



MI4

Power 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.

 The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user 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.	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN Warning: To reduce the risk of electric shock, do not remove cover (or back). No user serviceable parts inside. Refer servicing to qualified service personnel.	 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 the appliance.
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IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Read all warnings.
4. Follow all instructions.
5. Do not use this appliance near water.
6. Clean only with dry cloth.
7. 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 appliance (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 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 appliance during lightning storms or when unused for long periods of time.
13. Refer all servicing to qualified personnel. Servicing is required when the appliance has been damaged in anyway, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the appliance, the appliance 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 appliance.

MI4 Power Amplifier



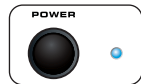
Congratulations on your purchasing of OSD Power Amplifier.

Please take a few moments to read the entire manual, and be sure to retain this document for future reference. Please read and observe all safety instructions detailed on each page.

Note: If any part of this product is damaged or missing, please call OSD AUDIO Return Department at (562) 697-2600

Using the controls/ Front Panel

Power



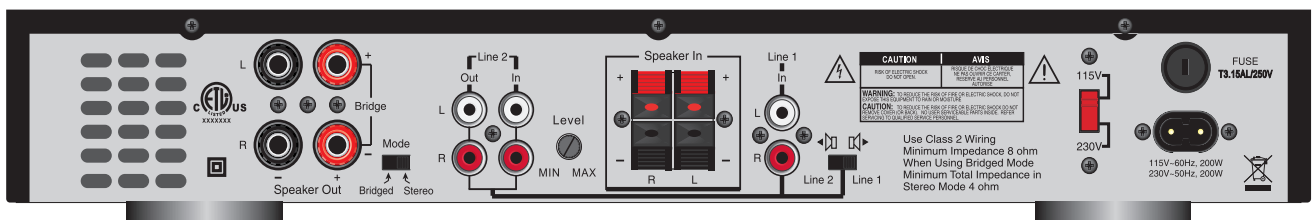
The POWER push button will manually switch the MI4 Power amplifier on or off. The blue LED beside the button indicate its power status. Whenever the amplifier's power switch is on, the LED will illuminate blue.

OUTPUT ADJUSTMENT



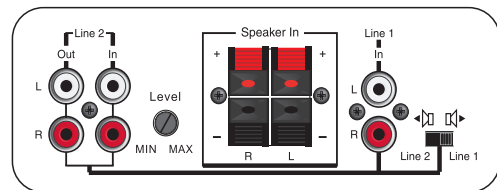
The RIGHT VOLUME and LEFT VOLUME knobs are for individual adjustment of left channel and right channel output. The corresponding L/MAX and R/MAX LED show the output level status. When the output is adjusted to reach clip, they will illuminate RED.

The BASS GAIN knob is used for adjust the gain of Bass for the output.



Using the controls/ Back Panel

INPUTS



There is a total of 2 pairs of RCA input on the rear panel of the MI4 Power Amplifier. These RCA inputs are labeled as "Line 1" and "Line 2". They are also designed with an "R" and "L" as Right Channel and 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 primary input whenever the signal is present. If the "Line 1" Input signal is absent after 12 seconds, the input will revert to the "Line 2" Input signal.

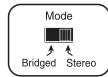
The Line 2 has "OUT" RCA connectors to loop the Line 2 signal to other devices.

The MI4 Power Amplifier also provides a pair of speaker level input labeled as "Speaker In" for those applications where either of the sources has only speaker level output signal available. The Speaker In signal will be mixed with Line 1 or Line 2 input signal controlled by the switch labeled "Line 1" and "Line 2" as option on the right side of "Line 1" Input RCA connectors.



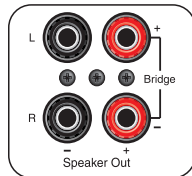
This screwdriver adjustment knob labeled as "LEVEL" can be used to adjust the sensitivity of MI4 inputs from "MIN" to "MAX".

