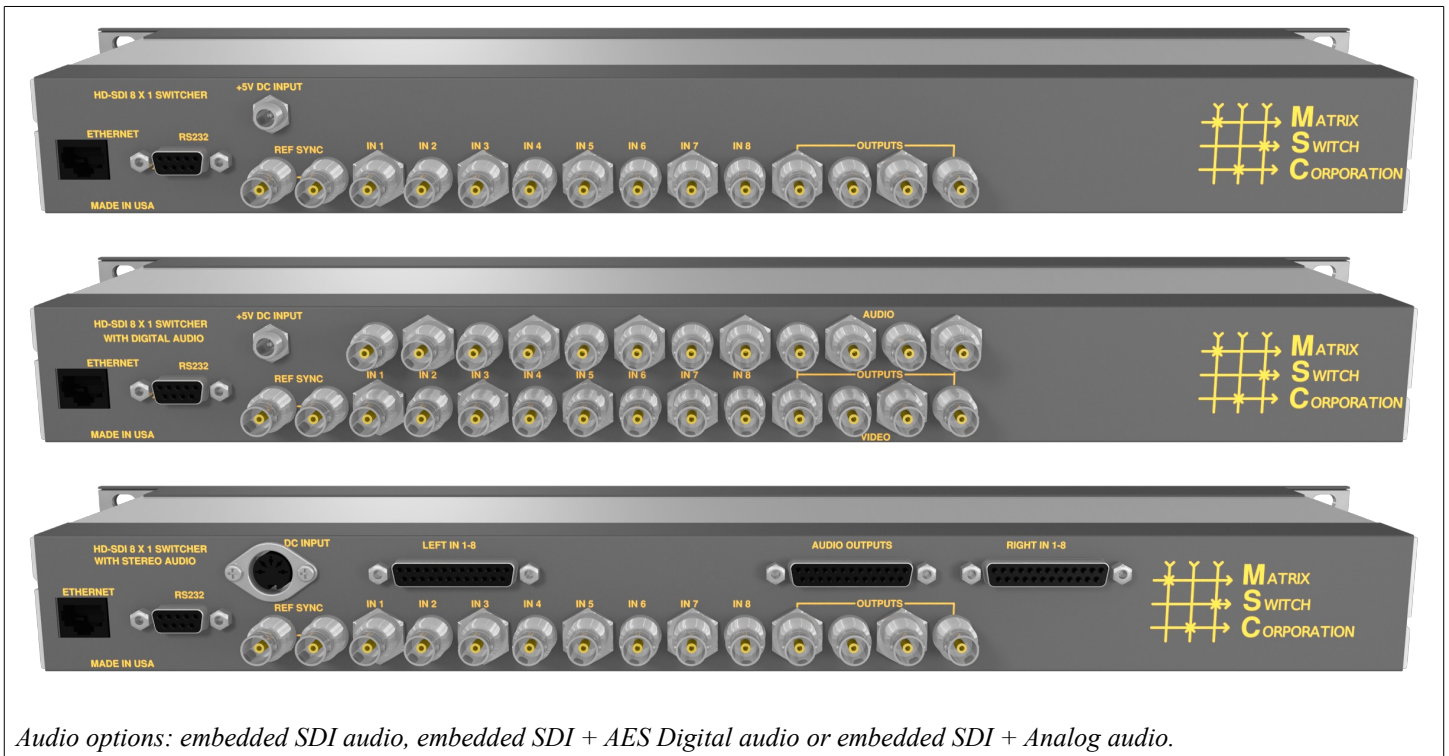


Matrix Switch Corporation Product Brief

8x1 Compact 3G/HD/SD-SDI Video Routers

with additional AES Digital and Analog audio options

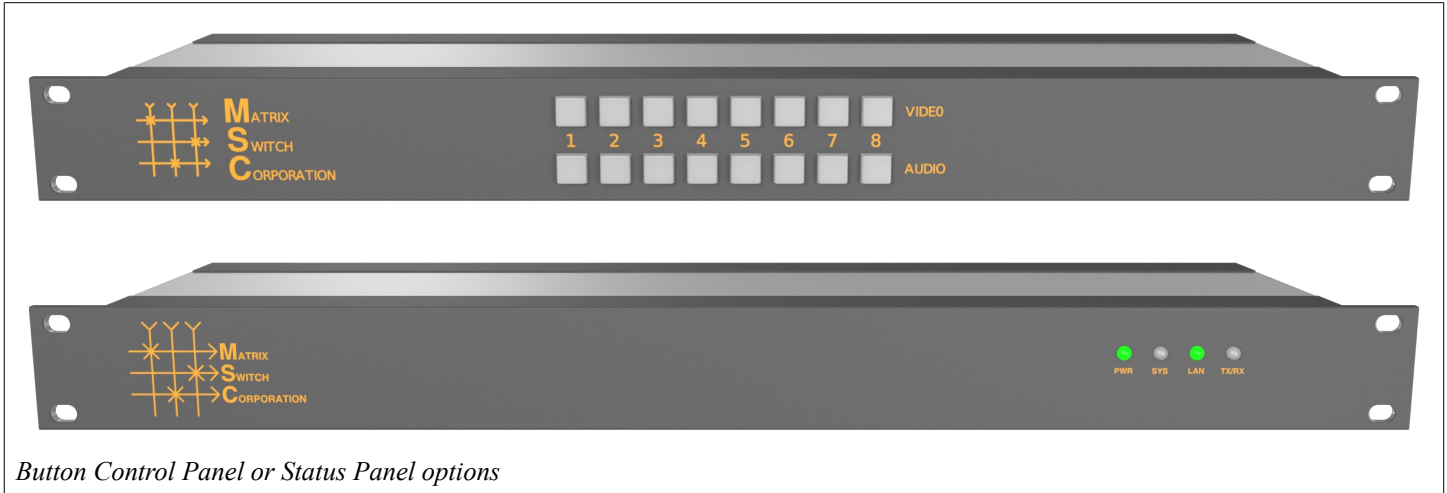


Matrix Switch Corporation offers the widest selection of [Compact SDI video routing switchers](#) in the industry. Our many product variations provide several matrix size, control panel and extra audio options for flexibility in purchasing only those features that are needed. These systems are all 1RU 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 8x1 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 8x1 models have quad redundant video and audio outputs (models with extra audio only).

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-HD81L	MSC-HD81DEL	MSC-HD81AAL
Status Panel	MSC-HD81S	MSC-HD81DES	MSC-HD81AAS

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
- Video mute on every output
- 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 and audio outputs (models with extra audio only)
- 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

Size	19"W x 1.75"H x 5"D
Weight	5 lbs
Power	5 VDC
Storage Temp	-10 Through +50 Deg C
