# **AudioSource**



# AMP200 / AMP300

Home Audio Multi-Zone Power Amplifier

Congratulations on your purchase of the AudioSource® AMP200/300. Please take a few moments to read this entire manual, and be sure to retain this document for future reference. Please read and observe all safety instructions detailed on page 2.

NOTE: if any part of this product is damaged or missing, please call your dealer or AudioSource® directly at 1.800.435.7115 or 503.286.9300.

Please read your warranty and retain your receipt and original carton for possible future use.

For more information about AudioSource® electronics, speakers and accessories please visit www.audiosource.net





# **CAUTION**

# RISK OF ELECTRICAL SHOCK DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER. NO USER SERVICABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL!

EXPLANATION OF SAFETY SYMBOLS



The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.



The lightning flash with the arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the products' enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

#### **IMPORTANT SAFETY INSTRUCTIONS**

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or third prong are provided for your safety. If the provided plug

- does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and at the point where they exit from the appliance
- 11. Only use attachments or accessories specified by the manufacturer.
- 12. Unplug the apparatus during lightning storms or when unused for long periods of time.
- 13. Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- TO PREVENT FIRE OF SHOCK HAZARD, DO NOT USE THIS PLUG WITH AN EXTENSION CORD, RECEPTICLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.
- TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE
- TO PREVENT ELECTRICAL SHOCK, MATCH WIDE BLADE PLUG TO WIDE SLOT, FULLY INSERT.

MAGNETIC FIELD: !!CAUTION!! Do not locate sensitive high-gain equipment such as preamplifiers or tape decks directly above or below the unit. Because this amplifier has a high power density, it has a strong magnetic field, which can induce hum into unshielded devices that are located nearby. The field is strongest just above and below the unit. If an equipment rack is used, we recommend locating the amplifier(s) in the bottom of the rack and the preamplifier or other sensitive equipment at the top.

# **Technical Support**

If any part of this product is damaged or missing, please call your dealer or AudioSource® directly at toll free 1.800.435.7115 or locally 503.286.9300.

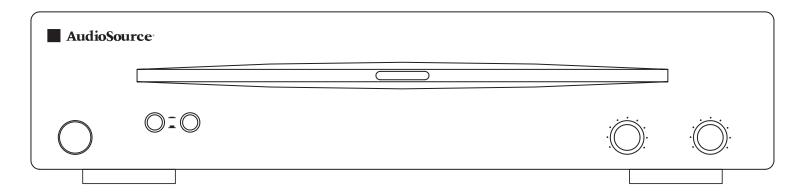
## **Limited Warranty**

AudioSource® warrants its amplifier products against defects in materials and workmanship for a limited period of time. For a period of two years from date of original purchase, we will repair or replace the product, at our option, without charge for parts and labor. Customer must pay all parts and labor charges after the limited warranty period expires. The limited warranty period for factory refurbished products expires after ninety (90) days from date of original purchase.

This limited warranty applies only to purchases from authorized AudioSource® Electronics retailers. This limited warranty is extended only to the original purchaser and is valid only to consumers in the United States.

Consumers are required to provide a copy of the original sales invoice from an authorized AudioSource® dealer when making a claim against this limited warranty. This limited warranty only covers failures due to defects in materials or workmanship that occur during normal use. It does not cover failures resulting from accident, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, modification, service by anyone other than AudioSource®, or damage that is attributable to Acts of God. It does not cover costs of transportation to AudioSource® or damage in transit. The customer should return his defective product, freight prepaid and insured, to AudioSource® only after receiving a Return Authorization.

This warranty will become void if the serial number identification has been wholly or partially removed, altered or erased. Repair or replacement under the terms of this warranty does not extend the terms of this warranty. Should a product prove to be defective in workmanship or material, the consumer's sole remedies will be repair or replacement as provided under the terms of this warranty. Under no circumstances shall AudioSource® be liable for loss or damage, direct, consequential or incidental, arising out of the use of or inability to use the product. There are no express warranties other than described above.



#### FRONT PANEL CONTROLS

#### 1. Power

The front panel power switch switches the AMP200/300 on or off. Blue and red LEDs behind the faceplate lens indicate power status. Whenever the amplifier's power switch is in the "ON" position and the amplifier is in "Active" status the lens is illuminated blue. If the amplifier is "ON" but in "Standby" status the lens is illuminated red.

#### 2. Speaker Selector

Selects speaker set (A or B)

#### 3. Balance Trim

Fades speaker output between the Right and Left Channels

#### 4. Volume Trim

Allows fine adjustment of amplifier volume.



