

Crestron® Multichannel Commercial Amplifiers

The Crestron® [AMP-2800](#) and [AMP-4600](#) are high-power, high-efficiency multichannel power amplifiers offering excellent sound quality for use with long runs of multiple high-impedance loudspeakers requiring high total power output, or with loudspeakers capable of high power handling, such as Crestron's Vector™ Performance series.

The AMP-2800 and AMP-4600 feature similar operation. For simplicity within this guide, the term "amplifier" is used for both models except where noted.



In the Box

- 1 AMP-2800 or AMP-4600, Multichannel Commercial Amplifier

Additional Items

- 2 Bracket, Rack Ear, 1U (2032123)
- 2 Bracket, Rear Mounting (2045677)
- 1 Cable, Power (P/N varies by country)
- 6 Screw, 4B x 1/4 in., Pan Head, Phillips (2007195)

AMP-2800 Only

- 2 Connector, 2-Pin (2044402)
- 2 Connector, 3-Pin (2003575)

AMP-4600 Only

- 4 Connector, 2-Pin (2044402)
- 4 Connector, 3-Pin (2003575)

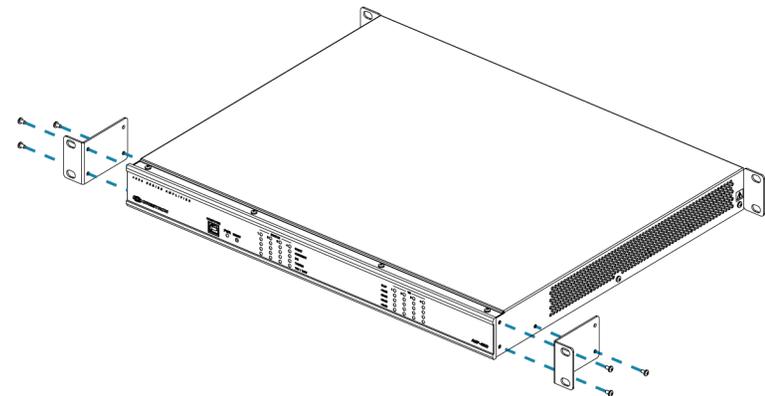


Install the Device

These devices occupy 1U of rack space.

To install the included rack ears:

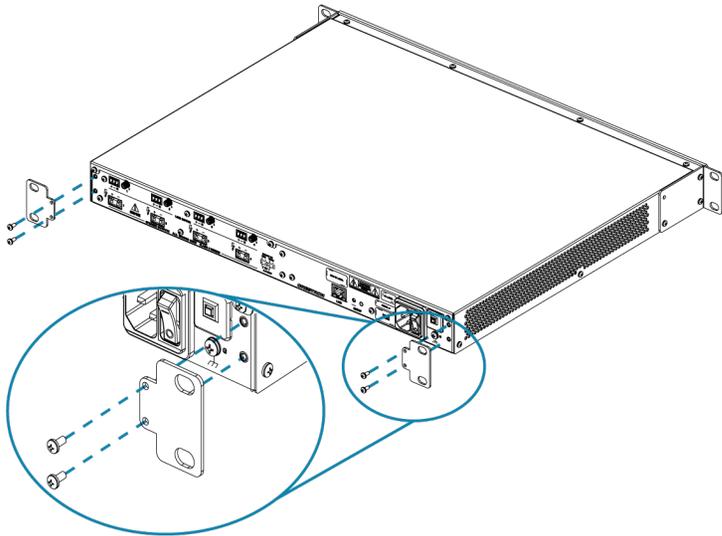
1. Use a #1 Phillips screwdriver to remove the three screws from each side of the front of the amplifier as shown in the following illustration.
2. Use the screwdriver and the six included 1/4 in. Phillips Pan Head screws to attach the included rack ears to the amplifier.



