

Crestron **MP-AMP30**
Media Presentation Audio Amplifier

Operations & Installation Guide



This document was prepared and written by the Technical Documentation department at:



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Regulatory Compliance

As of the date of manufacture, the MP-AMP30 has been tested and found to comply with specifications for CE marking and standards per EMC and Radiocommunications Compliance Labelling.



Federal Communications Commission (FCC) Compliance Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following conditions:
(1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION: Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
 - Increase separation between the equipment and the receiver
 - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
 - Consult the dealer or an experienced radio/TV technician for help
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Media Presentation Audio Amplifier: MP-AMP30

Introduction

The Crestron® MP-AMP30 provides a convenient, low-cost audio amplifier solution for a variety of applications. A perfect complement to the entire Media Presentation line from Crestron, it features a compact surface-mountable design that installs virtually anywhere without requiring an equipment rack. High-efficiency Class D circuitry delivers 15 Watts per channel to drive one or two pairs of 8-Ohm speakers, or a single pair of 4-Ohm speakers, making it ideal to support stereo speakers at the front of a room or mono speakers in the ceiling. Mono-summed operation is enabled by changing two jumpers on the front panel.

Refined, reliable operation is ensured thanks to pop-free turn-on circuitry and electronic short-circuit and overload protection. An energy-saving design achieves optimum efficiency under load, and powers down automatically when no input signal is detected for more than five minutes, reducing overall power consumption and heat as part of a green system design. Its extruded aluminum housing is both attractive and effective at dissipating heat, affording a silent running design without cooling fans.

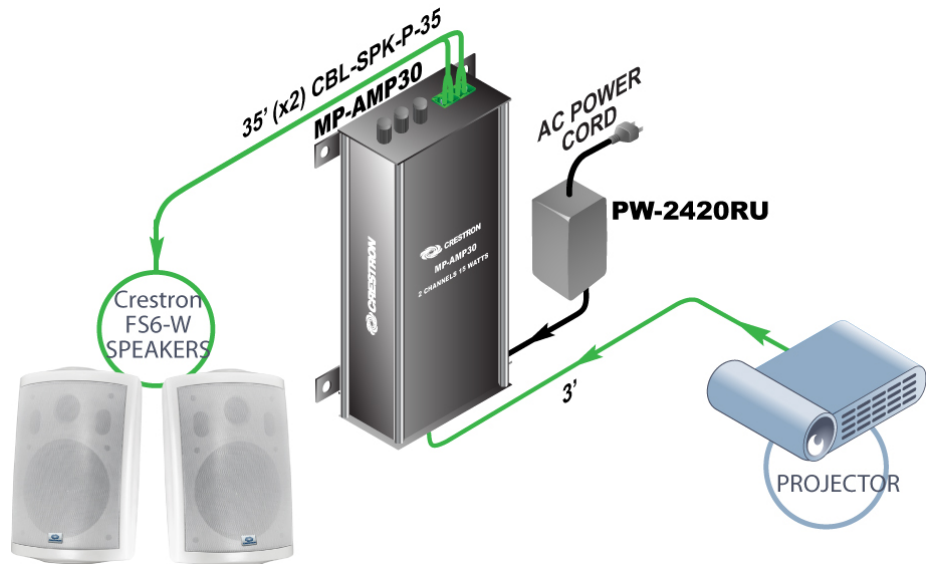
Features and Functions

- Compact surface mount power amplifier
- 15 Watts per channel into 8 or 4 Ohms
- Stereo or mono-summed operation
- High-efficiency Class D topology
- Energy saving design reduces power consumption when idle
- Convection cooled for noiseless operation
- Simple volume, bass, and treble adjustments
- Built-in loudness contour circuit
- Electronic short-circuit and overload protection
- Detachable terminal block speaker connections
- Unbalanced RCA line inputs, 3-foot (~0.9 meter) cable included

Installation and setup of the MP-AMP30 is simple. Detachable output connectors facilitate the termination of speaker wiring up to 16 gauge. RCA inputs connect directly to the line output of a video projector or display, audio processor, mixer, or AV switcher. Rotary controls provide for adjusting the overall speaker volume, as well as bass and treble. For quiet environments, loudness compensation is employed by setting the volume control below the center detent position.

Applications

The following diagram shows an MP-AMP30 in a typical application.



Specifications

Specifications for the MP-AMP30 are listed in the following table.

