MONOPRICE

2 CHANNEL AMPLIFIER

300 WATTS

PID 11497

USER'S MANUAL

SAFETY WARNINGS AND GUIDELINES

For best results, please thoroughly read this manual prior to use, paying particular attention to the warnings in this Safety section:

- Do not expose this device to water or moisture of any kind. Do not place objects containing liquid on or near this device.

- Do not expose this device to fire or other heat sources. Do not install it on or near heat sources, such as ventilators, radiators, or near a fireplace. Do not place objects with open flame, such as lit candles, on or near this device.

- This amplifier should only be used in a well-ventilated area. Do not block any of ventilation holes on the case. Ensure that there is sufficient airflow over the case to allow for proper cooling.

- This device contains no user-serviceable parts. Do not open or attempt to modify this device.

- Do not attempt to defeat the purpose of the ground lug on the power connect by using a "cheater" plug or by any other means.

- Take care to ensure that the power cord does not get crimped, kinked, pinched, stepped on, or otherwise damaged. Take care that the cord cannot be a trip/fall hazard.

- When unplugging connections, always grasp the connector head. Never pull on the cord or wires.

- Never connect speakers rated for less than 4-ohms to the amplifier in stereo mode. Never connect a speaker rated for less than 8-ohms to the amplifier in bridged mono mode.

- Do not bypass the purpose of the fuse by shorting the contacts or by any other means. If the fuse blows or breaks, replace it with the type specified for your mains voltage in the Specifications section of this manual.

- Do not connect speakers rated for less than 4 ohms when operating the amplifier in stereo mode. Do not connect a speaker rated for less than 8 ohms when operating the amplifier in mono mode. An insufficient load can damage the amplifier

SPECIFICATIONS

Power Output:	150 watts per channel into 8 ohm loads with less than 0.2% THD+N
	235 watts per channel into 4 ohm loads with less than 0.2% THD+N
	470 watts Bridged Mono into 8 ohms with less than 0.2% THD+N
Crosstalk:	>65dB@1kHz, ref. to rated power into 8 ohms
Frequency Response:	20Hz to 20kHz, +0.0dB, -0.5dB
Signal to Noise Ratio:	-103dB ref. to rated power into 4 ohms
Power Consumption:	1200 watts (all channels driven)
Net Weight:	28.7 lbs (13.0 kg)
Gross Weight:	36.6 lbs (16.6 kg)
AC Line Fuse:	115VAC, 60Hz: T10AL, 250V
	230VAC, 50Hz: T5AL, 250V

PACKAGE CONTENTS

After receiving the product, please inventory the contents to ensure you have all the proper parts, as listed below. If anything is missing or damaged, please contact Monoprice Customer Service for a replacement.

1x 150-watt per channel amplifier
1x AC power cable

CONTROLS AND CONNECTIONS

Front Panel

Power Switch: In normal operation, use this push button to power the amplifier on and off. When the switch is pushed in, power is on. Note that the amplifier can also be powered on from standby using a 12VDC external trigger or automatically when an audio signal is detected on one of the inputs, depending on the setting of the *Power Control* switch on the rear panel.

Speakers (A and B): Use these push buttons to select which of the two speaker zones is active. When the button is pushed in, the speaker zone is enabled. When the button is out, the speaker zone is off. In normal operation, you may use either or both zones at the same time.

Power Indicator: When there is no power applied to the amplifier, this indicator is off. When the amplifier is powered on and active, the indicator glows blue. When the amplifier is powered on, but is in standby more, the indicator glows red.

Balance: Use this knob to fine tune or temporarily adjust the balance between the left and right channels. This knob should only be used to temporarily adjust balance. The primary balance should be set using the *Master Volume* controls on the rear panel.

Volume: Use this knob to adjust decrease the maximum volume level set using the *Master Volume* controls on the rear panel.

Rear Panel

Primary Line: This stereo RCA input is intended for an input that will be normally off or inactive. Whenever a signal measuring 5mV or more is detected on the inputs, the amplifier will automatically switch to this input.