Crestron® Multichannel Commercial Amplifiers

To install the included rear mounting brackets:

1. Use a #1 Phillips screwdriver to remove the screws from the rear of the amplifier as shown in the following illustration.
2. Use the screws removed in step 1 to attach the mounting brackets to the rear of the amplifier.



Then mount the device into the rack using four rack mounting screws (not included).



Connect the Device

Connect the device as called out in the following illustrations. Connect power last.

CAUTIONS:

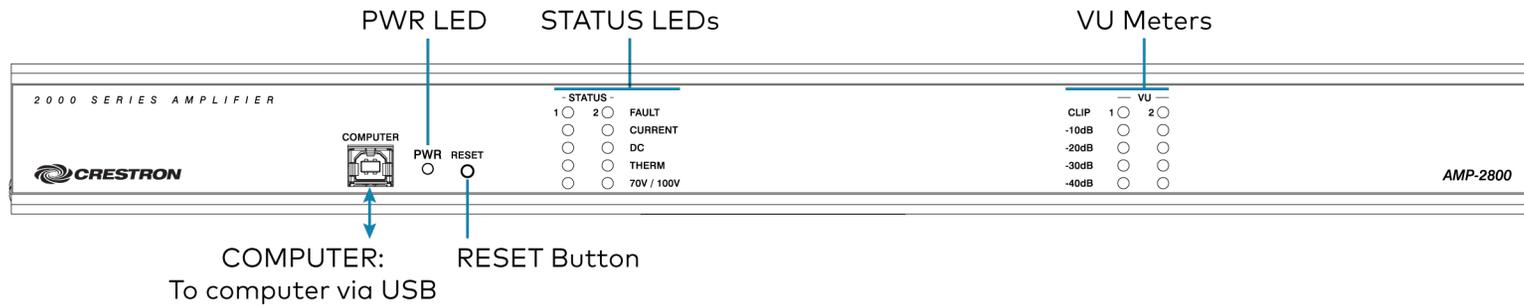
- Keep the device unplugged until all of the input, network, and speaker wiring is complete.
- Check the speaker cables for shorts and frayed wiring around the SPEAKER OUTPUTS connectors.

NOTES:

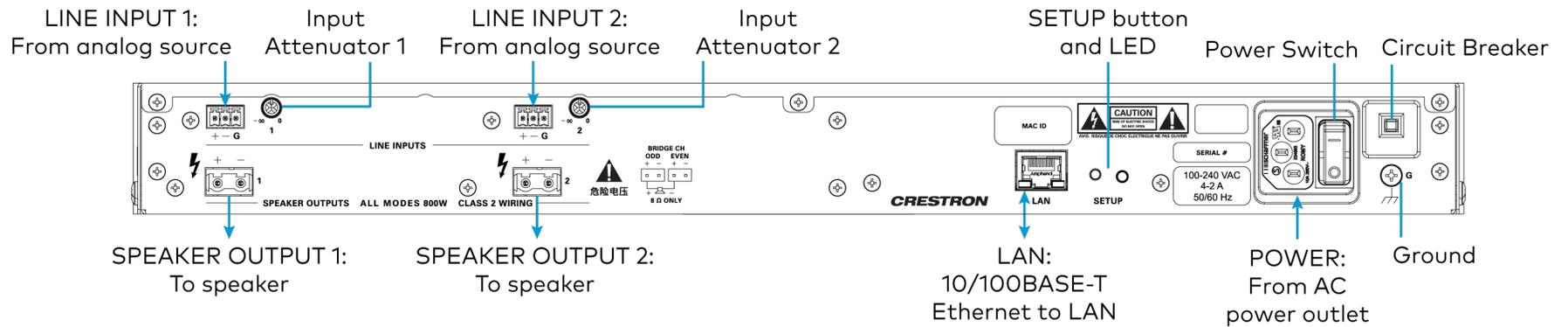
- Ensure the unit is properly grounded by connecting the chassis ground lug to an earth ground (building steel).
- To prevent overheating, do not operate this product in an area that exceeds the environmental temperature range listed in the table of specifications on the product web page. Fans provide side-to-side airflow for cooling. Do not block the ventilation holes.

