



SDN/SDR09

**SD-SDI (N=Non) reclocking dual channel distribution
amplifier (ASI/DVB compatible)**

A Synapse® product

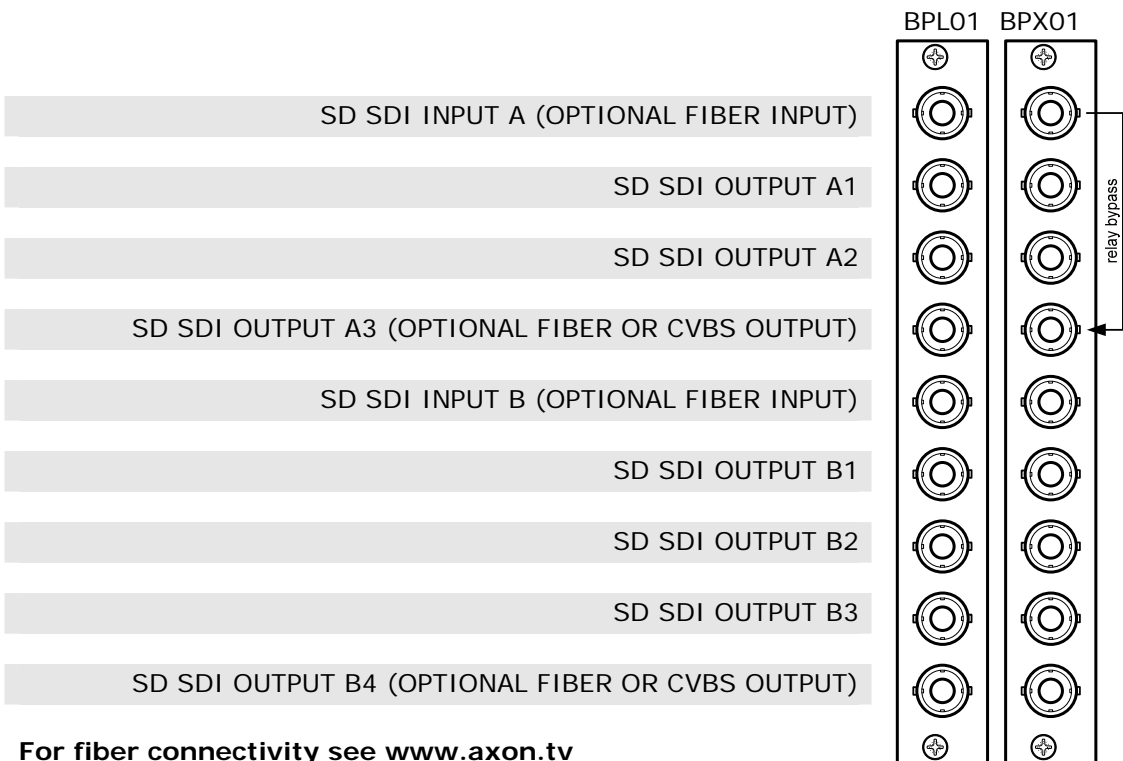
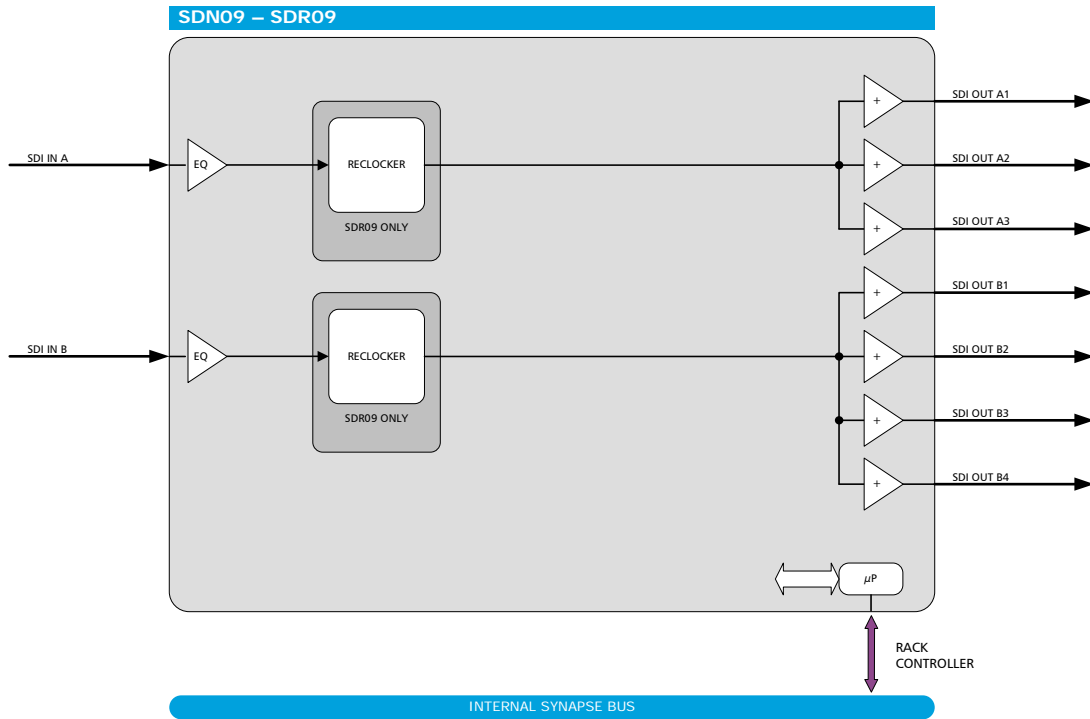
The logo for Synapse, written in a light blue, cursive script font with a slight shadow effect.