#### 5. Line 1 Input

A priority switching input that can be used for a second source and will take over when a signal is present and has at least a 5mV level. Whenever there is no signal at this input, or a signal with less than 5mV level, the amplifier switches back to the Line 2 or "primary" input.

#### 6. Speaker Level Input Line Select

Switches the input of the speaker level input to Line 1 or Line 2.

# 7. Speaker Level Input

Can be used to connect a source with speaker level output level outputs. Use the Speaker Level Input Line Select to Line 1 or Line 2.

# 8. Line 2 Input/Output

The primary line level input and output.

## 9. Delay Time

Allows for a 3-15 second delay t connected to the Line 1 input,

# 10. Master Level Controls

Provides indepedent a

#### 11. Mode Select Sw

Switches the

# 12. **12V Trigger**

13. **Poy** 

Allows the AMP200/300 to the other electronics or to power on other electronics or to power sable.

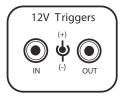
ormal for manual gger if the 12V

# FRONT PANEL CONTROLS

The front panel power switch switches the AMP200/300 on or off. Blue and red LEDs behind the faceplate lens indicate power status. Whenever the amplifier's power switch is in the "ON" position and the amplifier is in "Active" status the lens is illuminated blue. If the amplifier is "ON" but in "Standby" status the lens is illuminated red.

## **REAR PANEL CONTROLS**

The AMP200/300 can be turned on and off independently via the power switch on the front panel, by signal sensing, or remotely by a triggered DC input. Switch 3, located on the lower edge of the rear panel of the amplifier, selects turn-on functions of the AMP200/300. If you would like to control the unit's power on / power off status manually from the front, place the switch in the "Normal" position. If you would like to control the unit's power-on / power-off status by means of signal sensing, place the switch in the "AUTO ON" position. If you would like to control the unit's power-on / power-off status by a DC remote trigger, place the switch in the "TRIGGER" position, and connect the remote triggering cable from your triggering device to the jack labeled "IN" next to the switch.



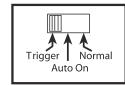


Figure 3. 12V Trigger

Figure 4. Power Mode

Use a 3.5mm phone plug (in the "IN" connector) to make this connection: the tip of the connector is (+) positive, and the sleeve of the connector is (-) negative. A second jack in the same block is labeled "OUT". This allows for remote turn-on of other devices when the AMP200/300 is powered on. Use the same polarity for the terminals of this plug. Please read the owner's manual for any devices you are attempting to connect in this manner to ensure compatibility.

Note: The front panel power switch must be in the "ON" position for the 12V triggers or "Auto ON" features to operate.



## **MASTER LEVEL CONTROLS**

These level controls allow independent volume adjustment for each channel. At the bottom left of the rear panel, there are 2 screwdriver adjustment knobs which set the maximum level of the channel identified by the channel designator below it.

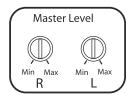


Figure 5. Master Level

The volume range is labeled Minimum to Maximum. Rotate the knob clockwise to increase output, and counter-clockwise to decrease output.

These adjustments set the master level and if not configured at initial setup of the AMP200/300 may adversely affect the performance of the amplifier.

Begin Master Level control setup by adjusting the front panel "Volume Trim" to its fully clockwise position. Set the front panel "Balance Trim" to its center detent position. Now adjust both the Left and Right Channel Master Level controls to set a "Maximum" desired volume for the AMP200/300 in its application, as well as setting an appropriate "Balance" from left to right.

Now use the front panel Volume and Balance Trim controls to make fine adjustments to your setup in this application.





# RCA INPUT/OUTPUT

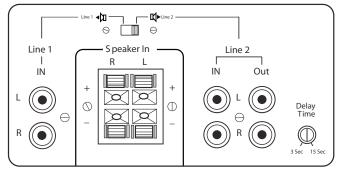


Figure 6. RCA Inputs

There are 2 pairs of RCA inputs on the back panel of the AMP200/300. These RCA inputs are labelled as "Line 1 Input" and "Line 2 Input". They are also designated with an "R" or an "L" as Right channel or Left Channel inputs respectively.

"Line 2 Input" should be used as the "primary" or normal input for various line level sources that may be available to the amplifier. "Line 1 Input" is a priority switching input that can be used for a second input, such as the output of a local source, and will take over as the selected input whenever a signal with a minimum of 5mV of level is present. Whenever there is no signal at the "Line 1 Input" RCAs, or a signal with less than 5mV level, the input will revert back to the normal Line 2 input signal.