Operating Temp	0 Through +40 Deg C
Humidity	0 Through 90% Non-Condensing
Warranty	2 Years Parts & Labor

SDI Video

Connector type	BNC
Data Types	SMPTE 259/292/424
Data Rates	19 Mbit/s through 3.0 Gbit/s
Re-clocking Data Rates	270 Mbit/s, 1.485 Gbit/s, 2.97 Gbit/s
Input/Output Return Loss	> 15dB @ HD, > 12dB @ 3G
Input Level	800 mV P-P +/- 20%
Input Impedance	75 Ohms +/- 1%
Cable equalization (1694A coax)	350m @ SD, 175m @ HD, 100m @ 3G
Output Level	800 mV P-P +/- 5%
Output Impedance	75 Ohms +/- 1%
Output Jitter	< 0.2 UI

Reference Signal

Connector Type	Analog BNC with pass-through
Format	NTSC, PAL and Tri-level sync

Digital Audio

Connector Type	BNC
Input level	200mV to 5V P-P
Input impedance	75 Ohm +/- 1%
Output level	1V P-P
Output impedance	75 Ohm 1%

Analog Audio

Connector type	D25 (Tascam pin compatible)
Channels	Stereo
Maximum input level	+24dBm
Input impedance	20K Ohm
Gain	Unity +/- 0.5dB
Output impedance	30 Ohms
S/N ratio	> 100dB
Frequency response	10Hz - 30kHz +/- 0.1dB
Distortion	< 0.1%
Crosstalk	Better than 80 dB at 10KHz

Control Specifications

Serial RS232	9600 Baud 8N1
Ethernet	10 BaseT TCP/IP
Panel control	Local and remote button control panel options