

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.

AMP-X50MP

X Series Media Presentation Amplifier

Specifications¹

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 mm²)

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 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)

AMP-X50MP

X Series Media Presentation Amplifier

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
X Series Media Presentation Amplifier

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%

Crestron and the Crestron logo are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. ENERGY STAR is either a trademark or registered trademark of the United States Environmental Protection Agency in the United States and/or other countries. UL is either a trademark or registered trademark of Underwriters Laboratories, Inc. in the United States and/or other countries. Other trademarks, registered trademarks, and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Crestron disclaims any proprietary interest in the marks and names of others. Crestron is not responsible for errors in typography or photography.

Specifications are subject to change without notice.

©2020 Crestron Electronics, Inc.

Rev 01/10/20

AMP-X50MP

X Series Media Presentation Amplifier

