

# 5AV2628 CEDA clamped equalising video DA



## ***Introduction***

The 2600 range comprises modular analogue audio and video equipment in a 1U or 2U format with each module independently powered. Designed to the highest specifications and meeting all relevant international standards, modules can be used individually or mixed with others in the range to increase the functionality.

Up to 9 modules can be housed in the 5AV2645 2U rack-mounting frame, up to 4 in the 5AV2641 1U frame and up to 2 in the 5AV2642 portable case (& 5AV2642X portable case with XLRs).

## ***Description***

Widely used in outside broadcast vehicles and in flyaway cases due to their compact, rugged and dependable features.

The 5AV2628 clamped equalising video distribution amplifier (CEDA) is designed primarily to equalise signals from outside the studio environment such as from satellite and microwave links but can also be used to equalise signals passed through a variety of cable types. Standard (5AV2628) and long time-constant (5AV2628L) CEDAs are available, the long time-constant version providing more compensation at lower frequencies when this is required. The units are based on the proven 5AV2646 video distribution amplifier and use the same mating rear connector unit (5AV2647) for input and output connections.

## ***Features***

- Differential looping inputs.
- +ve and -ve wide ranging equalisation to compensate for under and over equalised signals.
- Inherently high CMRR that effectively eliminates common mode hum pick up on lines.
- Front panel adjustments for gain and low, medium and high equalisation frequencies.
- New input presence LED.
- A clamp circuit with switched options on the front panel. Designed to considerably reduce the effect of differential mode hum or jitter on the input signal it can be switched on or off.
- Hard or soft clamping is selectable on the front panel to eliminate excessive or slight differential hum or jitter.
- Back-porch or sync-tip clamping allows the user to choose the most effective clamping point for the input signal.
- Passes sound in sync.
- With its associated 5AV2647 rear connector unit, provides differential looping input with six matched 75Ω outputs.
- All 2600 modules are independently mains powered maximising reliability & isolation between modules



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<b>Specification</b>	
<i>Input</i>	
Impedance	75Ω bridging
Return loss	<-46 dB to 15 kHz <-40 dB to 5.5 MHz
Allowable dc superimposed	3 V maximum
Common mode signal level	4 V maximum
CMRR	<-60 dB to 15 kHz <-35 dB to 5.5 MHz
<i>Output</i>	
Number	6
Impedance	75Ω
Return loss	<-40dB (50Hz-5.5MHz)
Isolation	<-46dB
Electrical length	18 ns
dc superimposed	<±20 mV adjustable
Signal level	1 V p-p video
Consistency	Typically 0.5 ns
<i>Video performance</i>	
Gain control range	±3dB
Frequency response	±0.1 dB to 8 MHz roll off 3 dB/octave
Pulse to bar ratio	<0.2% K
Bar slope	<0.2% K
Pulse slope	<0.2% K
Y/C gain inequality	<0.5%
Y/C gain delay	±1 ns
Differential gain	<0.2% (12.5%-87.5% APL)
Differential phase	<0.2° (12.5%-87.5% APL)
<i>Noise added at output</i>	
Luminance CCIR weighted	<-82 dB
Chrominance CCIR weighted	<-75 dB
LF random unweighted	<-70 dB
<i>Equalisation</i>	
Front panel controls	Low, medium and high frequencies
Range	±200m PSF1/2 or equivalent (+0-400m jumper selectable internally)
<i>Power</i>	
Power consumption	10VA
Operating temperature	0-40° C
<i>NB Above measurements refer to the 5AV2628 CEDA and associated 5AV2647 rear connector unit in a 5AV2645 frame using PSF1/2 cable and with all unused outputs terminated.</i>	



<b>Ordering information</b>		<i>Weight</i>	<i>Height</i>	<i>Width</i>	<i>Depth</i>
		<i>(kg)</i>	<i>(mm)</i>	<i>(mm)</i>	<i>(mm)</i>
5AV2628	Clamped equalising video distribution amplifier (CEDA)	1	88	44	300
5AV2628L	Long time-constant CEDA	1	88	44	300
5AV2647	Connector unit with looped through input and 6 outputs	0.21	88	44	120
5AV3123	Extender module for VDA, CEDA and delay DA	0.45	54	16	115

We reserve the right to change technical specifications without prior notice. E&OE.

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