

3Gbit SDI/ASI 2 Channel Changeover Switch

Description

The S VD 5812 is a 2 channel changeover switch which can be automatically triggered when an input fails or manually triggered. Fully compatible with SDI / DVB-ASI and SMPTE 310 signals up to 3Gbits/s. This module is ideally suited for demanding multi-format broadcast and professional video applications.

In re-clocked mode the module will auto-detect the connected video standard. When set to non re-clocked mode the module will transparently pass data from 15Mbit/s to 3Gbit/s.

The switch can be configured to switch manually from an external GPI input trigger or from the control system GUI. When configured for emergency switching the module will automatically switch when a designated input fails. This can be set to latch

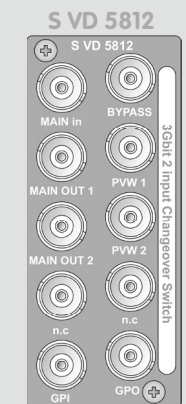
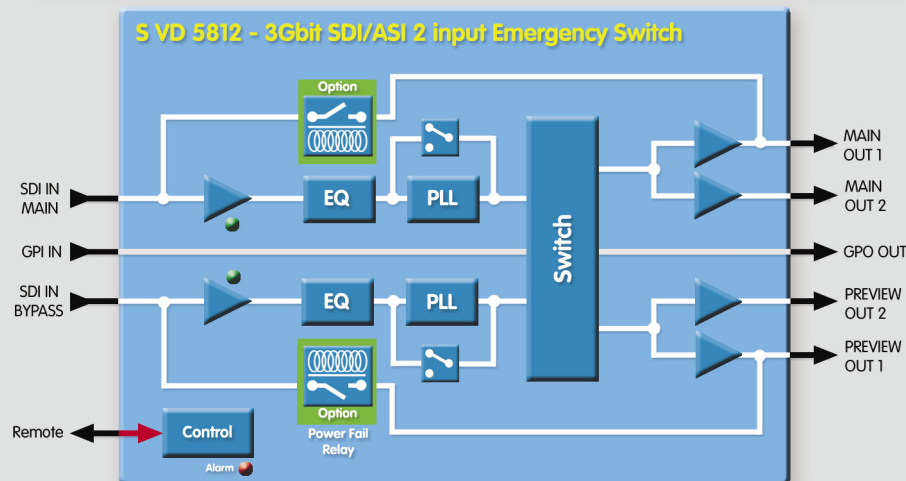
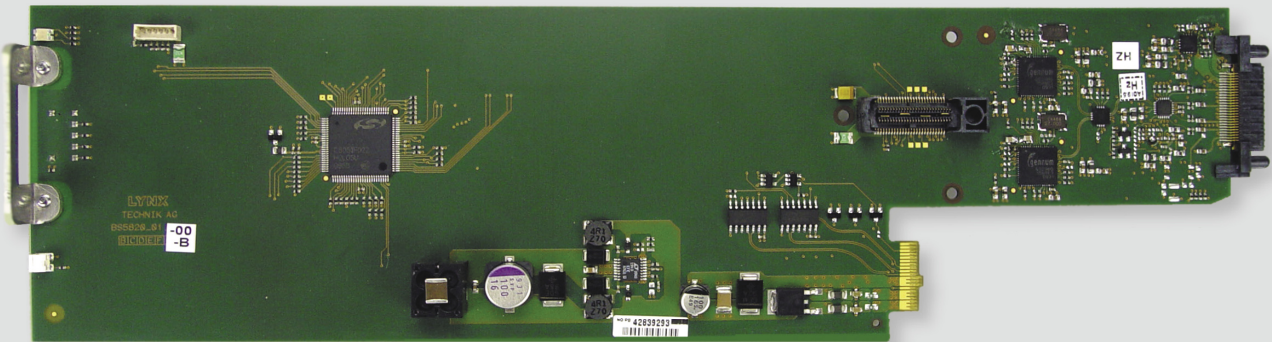
permanently or switch back automatically when main input returns. A GPO output trigger is provided when the emergency switch operates.

Optional mechanical relay will connect inputs to outputs in the event of a power failure.

