SW4 3G HD-SDI

FOUR INPUT MULTI-RATE SDI SWITCHER

- Automatically adapts to SMPTE and ITU digital video standards
- Supports data rates up to 3G-SDI
- Passes embedded audio, ancillary ID and metadata information
- Input data rate reporting
- Automatic input equalization
- Automatic output reclocking
- Auto input switching
- Dual buffered outputs
- Video output muting
- Front panel security lockout
- Multiple control options
- Internal universal power supply

The Extron SW4 3G HD-SDI is a four input, dual output switcher for multi-rate SDI digital video. This broadcast-quality switcher accepts SDI and HD-SDI signals at all common serial digital video data rates up to 3G-SDI including SMPTE 259M, SMPTE 292M, and SMPTE 424M, as well as embedded audio, ancillary ID and metadata information. The SW4 3G HD-SDI is ideal for applications that require the switching of a wide range of high resolution digital video signals.
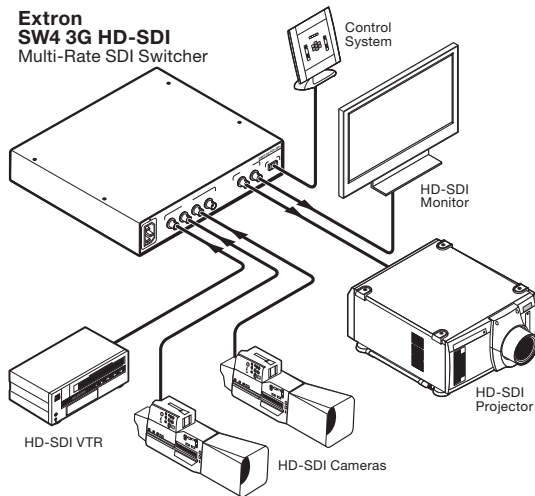
Extron® Electronics

www.extron.com

DESCRIPTION

The Extron **SW4 3G HD-SDI** is a multi-rate SDI digital video switcher. It is a convenient and economical solution for switching up to four HD-SDI signals as well as embedded audio, ancillary ID and metadata information. The switcher automatically recognizes and adapts to common SMPTE and ITU serial digital data rates, including 270 Mbps SDI, 1.485 Gbps HD-SDI, and 2.97 Gbps 3G-SDI. The switcher is housed in a compact, 1U high, half-rack width metal enclosure that is suitable for rack mounted or mobile applications. The SW4 3G HD-SDI is ideal for applications where multi-rate HD-SDI digital video signals must be switched then sent over long cable runs.

FEATURES

- **Supports data rates up to 3G-SDI**
- **Input data rate reporting** – Reads video signals on each input and reports recognized data rates on the front panel as well as via RS-232. This provides visual and control system feedback of common SDI and HD-SDI input data rates.
- A**utomatic input equalization** – Compensates for attenuation and distortion on the incoming signal and automatically equalizes cables in length up to a maximum of 500 feet (150 m).
- **Automatic output reclocking** – Reshapes and restores timing of digital video signals at each output, eliminating high frequency jitter and provides A/V system designers with additional headroom when connecting multiple devices.
- **Multiple control options** – RS-232, front panel, and autoswitching simplifies and enhances integration and day-to-day operation
- **Dual buffered outputs** – Allow for simultaneous viewing and recording of the selected input signal, eliminating the cost of a separate distribution amplifier.
- I**nternal universal power supply** – The 100-240VAC, 50/60 Hz, international power supply provides worldwide power compatibility.

APPLICATION DIAGRAM

**Extron
SW4 3G HD-SDI**
Multi-Rate SDI Switcher

Control System

HD-SDI Monitor

HD-SDI Projector

HD-SDI VTR

HD-SDI Cameras

SPECIFICATIONS

VIDEO

Gain	Unity
Resolution	8 or 10 bits, automatic
Operation standards	SMPTE 259M, SMPTE 292M, SMPTE 424M, ITU-R BT.601, ITU-R BT.1120
Auto data rate lock	Yes

VIDEO INPUT

Number/signal type	4 single link SDI, HD-SDI, or 3G-SDI digital component video
Connectors	4 female BNC
Data rates	19 Mbps to 2.97 Gbps
Input cable equalization	Automatic for up to -30 dB of cable loss
HD-SDI	120 m (400') using Extron RG6 cable 60 m (200') using Extron RG59 cable
SDI	150 m (500') using Extron RG6 cable 120 m (400') using Extron RG59 cable
Nominal level	0.8 Vp-p ±10%
Minimum/maximum levels	0.5 V to 1 Vp-p with no offset
Impedance	75 ohms
Return loss	<-15 dB @ 1 MHz to 1.5 GHz

VIDEO OUTPUT

Number/signal type	2 single link SDI, HD-SDI, or 3G-SDI digital component video
Connectors	2 female BNC
Re-clocking	Automatic for 270 Mbps, 1.485 Gbps, 2.97 Gbps, or bypassed for other rates
Nominal level	0.8 Vp-p ±10%
Minimum/maximum levels	0.5 V to 1.0 Vp-p
Impedance	75 ohms
Return loss	<-15 dB @ 1 MHz to 1.5 GHz
DC offset	±5 mV with input at 0 offset

CONTROL/REMOTE — SWITCHER

Serial control port	RS-232, 3.5 mm captive screw connector, 3 pole
Baud rate and protocol	9600 baud, 8 data bits, 1 stop bit, no parity
Program control	Extron's control/configuration program for Windows® Extron's Simple Instruction Set (SIS™)

GENERAL

Power	100 VAC to 240 VAC, 50/60 Hz, 4 watts, internal
Cooling	Convection, no vents
Rack mount	Yes, with optional 1U, 9.5" deep rack shelf (RSU 129, #60-190-01; RSB 129, 60-604-01; or 1U, 6.0" deep rack shelf; (RSU 126, #60-190-10; RSB 126, 60-604-10)
Enclosure type	Metal
Enclosure dimensions	1.7" H x 8.7" W x 6.0" D (1U high, half rack wide) (4.3 cm H x 22.1 cm W x 15.2 cm D) (Depth excludes connectors.)
Product weight	1 lb (0.5 kg)
Shipping weight	2 lbs (1 kg)

Model	Version Description	Part Number
SW4 3G HD-SDI	Four Input SDI Switcher	60-956-01

Specifications are subject to change without notice.

08-05
68-1593-01
REV. A