

## 4- and 8-Zone Power Amplifier Installation and Setup Guide



### Supported Models

- C4-AMP104 4-Zone Power Amplifier
- C4-AMP108 8-Zone Power Amplifier

### Box Contents

The following items are included in the box:

- Control4® 4-Zone or 8-Zone Power Amplifier
- IEC power cable
- Phoenix-style audio connectors (8)
- Phoenix-style trigger connectors (2)
- Warranty card
- 3U vented rack mount
- Eight (8) 8-32 x 3/8" flat-head screws

### Requirements and Specifications

#### Requirements

Ensure that your home network wiring is in place before starting your system setup.



**WARNING!** To reduce the risk of fire, do not install this device in a cabinet that is smaller than 20" (50.8 cm) wide x 20" (50.8 cm) deep x 12" (30.5 cm) high. If you do, the device may overheat.

**AVERTISSEMENT !** Pour réduire les risques d'incendie, ne pas installer cet appareil dans une armoire qui est plus petit que 20" (50.8 cm) de large x 20" (50.8 cm) de profondeur x 12" (30.5 cm) de haut. Si vous le faites, l'appareil peut surchauffer.

### Specifications

| C4-AMP104                                   | 4-Zone Power Amplifier        |
|---|-------------------------------|
| Zone line inputs                            | 4 stereo, RCA style           |
| Zone speaker outputs                        | 4 stereo, Phoenix style       |
| Zone line outputs                           | 4 stereo, RCA style           |
| Global line input                           | 1 stereo, RCA style           |
| Global line output                          | 1 stereo, RCA style           |
| Rated wattage/channel (two channels driven) | 55W @ 8 ohms<br>100W @ 4 ohms |
| Rated wattage/channel (all channels driven) | 45W @ 8 ohms<br>60W @ 4 ohms  |
| Rated wattage (bridged)                     | 200W @ 8 ohms                 |
| Frequency response                          | 20 Hz ~ 40 kHz (+/- 3dB)      |
| Signal-to-noise ratio                       | >-86dB A-weighted             |
| THD   | <0.3% at 1 kHz                |
| Zone input gain                             | Yes                           |
| Global input gain                           | Yes                           |
| Voltage input trigger                       | 5 - 30V AC or DC              |
| Voltage output trigger                      | 5 - 30V AC or DC              |
| Rack-mount kit                              | Included—3U vented            |
| Power requirements                          | 100-240VAC, 50-60 Hz          |
| Shipping weight                             | 11 lbs (4.99 kg)              |

| C4-AMP108                                   | 8-Zone Power Amplifier        |
|---|-------------------------------|
| Zone line inputs                            | 8 stereo, RCA style           |
| Zone speaker outputs                        | 8 stereo, Phoenix style       |
| Zone line outputs                           | 8 stereo, RCA style           |
| Global line input                           | 1 stereo, RCA style           |
| Global line output                          | 1 stereo, RCA style           |
| Rated wattage/channel (two channels driven) | 55W @ 8 ohms<br>100W @ 4 ohms |
| Rated wattage/channel (all channels driven) | 30W @ 8 ohms<br>40W @ 4 ohms  |
| Rated wattage (bridged)                     | 200W @ 8 ohms                 |
| Frequency response                          | 20 Hz ~ 40 kHz (+/- 3dB)      |
| Signal-to-noise ratio                       | >-86dB A-weighted             |
| THD   | <0.3% at 1 kHz                |
| Zone input gain                             | Yes                           |
| Global input gain                           | Yes                           |
| Voltage input trigger                       | 5 - 30V AC or DC              |
| Voltage output trigger                      | 5 - 30V AC or DC              |
| Rack-mount kit                              | Included—3U vented            |
| Power requirements                          | 100-240VAC, 50-60 Hz          |
| Shipping weight                             | 11 lbs (4.99 kg)              |

| Environmental                             |  |
|---|--|
| Operational temperature                   | 32°F ~ 104°F (0°C ~ 40°C)                                  |
| Humidity                                  | 5% to 95% non-condensing                                   |
| Storage                                   | -4°F ~ 158°F (-20°C ~ 70°C)                                |
| Miscellaneous                             |  |
| Dimensions without rack-mount kit (H×W×D) | 2U<br>17.32" × 3.43" × 9.69"<br>(440 mm × 87 mm × 246 mm)  |
| Dimensions with rack-mount kit (H×W×D)    | 3U<br>20.79" × 5.39" × 9.69"<br>(528 mm × 137 mm × 246 mm) |
| Power requirements                        | 115/230 VAC, 50-60 Hz                                      |

**⚠ WARNING!** Do not expose the apparatus to dripping or splashing. Do not place objects filled with liquids near the apparatus.

