AMP-X50MP

X Series Media Presentation Amplifier



- Compact and versatile power amplifier
- 2×25 W per channel (1 x 50 W) into 4 or 8 Ohm speakers
- 1x50 W output for Hi-Z (70V and 100V) 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
- Knob cover protects accidental changes to the device settings
- 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 ($4/8 \Omega$) and Hi-Z (70V or 100V) 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 (70/100V) 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. A knob cover is included with the product to protect against accidental changes to the front panel settings.

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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Audio

Input Signal Types Balanced or unbalanced analog line-

Output Power

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

LoZ (4-8 Ohms): 20 Hz to 20kHz Frequency Response

+/-0.5 dB at 1W;

Hi-Z (70V/100V): 90 Hz to 20kHz

+/-3 dB at 1 W;

HPF @ 80 Hz (+/-10 Hz),

-12 dB/Octave

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

output power

S/N Ratio > 90 dBA, 20 Hz to 20kHz, balanced,

Crosstalk -75 dB at 1 kHz

1.23Vrms, +4 dBu balanced; Input Sensitivity 0.316Vrms, -10 dBV unbalanced;

> For 25 W @ 8 Ohms 50 W @ 70V/100V

21.5 dB @ 8 Ohms, Balanced Gain

Wake Signal Threshold

-57 dBu (1 mV) max

Protection Clip limiter, over current, under

voltage, over temperature, DC offset, extreme high frequency

Connectors

(1) 6-pin, 5.08 mm pitch, 12A plug with Speaker Output

screw locking retainers;

Power amplifier outputs;

Wire Size: Terminals accept up to

12AWG (3.31 mm²)

(1) 3.5 mm connector, female; ALS OUT

> Unbalanced line level audio outputs; Maximum Output Level: 2.24Vrms,

+7 dBV (+9.2 dBu);

Fixed audio output for assisted listening devices duplicates the summed audio

input

(2) RCA connectors, female; **AUDIO IN 1-2** (unbalanced)

Unbalanced line level audio inputs; Maximum Input Level: 2.24Vrms, +7 dBV

(+9.2 dBu)

(1) 3.5 mm connector, female; **AUDIO IN 1-2**

Unbalanced line level audio inputs; (unbalanced)

Maximum Input Level: 2.24Vrms, +7 dBV (+9.2 dBu)

(1) 5 pin 3.5 mm detachable terminal **AUDIO IN 1-2** block; (balanced)

Balanced line level audio inputs; Maximum Input Level: 7.75Vrms,

+20 dBu;

Input Impedance: 20k Ohms

(1) 2 pin 3.5 mm detachable terminal **REMOTE**

Connect to contact closure to place

amplifier in standby mode.

(1) M3 with captivated internal tooth G

> lock washer screw; Chassis ground lug

(1) External 60 W desktop power supply 24V, 2.5A

(24VDC/2.5A);

Mates with locking barrel connector DC

Power supply included.

Controls & Indicators

(1) Bi-color white/red LED; **PWR**

White indicates operating power

supplied;

Red indicates standby mode.

FAULT (1) Red LED;

Indicates an over temperature or over

current fault

(1) Bi-color white/red LED; **SIGNAL**

White indicates input signal presence;

Red indicates input signal

clipping/limiting

Hi-Z (1) White LED;

Indicates speaker output is in Hi-Z

(70V/100V) 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 70V/100V)

(3) Rotary knobs adjust volume, bass (+/-VOLUME, BASS,

6 dB), and treble (+/- 6 dB) levels TREBLE

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Power

Main Power 24VDC, 2.5A;

100-240VAC, 50/60 Hz, 1.5A power

supply included

Power 14.6 W, 2 channels driven at 1/8th output

Consumption power (4 ohms); 6 W, idle (Hi-Z mode)

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

Knob Cover Polycarbonate transparent material

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) without knob cover;

7.57 in. (192 mm) with knob cover

Weight

3.24 lb (1.5kg)

Compliance

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

Model

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Available Accessories

For a list of available accessories, visit the AMP-X50MP product page.

Note:

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 or by calling 855-263-8754.

This product is covered under the Crestron standard limited warranty. Refer to www.crestron.com/warranty for full details.

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