

Specifications — MSV0502, MSV0804 Matrix Switchers

Video

Routing	
MSV0502	5 x 2 matrix
MSV0804	8 x 4 matrix
Gain	Unity
Bandwidth	450 MHz (-3dB), fully loaded 0 MHz to 10 MHz no more than +0.1dB to -0.1dB 0 MHz to 130 MHz .. no more than +4.5dB to -0.5dB
Crosstalk	-80dB @ 10 MHz
Switching speed	400 ns (max.)

Video input

Number/signal type	8 RGBHV, RGBS, RGsB, RsGsBs, component video (Y, R-Y, B-Y)
Connectors	
MSV0502	5 female 15-pin HD
MSV0804	8 female 15-pin HD
Nominal level	1V p-p for Y of component video 0.7V p-p for RGB 0.3V p-p for R-Y and B-Y of component video
Minimum/maximum levels	Analog: 0.6V to 1.8V p-p including offset
Impedance	75 ohms
Return loss	<-40dB @ 5 MHz
Maximum DC offset	±0.5VDC

Video output

Number/signal type	4 RGBHV, RGBS, RGsB, RsGsBs, component video (Y, R-Y, B-Y)
Connectors	
MSV0502	2 female 15-pin HD
MSV0804	4 female 15-pin HD
Nominal level	1V p-p for Y of component video 0.7V p-p for RGB 0.3V p-p for R-Y and B-Y of component video
Minimum/maximum levels	0.6V to 1.8V p-p
Impedance	75 ohms
Return loss	<-45dB @ 5 MHz
DC offset	±8.5mV maximum with input at 0 offset

Sync

Input type	RGBHV, RGBS, RGsB, RsGsBs
Output type	RGBHV, RGBS, RGsB, RsGsBs
Input level	2.0V to 5.5V p-p
Output level	4.0V to 5.5V p-p, unterminated
Input impedance	510 ohms
Output impedance	75 ohms
Max input voltage	5.0V p-p
Max. propagation delay	600 ns
Max. rise/fall time	600 ns
Polarity	Positive or negative (follows input)

Audio

Routing	
MSV0502	5 x 2 stereo matrix
MSV0804	8 x 4 stereo matrix

Gain	Unbalanced output: 0dB; balanced output: +6dB
Frequency response	20 Hz to 20 kHz, ± 0.05 dB; 10 Hz to 175 kHz, -3dB
THD + Noise	0.02% @ 1 kHz at nominal level
S/N	>74dB at maximum output
Crosstalk	<-70dB @ 1 kHz, fully loaded
Stereo channel separation	>76dB @ 1 kHz
CMRR	>81dB @ 20 Hz to 20 kHz

Audio input

Number/signal type	
MSV0502	5 stereo, balanced/unbalanced
MSV0804	8 stereo, balanced/unbalanced
Connectors	
MSV0502	(5) 3.5 mm captive screw connectors, 5 pole
MSV0804	(8) 3.5 mm captive screw connectors, 5 pole
Impedance	>20 kohms unbalanced, 1 kohm balanced, DC coupled
Nominal level	-10dBV (316mV)
Maximum level	+16dBu, (balanced or unbalanced) at 1%THD+N
Input gain adjustment	-55dB to 0dB, adjustable per input

Audio output

Number/signal type	
MSV0502	2 stereo, balanced/unbalanced
MSV0804	4 stereo, balanced/unbalanced
Connectors	
MSV0502	(2) 3.5 mm captive screw connectors, 5 pole
MSV0804	(4) 3.5 mm captive screw connectors, 5 pole
Impedance	50 ohms unbalanced, 100 ohms balanced
Gain error	± 0.1 dB channel to channel
Maximum level (Hi-Z)	>+22dBu, balanced or unbalanced at 1%THD+N
Maximum level (600 ohm)	>+16dBm, balanced or unbalanced at 1%THD+N

NOTE 0dBu = 0.775 volts (RMS).

Control/remote — switcher

Serial control port	RS-232, RS-422, or RS 485; 3.5 mm 5-pole captive screw connector
Baud rate and protocol	1200, 2400, 4800, 9600, 19200, or 38400 baud; 8-bit, 1 stop bit, no parity
Serial control pin configurations	1 = GND, 2 = TX-, 3 = TX+, 4 = RX-, 5 = RX+
IR controller module	CTL 120-2
Program control	ICS100 (Inline Control Software)

General

Power	100VAC to 240VAC, 50/60 Hz, 19 watts, internal, autoswitchable
Temperature/humidity	Storage -40° to +158°F (-40° to +70°C) / 10% to 90%, non-condensing Operating +32° to +122°F (0° to +50°C) / 10% to 90%, non-condensing
Rack mount	Yes, with included brackets, part #MTR102-1
Enclosure type	Metal
Enclosure dimensions	
MSV0502	1.8" H x 17.0" W x 11.4" D (1U high, full rack width) 4.6 cm H x 43.2 cm W x 29.0 cm D (Depth excludes connectors. Width excludes rack ears.)
MSV0804	3.5" H x 17.0" W x 11.4" D (2U high, full rack width) 8.9 cm H x 43.2 cm W x 29.0 cm D (Depth excludes connectors. Width excludes rack ears.)

Specifications — MSV0502, MSV0804 (continued)

Product weight	
MSV0502	5.6 lbs (2.5 kg)
MSV0804	6.9 lbs (3.1 kg)
Shipping weight	
MSV0502	10 lbs (5 kg)
MSV0804	12 lbs (6 kg)
DIM weight: MSV0804	
USA/Canada	25 lbs (12 kg)
International	30 lbs (14 kg)
Vibration	ISTA/NSTA 1A in carton (International Safe Transit Association)
Listings	ETL (UL1950)
Compliances	CE
Warranty	3 years parts and labor

NOTE *Specifications are subject to change without notice.*

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