

# AMP-X50MP

## X Series Media Presentation Amplifier



- Compact and versatile power amplifier
- 2 x 25 W per channel (1 x 50 W) into 4 or 8 Ohm speakers
- 1 x 50 W output for Hi-Z (70 V and 100 V) speakers
- Balanced, unbalanced, and stereo 3.5 mm inputs with auto summing
- Stereo or mono-summed operation
- Remote power control
- Energy saving design reduces power consumption when idle
- Highly sensitive audio-sensing circuitry with high-speed wake time
- Convection cooled for noiseless operation
- Volume, bass, and treble adjustments
- Captive speaker and power connectors for secure and robust connectivity
- Electronic short-circuit and overload protection
- Factory installed surface mount flange brackets are removable and reversible
- Quarter-Rack width for rack mounting with optional kit
- 60 W DC power supply with locking barrel connector and DC cable included

The Crestron® AMP-X50MP is a low-cost audio amplifier solution that is suitable for a variety of applications. It features a compact, surface-mountable design that installs virtually anywhere without requiring an equipment rack.

### LoZ (4/8 Ω) and Hi-Z (70 V or 100 V) Output

High-efficiency Class D circuitry delivers 25 W per channel to drive one pair of 4 or 8 Ohm speakers, making it ideal to support stereo speakers at the front of a room or mono speakers in the ceiling. The amplifier can also be used with Hi-Z (70/100 V) speakers, delivering 50 W.

### Convection Cooling

The efficient design provides cool running operation to ensure long term reliability. The AMP-X50MP is high-density stackable with other Crestron X Series and Modular Amplifiers, allowing multiple units to be installed vertically in an equipment rack without needing extra ventilation space.

### Easy Installation

Installation and setup of the AMP-X50MP is simple. Detachable connectors facilitate the termination of wiring. Balanced and unbalanced inputs can connect directly to the line output of a video projector or display, audio processor, mixer, or AV switcher. Independent controls for volume, bass, and treble allow a custom sound in any location.

### Fully Protected

The AMP-X50MP features protection against overheating, shorted or overloaded speaker lines, excessive input signals, and other faults. In the case of a shorted speaker line, both outputs mute automatically until the fault condition is resolved.

### ENERGY STAR® Certified

An energy-efficient design enables the AMP-X50MP to meet demanding ENERGY STAR requirements. In addition to its high efficiency operation, the AMP-X50MP powers down automatically when no input signal is detected for more than 25 minutes, reducing overall power consumption and heat as part of an Energy Star® compliant system design. The amplifier quickly powers back on the instant an input signal is detected. A remote input can connect to a contact closure to place the amplifier in standby mode.

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### Specifications<sup>1</sup>

#### Audio

**Input Signal Types** Balanced or unbalanced analog line-level

#### Output Power

Mode	1 Channel Driven	2 Channels Driven
LoZ	8 ohm: 25 W 4 ohm: 50 W	8 ohm: 25 W 4 ohm: 25W
Hi-Z 70 V	50 W	N/A
Hi-Z 100 V	50 W	N/A

**Frequency Response** LoZ (4-8 Ohms): 20 Hz to 20 kHz  
+/-0.5 dB at 1 W;  
Hi-Z (70 V/100 V): 90 Hz to 20 kHz  
+/-3 dB at 1 W;  
HPF @ 80 Hz (+/-10 Hz),  
-12 dB/Octave

**THD+N** < 0.1 % at 1 kHz @ -3 dB full rated output power

**S/N Ratio** > 90 dBA, 20 Hz to 20 kHz, balanced, Hi-Z

**Crosstalk** -75 dB at 1 kHz

**Input Sensitivity** 1.23 Vrms, +4 dBu balanced;  
0.316 Vrms, -10 dBV unbalanced;  
For 25 W @ 8 Ohms  
50 W @ 70 V/100 V

**Gain** 21.5 dB @ 8 Ohms, Balanced

**Wake Signal Threshold** -57 dBu (1 mV) max

**Protection** Clip limiter, over current, under voltage, over temperature, DC offset, extreme high frequency

#### Connectors

**Speaker Output** (1) 6-pin, 5.08 mm pitch, 12 A plug with screw locking retainers;  
Power amplifier outputs;  
Wire Size: Terminals accept up to 12 AWG (3.31 mm<sup>2</sup>)