**AVERTISSEMENT !** N'exposez pas l'appareil à l'égoutture ou à l'éclaboussement. Ne placez pas les objets remplis de liquides près de l'appareil.

**⚠ WARNING!** To reduce the risk of fire or electrical shock, do not expose this apparatus to rain or moisture.

**AVERTISSEMENT !** Pour réduire le risque du feu ou de choc électrique, n'exposez pas cet appareil à la pluie ou à l'humidité.

**✓ IMPORTANT!** Using this product in a manner other than outlined in this document voids your warranty. Further, Control4 is NOT liable for any damage incurred with the misuse of this product. See "Warranty."

**IMPORTANT !** Employer ce produit en quelque sorte autre que décrit dans ce document vide votre garantie. De plus, Control4 n'est pas responsable d'aucun dommage encouru avec l'abus de ce produit. Voyez que « garantie. »

## Features and Benefits

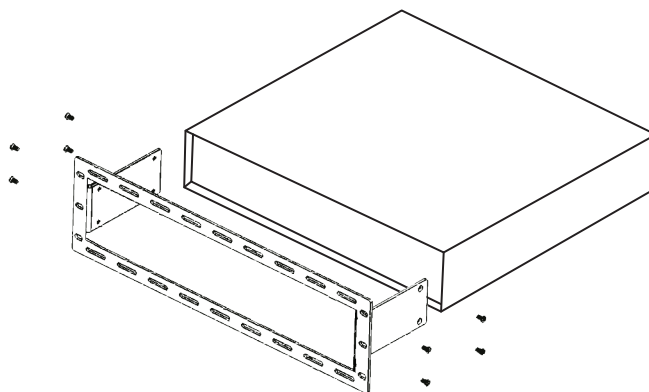
- Receives up to four (4) (4-Zone Power Amplifier) or eight (8) (8-Zone Power Amplifier) stereo inputs, plus one global input.
- Outputs four (4) (4-Zone Power Amplifier) or eight (8) (8-Zone Power Amplifier) class D amplified stereo zones at 55W per channel at eight (8) ohms or at 100W per channel at four (4) ohms (two channels driven simultaneously).

Outputs 200W per zone at eight (8) ohms in bridged mode. Amplifier cannot support 4-ohm loads in Bridge mode.

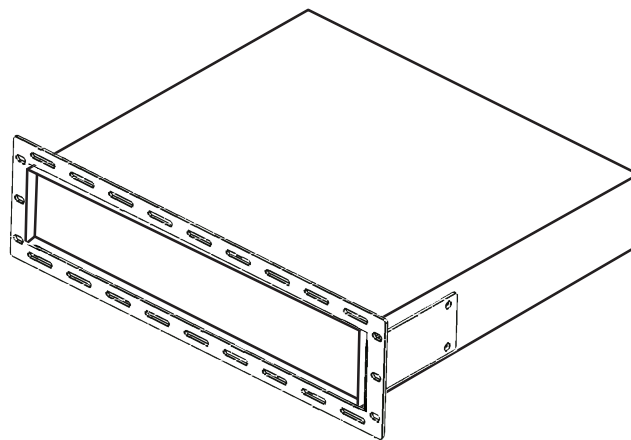
- Manually adjustable input gain for each zone.
- Manually adjustable input gain for global input.
- Each zone has independent line level inputs and outputs.
- Each zone has Phoenix-style amplified outputs for reliable connectivity.
- Auto-sense inputs when Trigger is off.
- Trigger enables discrete standby control of amplifier.
- Device chassis is two (2) standard rack spaces and rack mountable using three (3) standard rack spaces configuring to EIA 19" rack standards.

