



1616Sxl

16x16 Balanced Stereo Audio Matrix Switcher



16x16 Composite Video
Matrix Switcher With
Balanced Stereo Audio



1616Sxl

RGB Video Feature

- High Bandwidth - 100MHz (-3dB) fully loaded.
- Very Low Crosstalk - -80dB @ 1MHz -47dB @ 100MHz.
- Qwik Adjust Knob™ Rotary Control interface This user intuitive knob along with the 80 character LCD display provides quick and convenient setup, adjustment and signal switching.
- Video Mute Capability.
- Genlock Input - Looping internal sync input for vertical interval switching.
- Output Disconnect.

HD-SDI Video Features

- Max. Data Rate - 1.485Gbps single link, 3Gbps dual link.
- Backwards Compatible With SDI Signals.
- Standards - SMPTE 372, SMPTE 310, SMPTE 292, SMPTE 259, DVB-ASI.
- Jitter - < 0.2UI.

SDI Video Features

- Max. Data Rate - 360Mbps.
- Standards - SMPTE 310M, SMPTE 259M, DVB-ASI & ITU-R BT.601
- Jitter - < 0.2UI.

Stereo Audio Features

- Audio Type - Balanced or un-balanced on terminal blocks.
- Input (Level) Adjustment Capability (-8dB to +20.5dB) - Each input via RS-232, front panel, or TyLinX Pro™ software.
- Output (Volume) Adjustment Capability (Mute, -59.5dB to +15dB) - Each input via RS-232, front panel, or TyLinX Pro™ Software.
- No Zipper Effect - Lassen routing switchers use zero-crossover chip technology that eliminates the annoying "zipper sound effect" associated with digital volume controls.
- Audio Mute Capability.
- Crosstalk - 80dB @ 1kHz & 70dB @ 20kHz.
- S/N (20 - 20kHz) - > 90dB.

Digital Audio Features

- Standards - AES-3 & AES-3id.
- Jitter - 0.25UI p-p.

Control Features

- Local Front Panel Control With 80 Character LCD Readout.
- RS-232/422.
- RS-485 - For optional control panels.
- Supports TCP/IP Protocol - Rear Panel RJ-45 connector.
- WEB Browser Control.
- TyLinX Pro Router Control Software and TyLinX Pro Net™ Net work Enabled Router Control Software.

Other Features

- Downloadable Firmware Updates.
- Optional Control Panels. - Programmable, single bus and XY.
- Redundant Power Supplies - Optional on 32 x 32 & 32 x 16 models.
- UL & CE Approvals.



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TECHNICAL SPECIFICATIONS

RGB Video

Bandwidth	>100MHz (-3dB)
Video Gain	Unity
Crosstalk	-80dB @ 1MHz -47dB @ 100MHz
Switching Speed	Deterministic
Video Level	300mV to 2.5Vpp Max
Impedance	75Ω nominal
Return Loss	<-30dB @ 5MHz
Connector Type	BNC
Video Level	300mV to 2.5Vpp Max
Impedance	75Ω nominal
Return Loss	<-30dB @ 5MHz
Connector Type	BNC

HD-SDI Video

Max. Data Rate	1.485Gbps
Data Types	SMPTE 372M, SMPTE 344M, SMPTE 310M, SMPTE 292M, SMPTE 259, DVB-ASI, ITU-R BT.601
Jitter	<0.2 UI
Video Level	800mVpp +/-10%
Impedance	75Ω
Return Loss	<-15dB up to 1.5GHz
Cable Equalizing Range	0 - 100m for SMPTE 292, Belden 8281 0 - 300m for all other standards, Belden 8281
Connector Type	BNC
Video Level	800mVpp +/-10%
Impedance	75Ω
Return Loss	<-15dB up to 1.5GHz
Rise/Fall Times	<270psec
Connector Type	BNC



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SDI Video

Data Rates	19 - 360Mbps
Data Types	SMPTE 310M, SMPTE 259M, DVB-ASI, ITU-R BT.601
Jitter	<0.2UI
Video Level	800mVpp +/-10%
Impedance	75Ω
Return Loss	<-15dB
Cable Equalizing Range	0 - 300m, Belden 8281
Connector Type	BNC
Video Level	800mV p-p +/- 10%
Impedance	75Ω
Return Loss	<-15dB
Rise/Fall Times	400 - 1500psec
Connector Type	BNC

Stereo Audio

Input Adjust Ranges	+20.5dB to -8dB
Output Adjust Range	+15dB to -59.5dB and fully off (MUTE)
Frequency Response	20Hz to 20kHz +/-0.5dB (typical -3dB @ 120kHz) (unity gain)
Dynamic Range	96dB (20Hz to 20kHz unweighted) (unity gain)
Crosstalk (all inputs hostile)	<-80dB @ 1kHz (unity gain) <-60dB @ 10kHz (unity gain)
IM & THD (20 to 20kHz)	THD: <0.025% (20Hz to 20kHz @ +4dBu) (unity gain) IM: <0.025% SMPTE-DIN @ +4dBu (unity gain) <0.01% CCIF @ +16dBu (unity gain)
Max. Source Level	+24dBu
Impedance	>20kΩ
Connector Type	5-pin terminal block for balanced or unbalanced operation
Max. Source Level	+24dBu balanced +18dBu unbalanced
Impedance	<50Ω
Connector Type	5-pin terminal block for balanced or unbalanced operation

AES-3 Digital Audio

Data Rates	32kHz - 96kHz
Jitter	<0.25 UI p-p
Max Distance	100m
Cable	STP
Return Loss	<-30dB @ 6MHz
Minimum Input	200mV p-p
Connector Type	Terminal block
Audio Level	3.5V nominal
Return Loss	<-30dB @ 6MHz
Connector Type	Terminal block

AES-3id Digital Audio