Crestron® Multichannel Commercial Amplifiers

AMP-2800 Front

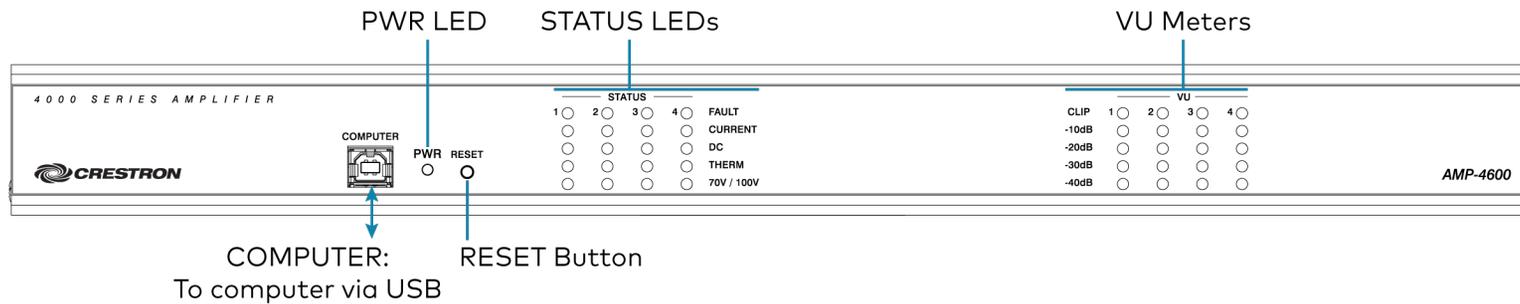


AMP-2800 Rear

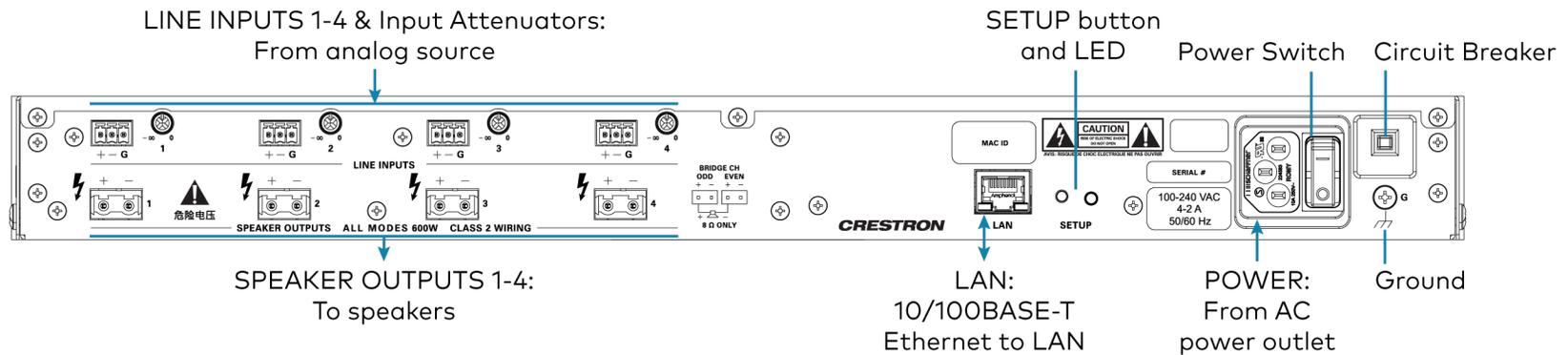


Crestron® Multichannel Commercial Amplifiers

AMP-4600 Front



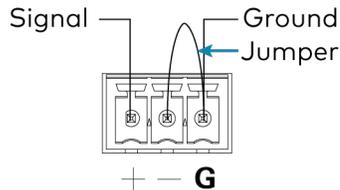
AMP-4600 Rear



Crestron® Multichannel Commercial Amplifiers

Line Input Connection

If an unbalanced connection from a line input is required, use a jumper between the negative (-) and ground (G) terminals.