An adjustable delay, of from 3 seconds to 15 seconds, can be set to accommodate the nature of the source connected to the "Line 1 Input" RCAs. As an example, if the "Line 1 Input" source was a CD Changer, the delay could be adjusted to prevent switching back to the "Line 2 Input" source while the changer moves from one disc to another.



# SPEAKER LEVEL INPUT

The AMP200/300 provides a pair of speaker level inputs for those applications where either of the sources has only speaker level output signal available. The switch routes the speaker level signal to either the Line 1 or Line 2 input.

#### AMP200 / AMP300 OWNER'S MANUAL

#### **MODE SWITCH**



Figure 7. Mode Select Switch

To the right of the Master Level controls is a switch labeled "Mode" with "Stereo" and "Bridged" as options. If you will be connecting one or two pair of speakers to the amplifier, place the switch in the "Stereo" position.

**NOTE:** If you are using the AMP200/300 in stereo mode, with 2 sets of speakers (A and B), make sure each speaker has an impedance of 8 ohms or greater.

When used in "Bridged" mode, the amplifier is a single channel Mono amplifier.

If you will be using a pair of channels to power a single mono speaker, place the switch in the "Bridged" position, and be sure to read the section titled "Speaker Terminals" below.

For the amplifier to operate properly in bridged mode you should have both "Right and Left" inputs connected to the amplifier. The amplifier will sum these signals and create your Mono source.

**NOTE:** Both of the "Master Level" adjustments should should be set to the center, 12 o'clock position for normal amplifier operation in "Bridged" mode.

**NOTE:** The AMP200 supplies 250W in bridged mode, while the AMP300 supplies 470W in bridged mode. Please verify that your speakers are capable of handling such power to avoid possible damage!

#### **SPEAKER TERMINALS**

Terminals are provided for "A" and "B" pairs of speakers for each channel. If you will be using the amplifier as a stereo amplifier (i.e. not a bridged amplifier), connect the speaker's positive (red) terminal to the amplifier's positive (red) terminal, and the speaker's negative (black) terminal to the amplifier's negative (black) terminal (immediately beside the positive terminal).

**NOTE:** Use the appropriate gauge speaker wire when connecting speakers to the AMP200/300.

If using one pair of channels bridged, place the "Mode" switch in the "Bridged" position and use both RED terminals to connect to the speaker.

**NOTE:** When in "Bridged" mode make sure to connect the speaker's negative (black) terminal to the amplifier's positive (red) terminal of the right channel and the speaker's positive (red) terminal to the amplifier's positive (red) terminal of the left channel

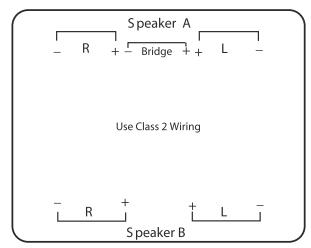


Figure 8. Speaker Terminals

**NOTE:** Only one pair of channels can be bridged together. Do not attempt to bridge both A & B speaker terminals, as this may result in a lower impedance than the amplifier is designed to accommodate and may damage your amplifier. The minimum impedance for the total load connected to a pair of channels in the bridged mode is 8 ohms.

#### MAINS POWER INLET/FUSE/ VOLTAGE SELECTOR

Power inlet accepts the IEC type linecord supplied with the amplifier. Fuse in integrated holder provides safety protection from fault conditions: only replace fuse with one of same type and rating.

This amplifier is configured for operation at the mains voltage of the market in which it is sold.

The AMP200/300 can be configured for operation from either 115V ~60Hz or 230V ~50Hz AC mains. Installed mains fuse must be of type and rating marked on amplifier corresponding to configured AC mains voltage.

Should you wish to configure the AMP200/300 for use at the alternate AC mains voltage, please contact AudioSource support at 1.800.435.7115.

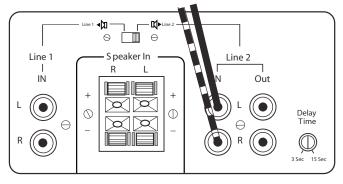
# **APPLICATIONS**

NOTE: It should be noted that the AMP200/300 is rated to operate into a minimum 8-ohm bridged load. Therefore, if you are using more than a single 8-ohm loudspeaker in bridged mode you should consider using an impedance matching speaker selector, such as the Phoenix Gold® Innovative Home ISM4, ISM6 or ISM8 or possibly using an impedance matching volume control, such as the Phoenix Gold® Innovative Home VMT1 in a weatherproof housing available at your favorite DIY store or electrical supply. The choice of a volume control would allow you the additional flexibility of being able to attenuate the volume whenever necessary.

