

# Specifications — MAV 44-88 Series

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## Video— composite video and S-video models

### Routing

MAV 44 Series.....	4 x 4 matrix
MAV 48 Series.....	4 x 8 matrix
MAV 84 Series.....	8 x 4 matrix
MAV 88 Series.....	8 x 8 matrix
Gain.....	Unity
Bandwidth.....	150 MHz (-3 dB), fully loaded
Differential phase error .....	<0.1° at 3.58 MHz and 4.43 MHz
Differential gain error.....	<0.1% at 3.58 MHz and 4.43 MHz
Crosstalk.....	<-50 dB @ 5 MHz
Switching speed .....	20 ms (max.)

## Video input— composite video and S-video models

### Number/signal type

MAV 44 AV, MAV 44 AV RCA, MAV 48 AV, MAV 48 AV RCA	4 composite video
MAV 44 SVA, MAV 44 SVA RCA, MAV 48 SVA, MAV 48 SVA RCA	4 S-video
MAV 84 AV, MAV 84 AV RCA, MAV 88 AV, MAV 88 AV RCA, MAV 88 V	8 composite video
MAV 84 SVA, MAV 84 SVA RCA, MAV 88 SVA, MAV 88 SVA RCA	8 S-video

### Connectors

MAV 44/48 composite video models	4 female BNC
MAV 44/48 S-video models	4 female 4-pin mini DIN
MAV 44/48 composite video models	8 female BNC
MAV 84/88 S-video models	8 female 4-pin mini DIN
Nominal level .....	1 Vp-p for Y of S-video, and for composite video 0.3 Vp-p for C of S-video
Minimum/maximum levels.....	Analog: 0.4 V to 2.0 Vp-p with no offset at unity gain
Impedance.....	75 ohms
Return loss	
Composite video .....	<-38 dB @ 0 to 10 MHz
S-video .....	<-25 dB @ 0 to 10 MHz
DC offset (max. allowable).....	5 V
External sync (genlock) .....	0.2 V to 0.4 Vp-p
Input coupling.....	AC coupling only

# Specifications — MAV 44-88 Series, cont'd

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## Video output— composite video and S-video models

### Number/signal type

MAV 44 AV, MAV 44 AV RCA, MAV 84 AV, MAV 84 AV RCA	4 composite video
MAV 44 SVA, MAV 44 SVA RCA, MAV 84 SVA, MAV 84 SVA RCA	4 S-video
MAV 88 AV, MAV 88 AV RCA, MAV 88 V, MAV 48 AV, MAV 48 AV RCA	8 composite video
MAV 88 SVA, MAV 88 SVA RCA, MAV 48 SVA, MAV 48 SVA RCA	8 S-video

### Connectors

MAV 44/84 composite video models	4 female BNC
MAV 44/84 S-video models	4 female 4-pin mini DIN
MAV 48/88 composite video models	8 female BNC
MAV 48/88 S-video models	8 female 4-pin mini DIN

Nominal level .....	1 Vp-p for Y of S-video, and for composite video 0.3 Vp-p for C of S-video
Minimum/maximum levels.....	0.4 V to 2.0 Vp-p (follows input)
Impedance.....	75 ohms
Return loss	
Composite video .....	<-40 dB @ 5 MHz
S-video .....	<-25 dB @ 5 MHz
DC offset.....	15 mV typical (per output enabled with 75 ohm termination) with input at 0 offset
Switching type.....	Vertical interval

## Sync— composite video and S-video models

Genlock connectors.....	2 female BNC
Standards.....	NTSC 3.58, NTSC 4.43, PAL, SECAM

## Audio — audio models

### Routing

MAV 44 Series.....	4 x 4 stereo matrix
MAV 48 Series.....	4 x 8 stereo matrix
MAV 84 Series.....	8 x 4 stereo matrix
MAV 88 Series.....	8 x 8 stereo matrix

Gain.....	Adjustable; the default is unity. Unity gain occurs for all RCA connector models. In all other models with captive screw connectors, unity gain occurs when the switcher is configured for balanced output.
Frequency response .....	20 Hz to 20 kHz, $\pm 0.5$ dB
THD + Noise.....	1% @ 1 kHz, 0.3% @ 20 kHz at nominal level
S/N.....	90 dB at maximum output (unweighted)
Crosstalk.....	<-65 dB @ 20 kHz, <-80 dB @ 1 kHz or below 60 Hz, fully loaded
Stereo channel separation .....	>80 dB @ 20 Hz to 20 kHz
CMRR.....	>75 dB @ 20 Hz to 20 kHz

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## Audio input — audio models

### Number/signal type

MAV 44 AV, MAV 44 SVA, MAV 48 AV, MAV 48 SVA	4 stereo, balanced/unbalanced
MAV 44 AV RCA, MAV 44 SVA RCA, MAV 48 AV RCA, MAV 48 SVA RCA	4 stereo, unbalanced
MAV 84 AV, MAV 84 SVA, MAV 88 AV, MAV 88 SVA	8 stereo, balanced/unbalanced
MAV 84 AV RCA, MAV 84 SVA RCA, MAV 88 AV RCA, MAV 88 SVA RCA	8 stereo, unbalanced