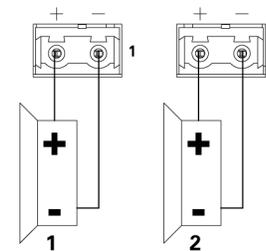


Speaker Connections

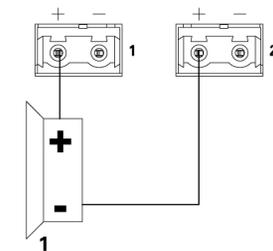
The speaker outputs can be wired conventionally or they can be bridged to deliver higher power. Refer to the following illustrations when connecting speakers.

WARNING: This amplifier is capable of delivering high power to the loudspeakers. Please use caution and wear adequate hearing protection if listening at high volume, as continued exposure to high sound pressure levels can cause permanent hearing impairment or loss.

Conventional Wiring



Bridged Wiring



Speakers are bridged with the Crestron Avid® Audio tool, which can be downloaded from www.crestron.com/software. The possible bridging combinations are Output 1 & Output 2 (AMP-2800 and AMP-4600) or Output 3 & Output 4 (AMP-4600 only).

NOTE: The minimum load impedance for bridged channels is 8 ohms.

Crestron® Multichannel Commercial Amplifiers



Operate the Device

Apply Power

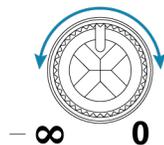
To turn the amplifier on, move the power switch (located next to the power connector) to **I**. To turn the amplifier off, move the power switch to **O**. This will also reset the device.

When power is applied to the device, the color of the PWR LED on the front panel indicates with the following:

- Green - Normal operation
- Amber - Device is booting up
- Amber/Green (cycling) - No network connection

Adjust the Signal Levels

Each channel has an input attenuator on the rear panel. Use these to adjust the loudness in each zone. To adjust the level of an input, turn the knob clockwise to increase the signal level, or counterclockwise to reduce the signal level.



Monitor Operation

Use the status indicators and VU meters on the front panel to monitor each speaker output.

LEDs in the STATUS section indicate the following for each output:

- Presence of a fault
- An overcurrent condition
- A DC offset condition
- Excessive operating temperature
- 70/100 volt operation

LEDs in the VU section indicate the signal level of each output and whether a clipping condition is present.

Reset the Device

Press **RESET** on the front panel to restart the device.

Circuit Protection

The amplifier is equipped with a resettable circuit breaker on the rear panel to protect the amplifier from excessive current draw or high (AC) mains voltage. If the circuit breaker opens, press the circuit breaker button to reset. If the breaker trips again, reduce the audio system volume to decrease amplifier current draw and verify that the mains voltage is within the specified range.

Crestron® Multichannel Commercial Amplifiers



Configure the Device

Create an Admin Account

When accessing the device for the first time, create an admin account using the Crestron Toolbox™ software.

To create an admin account:

1. Connect the device to a commonly accessible network.
2. Use the **Device Discovery Tool** in the Crestron Toolbox software to discover the device.
3. Select the device from the list that appears. A dialog box is displayed asking the user to create an admin account.
4. Enter a username and password for the admin account in the appropriate text fields.

CAUTION: Do not lose the username and password for the admin account, as the device must be reset to factory settings to regain access.

