PYLE®

HYDRA SERIES

FOR CAR AND MARINE USE



www.pyleaudio.com

PLMRA200

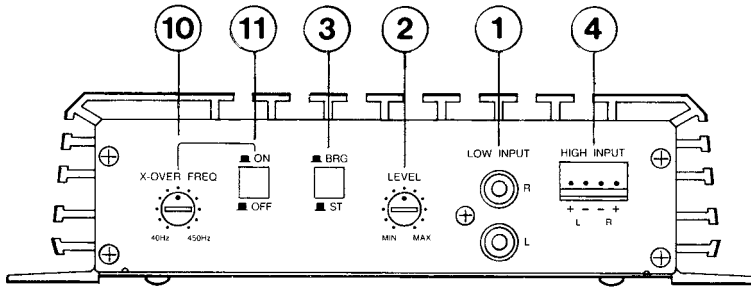
Waterproof Marine 400W 2 Channel MOSFET Amplifier

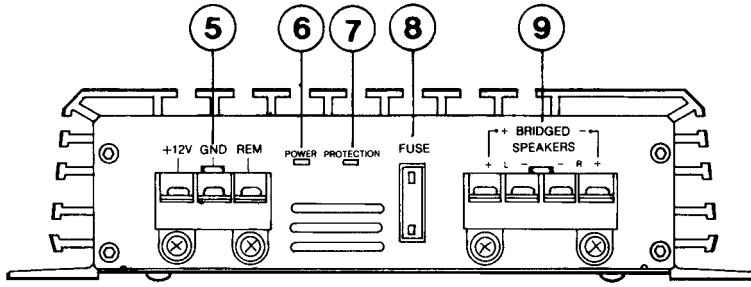
User's Manual

INTRODUCTION

Thank you for purchasing the PYLE PLMRA 200 Amplifier. The PLMRA 200 was engineered in the USA to the highest quality level and will provide you with years of high quality sound level amplification and reproduction.

The PLMRA 200 utilizes 2 MOSFETS in its design to produce enough voltage to supply the main amplifier and a huge considerable amount of reserve voltage for peak "high demand" situations.





① Input RCA Jack
② Input Level Control
③ Bridged Mode Switch
④ High Level Input
⑤ Power Connection Terminal
⑥ Power On LED
⑦ Protection LED
⑧ Fuse Holder
⑨ Speaker Output Terminal
⑩ Crossover Frequency Control
⑪ Crossover On/Off Switch

FEATURES

1. High Impedance Input (Low Level Input)

This unit is provided with RCA input jacks for high impedance. Couple the RCA input with the car stereo or equalizer outputs using RCA type connector cables.

2. Input Gain Control.

These are NOT Your amplifiers volume controls. They are a sophisticated device which is to be utilized when matching the input signal of your head unit or equalizer to their amplifier.

Some people automatically set the gain to maximum because they want their music loud, by doing this they are also increasing the chance of burning out their amplifiers input stage should the source signal already be of a high value. Please follow the precise instructions found later in this manual to help match the signals correctly.

Your system can also become extremely sensitive to noise conditions when you have a high signal level coming into the amplifier and you also have a high gain set on the amplifier. So avoid lots of problems and match your system correctly!

3. Bridging Capability.

The PLMRA200 can be bridged to a high power one channel unit. Make sure that you have a speaker or series of speakers on the bridged channel capable of handling at least 100 Watts or RMS power.

4. Low Impedance Input (High Level Input)

This unit is provided with terminal inputs for low impedance. Couple the terminals with a standard car stereo output system wither common ground to floating ground type originally output to speakers. The speaker wires of the car stereo should be connected to “L-” and “R-” terminals respectively. If the car stereo comes out with three wires only, connect the “COMMON” wire to both “L” and “R” input of the amplifier.

5. Power Supply Terminal

Connect the +12V DC power supply into the terminal by lugs and screws accessible at the panel of this amplifier.

BATT +12V

Connect +12V DC power supply wire into the terminal from the terminal of the battery.

GROUND

Ground terminal connect the ground wire to the chassis of the automobile

REMOTE

Remote terminal connects the control wire which provides remote turn-on and off of the amplifier by the radio/cassette play or equalizer

6. Power On LED.

When the PLMRA200 is properly grounded and has proper power and is receiving its remote power signal the green LED will light up indicating power conditions are correct.

7. Protection LED

This is indicator is illuminated when built-in protection circuitry is activated.

8. Power Fuse

Power fuse protects both this amplifier and the automobile electrical system from wrong electrical conditions.