OUTPUT



To the right of the Speaker Out connectors is a switch labeled :Mode" with "Stereo" and "Bridged" as options. It is used to switch the output mode of MI4.

If you will be connecting a pair of speakers to the amplifier, place the switch in the "Stereo" Position. If you will be using a pair channels to power a single mono speaker, place the switch in the "Bridged" position.



The MI4 Power Amplifier has 2 channels outputs. Each channel has a pair of multi-way binding post connectors. These are red and black screw posts on the rear panel of the amplifier. Terminals are provided for "L" and "R" output. If you will use the amplifier with a stereo mode(not a bridged mode), connect the speaker's positive(Red) terminal to the amplifier's positive(Red) terminal using the appropriate gauge speaker wire, and connect the speaker's negative(Black) terminal to the amplifier's negative(Black) terminal(immediately beside the positive terminal) using the appropriate gauge speaker wire.

If you would like to use the amplifier with "Bridged" mode, place the "Mode" Switch in the "Bridged" Position to be a single channel mono amplifier, the two channels will be internally connected in series. You will use both Red terminals to connect to the speaker, the "L" channel's Red terminal will be positive terminal and the "R" channel's Red terminal will be negative terminal under "Bridged" mode.

! **Note:** This amplifier will supply 130W in "Bridged" mode. Please verify that your speakers are capable of handling such power to avoid possible damage!

! **Note:** *The minimum impedance for the total load connected to a pair of channels in the "Bridged" mode is 8-ohm.*

MI4 Power Amplifier Specifications

Power Bandwidth: 20Hz - 20kHz

50W per Channel into 8 ohms loads with less than 0.05% THD+N
65W per Channel into 4 ohms loads with less than 0.1% THD+N
130W Bridged Mono into 8 ohms with less than 0.1% THD+N

Crosstalk: >60dB@1KHz, referred to rated power at 8 ohms

Frequency Response: (25Hz to 50kHz) +0dB, -1.0dB

Signal to Noise ratio: >98dB

RCA Line Input Sensitivity: 220mV (Max)

Speaker Input Sensitivity: 2.3V (Max)

AC Power Consumption: 360W (All Channels Driven)

Dimensions: 19"w x 7.87"d x 2.85"h,

"1.5U Option Rack Space Style"

Net Weight: 5.65 kg

Gross Weight: 6.25 kg

AC Mains Fuse:

115V~60Hz T3.15AL, 250V

230V~50Hz T3.15AL, 250V

! **NOTE:** This amplifier is capable of use with standard US voltage (115V) as well as European voltage (230V). 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 at (562) 697-2600.**

Limited Warranty

OSD AUDIO: 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.

This limited warranty applies only to purchases from authorized OSD AUDIO retailers. This limited warranty is extended only to the original purchaser and is valid only to customers in USA.

Customers are required to provide a copy of the original sales invoice from an authorized OSD AUDIO 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 AUDIO or damage that is attributable to acts of god. It does not cover costs or transportation to OSD AUDIO or damage in transit. The customer should return their defective product, freight prepaid and insured, to OSD AUDIO, only after receiving a Returned Merchandise Authorization (RMA) number.

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 customer's sole remedies will be repair or replacement as provided under the terms of this warranty. Under no circumstances shall OSD AUDIO be liable for loss or damage, direct, consequential or incidental, arising out of the use of or inability to use the product.

