

Specifications, Cont'd

Product weight

MDA 5SVA RCA,	
MDA 3AV RCA	2.2 lbs (1.0 kg)
MDA 5AV RCA	2.3 lbs (1.0 kg)

Shipping weight 5 lbs (2.3 kg)

Vibration ISTA/NSTA 1A in carton (International Safe Transit Association)

Listings UL, CUL

Compliances CE, FCC Class A, VCCI, AS/NZS, ICES

MTBF 30,000 hours

Warranty 3 years parts and labor

NOTE Specifications are subject to change without notice.

FCC Class A Notice

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Note: This unit was tested with shielded cables on the peripheral devices. Shielded cables must be used with the unit to ensure compliance.

Extron® Electronics

INTERFACING, SWITCHING AND DISTRIBUTION



User's Guide



MDA 5SVA RCA / 5AV RCA / 3AV RCA

Video and Audio Mini Distribution Amplifiers



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Installation

The Extron MDA 5SVA RCA, MDA 3AV RCA, and MDA 5AV RCA are a family of S-video or composite video and stereo audio mini distribution amplifiers (MDAs). The stereo audio input and output are on RCA connectors. Each MDA also has a passive loop-through for a local monitor.

- **MDA 5SVA RCA** — S-video DA with one S-video and stereo audio input and five S-video and stereo audio outputs.
- **MDA 3AV RCA** — Composite video DA with one video and stereo audio input and three video and stereo audio outputs.
- **MDA 5AV RCA** — Composite video DA with one video and stereo audio input and five video and stereo audio outputs.

The MDAs are rack mountable and have an internal switching power supply for worldwide power compatibility.

Rack Installation

The 1U high, half rack width MDAs can be mounted on a standard Universal 1U Rack Shelf (Extron part #60-190-01) (figure 1). If desired, mount the MDA as follows:

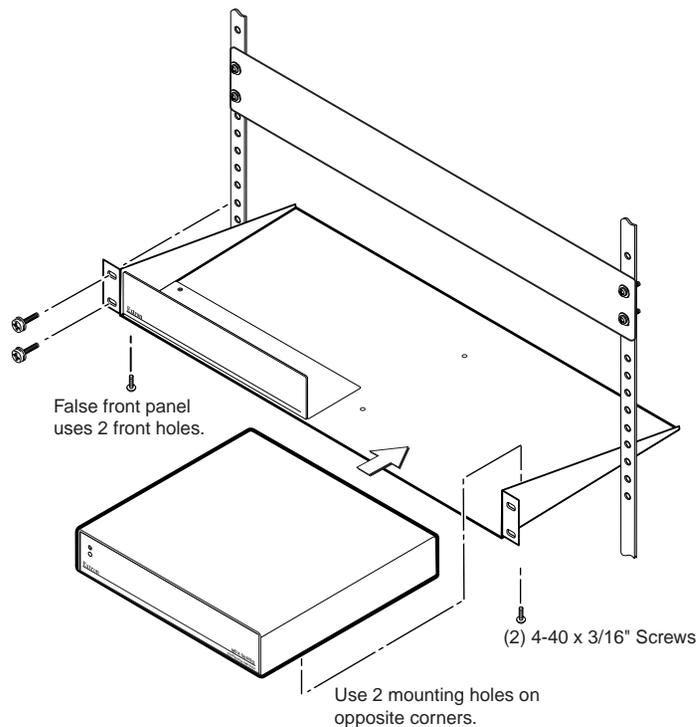


Figure 1 — Rack mounting the MDA 3 and MDA 5 Series DAs

1. If feet were previously installed on the bottom of the MDA, remove them.
2. Mount the MDA on the rack shelf, using two 4-40 x 3/16" screws in opposite (diagonal) corners to secure the MDA to the shelf.
3. Install the blank panel (included with the rack shelf) or another half-rack unit to the rack shelf.
4. Insert the shelf into the rack, aligning the holes in the shelf with those of the rack.
5. Secure the shelf to the rack using the supplied machine screws.