**ALS OUT** (1) 3.5 mm connector, female;  
Unbalanced line level audio outputs;  
Maximum Output Level: 2.24 Vrms, +7 dBV (+9.2 dBu);  
Fixed audio output for assisted listening devices duplicates the summed audio input

**AUDIO IN 1-2 (unbalanced)** (2) RCA connectors, female;  
Unbalanced line level audio inputs;  
Maximum Input Level: 2.24 Vrms, +7 dBV (+9.2 dBu)

**AUDIO IN 1-2 (unbalanced)** (1) 3.5 mm connector, female;  
Unbalanced line level audio inputs;  
Maximum Input Level: 2.24 Vrms, +7 dBV (+9.2 dBu)

**AUDIO IN 1-2 (balanced)** (1) 5 pin 3.5 mm detachable terminal block;  
Balanced line level audio inputs;  
Maximum Input Level: 7.75 Vrms, +20 dBu;  
Input Impedance: 20k Ohms

**REMOTE** (1) 2 pin 3.5 mm detachable terminal block;  
Connect to dry contact closure to place amplifier in standby mode.

**G** (1) M3 with captivated internal tooth lock washer screw;  
Chassis ground lug

**24 V, 2.5 A** (1) External 60 W desktop power supply (24 VDC/2.5 A);  
Mates with locking barrel connector DC cord;  
Power supply included.

#### Controls & Indicators

**PWR** (1) Bi-color white/red LED;  
White indicates operating power supplied;  
Red indicates standby mode.

**FAULT** (1) Red LED;  
Indicates an over temperature or over current fault

**SIGNAL** (1) Bi-color white/red LED;  
White indicates input signal presence;  
Red indicates input signal clipping/limiting

**Hi-Z** (1) White LED;  
Indicates speaker output is in Hi-Z (70 V/100 V) mode

**MONO/STEREO** (1) Slide switch to select STEREO, MONO;  
STEREO preserves channels;  
MONO creates a mono downmix of the input signals

**Hi-Z/LoZ** (1) Slide switch to select LoZ (low impedance 4-8 ohms) or Hi-Z (high impedance 70 V/100 V)

**VOLUME, BASS, TREBLE** (3) Rotary knobs adjust volume, bass (+/- 6 dB), and treble (+/- 6 dB) levels

#### Power

**Main Power** 24 VDC, 2.5 A;  
100-240 VAC, 50/60 Hz, 1.5 A power supply included

**Power Consumption** 14.6 W, 2 channels driven at 1/8th output power (4 ohms);  
6 W, idle (Hi-Z mode)

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### Environmental

Temperature	41° to 104° F (5° to 40° C)
Humidity	10% to 90% RH (non-condensing)

### Construction

Chassis	Metal, convection cooled (fanless)
Front Panel	Metal, black finish with polycarbonate label overlay
Mounting	Freestanding, surface mount, or 1/4 width 1 RU 19 in. rack mountable; Gangable with other Crestron modular and X series products (adhesive feet and surface mounting brackets included); Ganging kit and rack mounting kit optional

### Dimensions

Height	1.74 in. (44 mm) without feet; 1.85 in. (47 mm) with surface kit
Width	4.33 in. (110 mm); 5.58 in. (142 mm) with surface kit;
Depth	6.99 in. (178 mm)

### Weight

3.24 lb (1.5 kg)

### Compliance

ENERGY STAR, ErP (1275/2008/EC), UL 62368, FCC Class B commercial and residential use

### Model

**AMP-X50MP**  
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### Available Accessories

**SAROS ICT Series**  
Saros® In-Ceiling Tile Loudspeakers

**CBL Series**  
Crestron® Certified Interface Cables

**AUD-EXT**  
Audio over CAT5 Extenders

#### Notes:

1. All nominal specs, +/-10%

This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at [www.crestron.com/How-To-Buy/Find-a-Representative](http://www.crestron.com/How-To-Buy/Find-a-Representative) or by calling 855-263-8754.

This product is covered under the Crestron standard limited warranty. Refer to [www.crestron.com/warranty](http://www.crestron.com/warranty) for full details.

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