



MI5

Powered Amplifier OWNER'S MANUAL



WARNING

- TO PREVENT FIRE OR SHOCK HAZARD, DO NOT USE THIS PLUG WITH AN EXTENSION CORD, RECEPTACLE 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.

 <p>This Lightning flash with arrowhead Symbol, within an equilateral triangle, Is intended to alert the use to the Presence of un-insulated dangerous Voltage within the products enclosure That may be of sufficient magnitude To constitute a risk of electric shock To persons.</p>	<p>CAUTION</p> <p>RISK OF ELECTRIC SHOCK DO NOT OPEN</p> <p>Warning: To reduce the risk of Electric shock, do not remove Cover (or back) no user Servicing to qualified service Personnel.</p>	 <p>The exclamation point within the Equilateral triangle is intended to Alert the user to the presence of Important operating and Maintenance (servicing) Instructions in the literature Accompanying supplience.</p>
--	---	---

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Read all warnings.
4. Follow all Instruction.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturers 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. If the provided plugs 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 form 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 anyway, 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.

This appliance shall not be exposed to dripping or splashing water and no object filled with liquids Such as vases shall be placed on apparatus.

MI5 Powered Amplifier



Congratulations on your purchase of OSD Powered Amplifier.

MI6 Powered Amplifier. 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.

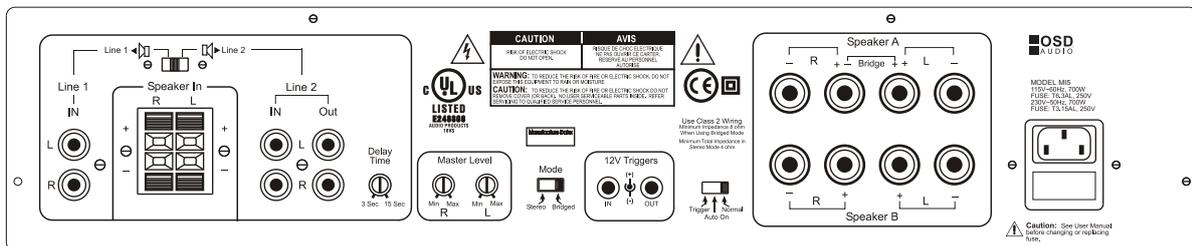


Note: If any part of this product is damaged or missing, Please call OSD Audio Return Department At (714) 447-9880

Using the controls/ Front Panel

Power

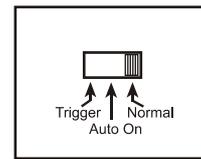
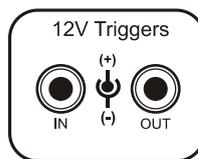
The front panel switch will manually switch the MI5 Powered Amplifier on or off. A blue led behind the faceplate lens indicates its power status. Whenever the amplifier's power switch is in the "ON" position and the amplifier is in "active" status the lens is illuminate blue. If the amplifier is "ON" but in the "standby" status the lens is illuminated RED.



Using The Controls/ Back Panel

Power

The MI5 Powered Amplifier can be turned on and off independently via a switch on the front panel, by signal sensing, or remotely by a triggered DC input. There is a switch located on the lower edge of the rear panel of the amplifier to select how you would like to turn on the MI5 power Amplifier. If you would like to control the unit's power On/Power off status manually from the front, place the switch in 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 device to the terminal labeled "TRIGGER IN" next to the switch.



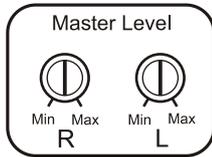
You should use a 3.5mm phone plug in the "IN" connector to make this connection. The tip of the connector is positive, and the sleeve of the connector is negative. A second terminal in the same block is labeled "OUT". This allows for remote turn-on of other devices when the MI5 powered Amplifier is powered 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 triggers or "Auto ON" features to operate.

Master Level Control

Each channel is able to control its volume independently relative to the other channel. At the bottom left of the rear panel, there are 2 screwdriver adjustment knobs which correspond to the volume level of the channel identified by a channel designator below it.



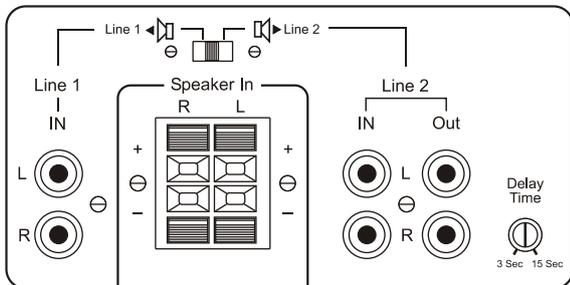
The volume range is labeled Minimum to Maximum and has 1 steps (clicks) at a center position as a reference. Rotate the knob clockwise to increase output, and counter clockwise to decrease output.

These adjustments set the master level and if not set up an initial setup of the MI5 Powered Amplifier will or may adversely affect the performance of the amplifier.

To set the Master Level controls begin by adjusting the front panel "Volume Trim" to its fully clockwise position. Also set the front panel "Balance Trim" to its center position. Now adjust both the left and Right Channel Master Level controls to set a "Maximum" desired volume for the MI5 Powered Amplifier in its application, as well as setting an appropriate "Balance" from left to right.