9. Speaker Terminals.

The speaker terminals are 14K Gold Plated for high conductivity and minimum impedance loss. The terminals are facing upwards for easy wiring in tight situations. Be sure to strip just enough insulation off your speaker wires that will fit under the screw plate to help ensure against speaker wire short circuits.

The PLMRA200 can support an impedance load as low as 2 ohms per channel or 4 ohms in the bridged mode, though a 4 ohm stereo load and 8 ohms bridge load will greatly increase the life expectancy of the amplifier.

10. Crossover Frequency Circuit

Lets you adjust the crossover frequency from 40-450 Hz for both channels.

11. Crossover On/Off Switch

Lets you set the amplifier to drive a connected subwoofer.

12. Mute Turn On Circuit

The PLMRA200 features an anti-thump delay circuit. This circuit eliminates irritating thump noises some times experienced with cheaper amplifiers when they are turned on.

13. Short Circuit Protection.

Advanced protection circuits have been designed into all PLMRA200 amplifiers. The protection circuitry will disable the amplifier if it senses an input overload, speaker short circuit or extreme high temperature conditions. When the protection circuit is in operation the LED indicator on the unit will light indicating that the amplifier has gone into a self preservation mode. At this time please check your system to see what is causing the protection circuit to fire. The amplifier can be reset by turning the remote power off and then on again. If the system shuts down because of a thermal overload condition, allow the amplifier to cool down before restarting. If the amplifier shutdown because of an input overload or speaker short circuit please be sure to correct these conditions before restarting the amplifier.

WARNING!

Do not play your music at a level which will inhibit your hearing necessary traffic safety sounds! Long term listening at extreme high levels may cause loss of hearing.

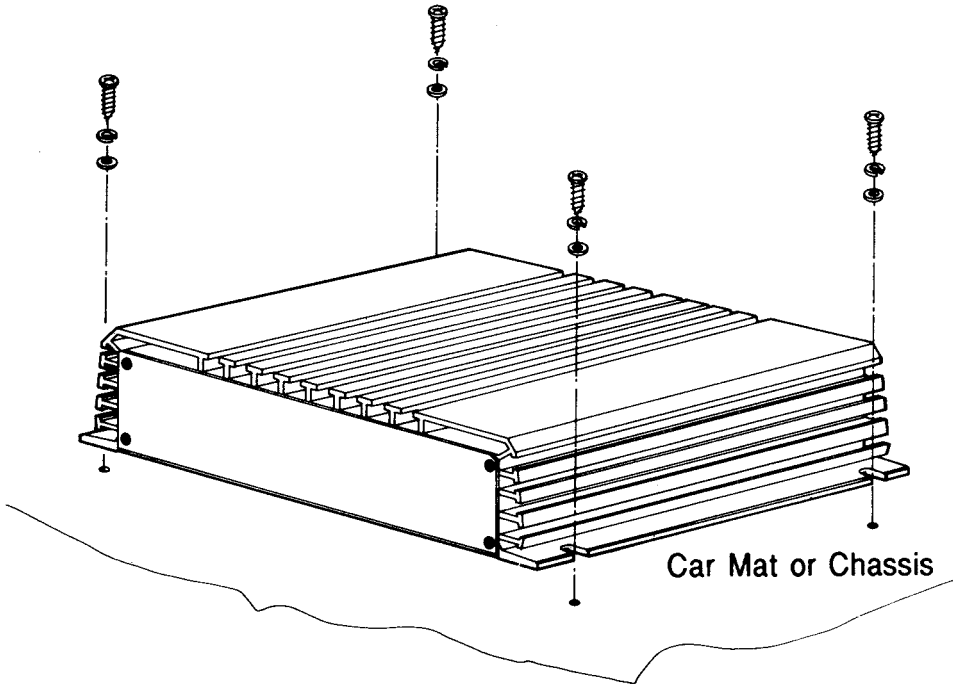
INSTALLATION

The PLMRA200 comes complete with all mounting hardware. While the PLMRA200 can be mounted in any convenient location in your vehicle, please remember that this is a high power unit which generates high electrical energy and heat. Therefore be sure to install the unit in a place with sufficient airflow, a minimum of dust and no moisture. Allow enough space around the cooling fins to permit reasonable airflow and cooling.

Choose a suitable location to mount the amplifier so that it is protected from vibration.

Check clearance all around the amplifier be sure to leave enough room for wiring.

Secure the amplifier tightly. Do not leave an unmounted amplifier in your car trunk or deck as it can be a driving hazard should you be forced to make a short stop.