# STEREO SETUP

In this configuration, the mode switch is set to "Stereo". Connect the line out jacks from a stereo preamplifier or source to the Line 2 input jacks of your AMP200/300 (Figure 9). Next connect your speakers to the terminals marked "SPEAKER A" observing proper polarity (see "Speaker Terminals" Page 6). Connect a second (optional) pair of speakers to the terminals marked "SPEAKER B". Select the "A" speakers using the front panel speaker selection buttons.

#### **To Source**



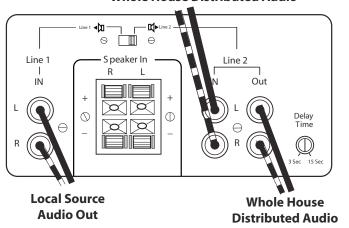
#### **MONO SETUP**

In this configuration, the mode switch is set to "Bridged". Connect the line out from a preamplifier to the right and left Line 2 inputs of your AMP200/300. Connect your mono speaker to the terminals of your AMP200/300 (see "Speaker Terminals" on Page 6). Use the "Master Level" controls on the rear panel to adjust the volume. Leave the balance set to the center detent position.

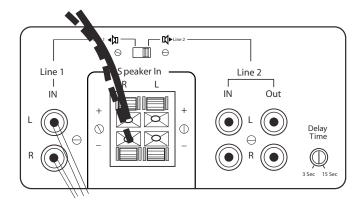
#### SETUP FOR MULTIPLE SOURCE

In the application shown in Figure 10, a distributed audio system is connected to the AMP200/300 as a local zone amplifier via the Line 2 inputs. Normally the distributed audio system will be the audio source for the AMP200/300. The distributed audio is then passed on to be used by additional zones or sub zones in the distributed system via the Line 2 outputs.

#### Whole House Distributed Audio



The audio output of a local source, such as an MP3 Player, CD, television, computer, etc., is connected to the AMP200/300 via the Line 1 inputs, and whenever the local source is active its signal will take priority over the distributed audio signal present at Line 2 . However, the distributed audio signal will still be present at the Line 2 input. In this circumstance the audio output of the local source will be heard via the AMP200/300. Once the local source is turned off or muted, the AMP200/300 will automatically switch back the distributed audio system as an audio source, assuming the local source remains inactive. The delay time adjustment determines when switch back to the normal source will occur. This set up assumes all incoming signals are at line level and not at speaker level.



## **AMP 200 SPECIFICATIONS**

Stereo (8 ohm): 80W RMS per channel at 8 ohms,

20Hz - 20kHz, <0.2% THD+N

Stereo (4 ohm): 125W per channel at 4 ohms,

20Hz-20kHz, <0.2% THD+N

Bridged Mono (8 ohm): 250W RMS at 8 ohms,

20Hz - 20kHz, <0.2% THD+N

Frequency Response: 20Hz - 20kHz, +0dB, -0.5dB

Signal to Noise Ratio: 103dB A-weighted, referred to rated

power at 4 ohms

Channel Separation: 65dB @ 1kHz, referred to rated power

at 8 ohms

Sensitivity: Variable, 350mV to 2.8V for rated

power at 8 ohms

AC Power Consumption: 700W maximum

Net Weight: 26.4lbs / 12.0kgs Gross Weight: 34.1lbs / 15.5kgs 4.0" (89mm) (419mm)

16.5"

14.0" (356mm)

# **AMP 300 SPECIFICATIONS**

Stereo (8 ohm): 150W RMS per channel at 8 ohms,

20Hz - 20kHz, <0.2% THD+N

Stereo (4 ohm): 235W per channel at 4 ohms,

20Hz-20kHz, <0.2% THD+N

Bridged Mono (8 ohm): 470W RMS at 8 ohms,

20Hz - 20kHz, <0.2% THD+N

Frequency Response: 20Hz - 20kHz, +0dB, -0.5dB

Signal to Noise Ratio: 103dB A-weighted, referred to rated

power at 4 ohms

Channel Separation: 65dB @ 1kHz, referred to rated power

at 8 ohms

Sensitivity: Variable, 350mV to 2.8V for rated

power at 8 ohms

AC Power Consumption: 1200W maximum

Net Weight: 35.2lbs / 16.0kgs

Gross Weight: 44.0lbs / 20.0kgs

## 16.5" (419mm)

