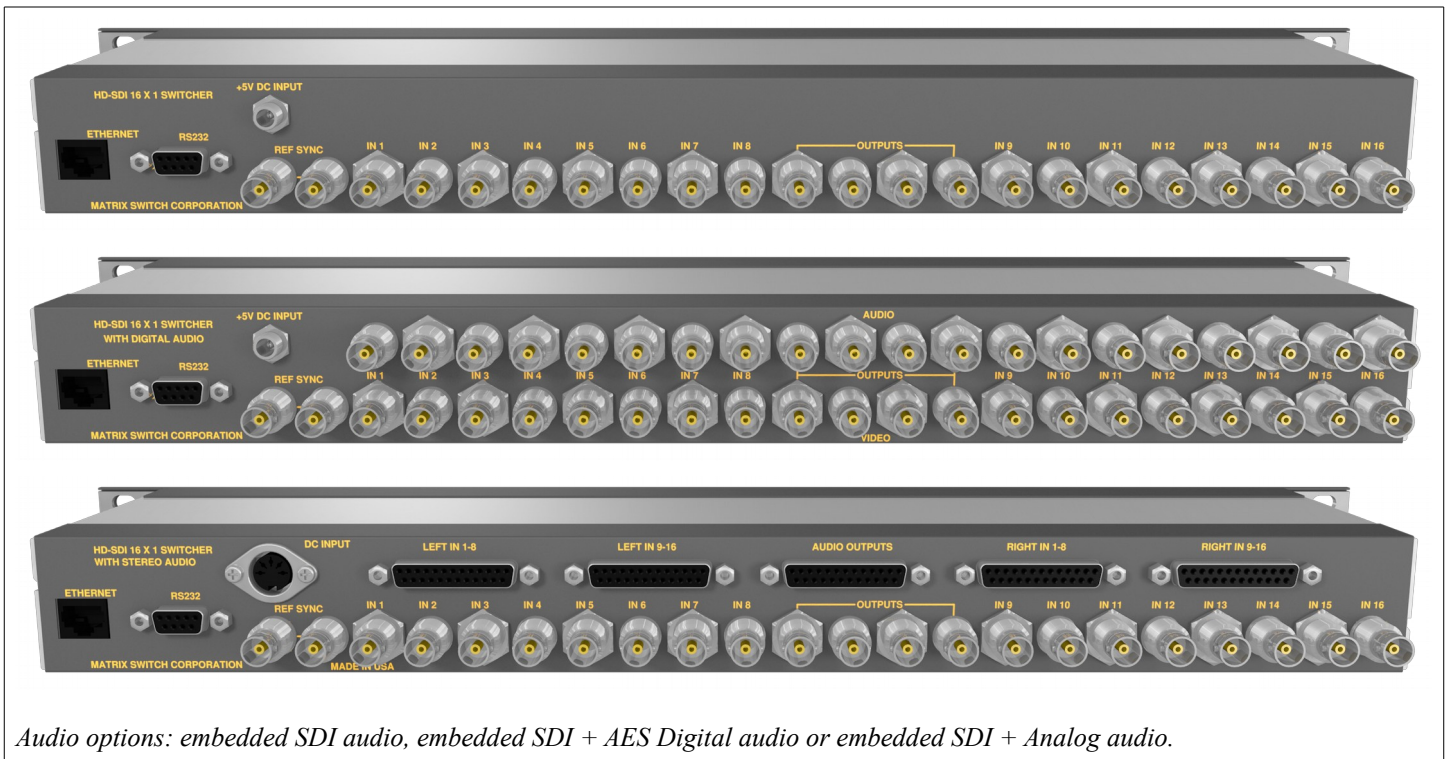


Matrix Switch Corporation Product Brief

16x1 Compact 3G/HD/SD-SDI Video Routers

with additional AES Digital and Analog audio options



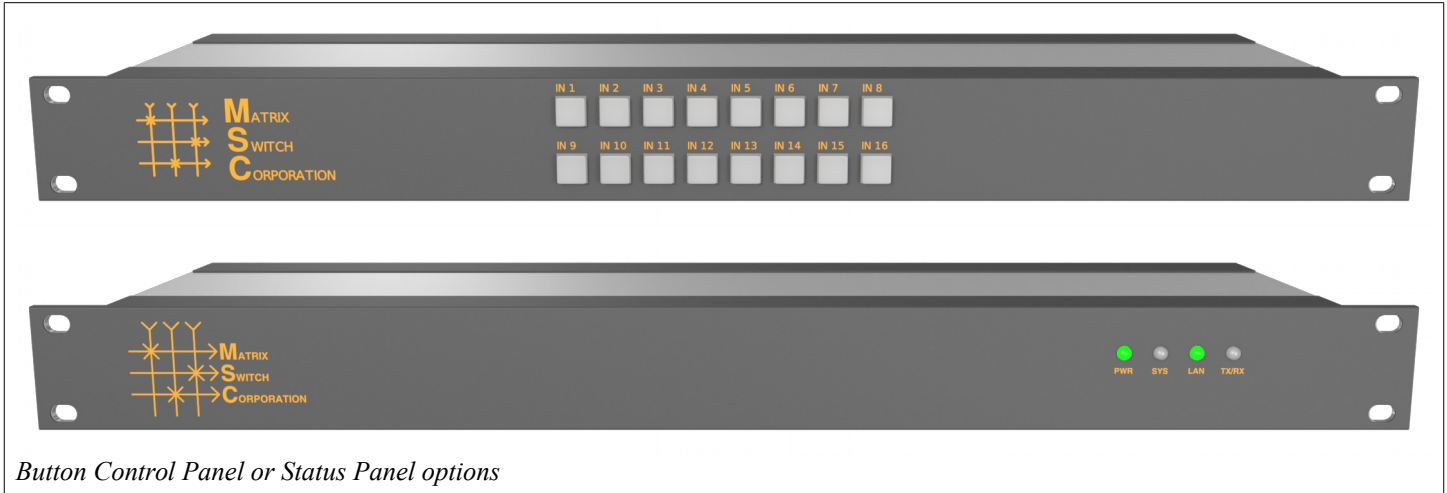
Audio options: embedded SDI audio, embedded SDI + AES Digital audio or embedded SDI + Analog audio.

