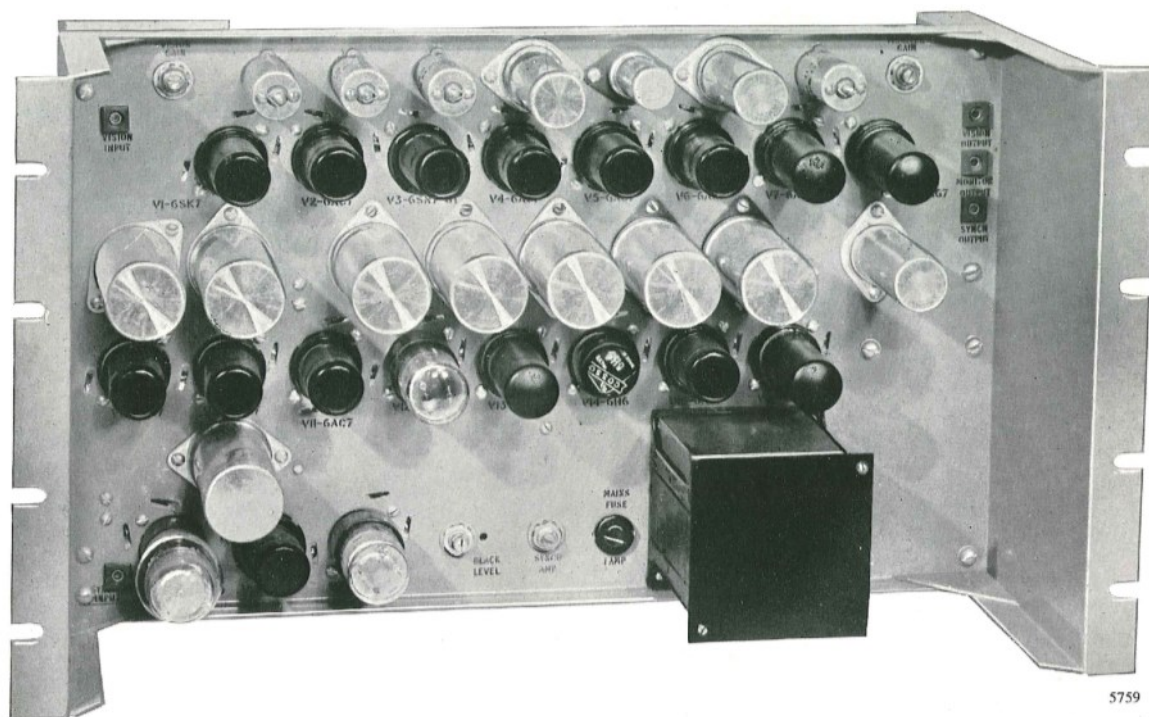




Line Clamp Amplifier *Type BD651*

FOR 525 LINE SYSTEMS



5759

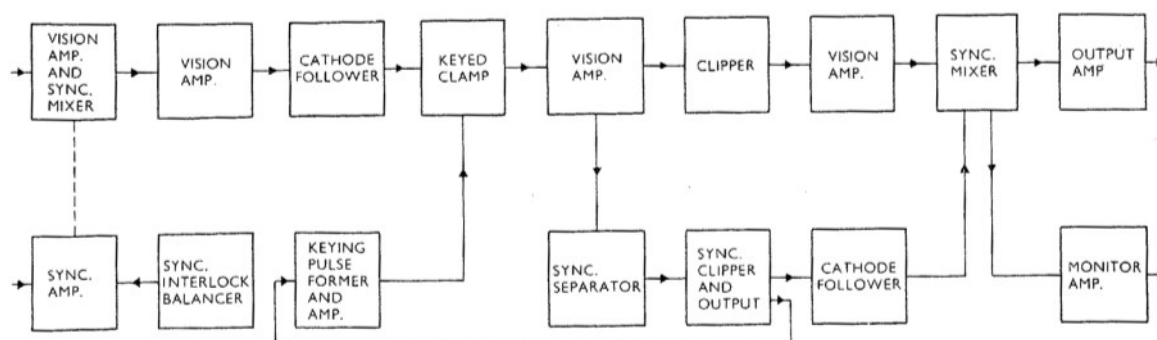
THE LINE CLAMP AMPLIFIER is used mainly on incoming and outgoing vision circuits where the waveform is in need of correction. It can also be used to insert synchronising pulses into a non-composite signal or to obtain separated synchronising pulses from a composite signal. Used after a switching system it not only removes switching surges but also provides remote control of picture amplitude, black level, and sync. amplitude.

The amplifier is assembled upon a chassis suitable for mounting in any rack or cabinet having standard 19 in. relay rack drillings. All valves are mounted on the front face of the unit together

with the various pre-set adjustments. There are no exposed electrical connections on the face of the unit. All small components and wiring are at the rear of the unit, which includes a mains-operated heater transformer and associated fuse.

FACILITIES

- (1) Removal of switching surges, hum and other low frequency disturbances by line clamp operating on the back porch of the signal.
- (2) Compensation for errors in low frequency response of equipment preceding the amplifier.



SCHEMATIC DIAGRAM

5604

- (3) Correction of picture amplitude to standard level.
 - (4) Correction of sync. amplitude to standard level. Sync. is removed, amplified, and re-inserted, allowing increase in sync./picture ratio if necessary and also a cleaning of the sync. waveform.
 - (5) Correction of black level. If the input signal is arranged to have a definite 'set up' then in reducing black level to normal the back and front porches are cleaned of any disturbances introduced by noise or clamp circuits.
 - (6) The picture component of the signal can be faded to zero without affecting the outgoing sync.
 - (7) There are two outputs, one gives a 2 V output into a 75 Ω line, with 75 Ω sending impedance. The other also gives 2 V into a 75 Ω line but not with a matched sending impedance. It is suitable for feeding local circuits such as monitors.
 - (8) Provision is made for inserting sync. into the input signal if required.
 - (9) Separated sync. is available from any composite input.
- The facilities 3, 4, 5 and 8 can all be offered from a remote position.

DATA SUMMARY

Inputs:

- (a) Mains and DC supplies (standard).
Consumption: 100 VA from mains and 350 mA at 280 V regulated DC.
- (b) Sync. at standard level (-4 V).
75 Ω input impedance.

Outputs:

- (a) Separated sync., -4 V into high impedance.
- (b) Line, 2 V max. peak-to-peak with up to 50% sync. or 1.25 V peak-to-peak

non-composite into 75 Ω with 75 Ω sending impedance.

- (c) Monitor, as line but high sending impedance.

HF response: ± 1 db up to 7 Mc/s.

LF response: Corrects low frequency components down to 60 c/s.

Dimensions:

Height	Width	Depth	Weight
10½ in.	19 in.	8¾ in.	25 lb
(26.6 cm)	(48 cm)	(22 cm)	(11.4 kg)

MARCONI'S WIRELESS TELEGRAPH COMPANY LIMITED

Head Office: Marconi House, Chelmsford

Telephone: Chelmsford 3221. Telegraphic Address: Expanse, Chelmsford