Now the front panel Volume and Balance Trim controls can make fine adjustments to your set up in this application.

RCA input



There are a total of 4RCA inputs on the back panel of the MI5 Powered Amplifier. These RCA inputs are labeled 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.

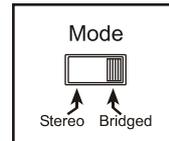
"Line 2 Input" should be used as the "primary" or normal input for various line level sources that may be available locally to the amplifier. "Line 1 Input" is a priority switching input that can be used for a second input, such as, the output of a second source, and will take over as the primary input whenever a signal with a minimum of 5mv of level is present. Whenever, there is an absence of signal at the "Line 2 Input" RCAs input signal. An adjustable delay of from 3 to 15 seconds of 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 disk to another.

Speaker Level Input

The MI6 Powered Amplifier also provides a pair of speaker level input for those applications where either of the sources has only speaker level output signal available. This input may be switched to be used in place of the line 1 or line 2 input.

Mode 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 speaker to the amplifier, place the switch in the "STEREO" position.

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

When you are using the amplifier in "Bridged Mode", the amplifier is now a single channel mono amplifier. The two channels have been internally connected in series by the "Bridge" switch. The MI6 Powered Amplifier is now capable of 250W, bridged into 8 ohms with less than 0.2% THD+N.

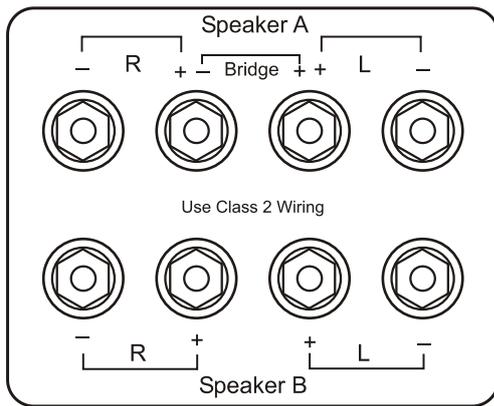
For the amplifier to operate properly in the bridged mode you should have both the "right and left" inputs connected to the amplifier. The amplifier will sum these signals and create your mono source.

Note: Both of the "Master Level" adjustments should be set to the same Position, and the "Balance Trim" should be set to the center or 12 o'clock position for the amplifier to operate normally in the "Bridged" mode.

Note: This Amplifier will produce excess of 200 watts with a bridge pair of channels. Please verify that your speaker are capable of handling such power to avoid possible damage!

Speaker Terminals

Each channel has two pair of multi-way binding post. These are the red and black screw posts on the rear of the amplifier. Terminals are provided for "A" and "B" Pairs of speaker for each channel. If you will be using the amplifier as a stereo amplifier (not a bridged amplifier) you will connect the speakers positive (Red) terminal to the amplifiers positive (Red) terminal using the appropriate gauge speaker wire, and the speakers negative (Black) terminal to the amplifiers negative (Black) terminal (immediately below the positive terminal) using the appropriate gauge speaker wire. If you would like to use on pair of channels bridged, place the "mode" switch in the "bridged" position and use both red terminals to connect to the speaker. (See illustration on page 5)



⚠ 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-ohm.**

⚠ NOTE: This amplifier is capable of use with standard US voltage (115 VAC) as well as European voltage (230 VAC). The amplifier will be preset for the voltage of the country it is sold in. Use with other voltages requires some changes to be made to the amplifier. Should you wish to use the amplifier in a country other than the one for which it was purchased, **Please contact OSD AUDIO HOME PRODUCT AT (714) 447-9880**

MI5 Powered Amplifier Specifications

Power Bandwidth 20Hz-20kHz:

80W per CH into 8 ohm loads with less than 0.2% THD+N
 125W per CH into 4 ohm loads with less than 0.2% THD+N
 250W 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
 AC Power Consumption: 1200W (all channels driven)
 Net Weight: 24.3 lbs (11.0 kgs)
 Gross Weight: 32.2 lbs (14.6 kgs)

AC Mains Fuse:
 115V~60Hz T10AL,250V
 230V~50Hz T5AL,250V

Limited Warranty
 OSD AUDIO: Warrants its amplifier products against defects in materials and workman-ship 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 out option, without charge for parts and labor. Customer must pay all parts and labor charges for factory refurbished product expires after ninety (90) days from date of original purchase.

This limited warranty applies only to purchases from authorized OSD Electronics retailers. This limited warranty is extended only to the original purchaser.

