

HPA 300

HD/SD Processing Amp



At a glance

- ⇒ Legalisation of SDI video
- ⇒ 10 bit processing throughout
- ⇒ Independent adjustment of processing parameters
- ⇒ Auto senses video standard
- ⇒ Transparent pass through of all ancillary data
- ⇒ Blank/pass individual VBI/VANC data lines
- ⇒ Intuitive Web or RS422 user control
- ⇒ Picture cropping

Features

The HPA 300 is a full feature proc amp and video legaliser in a single card.

With full controll over Y Gain, Black level, Limiting (standard or custom levels), U Gain, U Pedestal, Picture crop, V Gain, V pedestal, VBI line blanking, Overall Gain, Hue, Chroma Gain and Y Delay, the HPA 300 is the most complete and flexible processing amplifier and legaliser in the market today.

Auto detection of the incoming video make the HPA 300 imeadiatley adaptable to any broadcast environment.

The HPA 300 has one auto sensing SDI input (SDI IN). It has three outputs; program (PGM), and two auxiliary (AUX). PGM and AUX both show the SDI input with processing applied.

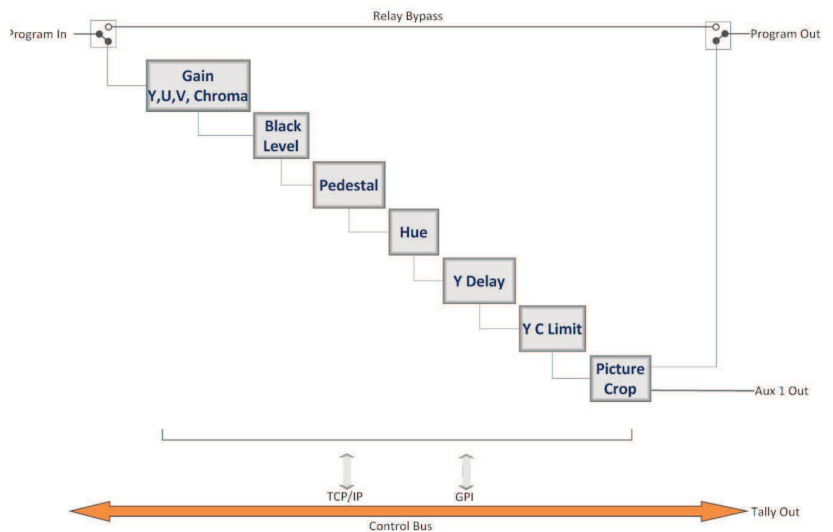
The HPA 300 is transparent to embedded audio and VBI data, which is passed to the outputs from the input feed.

Full control via intuitive web interface or through external remote control panel.

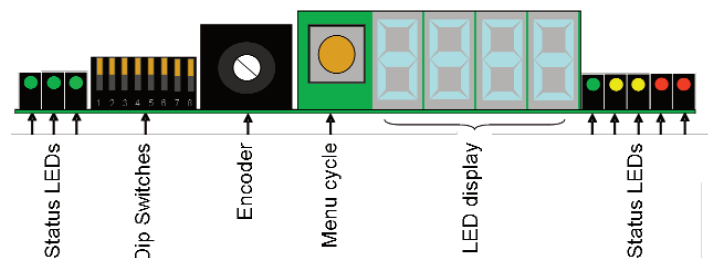
Applications

- live events
- satellite downlink
- camera feeds
- post conversion correction

Block Diagrams



Card-edge Controls



Specification

Input

SD/HD Serial Video	SMPTE 425M (3Gb/s) SMPTE 259M (270Mb/s) SMPTE 292M (1.5Gb/s)
Standard	up to 1080p/60
Number of Inputs	1
Equalization	Automatic to 75m @ 1.5Gb/s with Belden 1694A or equivalent cable.
Return Loss	> 10dB up to 3Gb/s, >15dB up to 1.5Gb/s

Output

HD Serial Video	As per input
Standard	As per input
Number of Outputs	3 (1 relay bypass protected, 2 broadcast quality monitoring outputs)
Signal Level	800mV nominal
DC Offset	0V \pm 0.5V
Rise and Fall Time	90ps nominal for HD 3Gb/s, 600ps nominal for SD 270Mb/s
Overshoot	< 10% of amplitude
Return Loss	> 10dB up to 3Gb/s, > 15dB up to 1.5Gb/s
Wideband Jitter	< 0.2UI

Miscellaneous

Weight Approx	175g
Operating Temp	0 °C to +50 °C ambient
Dimensions	16 x 100 x 237 mm (HxWxD)
Electrical	Voltage +5Vdc

Rear connections

Program In	
Not Used	
Not Used	
Aux Out	
Aux Out	
Program Out	