



SIM21

**SD hearing aid subtitles decoder and inserter keyer
from Teletext based subtitles**

A Synapse® product

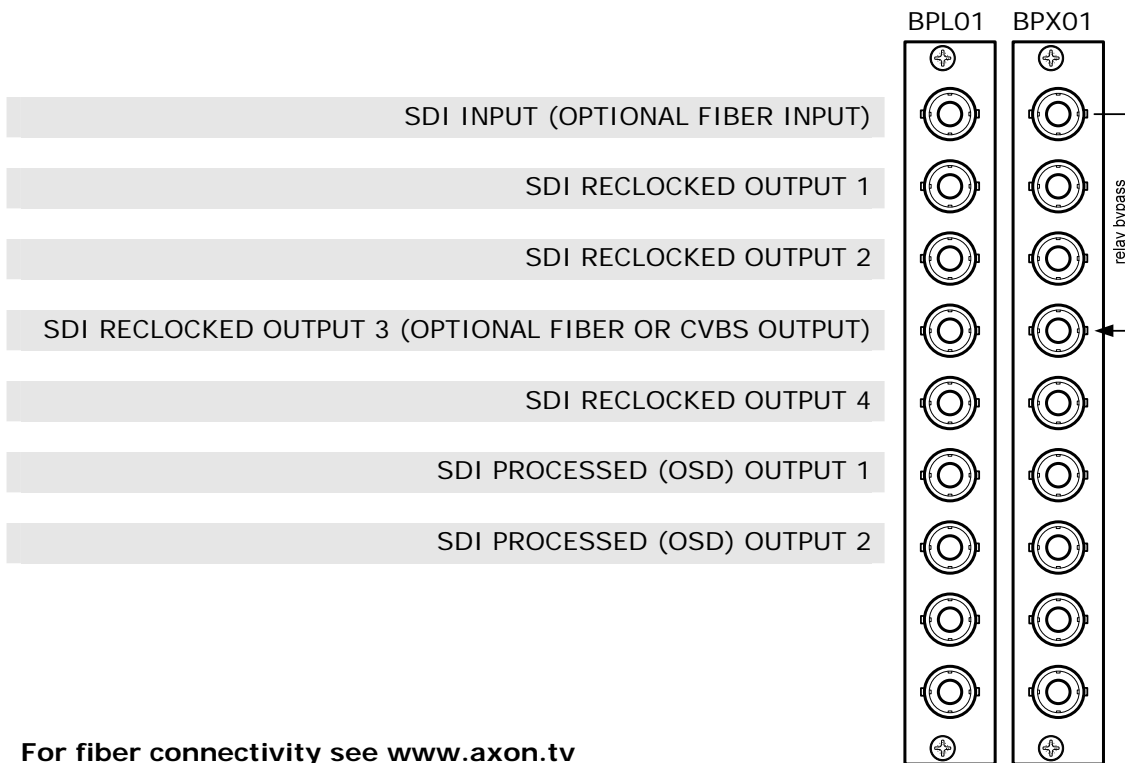
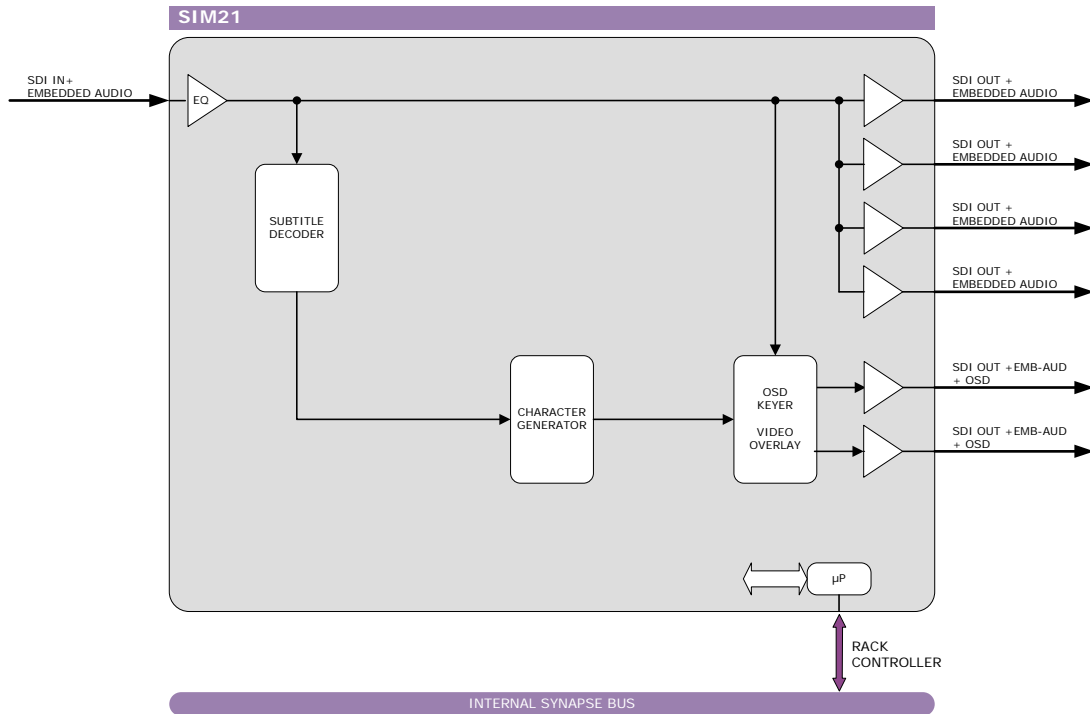
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Block schematic & I/O panel