MP-AMP30 Specifications

SPECIFICATION	DETAILS
Audio	
Input Volume Range	-55dB to +20dB
Loudness	Active at volume settings below center detent
Bass Gain Range	±15dB @ 100Hz
Treble Gain Range	±15dB @ 10kHz
Frequency Response	20Hz to 20kHz ±0.5dB
S/N Ratio	75dB 20Hz to 20kHz A-weighted
THD+N:	0.7% 20Hz to 20kHz
Output Power	15 Watts per channel at 8 or 4 Ohms
Power Requirements	
Power Consumption	48 Watts (2.0 Amps @ 24 Volts DC) Power supply included

(Continued on following page)

MP-AMP30 Specifications (Continued)

SPECIFICATION	DETAILS
Environmental	
Temperature	41° to 104° F (5° to 40° C)
Humidity	10% to 90% RH (non-condensing)
Heat Dissipation	21 BTU/Hr
Enclosure	
Chassis	Aluminum w/polycarbonate label overlay and four integral mounting flanges
Mounting	Freestanding or surface mount
Dimensions	
Height	5.85 in (149 mm)
Width	3.91 in (100 mm)
Depth	1.43 in (37 mm)
Weight	11.8 oz (335 g)

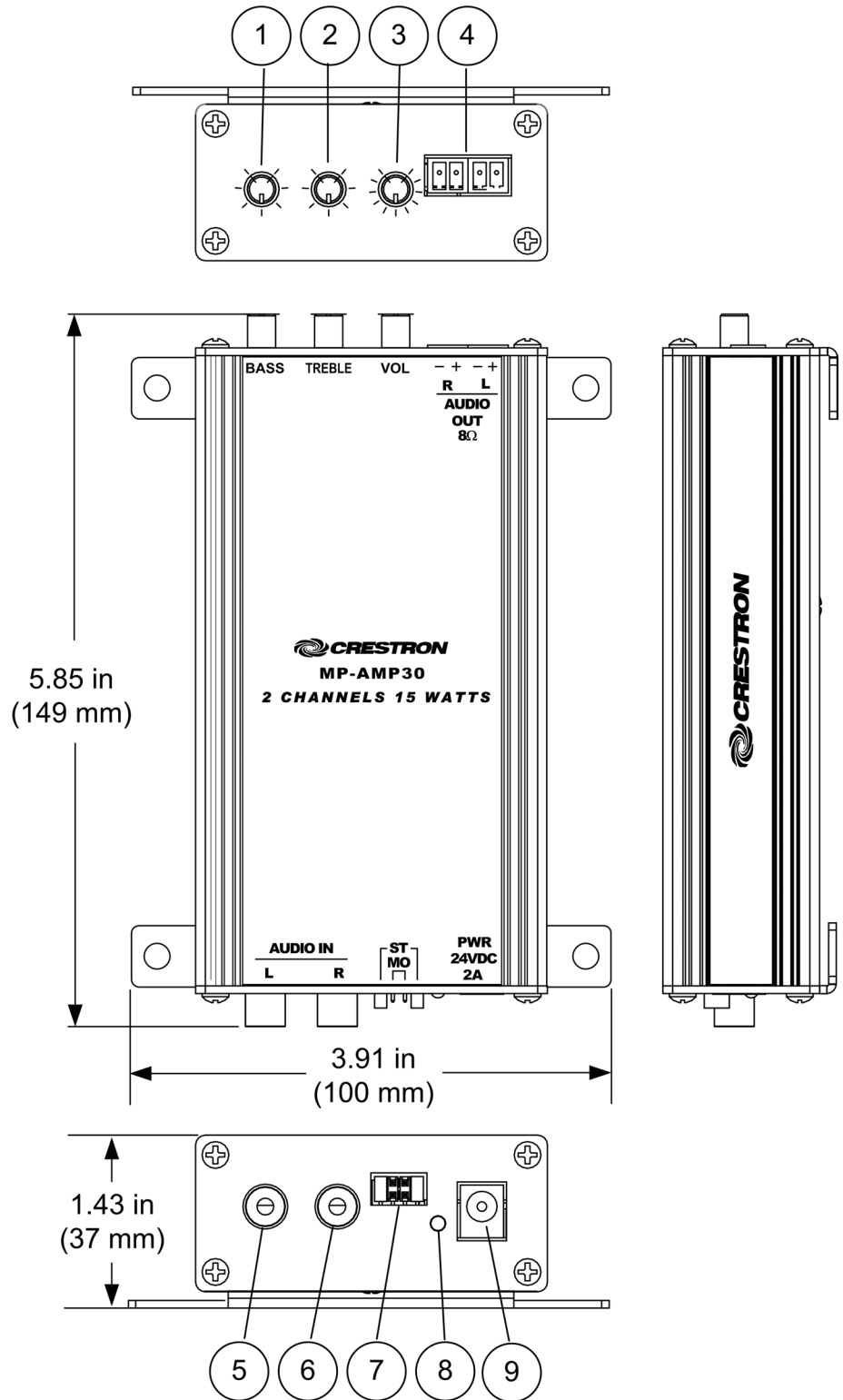
Physical Description

This section provides information on the connections, controls and indicators available on your MP-AMP30.

