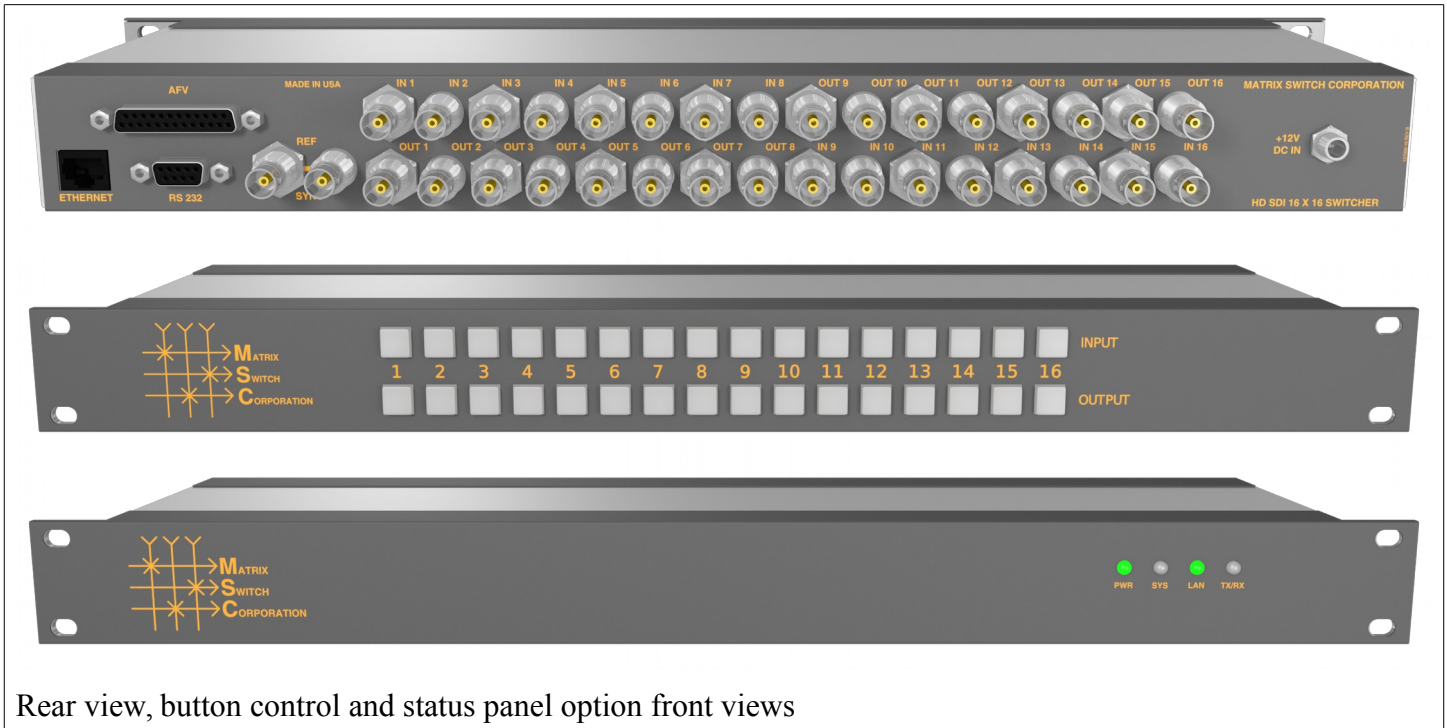


Matrix Switch Corporation 16x16 3G/HD/SD-SDI Video Router



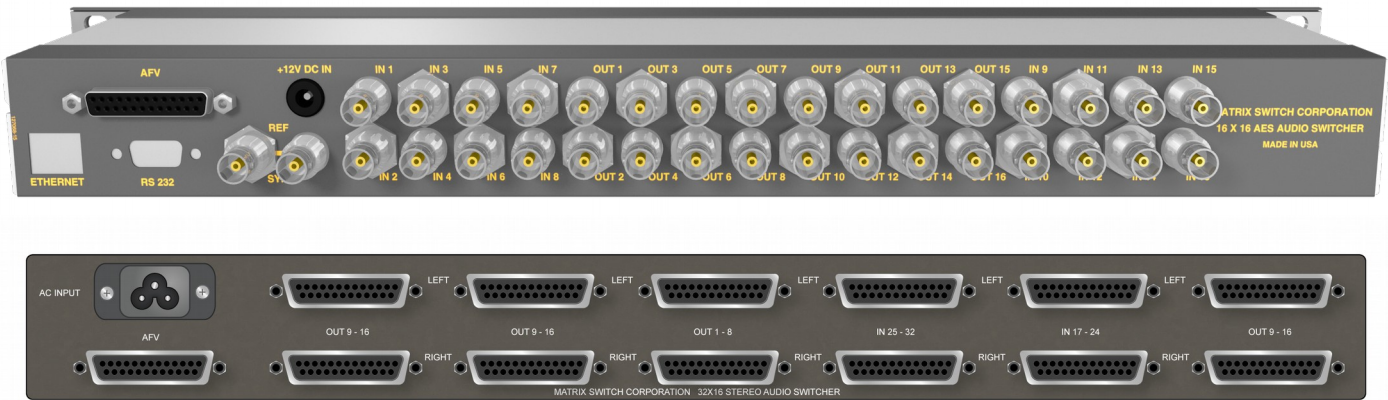
Rear view, button control and status panel option front views

Matrix Switch Corporation [configurable 1RU SDI video routing switchers](#) offer factory configurable matrix I/O size configurations of 8x16, 16x8 and 16x16. These systems are 1RU in height and less than 6 inches deep, allowing for installation in space and weight limited situations.

An extra audio option provides audio routing capabilities in addition to the included embedded SDI audio routing support. This option is ordered as a separate 1RU device connected via a D25 straight through male to male cable. Either AES digital ([MSC-DE1616](#)) or analog stereo audio ([MSC-AA1616](#)) can be chosen.

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.

Matrix Switch Corporation routers offer flexible and user friendly control, including a built in Javascript enabled web page interface and simple yet powerful text based control protocol which can be sent via TCP/IP, RS-232 Serial Port or the web page interface.



Optional AES digital audio ([MSC-DE1616](#)) and balanced analog stereo audio ([MSC-AA1616](#))

Models – Button Control Panel or Status Panel

Button Control Panel	Status Panel
MSC-1HD1616L	MSC-1HD1616S

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
- Video mute on every output
- Passes SDI embedded audio and ancillary data
- Interactive web page interface ([demo](#))
- Vertical interval switching
- Store and recall up to 10 presets (complete or partial matrix state recall)
- Compact design - 1RU less than 6 inches deep
- Low power consumption – less than 20VA
- 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](#)
- Optional additional 75 ohm AES digital audio (model [MSC-DE1616](#) connected via D25 connector)
- Optional additional balanced analog stereo audio (model [MSC-AA1616](#) connected via D25 connector)



Specifications

Size	19"W x 1.75"H x 6"D
Rack Size	1RU
Weight	5 lbs
Power	12 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

(optional MSC-DE1616)

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

(optional MSC-AA1616)

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