

D&A 3500&1 analogue video distribution amplifiers

Introduction

The 3500&1 analogue video equalising distribution amplifiers are modules in the expanding D&A distribution system. Designed to the highest specification, and meeting all relevant international standards including CE approval, digital and analogue audio and video modules can be mixed within a frame to satisfy a wide variety of interfacing requirements.

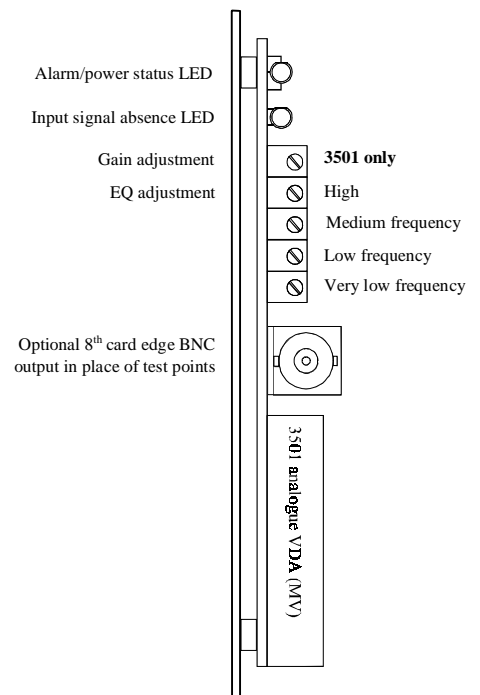
Up to 14 modules can be housed in the 3301 3U frame with a single power supply or 12 in the 3302 3U frame with dual power supplies.

Description

3500&1 analogue video equalising distribution amplifiers, together with the associated 3490 BNC rear connector units, have looping inputs and 7 outputs. Card edge LED's show alarm/power status & absence of input signal. Card edge adjustment is provided for gain and EQ (single EQ adjustment for the 3500, very low, low, medium and high frequency EQ adjustment for the 3501). Alarms can be triggered (card alarm LED, frame LED and external alarm) for loss of power and absence of input signal. Sub-modules are available for delay and clamping. An optional eighth BNC output can be supplied on the card edge.

Features

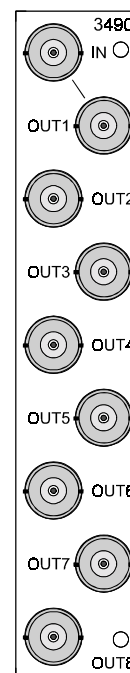
- Differential looping input and seven outputs
- High performance with wide bandwidth and inherently good CMRR
- 3500 has card edge adjustment for gain & equalisation for 0-450m cable
- 3501 has card edge adjustment for gain & very low, low, medium & high frequency equalisation for 0-450m cable
- AC or DC coupled
- Optional clamp sub-module for sync tip/back porch clamping (passes sound in sync) and with optional flywheel circuit
- Optional delay sub-module providing 0-511nS delay (with provision for additional 500 &/or 1000nS delay blocks to a total of 2011nS)
- Optional eighth BNC output on card edge replacing standard test points
- User configurable alarms can be triggered (card alarm LED, frame LED and external alarm) for loss of power and absence of input signal



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Specification

Input	
Impedance	High impedance bridging 75Ω termination
Return loss	>46dB to 5.5MHz
Common mode signal level	4V maximum peak to peak
CMRR	>60dB to 15kHz
	>40dB @ 5MHz
Signal level	1V peak to peak
Equalisation	0-450m
Connectors	BNC
Output	
Number	Looping input + 7 outputs (optional 8 th on card edge)
Impedance	75Ω ±1%
Return loss	>46dB to 5.5MHz
Isolation	>70dB to 5.5MHz
dc superimposed	<±20mV
Electrical length	11nS (without sub-modules) EQ set to 0m 7nS (without sub-modules) EQ set to 150m
Consistency	Typically <0.5nS
Signal level	1V peak to peak
Connectors	BNC
Performance	
Gain range	±3dB
Frequency response	±0.1dB to 20MHz, ±0.25dB to 30MHz -1dB @ 50MHz
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 delay inequality	<±1nS
Differential gain	<0.1% (12.5-87.5% APL)
Differential phase	<0.1° (12.5-87.5% APL)
Other	
User selectable alarm options	Loss of power/loss of input signal
Power supply required	Frames with 3310 6.5V or 3320 14.5V power supplies
Consumption 3310 PSU	0.88W (+ve rail) 0.52W (-ve rail)
Consumption 3320 PSU	2.61W (+ve rail) 1.16W (-ve rail)
Temperature range	0°C to 45°C
<i>Above measurements relate to the 3500 DA with 3490 BNC connector unit with all unused outputs terminated in 75Ω and when housed in the 3301 frame using the 3310 power supply.</i>	



3490 video rear

Ordering information

Part no.	Description	Weight	Height	Width	Depth
3500	Analogue equalising VDA with gain and single EQ adjustment	230g	100mm	25mm	220mm
3500-1	Analogue equalising VDA with gain and single EQ adjustment with card edge 8 th BNC output in place of test points	230g	100mm	25mm	220mm
3501	Analogue equalising VDA with gain and multi-variable EQ adjustment	233g	100mm	25mm	220mm
3501-1	Analogue equalising VDA with gain and multi-variable EQ adjustment with card edge 8 th BNC output in place of test points	233g	100mm	25mm	220mm
3490	BNC connector unit with looping inputs & 7 outputs	265g	130mm	25mm	80mm
AV60191	Clamp/sync inter-link sub-module	50g	N/A	N/A	N/A
AV6019	Clamp/sync inter-link sub-module with flywheel circuit	53g	N/A	N/A	N/A
AV5017	Delay sub-module for VDA providing 0-511nS delay	55g	N/A	N/A	N/A
AV5018	Additional 500nS delay block for AV5017 delay sub-module	8g	N/A	N/A	N/A
AV5019	Additional 1000nS delay block for AV5017 delay sub-module	13g	N/A	N/A	N/A

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

LOCAL
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