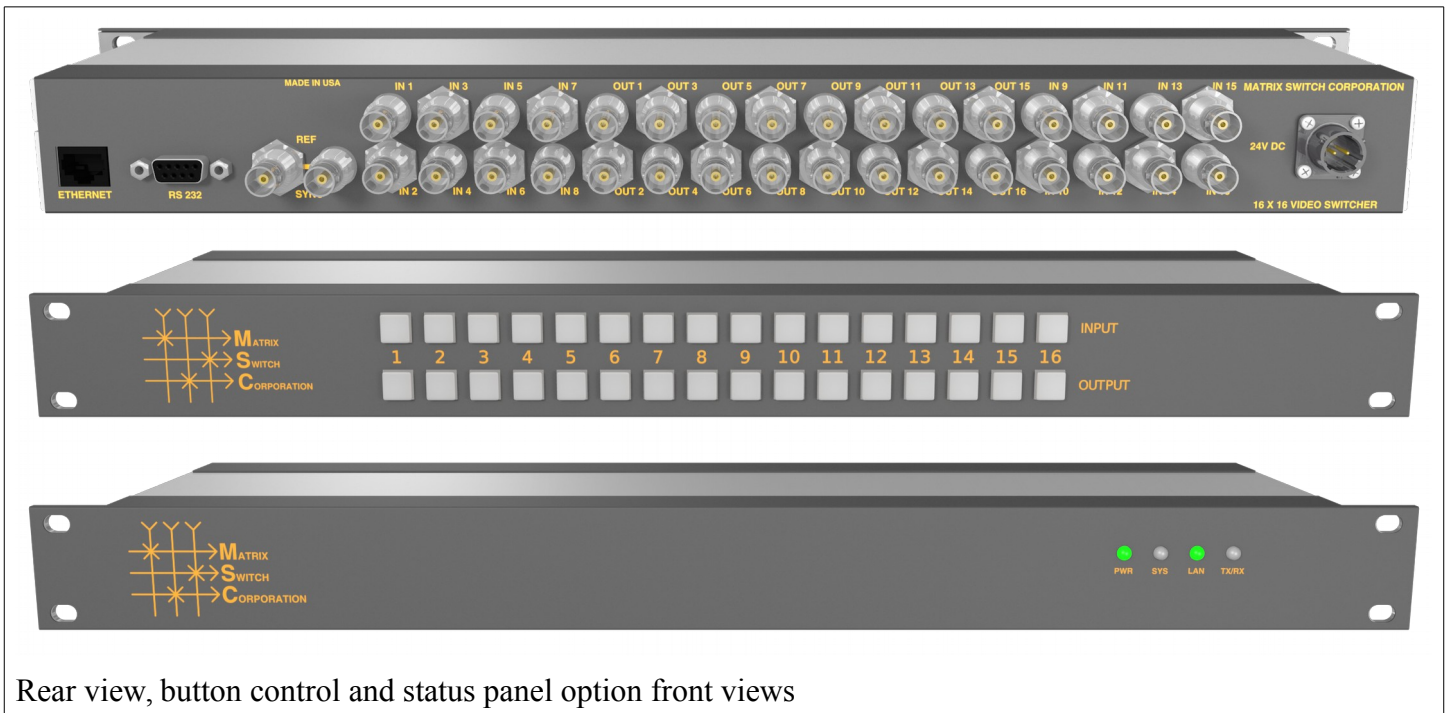


## Matrix Switch Corporation 16x16 Composite Analog Video Router Aviation Ready Models



Rear view, button control and status panel option front views

**Matrix Switch Corporation** [aviation ready composite analog video routing switchers](#) have a minimum signal bandwidth of 50MHz, more than enough for any analog video installation. The use of premium quality components, extensive shielding and low noise linear on board power supply regulation has resulted in systems with extremely low crosstalk and noise levels.

Aviation ready models come with a MIL spec power connector (two pin MIL-C-26482 series 1) for aircraft DC power interfaces, 18-50 VDC isolated internal power supply (28 VDC nominal), secured (Locktite) screws and chassis components for anti-vibration and airworthiness, and 24 hour burn-in. Manufacturers' conformance certificate issued for all systems.

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.

**Models – Button Control Panel or Status Panel**

<b>Button Control Panel</b>	<b>Status Panel</b>
MSC-V1616L+DC	MSC-V1616S+DC

**Feature Highlights**

- 50MHz signal bandwidth
- Vertical interval switching
- Interactive web page interface ([demo](#))
- Store and recall up to 10 presets (complete or partial matrix state recall)
- 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](#)
- Complies with all relevant FCC, U/L and CE requirements

**Additional +DC Aviation Model Features**

- 18-50 VDC isolated internal power supply (28 VDC nominal) with Mil-Spec power connector for aircraft DC power interfaces
- Secured (Locktite) screws and chassis components for anti-vibration and airworthiness
- 24 hour burn in
- Manufactures' conformance certificate issued for all systems



### Specifications

Size	19"W x 1.75"H x 6"D
Rack Size	1RU
Weight	5 lbs
Power	18-50 VDC (28VDC Nominal)
Power Connector	MS3112E8-2P
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

### Composite Analog Video

Connector type	BNC
Input/Output Impedance	75 Ohms
Nominal Input/Output Level	1V P-P
Maximum Input/Output Level	+/- 2V P-P
Input Return Loss	< 40dB at 5MHz typical
Output Return Loss	< 35dB at 5MHz typical
Overall Gain Unity	+/-1% into a 75 ohm termination
Frequency Response	+/- 0.1dB to 5MHz +0 -3dB to 60MHz
Crosstalk	> 60dB at 5MHz all hostile
Differential Phase	< 0.2 degrees at 3.58MHz @ 4.43MHz
Differential Gain	< 0.2% at 3.58MHz @ 4.43MHz
S/N Ratio	>75dB 0 to 10MHz

### 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