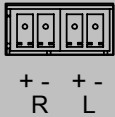




MP-AMP30 Front View



MP-AMP30 Overall Dimensions



Connectors, Controls & Indicators

#	CONNECTORS*, CONTROLS & INDICATORS	DESCRIPTION
1	BASS Control	Rotary low frequency boost/cut adjustment, flat at center detent
2	TREBLE Control	Rotary high frequency boost/cut adjustment, flat at center detent
3	VOL Control	Rotary input level adjustment
4	AUDIO OUT 8Ω, R, L 	(2) 2-pin 3.5 mm detachable terminal blocks; Left & right channel speaker-level audio outputs Wire Size: Connector accepts 16 AWG maximum Output Power: 15 Watts per channel at 8 or 4 Ohms
5, 6	AUDIO IN 	(2) RCA female Unbalanced stereo line-level audio input Maximum Input Level: 2 V _{rms} Input Impedance: 18k Ohms 3 ft (0.9 m) stereo RCA-RCA cable included
7		Mode selection jumpers, select stereo or mono-summed operation
8	PWR 	(1) green LED, indicates operating power supplied from external power supply
9	PWR 24VDC 2A 	(1) 2.1 mm barrel DC power jack, 24 Volt DC power input; (Power supply included)

* Interface connectors for **AUDIO OUT** ports are provided with the unit.

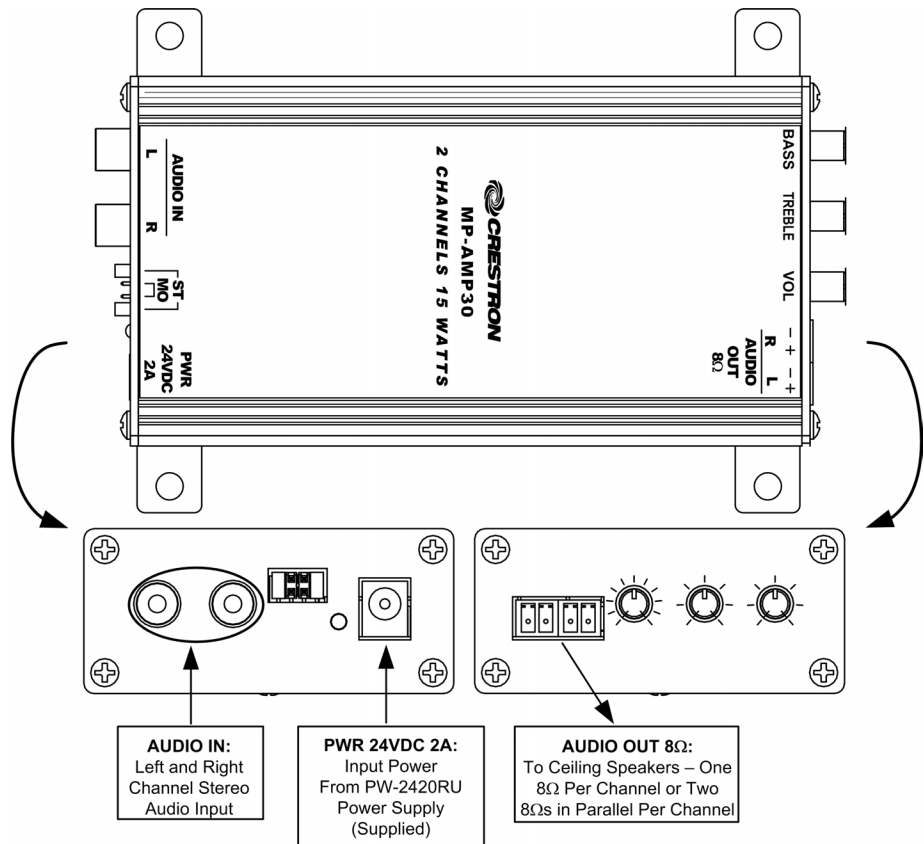
Setup

Installation

Mount the MP-AMP30 to a flat surface near the audio source equipment, using four screws (not supplied).

Hardware Hookup

Hardware Connections for the MP-AMP30



Before applying power, do the following:

1. Make sure the shunt jumpers are properly positioned for stereo (ST) or mono (MO) audio. (Refer to diagram on unit.)
2. Connect all input and output cables (refer to the above illustration).
3. Set the **BASS** and **TREBLE** controls to their default center detent positions, and set the **VOL** control to a low (counterclockwise) position.