For fiber connectivity see www.axon.tv

Features

The SIM21 is a 1 to 4 distribution amplifier with Teletext derived subtitle insertion in a quality suitable for transmission. This unit inserts and displays fully shaped fonts. Every individual character is designed and stored in memory for an optimum subtitle presentation with white characters on a dark (anti-aliased) background.

- Clean and rendered (transmission ready) subtitle keying from Teletext based subtitles
- Manual 2 line subtitle insertion
- Adjustable page for decoding (100 to 899)
- Adjustable subtitle position (0 to 300 pix and 300 to 510 lines)
- Adjustable slicing frequency
- Adjustable slice level (200 to 550 mV)
- 1 to 4 distribution amplifier
- 2 outputs for OSD subtitle insertion
- Full control and status monitoring through the front panel of the SFR04/SFR08/SFR18 frame and the Ethernet port (ACP)
- Optional 1 fiber input (replacing 1 SDI input) or 1 fiber output (replacing 1 SDI output) on I/O panel
- Optional 1 CVBS output (replacing 1 SDI output) on I/O panel

Applications

- Transmission subtitle insertion out of Teletext based subtitles

Ordering information

Module:

- **SIM21:** SD hearing aid subtitles decoder and inserter keyer from Teletext base subtitles

Standard I/O:

- **BPL01_SIM21:** I/O panel for SIM21
- **BPX01_SIM21:** I/O panel for SIM21 with relay bypass

Fiber outputs:

- **BPL01T_FC/PC_SIM21:** I/O panel for SIM21 with fiber transmitter on FC/PC
- **BPL01T_SC_SIM21:** I/O panel for SIM21 with fiber transmitter on SC

Fiber inputs:

- **BPL01R_FC/PC_SIM21:** I/O panel for SIM21 with fiber receiver on FC/PC
- **BPL01R_SC_SIM21:** I/O panel for SIM21 with fiber receiver on SC

CVBS output:

- **BPL01C_SIM21:** I/O panel for SIM21 with CVBS output

Specifications

Serial Video Input

Standard	625/50 or 525/59.94 SMPTE 259M-C (270Mb/s) with SMPTE 272M embedded audio
Number of Inputs	1
Equalization	Automatic to 300m @ 270Mb/s with Belden 1694A or equivalent cable 150m with BPX03
Return Loss	> 20dB 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	6 (2 processed and 4 reclocked)
Signal Level	800mV nominal
DC Offset	0V \pm 0.5V
Rise/Fall Time	520ps nominal
Overshoot	< 10% of amplitude
Return Loss	> 18dB up to 270MHz
Jitter	< 600ps 10Hz HPF

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	<8 Watts