Connections, Controls, and Indicator

See figure 2 on the next page to make the following connections.

S-video (MDA 5SVA RCA)

- ① **Input connector** — Connect an S-video input to this 4-pin mini DIN connector.
- ② **Loop connector** — Connect an S-video local monitor or other S-video device to this 4-pin mini DIN connector.
- ③ **Outputs connectors** — Connect up to five S-video devices to these 4-pin mini DIN connectors.

Composite video (MDA 3AV RCA and MDA 5AV RCA)

- ④ **Input connector** — Connect a composite video input to this BNC connector.
- ⑤ **Loop connector** — Connect a composite video local monitor or other composite video device to this BNC connector.
- ⑥ **Outputs connectors** — Connect up to three or five composite video devices to these connectors.

Video connector termination switch (all models)

- ⑦ **High Z / 75 Ohm switch** — Select 75-ohm termination off or on.

High Z — Select this position if you are connecting a terminated device to the Loop connector.

75 Ohm — This position terminates the Input connector with 75 ohms of impedance. Select this position if you are not using the Loop connector or if you are connecting an unterminated device to the Loop connector.

Connections

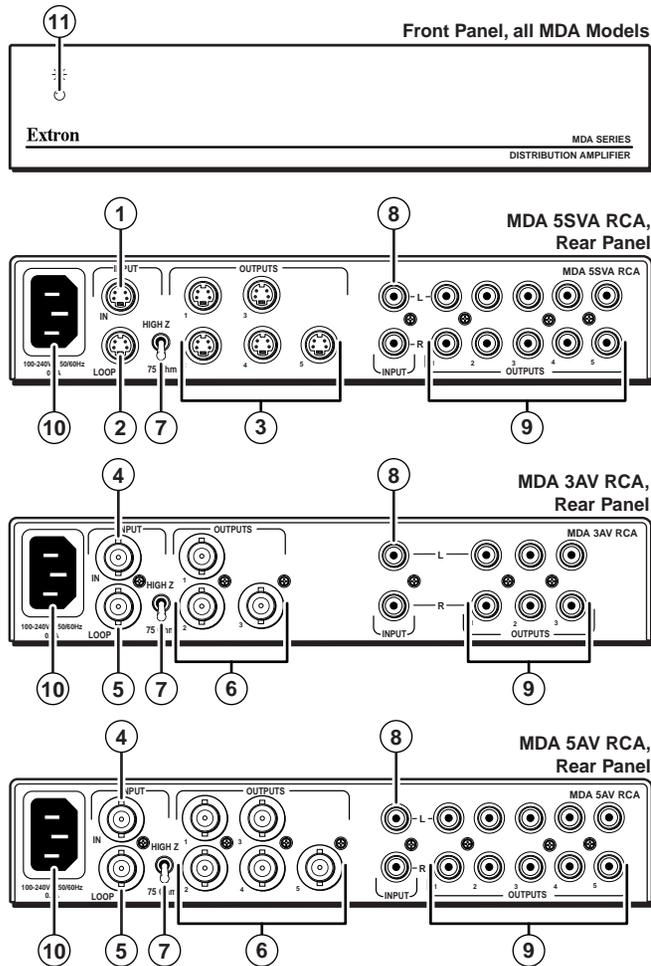


Figure 2 — MDA 3 and MDA 5 Series front and rear panels

Audio connections (all models)

- ⑧ **Audio Input connectors** — Connect an unbalanced stereo audio signal to these L(ef) and R(ight) RCA connectors.
- ⑨ **Audio Outputs connectors** — Connect up to three (MDA 3AV RCA) or five (MDA 5AV RCA or MDA 5SVA RCA) stereo audio devices to these L(ef) and R(ight) RCA connectors.

Power

- ⑩ **Power connector**— Plug a standard IEC power cord into this connector to connect the MDA to a 100 to 240VAC, 50 Hz or 60 Hz power source.
- ⑪ **Power LED** — The power LED indicates power is applied.