Local control capability is provided via the integrated dip switch. Remote control, status monitoring and error reporting is possible when using the LYNX control system.

Features

- Supports SDI / DVB-ASI and SMPTE 310 inputs up to 3Gbit/s
- 2 x Inputs and 2 sets of switched outputs
- Inputs can be relocked or non-relocked
- Auto detect input video standard
- Manual switching from external GPI trigger or from control system GUI
- Automatic emergency switching when designated input fails
- Select latch or automatic return when main input returns
- GPO output trigger provided when switch operates
- Transparently pass data between 15Mbit/s and 3Gbit/s in non-relocked mode.
- Input presence detection with LED indicators
- Optional power fail relay connecting inputs to outputs
- Remote control, status monitoring and error reporting possible when used with LYNX control system
- Full SNMP support when used with master controller option
- Hot Swappable



Backplane

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Specifications

Video Inputs

Signal Type	Serial Digital Video SMPTE 259M, 292M, 424M DVB-ASI and SMPTE 310
Video Standard	All formats (270Mbit/s through 2.97Gbit/s)
Input level	0.8 v peak to peak
Input Impedance	75 Ohms
No. Of inputs	2
Connector	BNC
Return loss	> 15dB (1.485Gbit) > 10dB (2.97Gbit)

Video Outputs

Signal Type	Serial Digital Video SMPTE 259M, 292M, 424M DVB-ASI and SMPTE 310
Video standard	Follows input
Output level	0.8 v peak to peak
Output impedance	75 Ohm
No. Of Outputs	4 (2x2)
Connector	BNC
Return loss	> 15dB (1.485Gbit) > 10dB (2.97Gbit)
Jitter	< 0.20 UI (270Mbit) < 1,0 UI - Timing Jitter - (1.485Gbit - 2.97Gbit) < 0.20 UI - Alignment Jitter - (1.485Gbit - 2.97Gbit)

Performance

Cable equalization	Up to 250M using Belden 8281 (270Mbit) Up to 140m using Belden 1694A (1.485Gbit) Up to 80m using Belden 1694A (2.97Gbit)
Control	Local settings using on board dip switches. Remote control possible when used with LYNX controller
Status monitoring (LED)	Signal presence for each input plus general alarm

GPI and GPO

Connections	BNC
Impedance	75 Ohms
GPI Signal	Switch closure. (opto coupled) Connect signal to BNC ground to activate. (reccomend connecting through 75 Ohm resistor) Max. current sink without resistor = 10mA
GPO Signal	Switch closure. (opto coupled) High level = GPO activated. High voltage = 3.3 volts. Max current 15mA

Operation modes

Automatic	Automatic Main / Bypass changeover of output channels when designated input is lost.
Manual	Switch on external GPI input trigger or control system trigger.
Re-clocking	Clocked or non re-clocked operation (each channel, selectable)

Electrical Specifications

Operating Voltage	12 VDC
Power Consumption	< 4W
Safety	IEC 60950/ EN 60950/ VDE 0805

Mechanical

Size	283mm x 78mm
Weight	CardModule 120g, connector plate 50g

Ambient

Temperature	5°C to 40°C Maintaining specifications
Humidity	90% Max non condensing

Specifications subject to change

Settings and Control

Local Settings

Mode selection	Manual or Automatic
Set auto trigger input	Main IN / Bypass IN
Re-clocking	Clocked / non re-clocked

Settings Available from Control System

Manual Switch.	Control system switch trigger.
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On Board Indicators / LEDs

Input 1 Present / No Input
Input 2 Present / No input
General Alarm Indicator – 3 Color

Options

OH DVD RL2 - Bypass Relay

Optional mechanical relay which will connect MAIN IN 1 to MAIN OUT 1 and BYPASS to PWV 1 in the event of a power failure.

Ordering Information

Model #	Part Number	Description	Includes
S VD 5812	5155025812	3Gbit SDI/ASI 2 Input Changeover Switch	CardModule, Rear termination Panel, + Mounting Screws, and Reference Manual
OH DVD RL2	5155105800	Power Fail Relay Option	Rear termination panel with integrated mechanical relay.