## Installing a Rack-mount Bracket

- 1 Slide the rack-mount bracket onto the amplifier. Align the holes on the bracket edge with the holes on the amplifier.

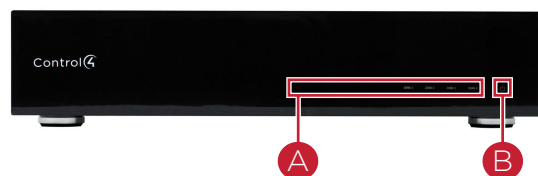


- 2 Mount the bracket using eight (8) 8-32 x 3/8" flat-head screws (included).



## Front and Rear Panel

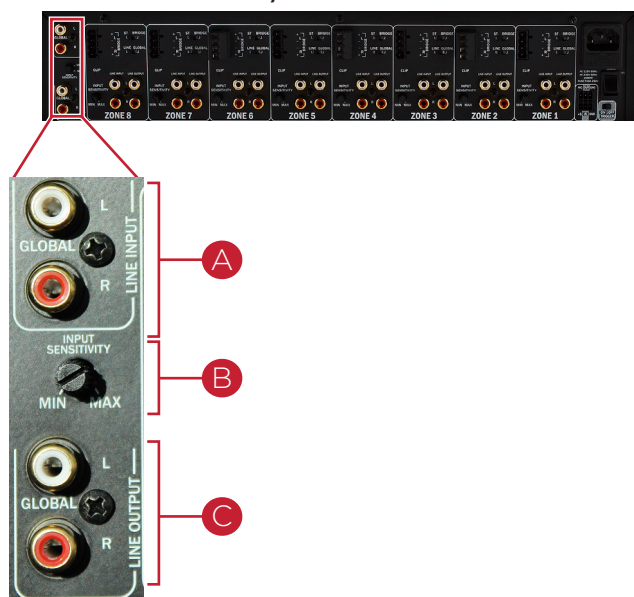
### Front Panel



- A** Zone indicators (LED)—Displays only when zone has an active audio input. Lights blue when audio is being output, and lights red when signal processing encounters a fault.
- B** Power indicator (LED)—Lights blue for on, and red for standby.

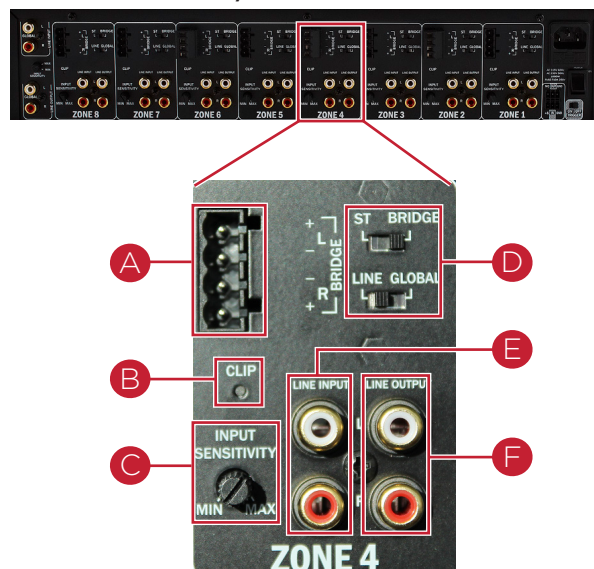
For general information about the product, see the Product pages at [www.control4.com](http://www.control4.com).