Applications

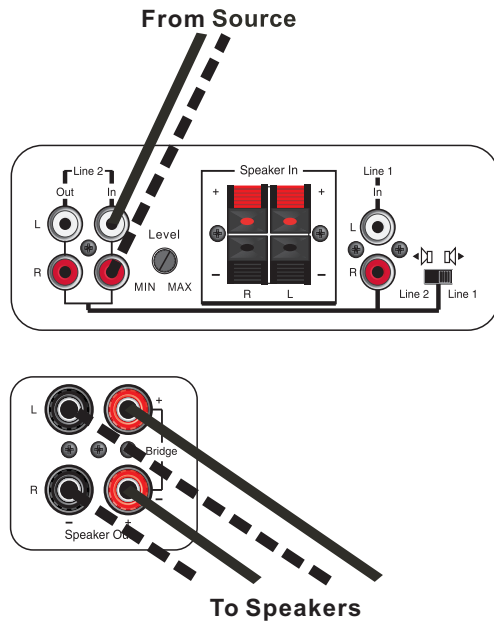
Powering Speaker Outdoors

! Whenever you are using speakers outdoors, you should be aware that sound does not travel like it would be in your home. Without the reflective surfaces of walls and ceilings, sound at outdoors will dissipate quickly. Therefore, in an outdoor situation the MI4 Power 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 MI4 Power Amplifier 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 SSVC-6 or possibly using an impedance matching volume control, such as the SVC 70, SVC 100, SVC 300, VKR 120, VMS 100 or VMX 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.

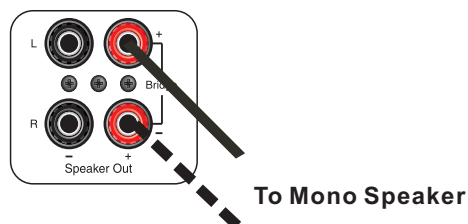
Stereo Setup

In this configuration, the Mode 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 MI4 Power Amplifier. Then connect your speakers to the output Binding Post observing proper polarity(You can check "OUTPUT" on Page 4 for reference about the polarity).



Mono Setup

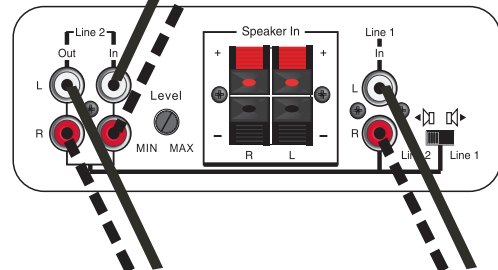
In this configuration, the Mode switch is set to "Bridged" for Bridged operation. Connect the line out jacks from a stereo preamplifier or source to the Line 2 Input jacks of your MI4 Power Amplifier. Then connect your single mono speaker to the output Binding Post observing proper polarity(You can check "OUTPUT" on Page 4 for reference about the polarity).



Setup For Multiple Sources

In the application shown below, a distributed audio system is connected to the MI4 Power Amplifier as a local zone amplifier via the Line 2 Input. Normally the distributed audio system will be the audio source for the MI4 Power Amplifier. The distributed audio can be passed on to be used by additional zones or sub zones in the distributed system via the Line 2 Output.

Whole House Distributed Audio

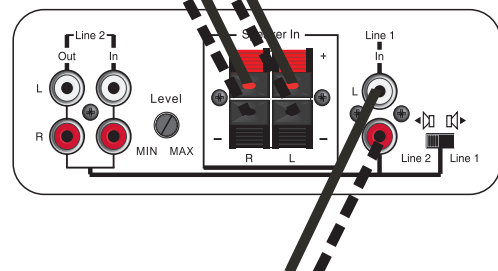


Whole House Distributed Audio

Local Source Audio Out

The audio output of a local source, such as MP3 Player, CD, Television, computer, etc., is connected to the MI4 Power Amplifier via the Line 1 Input, 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 MI4 Power Amplifier. Once the local source is turned off or muted, the MI4 Power Amplifier will automatically switch back to the distributed audio system as an audio source, assuming the local source remains inactive. The delay time is 12 seconds 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.

Whole House Distributed Audio



Local Source Audio Out

If the Whole House Distributed Audio was only available as a speaker level signal you could connect it to the "Speaker In" connections and set the switch which is on the right side of "Line 1" Input RCA connectors to the "Line 2" position or toward to the left hand position of the switch. The MI4 Power Amplifier will no longer be able to pass the Whole House Distributed Audio to another zone via the Line 2 Output.

If you have any questions regarding how to set this up, please call OSD AUDIO support at (562) 697-2600.