

Matrix Switch Corporation Product Brief

4x2 Mini 3G/HD/SD-SDI Video Router

MSC-HD42L



Matrix Switch Corporation's [Mini SDI video routing switchers](#) are available in three versions: 2 inputs with 2 outputs, 4 inputs with 1 output and 4 inputs with 2 outputs. The Mini router is ideal for applications that do not need rack mounting, need a compact size and when low cost is important.

These small routers do not skimp on either technical performance or control features and employ the same high reliability components used in our other routers.

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.



Video and Audio Routing Solutions
www.matrix-switch.tv

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
- Interactive web page interface ([demo](#))
- Vertical interval switching
- Store and recall up to 10 presets (complete or partial matrix state recall)
- Small size - 5 x 5 x 1.75 inches and weighs less than 2 pounds including the power supply
- Low power consumption (7VA)
- 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	5"W x 1.75"H x 5"D
Weight	2 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

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

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