Speaker Level Input: If one of your inputs is a speaker level output from another amplifier, such as in a whole home entertainment system, you can use these push button speaker grip connectors to connect the speaker wires from the source. These connectors can accept 20-24 AWG speaker wire.

Primary Line/Secondary Line: This switch determines whether the *Speaker Level* input will be considered the Primary Line or Secondary Line input. If both Line Level and Speaker Level inputs are on the same Line (Primary or Secondary), the Line Level input will override the *Speaker Level* input.

Secondary Line In: This stereo RCA input is for an input that will be normally on or usually active. The amplifier will automatically switch to the Primary input whenever a minimum 5mV signal is detected on either the Primary Line input or on the Speaker Level input when the *Primary/Secondary* switch is set to Primary.

Secondary Line Out: This pass-through stereo RCA output contains the original signal from the Secondary Line input. Note that if using Speaker Level inputs for the Secondary input, the signal will NOT be repeated on this output.

Time Delay: This control sets the amount of time during which no signal is detected on the Primary input before the amplifier switches back to the Secondary input. The delay can be set to anywhere between 3 and 15 seconds.

Master Volume: These controls are used to set both the maximum volume level for the amplifier and the master balance setting. To set the maximum volume level, set the *Volume* knob on the front panel to the Max position, then adjust these controls for the loudest level you want and for proper balance. Thereafter, use the *Volume* knob on the front panel to decrease volume from the maximum possible level.

Stereo/Bridge: Use this switch to determine whether the amplifier will drive two channels or whether it will be bridged to form a single, larger mono amplifier. Note that when using the amp in bridged mode, the speaker load needs to have a minimum of 8 ohms impedance.

12VDC Trigger In: This 3.5mm TS jack accepts a trigger input from another source. The tip of the connector is positive (+) and the sleeve is negative (-). When the *Power Control* switch is set to the **Trigger** position, the presence of a 12VDC trigger signal on this input will turn the amplifier on, while the absence of the signal will turn it off.

12VDC Trigger Out: This 3.5mm TS jack sends a 12VDC trigger signal when the amplifier is turned on or off, which can be used to activate other equipment. The tip of the connector is positive (+) and the sleeve is negative (-).

Power Control (Trigger/Auto-On/Normal): The position of this switch determines the method by which the amplifier is turned on and off. When set to the **Normal** position, the power switch on the front panel turns the amplifier on and off. When set to the **Auto-On** position, the amplifier turns on when a signal is detected on the input and turns off when no signal is present. When set to the **Trigger** position, the amplifier is turned on and off using a 12VDC trigger signal on the 12VDC Trigger In input. Note that the *Power* switch on the front panel must be in the ON position for the Auto-On and Trigger modes to operate.

Speaker Out (A and B): Use these five-way binding posts to connect up to two sets of stereo speakers. The five-way binding post can accept bare speaker wire up to 7

AWG inserted into the holes on the post, bare speaker wire wrapped around the post, spade plugs, pin plugs, or banana plugs. In normal operation you can have two sets of stereo speakers operating at the same time. However, in Bridged mode, you can only use speaker bank A with a single speaker connected to the positive (+) terminals, as indicated on the rear panel.

Power Connector and Fuse Holder: Plug the included AC power cord, or an exact replacement, into this C14 panel connector. The panel connector also contains the fuse behind a small door. If the fuse requires replacement, replace with the type listed in the *Specifications* section.

Voltage Select Switch (120V/230V): Use this switch to set the input to 115/120V or 230/240V. Double check the position of this switch before plugging the amplifier into an AC power outlet. When switching voltage, you must ensure that the fuse is the correct type for the voltage level in use. See the *Specifications* section for the fuse types to use with each voltage value selected.

CABLE PREPARATION

You will need several types of cables for this installation, the specifics of which vary depending on your installation choices. None of the cables or connectors mentioned in this section are included with the system.

Important Safety Note! If you plan on running any of these cables through the walls, through a connecting floor, or inside an air duct, they should be rated for In-Wall, Riser (between floors), or Plenum (air duct) use, respectively. Using unrated or improperly rated cables could accelerate the spread of any fire and could nullify insurance claims.