5. Click **OK** to confirm.

Connect to the Device

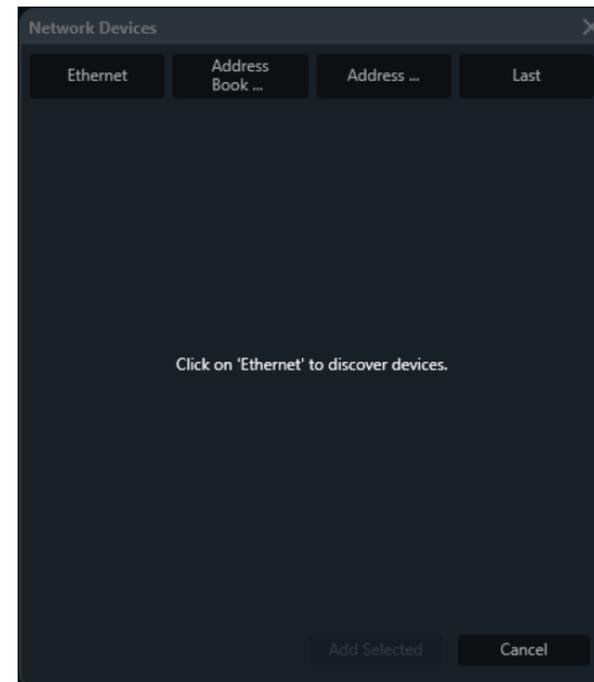
Configure the amplifier with the Crestron Avia Audio tool, which can be downloaded from www.crestron.com/software.

To connect to the amplifier:

1. In the Crestron Avia Audio tool, click **CONNECT TO DEVICE**.



The **Network Devices** window is displayed.



Crestron® Multichannel Commercial Amplifiers

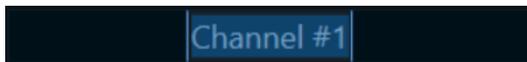
- Do one of the following:
 - Click **Ethernet** to discover all devices on the network that are compatible with the tool, and then select the amplifier from the list.
 - Click **Address Book...** to connect to the amplifier in a Crestron Toolbox™ software Address Book.
 - Click on **Address...** to manually enter the address of the amplifier.
- If the **Ethernet** option in step 2 was used, click **Add Selected** to add the amplifier to the **Devices** list, and then select the amplifier in the list to connect to it. If either of the other methods in step 2 was used, the amplifier is connected automatically and the **Signal** view is displayed.

Name the Outputs

Outputs can be given friendly names (such as "Stage Left" or "Stage Right") to keep track of them while using the tool. These will only apply within the Crestron Avia Audio tool.

To name an output:

- Double-click the output's current name to highlight it.



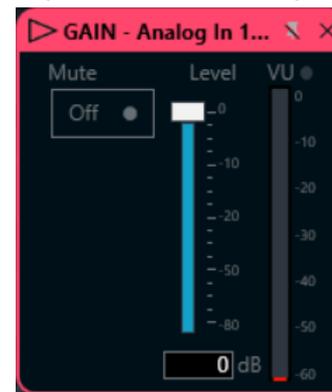
- Enter a new name for the output, and then press **Enter**.

Mute or Adjust an Output

By default, the Crestron Avia Audio tool comes with the amplifier outputs unmuted. However, the tool can be used to mute outputs or to make digital level adjustments prior to analog conversion at the amplifier output.

To mute an output or adjust its level:

- Double-click the red **GAIN** block associated with the output to be adjusted. The **GAIN** object for that output is displayed.



- Click the **Mute** button to toggle the output's mute on or off, and drag the level fader to adjust the digital output level from -80 to 0 dBFS. The VU meter within the object will match the tool's horizontal VU meter associated with the output, and will reflect any changes made to the **Mute** or **Level** controls.

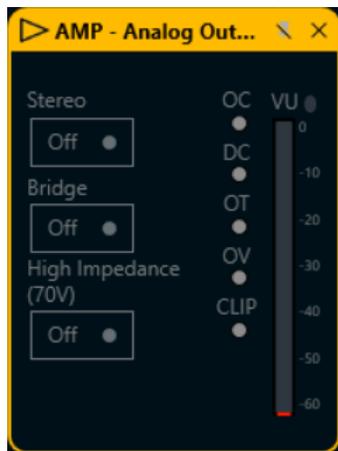
Crestron® Multichannel Commercial Amplifiers

Change the Output Type

The outputs of the amplifier can be adjusted for either high impedance or low impedance loads. Outputs can also be bridged for greater power output from two connectors to a single load. See [Speaker Connections](#) above for details. Outputs can also be configured as stereo pairs to apply the same **Mute** and **Level** controls to both channels (this applies only within the tool).

