



CDV07

**Analog video (B&B / Tri-Level) distribution amplifier
(word clock DA for high impedance circuits)**

A Synapse® product

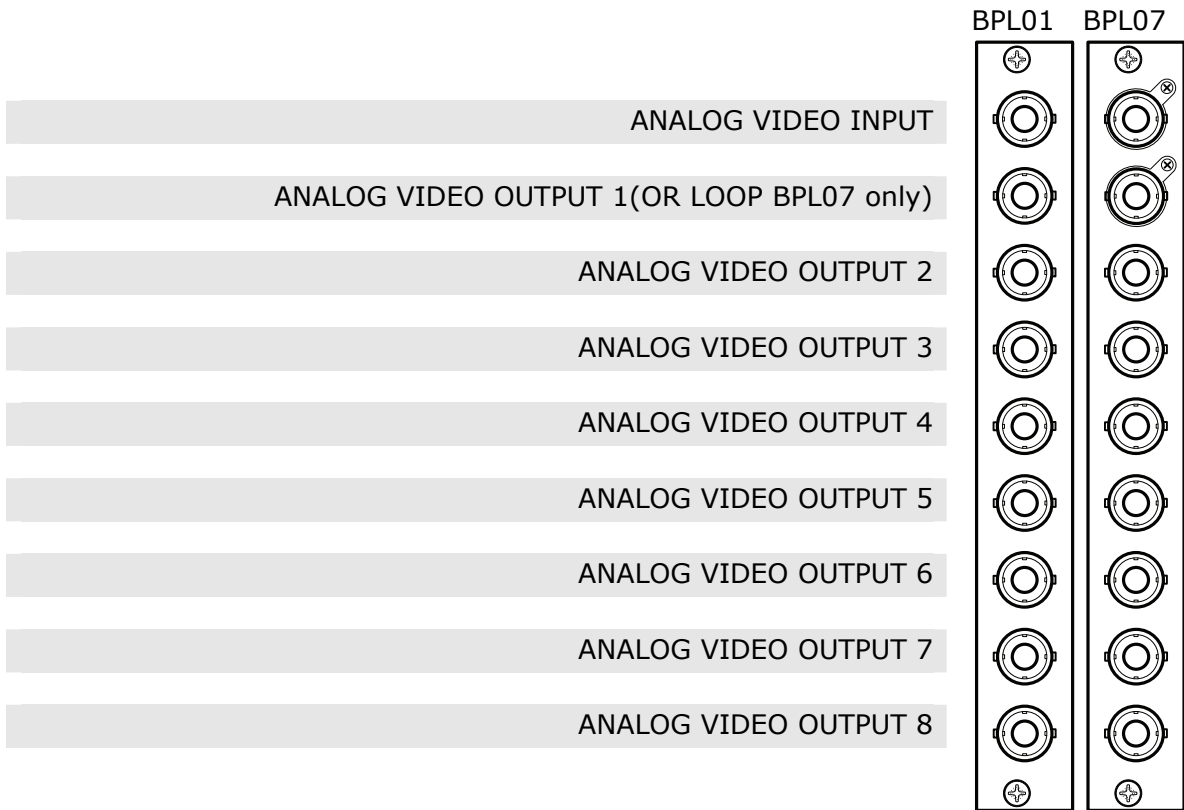
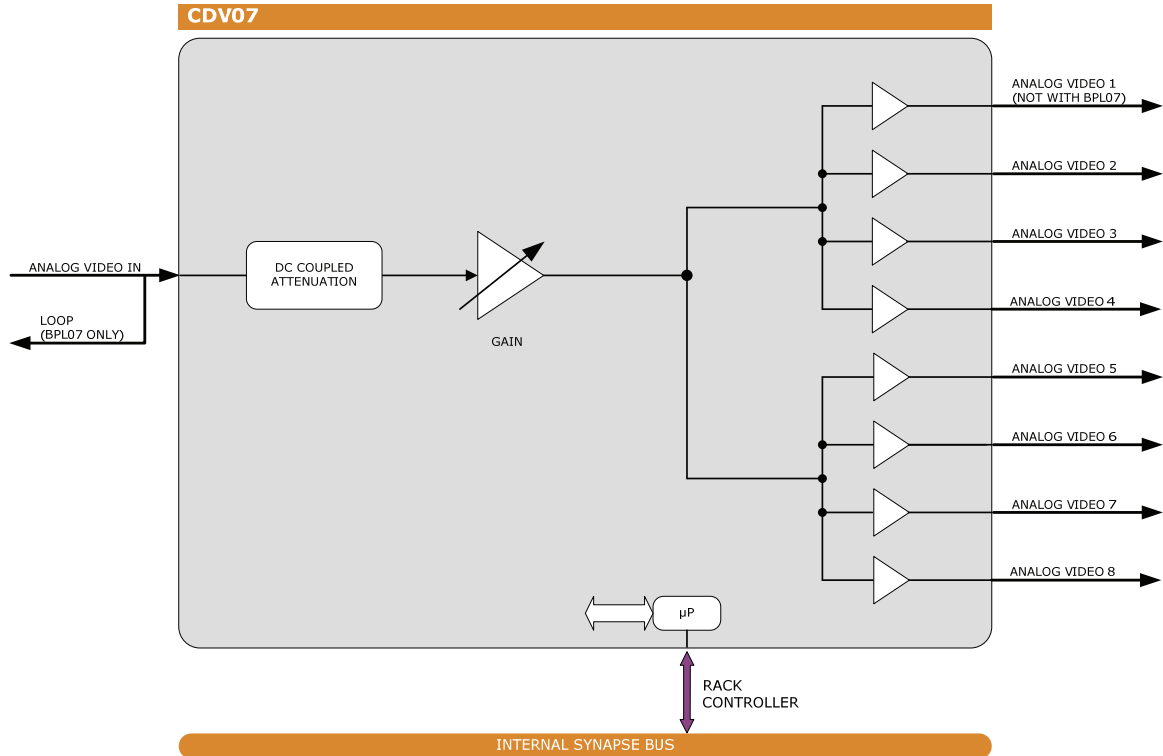
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Block schematic & I/O panel



