



Line Clamp Amplifiers Types BD 651 and BD 813

EXTENSIVE experience with programme networking has led to the incorporation of various refinements in these amplifiers. The two types are essentially the same, the Type BD 651 being built on a vertical recessed chassis suitable for rack-cabinet mounting, as required in studio applications, whereas the Type BD 813 is housed in a case for mobile service. Both units are self-contained and include their own regulated power supply units. A Lift Pulse Gating Unit is provided with both units; this prevents pedestal being applied during frame blanking.

FACILITIES

Efficient clamping to remove hum and switching surges.

Set-up adjustment on all types of signal, even where set-up has been partially lost.

Sync. separation and picture separation from composite inputs.

Reconditioning of sync. signals on composite inputs.

Mixing of local sync. signal into non-composite vision input signals.

Local or remote control of picture amplitude, sync. amplitude, peak-white chopping and set-up.

Picture fading in conjunction with master control or vision mixer.

Stabilized black level by a form of servo control.

Insertion of electronic cue dots in picture corners when used with an external generator.

Available for operation on 405, 525 or 625-line standards.

CONTROL

The line clamp amplifier may be controlled either locally or from a remote position. A five-position local switch selects the required operating condition.

Remote control is carried out from a Type BD 822 Control Panel which is available in various editions to suit operational requirements. These include a desk-top panel designed to fit on a console desk, a panel measuring 14×2 in. (35×5 cm) which may be assembled in the upright face of a console, and a standard 19-inch (48 cm) panel for cabinet monitoring. The basic facilities available are remote control of picture amplitude, sync. amplitude, peak-white clipping and set-up. Picture fading can be provided additionally as may be



Type BD 813.

required at a master control desk or vision mixer.

Data Summary

Inputs:

(a) 101–121 V or 206–254 V, 50–60 c/s single-phase AC at 300 VA.

(b) Composite or non-composite signal at -10 dB to $+3$ dB rel. to standard level, bridging input.

(c) Blanking at ± 3 dB, bridging input.

(d) Local sync. at ± 3 dB, bridging input.

Outputs:

(a) Four composite vision signals at up to $+2$ dB rel. to standard level in 75Ω .

(b) Non-composite vision signal at up to $+2$ dB rel. to standard level in 75Ω or, optionally on BD 651 only, an isolated composite vision signal for monitoring purposes where switching disturbances are likely and must be isolated from the output circuits.

(c) Separate sync. at standard level in 75Ω .

Performance:

HF response, ± 0.2 dB from 100 kc/s to 7 Mc/s and -4 dB at 10 Mc/s, rel. to general response. *LF response*, less than 2% tilt on field waveform. *Sync. rise time*, less than 0.15 μ s. *Set-up*, adjustable $\pm 15\%$ of picture level. *Amplitude non-linearity*, less than 2% sync. or peak-white compression.

Dimensions:

	Height	Width	Depth	Weight
Type BD 651 (studio)	1 ft 3 $\frac{3}{4}$ in. (40 cm)	1 ft 7 in. (48 cm)	12 $\frac{1}{2}$ in. (32 cm)	49 $\frac{1}{2}$ lb (22.5 kg)
Type BD 813 (mobile)	1 ft 4 in. (41 cm)	8 $\frac{1}{2}$ in. (22 cm)	2 ft 2 $\frac{1}{2}$ in. (66 cm)	70 lb (31.7 kg)

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