

5AV2646 Video equalising distribution amplifier

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 5AV2646 video distribution amplifier (VDA) together with its associated 5AV2647 rear connector unit is a high quality amplifier of proven reliability with looping inputs and six 75Ω outputs. The VDA handles composite video (or a channel of YC, YUV or RGB) and 4-volt pulse. Various equalisation (EQ) sub-modules can be fitted to cater for most cable types and lengths. The front panel incorporates an input presence LED together with frequency range and gain adjustments dependent on the EQ sub-module fitted. Each module contains its own independent power supply and can be mixed with other modules in the standard frames.

Features

- Front panel gain & equalisation control (by frequency dependant on sub-module fitted).
- New input presence LED.
- Choice of plug in equalisation sub-modules to cater for most cable types and lengths (including new 800 metre version).
- Inherently high CMRR that effectively eliminates common mode hum pick-up on lines.
- 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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<i>Specification</i>	
<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 >46 dB to 5.5 MHz
<i>Output</i>	
dc superimposed	<±20 mV
Signal level	1 V p-p
Return loss	>40 dB
Electrical length	18 ns
Consistency	Typically 0.5 ns
<i>Video performance</i>	
Gain control range	-3.5 dB to +3.5 dB
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>Power</i>	
Power consumption	8 VA
Operating temperature	0-40° C
<i>NB Above measurements refer to the 5AV2646 VDA with 6PD2649 EQ and associated 5AV2647 rear connector unit in a 5AV2645 frame using PSF1/2 cable and with all unused outputs terminated.</i>	



<i>Ordering information</i>		<i>Weight</i>	<i>Height</i>	<i>Width</i>	<i>Depth</i>
5AV2646	Video distribution amplifier for 6 outputs	635g	88mm(2U)	44mm(1U)	300mm
5AV2647	Connector unit with looped through input and 6 outputs	210g	88mm(2U)	44mm(1U)	120mm
6PD26492	No gain cable equalising sub-module	10g	N/A	N/A	N/A
6PD2649	0-150m cable equalising sub-module	10g	N/A	N/A	N/A
6PD26491	150-450m cable equalising sub-module	10g	N/A	N/A	N/A
6PD3191	Multi-variable 0-300m cable equalising sub-module with front panel adjustment for very low, low, medium and high frequencies	10g	N/A	N/A	N/A
6PD26493	Multi-variable 0-800m cable equalising sub-module with front panel adjustment for very low, low, medium and high frequencies	10g	N/A	N/A	N/A
5AV3123	Extender module for VDA, CEDA and delay DA	45g	54mm	16mm	115mm

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

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