

Synapse CDV08

Analog video distribution amplifier with cable equalizer

A Synapse[®] product



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Block schematic & I/O panel





ANALOG VIDEO INPUT

ANALOG VIDEO OUTPUT 1 (OR LOOP WITH BPL07)

ANALOG VIDEO OUTPUT 2

ANALOG VIDEO OUTPUT 3

ANALOG VIDEO OUTPUT 4

ANALOG VIDEO OUTPUT 5

ANALOG VIDEO OUTPUT 6

ANALOG VIDEO OUTPUT 7

ANALOG VIDEO OUTPUT 8

Features

The CDV08 is an enhanced analog distribution amplifier providing a low loss electronically balanced input with loop through when used with the BPL07 or terminated when used with the BPL01. If necessary the input can be used fully floating by unscrewing the tabs on the BPL07.

- Adjustable input gain
- AC or DC coupled
- Equalizer for up to 300 meter of RG59 or equivalent cable
- Equalizer level of up to 230%
- Floating inputs and loop through with BPL07
- +/- 3 dB gain adjustment
- Input status detection
- Full control and status monitoring through the front panel of the SFR04/SFR08/SFR18 frame and the Ethernet port (ACP)

Applications

The CDV08 is designed for applications where a long cable length is used and analog video or Black & Burst signals need equalization. The straightforward design enables easy installation and reliable operation.

Ordering information

Module:

• CDV08: Analog video distribution amplifier with cable equalizer

Standard I/O:

- BPL01_CDV08: I/O panel for CDV08
- **BPL07_CDV08:** I/O panel for CDV08 with loop through

Specifications

Analog input	
Input levels	700 mV. White to black. Nominal 1 V sync tip to white. 75
Return loss	Ohms terminated with BPL01 Floating with BPL07 Measured with Mini Circuits ZFDC-15-6-75
Neturn 1055	> 40 dB. $@$ 5 MHz
	> 36 dB, @ 15 MHz
	> 28 dB, @ 30 MHz
	75 Ohms terminated
Common mode rejection (CMR)	Measured with BPL07 BNC inputs floating
	CM signal on both inner and outer leads. CM input impedance 5 kOhms. 10 kOhms each input to GND
	> 68 dB, @ 50 Hz
	> 55 dB, @ 5 MHz
	> 40 dB, @ 15 MHz
	> 30 dB, @ 30 MHz
Analog outputs	
Output levels	1 V sync tip to white, 75 Ohms terminated
Number of outputs	8 with BPL01, 7 with BPL07
Return loss	Measured with Mini Circuits ZFDC-15-6-75
	> 37 dB, @ 5 MHz
	> 34 dB, @ 15 MHz > 29 dB, @ 30 MHz.
	Other outputs 75 Ohms terminated
Performance	
Frequency response	within 0,4 dB, 0 to 5 MHz.
Signal to noise ratio Bar tilt	66.5 dB. 10KHz to 6MHz, Tektronix VM700T
Gain stability	0,1 % 1%
Gain Stability	170
Miscellaneous	
Weight	Approx. 250g
Operating Temperature	0 °C to +50 °C
Dimensions	137 x 296 x 20 mm (HxWxD)
Electrical	
Voltage	+24V to +30V
Power	<5 Watts