



PBS03

Dual channel relay based back-up switcher with signal integrity checking

A Synapse® product

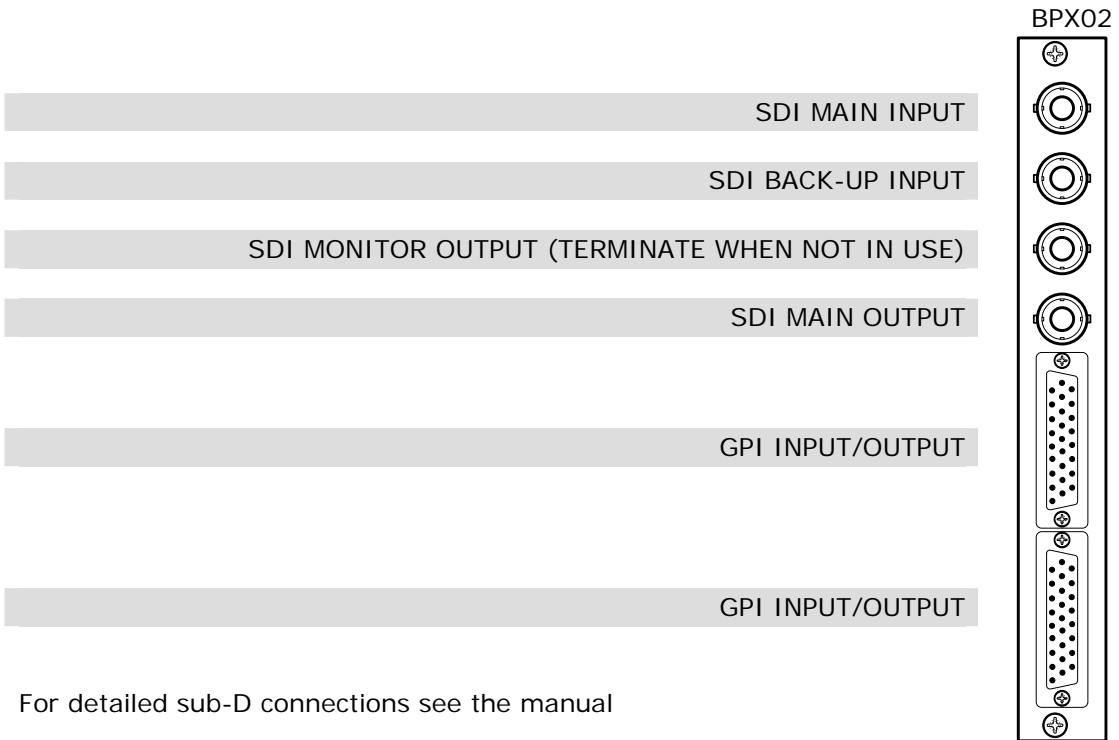
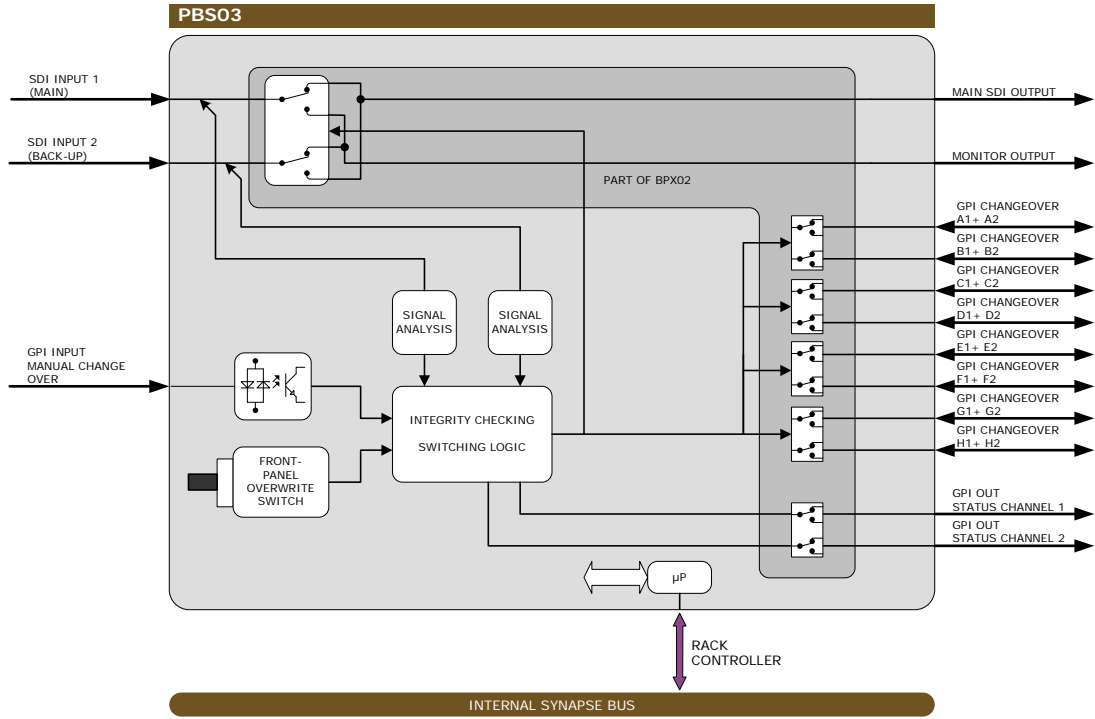
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Block schematic & I/O panel



Features

The PBS03 is a dual channel digital SD-SDI change-over back-up switch with integrity checking. The PBS03 has 2 SDI inputs to 2 outputs. The loop-through input is high impedance and must be terminated in 75 Ohms when not used. The cross-switching can be executed by several signal analysis triggers. These triggers are loss of input, loss of embedded audio, freeze frame, TRS errors or any combination of these.

- Electromechanical Relay based switching on connector panel for optimal reliability (even when the probing card is removed)
- 2 SDI inputs
- 2 SDI outputs
- Switching triggers based on:
 - GPI
 - Carrier loss
 - TRS error
 - Audio silence
 - Freeze detection
 - Event (an event triggered by a different card in the same frame)
- Automatic switching (with control of back-up channel)
- Freeze length and threshold adjustments
- Silence time and threshold adjustment
- 8 fully wired alternated relay based switches (suitable for AES/EBU and analog audio)
- Cable length up to 100 meter
- Automatic (signal quality controlled) switching
- GPI based switching
- Manual overwrite on front panel switch
- Channel 'OK' indication by GPI output
- Full control and status monitoring through the front panel of the SFR04/SFR08/SFR18 frame and the Ethernet port (ACP)

Applications

- Ultra reliable transmission output back-up switch
- Truck output bypass switch

Ordering information

Module:

- **PBS03:** Dual channel relay based back-up switcher with signal integrity checking

Standard I/O:

- **BPX02_PBS03:** I/O panel for PBS03

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 100m @ 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	2
Signal Level	As input
DC Offset	As input
Rise/Fall Time	As input
Overshoot	As input
Return Loss	> 15dB up to 270MHz

GPI Input/Output

Connector	26 pins female sub-D
Number of Connectors	2
Number of GPI Inputs	10
Type of Inputs	Opto coupled
Number of GPI Outputs	16
Type of Outputs	relay

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