

Matrix Switch Corporation Product Brief 4RU Modular 3G/HD/SD-SDI Video Router



Matrix Switch Corporation Modular 4RU SDI Video Routing Switchers offer field expandable matrix size configurations in input <u>or</u> output increments of 8 up to 64x64. With the possibility of a non symmetrical matrix, there are a total of 64 different sizes to choose from. These systems are 4RU in height and less than 6 inches deep, allowing for installation in space limited situations.

Forced air cooling ensures low internal temperatures for long service life in the most harsh environments and a redundant power supply is also included for added reliability.

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.

Ordering options

These modular systems can be factory assembled and configured for a particular size. For convenience we offer model numbers for complete systems of various sizes as well as part numbers for the individual components (factory assembly available for both options). Consult the tables below for these two ordering methods.



MSC-XD8RB - 8 Input SDI Video Equalizer Card

MSC-XD8TB - 8 Output SDI Video Reclocker Card

Ordering Option 1 – Individual Components

| Model Number | Description |
|--------------|---------------------------------------------------------------------------------------------------------------------------|
| MSC-HDX4000 | Frame for 4RU Modular SDI Routing Switcher including control module, dual power supplies, dual fans and crosspoint board. |
| MSC-XD8TB | 3G/HD/SD-SDI 8 channel input equalizer module for Matrix Switch Corporation modular I/O systems. |
| MSC-XD8RB | 3G/HD/SD-SDI 8 channel output re-clocking module for Matrix Switch Corporation modular I/O systems. |

Ordering Option 2 – Model Numbers by Matrix Size (prepend "MSC-" to model numbers)

| Inputs | Outputs | | | | | | | |
|--------|----------|----------|----------|----------|----------|----------|----------|----------|
| | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 |
| 8 | 4HDX0808 | 4HDX0816 | 4HDX0824 | 4HDX0832 | 4HDX0840 | 4HDX0848 | 4HDX0856 | 4HDX0864 |
| 16 | 4HDX1608 | 4HDX1616 | 4HDX1624 | 4HDX1632 | 4HDX1640 | 4HDX1648 | 4HDX1656 | 4HDX1664 |
| 24 | 4HDX2408 | 4HDX2416 | 4HDX2424 | 4HDX2432 | 4HDX2440 | 4HDX2448 | 4HDX2456 | 4HDX2464 |
| 32 | 4HDX3208 | 4HDX3216 | 4HDX3224 | 4HDX3232 | 4HDX3240 | 4HDX3248 | 4HDX3256 | 4HDX3264 |
| 40 | 4HDX4008 | 4HDX4016 | 4HDX4024 | 4HDX4032 | 4HDX4040 | 4HDX4048 | 4HDX4056 | 4HDX4064 |
| 48 | 4HDX4808 | 4HDX4816 | 4HDX4824 | 4HDX4832 | 4HDX4840 | 4HDX4848 | 4HDX4856 | 4HDX4864 |
| 56 | 4HDX5608 | 4HDX5616 | 4HDX5624 | 4HDX5632 | 4HDX5640 | 4HDX5648 | 4HDX5656 | 4HDX5664 |
| 64 | 4HDX6408 | 4HDX6416 | 4HDX6424 | 4HDX6432 | 4HDX6440 | 4HDX6448 | 4HDX6456 | 4HDX6464 |



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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 (<u>demo</u>)
- Vertical interval switching
- Store and recall up to 10 presets (complete or partial matrix state recall)
- Compact design 4RU less than 6 inches deep
- Software updates via Ethernet port
- Backed by a full 2 year manufacturer parts and labor warranty
- Redundant power supply included
- Can be used with one or more Matrix Switch Corporation TCP/IP Remote Panels
- Flexible control using the MASCOT text based protocol via TCP/IP, serial port or web page interface
- Sierra Video Systems protocol support
- Ask us about other 3rd party control protocol support



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| Specif | ications | SDI Video | | |
|----------------|-----------------------------------------------|---------------------------------|------------------------------------------------|--|
| Size | 19"W x 7"H x 6"D | Connector type | BNC | |
| Rack Size | 4RU | Data Types | SMPTE 259/292/424 | |
| Weight | 20 lbs | Data Rates | 19 Mbit/s through 3.0 Gbit/s | |
| Power | 12 VDC 10A | Re-clocking Data Rates | 270 Mbit/s, 1.485 Gbit/s, 2.97 Gbit/s | |
| Storage Temp | -10 Through +50 Deg C | | | |
| Operating Temp | 0 Through +40 Deg C | Input/Output Return Loss | > 15dB @ HD, > 12dB @ 3G 800 mV P-P +/- 20% | |
| Humidity | 0 Through 90% Non-Condensing | Input Level | | |
| Warranty | 2 Years Parts & Labor | Input Impedance | 75 Ohms +/- 1% | |
| | ecifications | Cable equalization (1694A coax) | 350m @ SD, 175m @ HD, 100m @ 3G | |
| Serial RS232 | Configurable Baud Rate, 8 data | Output Level | 800 mV P-P +/- 5% | |
| | bits, no parity, 1 stop bit | Output Impedance | 75 Ohms +/- 1% | |
| Ethernet | 100 BaseT TCP/IP | Output Jitter | < 0.2 UI | |
| Panel control | Local and remote button control panel options | Reference Signal | | |
| | | Connector Type | Analog BNC with pass-through | |
| | | Format | NTSC, PAL and Tri-level sync | |