.
- Sound may be recorded on separate 16 mm perforated magnetic tape.
- Cathode-ray tube brightness sufficient to enable relatively cheap blue-sensitive film to be used.
- Gamma and top correction circuits are included.

Positive recordings can be made.

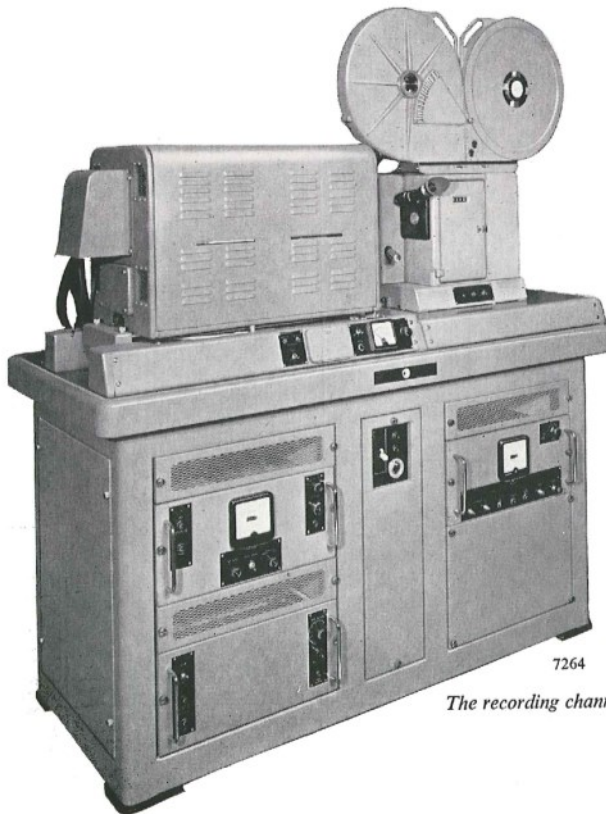
Signal levels throughout the channel can be checked by means of a 5-inch (13 cm) waveform monitor.

Recording monitor tube mounting is adjustable so that customers may use tubes of their own choice from 5 and 10½ in. (12 and 27 cm) diameter.

EQUIPMENT

The power supply units and the camera drive chassis are built into the base of the recording channel stand, which forms a rigid mounting for the monitor, monitor head and camera. The control desk fits into the stand and includes a 5-inch waveform monitor and a switching unit providing selection of eight vision and four sound inputs.

Full test and monitoring facilities are provided by the vision equipment rack. The sound equipment rack houses the magnetic sound recorder reproducer.



7264

The recording channel stand.

Data Summary

Inputs:

- (a) 100–125 V or 200–250 V (5 V steps), 50 or 60 c/s a.c at 2 kVA.
- (b) Composite or non-composite vision signal at ± 6 dB rel. to 1 V p-p comp.
- (c) Line and field driving pulses.
- (d) Composite sync. pulses.

Monitor:

- (a) Deflection, vertical 30°, horizontal 40°.
- (b) Scan linearity, positional error at any point in the raster not more than 1½% of picture height and width.
- (c) Frequency response (without correction); h.f. within ± 0.2 dB to 7 Mc/s, -3 dB at 8.5 Mc/s; l.f. maintained by clamp.

Aperture correction: Up to 6 dB at 3 Mc/s, 10 dB at 5 Mc/s, 12 dB at 7 Mc/s.

Minimum amplifier gamma: 0.6.

Black stretch: Max. gain of 10 up to 50% peak white output, operating from blanking level.

White stretch: Max. gain of 4 down to 50% peak white.

Camera pull down: 2 ms.

Film magazine: 2400 ft capacity each.

Magnetic sound recorder: Standard supply 16 mm tape recorder/reproducer operating on an A.S.A.P. 22.87 100 mil. edge stripe. Spool capacity 1 hour's operation.

High-speed processing: Lawley 'Junior' recommended where laboratory facilities are not available. 16 mm version processes negative or reversal film at 80 ft/min. 16 and 35 mm versions will process mixed lengths at 40 ft/min. Requirements – water inlet, drain outlet, 7 kW power. Dimensions 43 in. (109 cm) \times 30 in. (76 cm) \times 90 in. (229 cm) high.

Dimensions:

Height	Width	Depth	Weight
Recording stand			
6 ft (183 cm)	5 ft 4 in. (163 cm)	3 ft 10 in. (76 cm)	950 lb (386 kg)
Vision equipment rack			
6 ft (183 cm)	1 ft 11½ in. (60 cm)	2 ft 5½ in. (75 cm)	365 lb (166 kg)
Sound equipment rack			
6 ft (183 cm)	1 ft 11½ in. (60 cm)	2 ft 5½ in. (75 cm)	340 lb (154 kg)

Marconi

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