### Connectors

MAV 44 AV, MAV 44 SVA, MAV 48 AV, MAV 48 SVA	(4) 3.5 mm captive screw connectors, 5 pole
MAV 44 AV RCA, MAV 44 SVA RCA, MAV 48 AV RCA, MAV 48 SVA RCA	4 pairs of female RCA connectors
MAV 84 AV, MAV 84 SVA, MAV 88 AV, MAV 88 SVA	(8) 3.5 mm captive screw connectors, 5 pole
MAV 84 AV RCA, MAV 84 SVA RCA, MAV 88 AV RCA, MAV 88 SVA RCA	8 pairs of female RCA connectors

Impedance.....	>18k ohms unbalanced, 24k ohms balanced, DC coupled
Nominal level .....	Configurable: +4 dBu ( .23 V, professional level) or -10 dBV (316 mV, consumer level)
Maximum level.....	>+20 dBu (captive screw models) at 1% THD+N >+14 dBu (RCA models) at 1% THD+N
Input gain adjustment .....	-18 dB to +10 dB, adjustable per input; default = 0 dB.

**NOTE** *Input gain is referenced to the internal bus signal level. It can be verified by measuring the unbalanced output level when the output level is set to "Consumer".*

**NOTE** *0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV ≈ 2 dBu*

## Audio output — audio models

### Number/signal type

MAV 44 AV, MAV 44 SVA, MAV 48 AV, MAV 48 SVA	4 stereo, balanced/unbalanced
MAV 44 AV RCA, MAV 44 SVA RCA, MAV 48 AV RCA, MAV 48 SVA RCA	4 stereo, unbalanced
MAV 88 AV, MAV 88 SVA, MAV 48 AV, MAV 48 SVA	8 stereo, balanced/unbalanced
MAV 88 AV RCA, MAV 88 SVA RCA, MAV 48 AV RCA, MAV 48 SVA RCA	8 stereo, unbalanced

### Connectors

MAV 44 AV, MAV 44 SVA, MAV 84 AV, MAV 84 SVA	(2) 3.5 mm captive screw connectors, 10 pole
MAV 44 AV RCA, MAV 44 SVA RCA, MAV 48 AV RCA, MAV 48 SVA RCA	4 pairs of RCA female
MAV 88 AV, MAV 88 SVA, MAV 48 AV, MAV 48 SVA	(4) 3.5 mm captive screw connectors, 10 pole
MAV 88 AV RCA, MAV 88 SVA RCA, MAV 48 AV RCA, MAV 48 SVA RCA	8 pairs of female RCA

Impedance.....	50 ohms unbalanced, 100 ohms balanced
Gain error .....	<±0.1 dB channel to channel

# Specifications — MAV 44-88 Series, cont'd

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Nominal level .....	Configurable: +4 dBu ( .23 V, professional level) or -10 dBV (316 mV, consumer level)
Maximum level (Hi-Z) .....	>+20 dBu, balanced; >+18 dBu, unbalanced at 1% THD+N at default settings
Maximum level (600 ohm).....	>+19 dBm, balanced; >+13 dBm, unbalanced at 1%THD+N at default settings

## Control/remote — switcher

Serial control port.....	RS-232, female 9-pin D connector
Baud rate and protocol.....	9600 baud, 8 data bits, 1 stop bit, no parity
Serial control pin configuratio ..	2 = TX, 3 = RX, 5 = GND, 9 = hardwired IR
IR controller module.....	IR 501 remote control (optional)
Program control.....	Extron control/configuration program for Windows® Extron Simple Instruction Set (SIS™)

## General

Power .....	100 VAC to 240 VAC, 50-60 Hz, 15 watts, internal
Temperature/humidity .....	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Mounting	
Rack mount .....	Yes, with included brackets
Furniture mount.....	Yes, with an optional under-desk mounting kit
Cooling .....	Convection, no vents
Enclosure type .....	Metal
Enclosure dimensions.....	1.75" H x 17.4" W x 8.5" D (1U high, full rack wide) (4.4 cm H x 44.2 cm W x 21.6 cm D) (Depth excludes connectors. Width excludes rack ears.)
Product weight .....	7.0 lbs (3.2 kg)
Shipping weight .....	10 lbs (5 kg)
Vibration .....	ISTA 1A in carton (International Safe Transit Association)
Regulatory compliance	
Safety.....	CE, c-UL, UL
EMI/EMC .....	CE, C-tick, FCC Class A, ICES, VCCI
Warranty .....	3 years parts and labor

**NOTE** All nominal levels are at ±10%.

**NOTE** Specifications are subject to change without notice.

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