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Block schematic & I/O panel



Features

The SDR & SDN series provide a range of distribution amplifiers with flexible input and output variations. The SDR09 reclocks the input signal.

The SDN09/SDRR09 are 1 to 3 and 1 to 4 distribution amplifiers compatible with ASI/DVB

- Dual channel
- 3 and 4 standard or reclocked outputs
- Input carrier detection
- Reclocking compatible with:
 - 143Mb/s
 - 177Mb/s
 - 270Mb/s
 - 360Mb/s
- ASI/DVB compatible
- Guaranteed output on BNC 4 with the BPX01 electromechanical by-pass relay
- Full control and status monitoring through the front panel of the SFR04/SFR08/SFR18 frame and the Ethernet port (ACP)
- Optional 2 fiber inputs (replacing 2 SDI inputs) or 2 fiber outputs (replacing 1 SDI outputs) on I/O panel
- Optional 2 CVBS outputs (replacing 2 SDI outputs) on I/O panel

Applications

- The SDN09 and SDR09 can be used as a generic dual channel DA
- ASI/DVB distribution
- Fiber I/O transmitter/receiver

Ordering information

Module:

- **SDR09:** SD reclocking dual channel distribution amplifier (ASI/DVB compatible)
- **SDN09:** SD non-reclocking dual channel distribution amplifier (ASI/DVB compatible)

Standard I/O:

- **BPL01_SDR09:** I/O panel for SDR09
- **BPX01_SDR09:** I/O panel for SDR09 with relay bypass
- **BPL01_SDN09:** I/O panel for SDN09
- **BPX01_SDN09:** I/O panel for SDN09 with relay bypass

Fiber outputs:

- **BPL01T2_FC/PC_SDR09:** I/O panel for SDR09 with 2 fiber transmitters on FC/PC
- **BPL01T2_SC_SDR09:** I/O panel for SDR09 with two 2 transmitters on SC
- **BPL01T2_FC/PC_SDN09:** I/O panel for SDN09 with 2 fiber transmitters on FC/PC
- **BPL01T2_SC_SDN09:** I/O panel for SDN09 with two 2 transmitters on SC

Fiber inputs:

- **BPL01R2_FC/PC_SDR09:** I/O panel for SDR09 with 2 fiber receivers on FC/PC
- **BPL01R2_SC_SDR09:** I/O panel for SDR09 with 2 fiber receivers on SC
- **BPL01R2_FC/PC_SDN09:** I/O panel for SDN09 2 two fiber receivers on FC/PC
- **BPL01R2_SC_SDN09:** I/O panel for SDN09 with 2 fiber receivers on SC

CVBS outputs:

- **BPL01C2_SDN09:** I/O panel for SDN09 with 2 CVBS outputs
- **BPL01C2_SDR09:** I/O panel for SDR09 with 2 CVBS outputs

Specifications

Serial Video Input

Standard	625/50 or 525/59.94 SMPTE 259M-C (270Mb/s) with SMPTE 272M embedded audio
Number of Inputs	2
Equalization	Automatic to 300m @ 270Mb/s with Belden 1694A or equivalent cable
Return Loss	> 15dB up to 270MHz

SD Serial Video Output

Standard	625/50 or 525/59.94 SMPTE 259M-C (270Mb/s) with SMPTE 272M embedded audio
Number of Outputs	3 and 4
Signal Level	800mV nominal
DC Offset	0V \pm 0.5V
Rise/Fall Time	800ps nominal
Overshoot	< 10% of amplitude
Return Loss	> 15dB up to 270MHz

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	<6 Watts