Apply power and verify operation as follows:

1. With the 24VDC power source connected, the green LED should be illuminated.
2. Slowly turn the **VOL** control clockwise until the audio is at a comfortable level.
3. Adjust the **TREBLE** and **BASS** controls to suit personal preference.

Problem Solving

Troubleshooting

The following table provides corrective action for possible trouble situations. If further assistance is required, please contact a Crestron customer service representative.

MP-AMP30 Troubleshooting

TROUBLE	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Power LED does not illuminate.	MP-AMP30 is not receiving power.	Verify that the power supply is connected and turned on.
Audio is distorted or not present at speakers.	Audio input or speaker cables are loose or not connected.	Verify that all cables are securely and correctly connected at both ends.
Audio not present at either left or right channel	Speaker was momentarily disconnected or shorted.	Reconnect speaker and re-apply power.
	Mono/stereo shunt jumpers are missing.	Replace jumpers and re-apply power.

NOTE: Any momentary short, misconnection, or overload will cause the protective circuits to turn the unit off. Once the fault is cleared, the unit should automatically recover. Should it not, recycling power will ensure full recovery.

Further Inquiries

If you cannot locate specific information or have questions after reviewing this guide, please take advantage of Crestron's award winning customer service team by calling Crestron at 1-888-CRESTRON [1-888-273-7876].

You can also log onto the online help section of the Crestron website (www.crestron.com/onlinehelp) to ask questions about Crestron products. First-time users will need to establish a user account to fully benefit from all available features.

Future Updates

As Crestron improves functions, adds new features and extends the capabilities of the MP-AMP30, additional information may be made available as manual updates. These updates are solely electronic and serve as intermediary supplements prior to the release of a complete technical documentation revision.

Check the Crestron website periodically for manual update availability and its relevance. Updates are identified as an "Addendum" in the Download column.

Return and Warranty Policies

Merchandise Returns / Repair Service

1. No merchandise may be returned for credit, exchange or service without prior authorization from CRESTRON. To obtain warranty service for CRESTRON products, contact an authorized CRESTRON dealer. Only authorized CRESTRON dealers may contact the factory and request an RMA (Return Merchandise Authorization) number. Enclose a note specifying the nature of the problem, name and phone number of contact person, RMA number and return address.
2. Products may be returned for credit, exchange or service with a CRESTRON Return Merchandise Authorization (RMA) number. Authorized returns must be shipped freight prepaid to CRESTRON, 6 Volvo Drive, Rockleigh, N.J. or its authorized subsidiaries, with RMA number clearly marked on the outside of all cartons. Shipments arriving freight collect or without an RMA number shall be subject to refusal. CRESTRON reserves the right in its sole and absolute discretion to charge a 15% restocking fee plus shipping costs on any products returned with an RMA.
3. Return freight charges following repair of items under warranty shall be paid by CRESTRON, shipping by standard ground carrier. In the event repairs are found to be non-warranty, return freight costs shall be paid by the purchaser.

CRESTRON Limited Warranty

CRESTRON ELECTRONICS, Inc. warrants its products to be free from manufacturing defects in materials and workmanship under normal use for a period of three (3) years from the date of purchase from CRESTRON, with the following exceptions: disk drives and any other moving or rotating mechanical parts, pan/tilt heads and power supplies are covered for a period of one (1) year; touchscreen display and overlay components are covered for 90 days; batteries and incandescent lamps are not covered.

This warranty extends to products purchased directly from CRESTRON or an authorized CRESTRON dealer. Purchasers should inquire of the dealer regarding the nature and extent of the dealer's warranty, if any.

CRESTRON shall not be liable to honor the terms of this warranty if the product has been used in any application other than that for which it was intended or if it has been subjected to misuse, accidental damage, modification or improper installation procedures. Furthermore, this warranty does not cover any product that has had the serial number altered, defaced or removed.

This warranty shall be the sole and exclusive remedy to the original purchaser. In no event shall CRESTRON be liable for incidental or consequential damages of any kind (property or economic damages inclusive) arising from the sale or use of this equipment. CRESTRON is not liable for any claim made by a third party or made by the purchaser for a third party.

CRESTRON shall, at its option, repair or replace any product found defective, without charge for parts or labor. Repaired or replaced equipment and parts supplied under this warranty shall be covered only by the unexpired portion of the warranty.

Except as expressly set forth in this warranty, CRESTRON makes no other warranties, expressed or implied, nor authorizes any other party to offer any warranty, including any implied warranties of merchantability or fitness for a particular purpose. Any implied warranties that may be imposed by law are limited to the terms of this limited warranty. This warranty statement supersedes all previous warranties.

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Specifications subject to
change without notice.