Matrix Switch Corporation offers the widest selection of [Compact SDI video routing switchers](#) in the industry. Our many product variations provide several matrix size, control panel and extra audio options for flexibility in purchasing only those features that are needed. These systems are all 1RU in height and less than 5 inches deep, allowing for installation in space and weight limited situations.

All of our SDI video routers pass SDI embedded audio and ancillary data. Additionally the 16x1 Compact Routers offer models with AES digital or stereo analog audio integrated in the same 1RU rack enclosure.

Redundant outputs can eliminate the need for extra distribution amplifiers. These 16x1 models have quad redundant video outputs and audio outputs (models with extra audio).

The choice of a button control panel or status only panel provides an additional savings opportunity for applications that only use remote control panels, web page interface, telnet or RS-232 serial control.



Model numbers – Panel and audio options

	SDI Embedded Audio	SDI + AES Digital Audio	SDI + Analog Audio
Button Panel	MSC-HD161L	MSC-HD161DEL	MSC-HD161AAL
Status Panel	MSC-HD161S	MSC-HD161DES	MSC-HD161AAS

Feature Highlights

- Re-clocking of standard SD, HD and 3G SDI data rates
- Auto bypasses non-standard SDI rates from 20Mbit/s to 3Gbit/s
- DVB-ASI support
- Passes SDI embedded audio and ancillary data
- Models available with additional AES digital or analog audio routing in the same 1RU rack enclosure
- Audio breakaway (AES digital or stereo analog audio only, not embedded SDI audio)
- Quad redundant video outputs and audio outputs (models with extra audio)
- Interactive web page interface ([demo](#))
- Vertical interval switching
- Store and recall up to 10 presets (complete or partial matrix state recall)
- Compact 1RU design - less than 5 inches deep and weighs less than 5 pounds
- Low power consumption (5VA to 15VA depending on model)
- Software updates via Ethernet port
- Backed by a full 2 year manufacturer parts and labor warranty
- Flexible control using the [MASCOT text based protocol](#) via TCP/IP, serial port or web page interface
- Can be used with one or more Matrix Switch Corporation TCP/IP [Remote Panels](#)



Specifications		Digital Audio	
Size	19"W x 1.75"H x 5"D	Connector Type	BNC
Weight	5 lbs	Input level	200mV to 5V P-P
Power	5 VDC	Input impedance	75 Ohm +/- 1%
Storage Temp	-10 Through +50 Deg C	Output level	1V P-P
Operating Temp	0 Through +40 Deg C	Output impedance	75 Ohm 1%
Humidity	0 Through 90% Non-Condensing	Analog Audio	
Warranty	2 Years Parts & Labor	Connector type	D25 (Tascam pin compatible)
SDI Video		Channels	Stereo
Connector type	BNC	Maximum input level	+24dBm
Data Types	SMPTE 259/292/424	Input impedance	20K Ohm
Data Rates	19 Mbit/s through 3.0 Gbit/s	Gain	Unity +/- 0.5dB
Re-clocking Data Rates	270 Mbit/s, 1.485 Gbit/s, 2.97 Gbit/s	Output impedance	30 Ohms
Input/Output Return Loss	> 15dB @ HD, > 12dB @ 3G	S/N ratio	> 100dB
Input Level	800 mV P-P +/- 20%	Frequency response	10Hz - 30kHz +/- 0.1dB
Input Impedance	75 Ohms +/- 1%	Distortion	< 0.1%
Cable equalization (1694A coax)	350m @ SD, 175m @ HD, 100m @ 3G	Crosstalk	Better than 80 dB at 10KHz
Output Level	800 mV P-P +/- 5%	Control Specifications	
Output Impedance	75 Ohms +/- 1%	Serial RS232	9600 Baud 8N1
Output Jitter	< 0.2 UI	Ethernet	10 BaseT TCP/IP
Reference Signal		Panel control	Local and remote button control panel options
Connector Type	Analog BNC with pass-through		
Format	NTSC, PAL and Tri-level sync		