### Back Panel: Global I/O



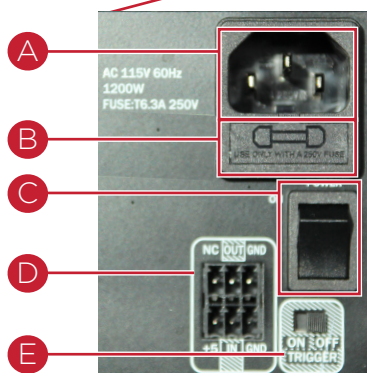
- A** Global line input
- B** Global line input sensitivity (gain)
- C** Global line output (unamplified, unaffected by gain)

### Back Panel: Zone I/O



- A** Input Phoenix connector.
- B** CLIP indicator—When clipping (caused by overly strong signal or gain) is detected, this lights red.
- C** INPUT SENSITIVITY (gain).
- D** Zone stereo and source selectors—While **ST** is selected, inputs and outputs process L and R channels separately. While **BRIDGE** is selected, the zone amplifies only the L channel (R channel is disabled). With **LINE** selected, the source for the zone is the source connected to the zone's **LINE INPUT** jacks. With **GLOBAL** selected, the source for the zone is the **GLOBAL LINE INPUT** source.
- E** LINE INPUT L and R jacks.
- F** LINE OUTPUT L and R jacks.

## Back Panel: Power Cluster



- A** Power Plug Port—For use with a standard IEC equipment power cord. Use the supplied power cord or ensure the power cord you are using is at least 18 AWG or larger.
- B** Fuse—Replace only with 6.3A 250V fuse.
- C** POWER switch
- D** Trigger Input / Output Controls
- E** ON/OFF TRIGGER

## Install the Amplifier

This device operates as part of the Control4 home system which requires physical connections to function as designed. This section describes how to set up the physical connections required for the amplifier and all of the devices associated with it.

**CAUTION!** To prevent damage, maintain adequate ventilation space above and below the amplifier. Space of ½U on top and bottom is adequate. The rack mount ears provide the necessary ½U ventilation space. **Do not place other components on top of the amplifier.** Doing so will block ventilation openings.

**ATTENTION !** Pour éviter tout dommage, maintenir un espace de ventilation adéquate au-dessus et en dessous de l'amplificateur. Espace de ½ U sur le dessus et le bas est adéquate. La monture oreilles pour rack fournissent des ½ U d'espace de ventilation. **Ne placez pas d'autres éléments sur le dessus de l'amplificateur.** Ceci bloquerait les ouvertures de la ventilation.



**WARNING!** Connecting speaker wires or input cables while the amplifier is powered may cause electrical shock and could damage the amplifier. Unplug the power cord before making connections.

**AVERTISSEMENT !** Les fils se reliant de haut-parleur ou les câbles entrés tandis que l'amplificateur est actionné, peuvent causer le choc et pourraient endommager l'amplificateur. Débranchez le cordon de secteur avant d'établir des rapports.

- 1** Connect up to four (4) (4-Zone Power Amplifier) or up to eight (8) (8-Zone Power Amplifier) audio sources to the audio input jacks. You can also connect an additional audio source to the GLOBAL input jacks.
- 2** Connect speakers to the Phoenix-style connectors.



**CAUTION!** Check the polarity of the speakers and wires before connecting to the amplifier.

**ATTENTION !** Vérifiez la polarité des enceintes et des câbles avant de brancher à l'amplificateur.

- 3** Set the individual Zone Input settings. Select **Line In** or **Global In** depending on system setup. If zone is configured for a bridge, see "Setting Up Bridge Mode" below.
- 4** Connect the power cord provided to the back of the amplifier and to the power outlet.
- 5** Press the top of the POWER switch to turn on the amplifier. The amplifier powers on.

## Setting Up Stereo Mode

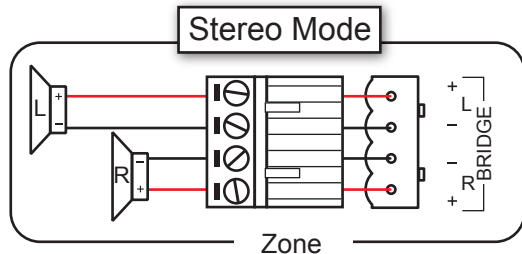
In Stereo mode, connect the L and R channels as usual.

- 1** In the zone you are connecting speakers to, slide the **ST/BRIDGE** switch to **ST**.



- 2** Connect the audio source's **L** channel to the **LINE INPUT (L)** jack and the **R** channel to the **LINE INPUT (R)** jack.

