



Line Clamp Amplifier Type B4011

The B4011 Line Clamp Amplifier is designed to re-furbish both monochrome and colour signals. A large number of facilities are provided and the equipment has several operating modes.

The amplifier is completely self-contained of modular design, lightweight, and completely transistorized.

Features

- Monochrome to colour conversion by the addition of plug-in modules.
- Suitable for NTSC and PAL colour signals.
- Basic unit can be extended to provide full facilities.
- Completely solid state.
- Remote control available.
- Three outputs.
- By-pass facility included.
- 405, 525, or 625 line standards.
- Self powered.

Facilities

Four basic versions of the amplifier are available; Editions -01, -09, -501 and -513. The table shows how modules may be assembled into the frame to achieve the required Edition.

Edition -01 provides basic black and white facilities. Edition -09, also handles NTSC or PAL colour signals. A full range of facilities is available from the simple to the comprehensive.

Construction

The mechanical design follows established Marconi modular practice. Magnetic relays on the back connector provide continuity automatically, when a given module is withdrawn.

Data summary

Inputs

Mains: 100-125V and 200-250V in 5% steps at 50-60Hz. Consumption 78VA (Max. with all modules).

Vision: 1V nominal picture + sync.

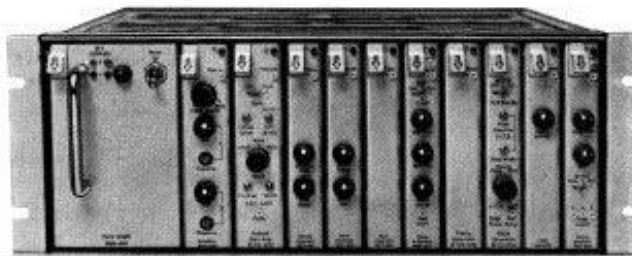
Sync. and Blanking (bridged): Between 1.5 and 5V p-p.

By-pass (bridged): 1V nominal picture + sync.

Outputs

Vision: 3 of 1V picture + sync.

Sync. pulses: 2V in 75Ω neg. going.



B4011

Remote control: To mixer and remote control panel.

Performance

Gain: Control on remote control panel, covers two ranges +9dB to -3dB and -15dB to +3dB selected by a switch on the module.

Clamp: Two hum reduction factors, either 20dB or 30dB selected by switch on module.

Sync. regenerator & reblanking:
625 line black and white or PAL.
525 line black and white or NTSC.
405 line black and white.

Peak white clipper: Adjustable from module over a range 85% to 150% of nominal signal level.

Fading: From 0dB to -50dB over 6MHz bandwidth.

VITS pass/deletion: The VITS controls can be set to pass any consecutive series of Vertical Interval lines i.e. in the case of 625 line systems to a maximum of six with variable position starting from line 16 to 20 inclusive and lines 329 to 333 on the other field.

Chroma gain: Adjustment for chrominance/luminance gain over range of ±3dB.

Dimensions:

- Height: 17.8cm (7in.)
- Width: 48.3cm (19in.)
- Depth: 40.6cm (16in.)
- Weight: 15kg (33lb)

New Features:

- Burst can be remotely switched ON/OFF (Ed.-513).
- Edition-01 can now handle non-composite synchronous signals.

Full details are given in TD-2-B4011.

Edition	-01	-09	-501	-513	
Power Supply	x	x	x	x	Basic modules supplied as standard
Chroma Separator		x		x	
Sync. Separator	x	x	x	x	
Clamp and Reblank	x	x	x	x	
Timing Generator			x	x	
Pulse Generator			x	x	Optional modules, as requested
Output Amplifier	x	x	x	x	
Pulse Shaper	x	x			
VITS Delete	x	x			
Equalizer	o	o	o	o	
Remote Gain	o	o	o	o	
*Automatic Gain	o	o	o	o	
Burst Generator			o	o	
Fader	o	o	o	o	

*Optional printed board assembly which plugs into remote gain amplifier.