Features & Applications

The CDV07 is a basic 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
- DC coupled
- Compatible with Tri-Level sync
- Compatible with Word clock for high impedance circuits
- Floating inputs and loop through with BPL07
- +/- 6dB 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 CDV07 is designed for applications where a cost effective analog video or Black & Burst distribution is needed. The straightforward design enables easy installation and reliable operation.

- Can be used for word clock distribution into high impedance circuits
- Tri-Level sync distribution

Ordering information

Module:

- **CDV07:** Analog video distribution amplifier

Standard I/O:

- **BPL01_CDV07:** I/O panel for CDV07
- **BPL07_CDV07:** I/O panel for CDV07 with loop through

Specifications

Analog input

Input levels	700 mV. White to black. Nominal 1 V sync tip to white. 75 Ohms terminated with BPL01. Floating with BPL07
Return loss	Measured with Mini Circuits ZFDC-15-6-75 > 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 5K Ohms. 10 KOhms each input to GND > 68 dB, @ 50Hz > 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	7 with BPL07, 8 with BPL01
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 Ohm terminated

Performance

Frequency response	within 0,4 dB, 0 to 5 MHz.
Signal to noise ratio	66.5 dB. 10KHz to 6MHz, Tektronix VM700T
Bar tilt	0,1 %
Gain stability	1%

Miscellaneous

Weight	Approx. 250g
Operating Temperature	0° C to +50° C
Dimensions	137 x 296 x 20 mm (HxWxD)

Word-clock distribution

Input voltage	Maximum 5V
Output voltage	Maximum 3.5V into high impedance (1K Ohms)

Electrical

Voltage	+24V to +30V
Power	<5 Watts