Speaker Wires

You will need speaker wire to connect each speaker to the amplifier and to connect one of the sources, if necessary. The size (AWG) of wire you choose depends on the distance from the amplifier to the speaker(s), the speaker impedance, and the physical limits of the terminals at each end.

Other than saving a few pennies of cost or grams of weight per foot, there is no reason to use anything other than the thickest wire possible. This amplifier can accept up to 7 AWG wire, so it is recommended to use 10 or 12 AWG speaker wire. If the speaker

terminals cannot accept 10 or 12 AWG wire, you can use a banana or pin plug to connect the wire to the speaker terminal.

Whatever speaker wire you get, make sure that it has marks to identify one conductor from another. Most speaker wire uses a colored stripe to identify one of the conductors. The identified conductor is usually used for the positive (+/red) connection and the other for the negative (-/black) side.

Note: When cutting speaker wire, ensure that the length of each stereo pair is the same. This ensures that the overall impedance of each channel is identical. If there is any excess speaker wire, it should not be coiled, as it could create an antenna to receive stray radio signals. Instead, snake the excess wire back and forth.

RCA Cables

You will need stereo RCA cables to connect at least one of the source devices to the amplifier's source inputs. In most cases these will be relatively short connections, so ordinary RCA cables are sufficient. However, if the distance is longer than about 15-20 feet (4.5-6 meters), it is recommended to use RCA cables manufactured using shielded RG6 or RG59 cable. RG59 can connect to distances up to about 131 feet (40 meters), while RG6 can make reliable connections to distances up to about 328 feet (100 meters).

Trigger Cables

This amplifier includes one trigger input and one trigger output. The trigger output can be connected to the trigger input of responsive devices, such as projection screens, lighting systems, curtain motors, etc. The trigger input allows an alternate method of powering the amplifier on and off.

The trigger signal is a low-current 12 VDC, which is carried between systems with a two-conductor cable that terminates in a 3.5mm TS plug. You can also use standard, off the shelf 3-conductor audio patch cables that terminate in 3.5mm TRS plugs.

SETUP

Note: Before making any connections, ensure that all equipment is powered off and unplugged to prevent the possibility of personal injury or equipment damage due to electrical shock.

1. Position the amplifier in a location in which it can get adequate airflow around the casing and ventilation holes. Do not connect the power cord yet.

2. Determine whether you will be using one or two stereo speaker zones or if you will be using just a single, monophonic speaker zone. If you will be using stereo zone(s), set the *Stereo/Bridge* switch to the **Stereo** position. If you will be using a single monophonic zone, set the *Stereo/Bridge* switch to the **Bridge** position.

Connecting the Speakers

3. (Stereo configurations only) Measure the distance between the amplifier and the speakers, taking into account the need to route the wire around furniture or other obstacles. Cut two lengths of 2-conductor speaker wire to the measured length. It is best to cut the wires longer than needed as any excess can be trimmed later.

4. (Stereo configurations only) Connect one end of each speaker wire to the *Speaker Output* five-way binding posts, taking care to connect the negative side of the speaker wire to the negative (black) binding posts and the positive side of the wire to the positive (red) binding posts. The easiest and safest method of connecting the wires to the binding posts is to use banana plugs. If using bare speaker wire, carefully inspect each connection to ensure that there are no stray wire strands.

5. (Stereo configurations only) Connect the other end of each speaker wire to the speakers.

6. (Stereo configurations only) If you will be using two stereo speaker zones, repeat steps 3-5 for the second zone.

7. (Bridged/Mono configurations only) Measure the distance between the amplifier and the speaker, taking into account the need to route the wire around furniture or other obstacles. Cut one length of 2-conductor speaker wire to the measured length. It is best to cut the wire longer than needed as any excess can be trimmed later.

8. (Bridged/Mono configurations only) Connect the negative side of the wire to the Right Channel positive (red) binding post of the Speaker A output. Connect the positive side of the wire to the Left Channel positive (red) binding post.

9. (Bridged/Mono configurations only) Connect the other end of the speaker wire to the speaker.