- 3 Connect the left speaker to the **LINE OUTPUT (L)** jack, and the right speaker to the **LINE OUTPUT (R)** jack. If you are using a Phoenix-style connector, wire it as shown below.



### Setting Up Bridge Mode

In Bridge mode, the R channel is disabled. This effectively doubles the power output of the remaining L channel, but at the cost of outputting only a mono signal. To set up a stereo signal while using Bridge mode, you will need to set up two (2) separate zones:

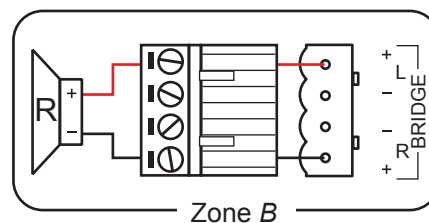
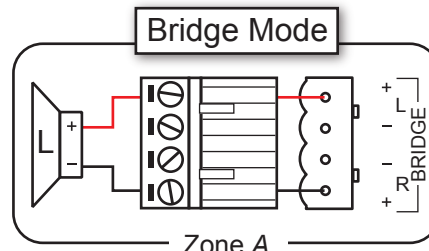
**NOTE:** In Bridge mode, outputs are rated for only eight (8) ohm loads and will not function correctly for four (4) ohm loads.

- 1 In two (2) neighboring zones (for ease of connections), called Zone A and Zone B in this example, slide each **ST/BRIDGE** switch to **BRIDGE**.



- 2 In Zone A's port cluster, connect the audio source's **L** channel to the **LINE INPUT (L)** jack.
- 3 Also in Zone A's port cluster, connect the speaker for the **L** channel output to the **LINE OUTPUT (L)** jack. You must use the **+** signals of the Phoenix-style connector. Make sure to note speaker polarity. You should connect the positive speaker polarity to the top **+** and the negative speaker polarity to the bottom **+**.

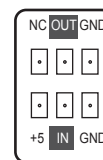
- 4 In Zone B's port cluster, connect the audio source's **R** channel to the **LINE INPUT (L)** jack. Again, you must use the **+** signals of the Phoenix-style connector. Make sure to note speaker polarity. You should connect the positive speaker polarity to the top **+** and the negative speaker polarity to the bottom **+**.



- 5 Also in Zone B's port cluster, connect the speaker for the **R** channel output to the **LINE OUTPUT (L)** jack.

**NOTE:** Phoenix-style connectors, if used in Bridge mode, need to be wired identically (left channel, identical polarity wiring) for each zone.

### Setting Up Trigger Mode



Trigger input/output controls:

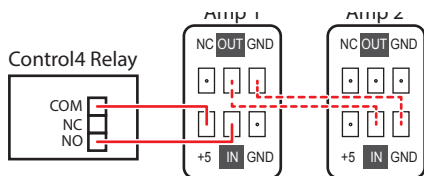
When Trigger is ON:

- NC = No connection.
- OUT = Trigger Output. Driven High when device is NOT in standby mode.
- GND = Ground connection.
- +5 = Constant +5V output.
- IN = Trigger input. When Low, device will be forced into standby; when High, device will be forced to ON.
- GND = Ground connection.

When Trigger is OFF:

- - NC = No connection.
- - OUT = Trigger output not used.
- - GND = Ground connection.
- - +5 = Constant +5V output.
- - IN = Trigger input not used.
- - GND = Ground connection.

### Example



To set an amplifier to power on from a relay's trigger, connect the amplifier's **+5** and **IN** trigger contacts to a relay's COM contacts. Polarity does not matter.

To set multiple amplifiers to power on with the same relay trigger, connect the first amplifier's **NC** and **OUT** trigger contacts to the second amplifier's **+5** and **IN** trigger contacts. Continue using this pattern for any additional amplifiers.

## Regulatory/Safety Information

To review Regulatory information for your particular Control4 products, see the information located on the Control4 website at: <http://www.control4.com/regulatory/>.

## Patent Information

Applicable patents are available at <http://www.control4.com/legal/patents>.

## Warranty

For complete warranty information, including details on consumer legal rights as well as warranty exclusions, review the Warranty card or visit [www.control4.com/warranty](http://www.control4.com/warranty).