To adjust the output type settings:

1. Double-click the yellow **AMP** block associated with the output to be adjusted. The **AMP** object for that output is displayed.



2. Do one of the following:

- Click the **Stereo** button to pair the output with its associated stereo partner channel (channel 1 with channel 2, or channel 3 with channel 4*). The **AMP** object closes. When the object is reopened, the **Bridge** button is disabled. Click the **Stereo** button again to toggle Stereo mode off and unpair the output channels.
- Click the **Bridge** button to bridge the output with its associated bridge partner channel (channel 1 with channel 2, or channel 3 with channel 4*). The **AMP** object closes. There is an audible relay click at the device to indicate that these outputs are now bridged. The **GAIN** object associated with the even-numbered output (channel 2 or channel 4*) in the pair disappears. When the **AMP** object is reopened, both the **Stereo** and **High Impedance** buttons are disabled. Click the **Bridge** button to toggle Bridge mode off.
- Click the **High Impedance** button to enable the output to operate as a high impedance output (for operation with 70/100V loudspeaker systems). There is an audible relay click at the device to indicate that the output is now operating in high impedance mode. The **Bridge** button is disabled. Click the **High Impedance** button again to toggle back to low impedance operation for that output channel.

* Channels 3 and 4 are AMP-4600 only.

Crestron® Multichannel Commercial Amplifiers



Connect to Crestron XiO Cloud Service (Optional)

The Crestron XiO Cloud™ service allows supported Crestron devices across an enterprise to be managed and configured from one central and secure location in the cloud. Supported devices are preconfigured to connect to the service. Use of the service requires a registered Crestron XiO Cloud account.

NOTE: The device can be disconnected from the service using the **Cloud Services** tab in Crestron Toolbox software (**Functions > Device Info > Cloud Services**). For details, refer to the Crestron Toolbox help file.

To connect the device to the Crestron XiO Cloud service:

1. Record the MAC address and serial number labeled on the shipping box or rear panel of the device. The MAC address and serial number are required in order to add the device to the Crestron XiO Cloud environment.
2. Do either of the following:
 - Access the Crestron XiO Cloud service at <https://portal.crestron.io>.
 - Register for a Crestron XiO Cloud account at www.crestron.com/xiocloud.

For detailed information about using the Crestron XiO Cloud service, refer to the [Crestron XiO Cloud Service User Guide](#) (Doc. 8214).



Visit the Product Page

Scan the QR code to visit the product page.

AMP-2800



www.crestron.com/model/6508359

AMP-4600



www.crestron.com/model/6508361

Crestron® Multichannel Commercial Amplifiers

Additional Information

Original Instructions

The U.S. English version of this document is the original instructions. All other languages are a translation of the original instructions.

Crestron product development software is licensed to Crestron dealers and Crestron Service Providers (CSPs) under a limited nonexclusive, nontransferable Software Development Tools License Agreement. Crestron product operating system software is licensed to Crestron dealers, CSPs, and end-users under a separate End-User License Agreement. Both of these Agreements can be found on the Crestron website at www.crestron.com/legal/software_license_agreement.

The product warranty can be found at www.crestron.com/warranty.

The specific patents that cover Crestron products are listed at www.crestron.com/legal/patents.

Certain Crestron products contain open source software. For specific information, visit www.crestron.com/opensource.

Crestron, the Crestron logo, Crestron Avia, Crestron Toolbox, Crestron XiO Cloud, and Vector are either trademarks or registered trademarks of Crestron Electronics, 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.

©2021 Crestron Electronics, Inc.

Doc. 8400E

03/30/21