

Description:

The EAP-70D is an SDI embedded audio processor / automatic level controller, which allows audio to be reconfigured to match a station's infrastructure. This unit will allow you to process up to 4 channels (1 group) of audio. Audio processing includes audio ALC, manual gain, phase inversion, mute, shuffling and mixing. All audio channels can be mixed multiple times, and re-embedded into different audio channels.

The EAP-70D has one composite analog video output and dual mono/stereo analog audio output for monitoring or other use.

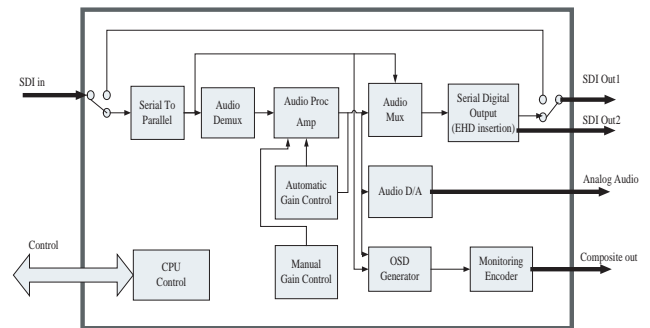
The EAP-70D generates up to 4 audio level meters for display in the composite analog video output or with RCP70D. This allows the signals to be controlled and monitored more effectively, seeing and hearing (with RCP70D) changes to the signal.

The EAP-70D has two modes for audio level control, ALC or manual gain control, which are selectable for different purpose. The ALC is exceedingly effective at controlling levels.

It controls the average output level around -20dBFS and limits the peaks below -8 dBFS, the combination of averaging the level around -20dBFS and of holding peaks below -8 dBFS packages the audio perfectly for natural sound quality and for most transfer purpose.

**Features:**

- ▶ SDI input with auto-detection on 525/625
- ▶ 10-bit processing (video)
- ▶ Audio processing of 4 channels of embedded audio
- ▶ ALC or manual gain control
- ▶ Audio Level Meter Provides composite analog video output and dual
- ▶ mono/stereo analog audio to monitor



FUNCTIONAL BLOCK DIAGRAM

Specifications: Specifications are subject to change without notice

Serial Digital Video Input

Quantity	1
Standards	259M-C 270 Mb/s; 525/625 auto sensing
Connector	BNC per IEC 169-8
Impedance	75 Ohms
Return Loss	>18 dB to 270MHz
Signal Level	800mV ±10%
Equalization	Auto EQ to 300m

Serial Digital Video Output

Quantity	2
Standards	259M-C 270 Mb/s; 525/625 auto sensing
Connector	BNC per IEC 169-8
Impedance	75 Ohms
Return Loss	>18 dB to 270MHz
Signal Level	800mV ±10%
DC Level	0.0 V ±0.5 V
Overshoot	<10% of amplitude (all outputs terminated)
Rise and Fall Times	400 to 1000ps(20% to 80% amplitude)
Jitter	<50ps

Composite Analog Video Output

Quantity	1
Standards	NTSC, PAL-B
Impedance	75 Ohms
Return Loss	>40 dB to 5.75MHz
Quantizing	8 bits
Frequency Response	±0.25dB to 5MHz
Differential Gain	<1.5%
Differential Phase	<1.2°
DC Offset	±50mV

Chroma/Luma Delay	<1.5ns
Chroma/Luma Gain	±1.5%
Transient Response	<0.5% K Factor
Signal to Noise	>54dB RMS to 5MHz

Analog Audio Output

Quantity	2
Connector	3-pin Connector(male)
D/A Resolution	24-bit
Output Operating Levels	+24, +22, +20, +18dBu, balanced, 36kohms
Maximum Output Level	+24 dBu (66ohms)
Sampling Rate	48 kHz
THD+N	>90 dB@1KHz
Crosstalk	>95dB, 20-20KHz
Freq. Response	<±0.2dB, 20-20KHz
Hum & Noise	>70dB below full output
SNR	>100dB
Audio Processing	
Signal Path	20 or 24 bits
Sampling	48KHz
AGC Silence Gate	-30 to -50 dBFS
AGC Leveler	-20dBFS
AGC Peak Limite	-8 dBFS
AGC Output Gain	±6dB, 0.5dB step
Manual Gain	-96dB to +12dB, 0.5dB step

General Specifications

Magnetic Shielding	<1 gauss any adjacent surface
Chassis Type	1RU, 19" rack mounting
Power Consumption	<5W
Power Supply	100-240 VAC, 50/60Hz
Dimensions(HxWxD)	44.5x483x320mm

On Screen Level Meters (Composite Analog Video)

Quantity	4	Scale	0 to -52dBFS
Display	52-segment	Dynamics	VU & PPM/True Peak Simultaneous
		Midscale Resolution	1dB

Ordering Information:

EAP70D-AGC:	Automatic or manual gain control	EAP70D-MET:	Analog video overlaid with audio meter accessories
EAP70D-MNL:	Manual gain control	RCP-70D:	Remote control panel