Connecting the Sources

10. If connecting more than one source device, determine which of the two will be the source that is normally in use (the Secondary input) and which source will override and take priority when it is in use (the Primary input). If using only one source, use the Primary input unless you want to pass the input signal on to another device, in which case you should use the Secondary input.

11a. If your primary source has stereo line level outputs, connect one end of an RCA stereo cable to the left and right Primary inputs on the amplifier. Connect the other end to the left and right outputs of the Primary source.

11b. If your Primary source has only Speaker Level outputs, cut two lengths of speaker wire to the appropriate length. Connect one end of each speaker wire to Speaker Level input connectors, taking care to connect the negative side of the speaker wire to the negative (black) speaker grip connectors and the positive side of the wire to the positive (red) speaker grip connectors. Set the Primary Line/Secondary Line switch to the Primary Line position.

12a. If your Secondary source has Line Level outputs, repeat step 11a for the Secondary source.

12b. If your Secondary source has only Speaker Level outputs and you have not already used the Speaker Level input on the amplifier, repeat step 11b for the Secondary source.

13. If you will be passing the Secondary source to another device, connect a stereo RCA cable to the *Secondary Out* jacks. Connect the other end to the line level input of another device. Note that the *Secondary Out* will not contain a signal if you are using *Speaker Level* inputs for the Secondary source.

Connecting the Triggers

14. If you will be using a trigger to turn the amplifier on and off, plug a 3.5mm TS or TRS cable into the *12V Trigger In* jack and the other end to the trigger output of another device. Set the *Power Control* switch to the **Trigger** position.

15. If you want to trigger another device whenever the amplifier is powered on or off, connect a 3.5mm TS or TRS cable to the *12V Trigger Out* jack and the other end to the trigger input of the device you want to activate.

Connecting Power

16. Check the position of the *Voltage Select* switch to ensure that it is set to the proper value for the AC power source.

17. This amplifier ships with an installed fuse that is appropriate for 110-120V AC power sources. If you will be using this amplifier with a 220-240V AC power source, you must change to the fuse to the type listed in the *Specifications* section for 230V sources.

18. Plug one end of the AC power cord into the Power Connector on the amplifier's rear panel. Plug the other end into an AC power socket.

Setting the Master Volume and Delay

19. Temporarily set the *Power Control* switch to the **Normal** position.

20. Using a small screwdriver, set the *Master Volume* controls on the rear panel to the minimum value.

21. On the front panel, set the *Volume* level to Min and set the *Balance* control the middle (12 o'clock) position.

22. Depress the *Speaker A* button on the front panel. If you are using a second speaker zone, depress the *Speaker B* button, as well.

23. Press the *Power* switch on the front panel to apply power. Power on your Secondary source and cue up audio material that will be representational of the maximum volume level you will want out of this amplifier.

24. With the audio material playing, turn the *Volume* knob on the front panel to the Max position.

25. Using a small screwdriver, slowly increase the left channel *Master Volume* control on the rear panel until the volume is at your desired maximum level. Do the same for the right channel *Master Volume* control.

26. Check the balance between the two channels and adjust the *Master Volume* controls as necessary to obtain the desired balance.

27. Use the *Volume* control on the front panel to set the volume level to a comfortable listening level and use the *Balance* control on the front panel to make minor, temporary adjustments to the audio balance.

28. Start playing audio material on your Primary source. The amplifier should switch over to the audio from the Primary source.

29. Stop playback from the Primary source. Note the length of silence before the amplifier switches back to your Secondary source. This amount is determined by the *Delay* control on the rear panel and can be between 3 and 15 seconds.

30. Using a small screwdriver, adjust the *Delay* up or down as desired. Note that if the delay is too short, a pause while a CD changer changes discs, for example, could cause the amplifier to switch sources.

31. If you want the amplifier to power on and off with a trigger signal, set the *Power Source* switch to the **Trigger** position. If you want it to turn on when audio source material is detected and turn off when there is no longer an audio source, set the *Power Control* switch to the **Auto-on** position. Otherwise, leave the *Power Control* switch in the **Normal** position.

Congratulations! Your amplifier is now properly setup and ready for use!