Specifications

Video

Gain	Unity
Bandwidth	
MDA 5SVA RCA	270 MHz (-3dB)
MDA 3AV RCA, MDA 5AV RCA	435 MHz (-3dB)
Differential phase error	0.05°, 0 to 50 MHz
Differential gain error	<0.05%, 0 to 50 MHz

Video input

Number/signal type	
MDA 5SVA RCA	1 NTSC/PAL/SECAM S-video
MDA 3AV RCA, MDA 5AV RCA	1 NTSC/PAL/SECAM composite video
Connectors	
MDA 5SVA RCA	1 4-pin mini DIN female
MDA 3AV RCA, MDA 5AV RCA	1 BNC female
Nominal level	
MDA 5SVA RCA	Y: 1.0V p-p (including sync), C: 0.3V p-p
MDA 3AV RCA, MDA 5AV RCA	1.0V p-p (including sync)
Minimum/maximum level	
MDA 5SVA RCA	Y: 0.4V to 2.0V p-p with no offset
MDA 3AV RCA, MDA 5AV RCA	0.4V to 2.0V p-p with no offset
Impedance	75 ohms
Return loss	-40dB @ 0 to 10 MHz
Maximum DC offset	5.0V

Specifications, Cont'd

Video output

Number/signal type	
MDA 5SVA RCA	6 S-video: 5 buffered for distribution, 1 passive loop-through
MDA 3AV RCA	4 composite video: 3 buffered for distribution, 1 passive loop-through
MDA 5AV RCA	6 composite video: 5 buffered for distribution, 1 passive loop-through
Connectors	
MDA 5SVA RCA	6 4-pin mini DIN
MDA 3AV RCA	4 BNC female
MDA 5AV RCA	6 BNC female
Nominal level	
MDA 5SVA RCA	Y: 1.0V p-p (including sync), C: 0.3V p-p
MDA 3AV RCA, MDA 5AV RCA	1.0V p-p (including sync)
Minimum/maximum level	0.4V to 2.0V p-p
Impedance	75 ohms
Return loss	-30dB @ 5 MHz
DC offset	±5mV maximum with input at 0 offset

Sync

Standards	NTSC 3.58, NTSC 4.43, PAL, SECAM
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Audio

Gain	Unity
Frequency response	20 Hz to 20 kHz, ±0.05dB
THD + Noise	0.03% @ 1 kHz at nominal level
S/N	>90 dB, at rated maximum output drive
Stereo channel separation	>80 dB @ 1 kHz; >60 dB @ 20 kHz
CMRR	>75 dB @ 20 Hz to 20 kHz

Audio input

Number/signal type	1 stereo unbalanced
Connectors	2 RCA connectors
Impedance	>10 kohms unbalanced, DC coupled
Nominal level	Compatible with +4dBu (1.23V), 0dBu (0.775V), -10dBV (316mV), and -20dBV (100mV)
Maximum level	+24 dBu (unbalanced) at 1%THD+N

Audio output

Number/signal type	
MDA 5SVA RCA	5 stereo, unbalanced
MDA 3AV RCA	3 stereo, unbalanced
MDA 5AV RCA	5 stereo, unbalanced
Connectors	
MDA 5SVA RCA	10 RCA connectors
MDA 3AV RCA	6 RCA connectors
MDA 5AV RCA	10 RCA connectors
Impedance	50 ohms unbalanced, 100 ohms balanced
Gain error	±0.1dB channel to channel
Nominal level	Compatible with +4dBu (1.23V), 0dBu (0.775V), -10dBV (316mV), and -20dBV (100mV)
Maximum level (Hi-Z)	>+24dBu, unbalanced at 1%THD+N

NOTE 0dBu = 0.775 volts (RMS). 0dBV = 1.0 volts (RMS)

General

Power	100VAC to 240VAC, 50/60 Hz, 20 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 optional 1U rack shelf, part #60-190-01
Enclosure type	Metal
Enclosure dimensions	1.6" H x 8.75" W x 9.4" D (1U high, half rack width) 4.1 cm H x 22.2 cm W x 23.9 cm D (Depth excludes connectors and knobs.)