Consumers are required to provide a copy of the original sales invoice from an authorized OSD 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 OSD or damage that is attributable to acts of god. It does not cover costs of transportation to OSD or damage in transit. The customer should return their defective product, freight prepaid and insured, to OSD AUDIO. 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 replacements as provided under the terms of this warranty. Under no circumstances shall OSD 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

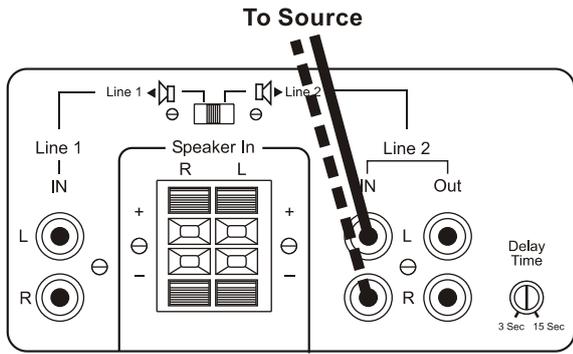
Applications Powering Speaker Outdoors

⚠ Whenever you are using loudspeakers outdoors, you should be aware that sound does not travel like it would in your home. Without the reflective surfaces of walls and ceilings, sound outdoors will dissipate quickly. Therefore, in an outdoor situation the MI6 Powered Amplifier provides the opportunity to bridge adjacent channels, effectively doubling the available power for your speakers, This can help to overcome the problem of using speakers outdoors assuming the speakers chosen are capable of handling the additional power.

⚠ It should be noted that the MI6 Powered Amplifier is rated to operate into minimum 8-ohm bridged load. Therefore, if you are using more than single 8-ohm loudspeaker in bridged mode you should consider using an impedance matching speaker selector, such as the SVCC-6 or possibly using an impedance matching volume control, such as the SVC-300, VKR-120 or VMS-300 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 mono switch is set to stereo for stereo operation. Connect the line out jacks from a stereo preamplifier or source to the Line 2 input jacks of your MI5 Powered Amplifier. Next connect your speakers to the terminals marked "SPEAKER A" observing proper polarity (see "speaker terminals" Page 5). Connect a second (optional) pair of speakers to the terminals marked "SPEAKER B". Select between the "A" and or "B" speakers using front panel speaker selection buttons.



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. The Audio output of a local source, such as MP3 Player, CD, television, computer, etc.. Is connected to the MI5 Powered Amplifier via the television, computer etc.. Is connected to the MI5 Powered Amplifier 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 MI5 Powered Amplifier. Once the local source is turned off or muted, the MI5 Powered Amplifier will automatically switch back the distributed audio system as an audio source, assuming the television is 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. If the Whole House Distributed Audio was only available as a speaker Level signal you could connect it the "speaker In" connections and set the switch above to the "Line 2" position, or toward the right hand position of the switch.

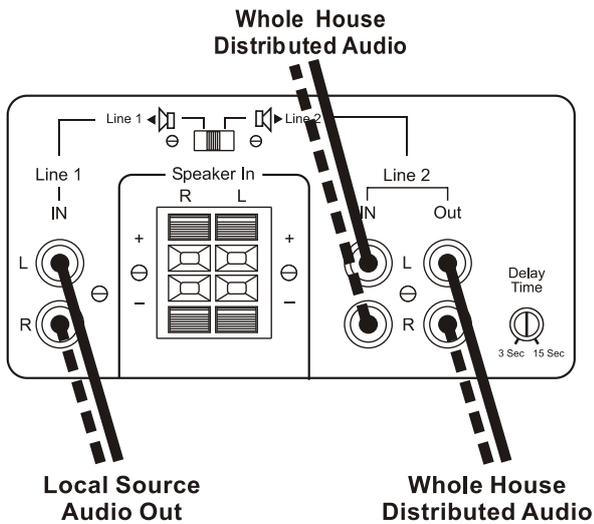
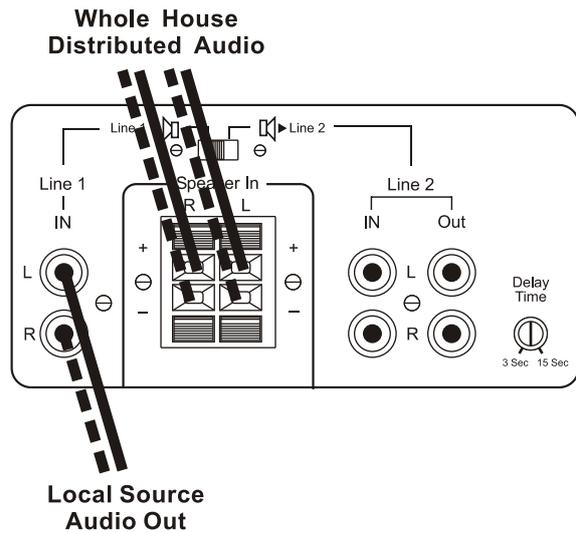
Mono Setup

In this configuration, the mono switch is set to bridged. Connect the line out from a preamplifier to the right and left Line 2 input of your MI5 Powered Amplifier. Connect your mono speaker to the terminals of your MI5 Powered Amplifier, following the instructions in "Speaker Terminals" on Page 4. 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 Sources

In the application shown below, a distributed audio system is connected to the MI5 Powered Amplifier as a local zone amplifier via the Line 2 inputs. Normally the distributed audio system will be the audio source for the MI5 Powered Amplifier.

The distributed audio is than passed on to be used by additional zones or sub zones in the distributed system via the Line 2 outputs.



If you have any questions regarding how to set this up, please call OSD AUDIO support at (714) 447-9880.