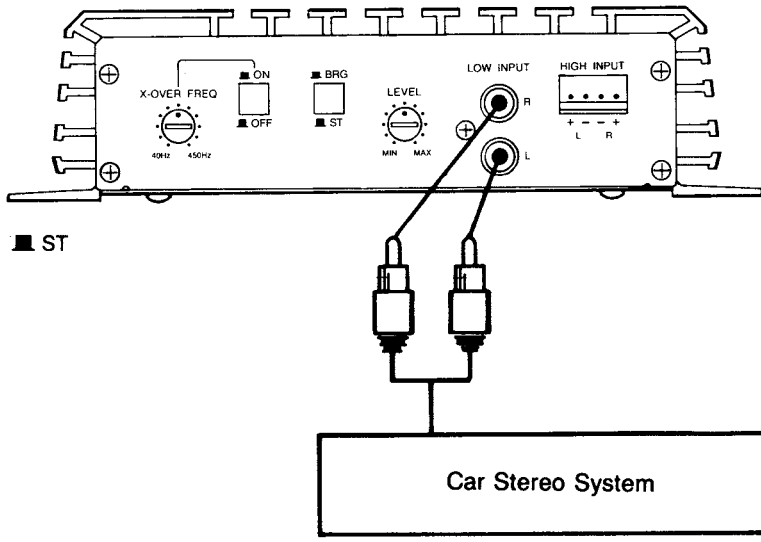


ELECTRICAL CONNECTION

A. STEREO INPUT CONNECTION

RCA TYPE TERMINAL

This amplifier is provided with gold plated RCA terminals for LOW LEVEL INPUT to match radios and equalizers with line level output. Couple the RCA input with the car stereo/equalizer output using RCA type connector cables.
(Fig. 1)



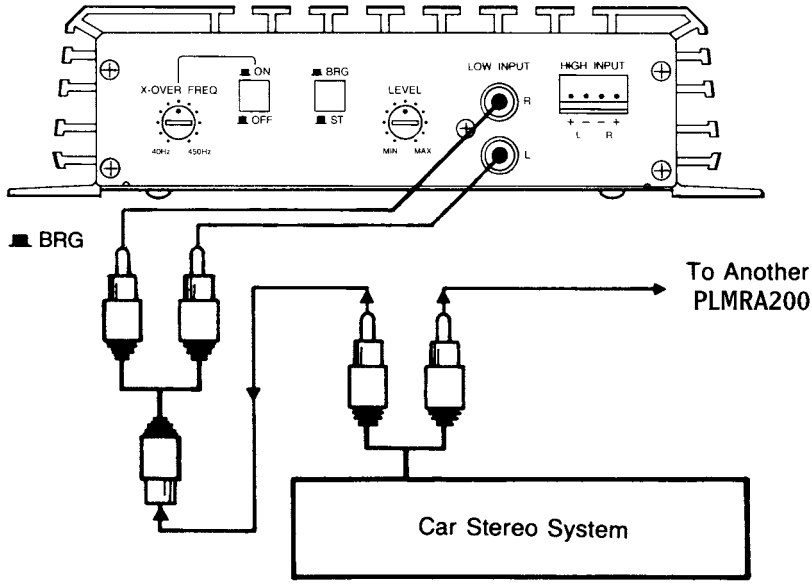
(Fig. 1)

You may want to operate two PLMRA200 in the mono mode, in this case you will have to bridge your input signal for each amplifier to MONO* using this format your two PLMRA200's in MONO will provide full stereo when used simultaneously.

* BESIDES BRIDGEING YOUR OUTPUT

B. MONO INPUT CONNECTION

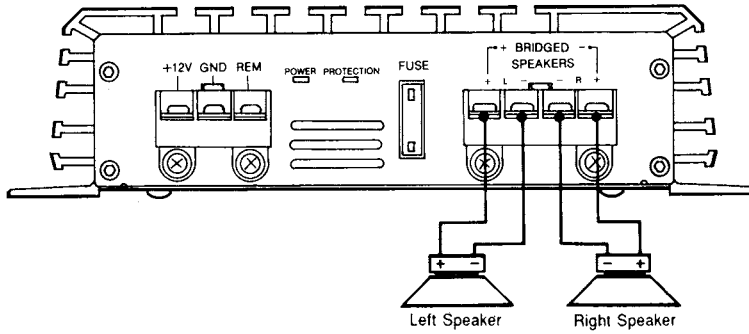
PLMRA200 may easily be bridged for mono operation by feeding the same signal to both LEFT and RIGHT Input terminals. The simpliest way is by using a Y-adaptor to connect your car stereo output to the PLMRA200 input. No matter what output the car stereo has (some car stereos have LR, RR, LF, RF output, and some are only RIGHT and LEFT output), choose anyone of them and connect it. (Fig. 2)



(Fig. 2)

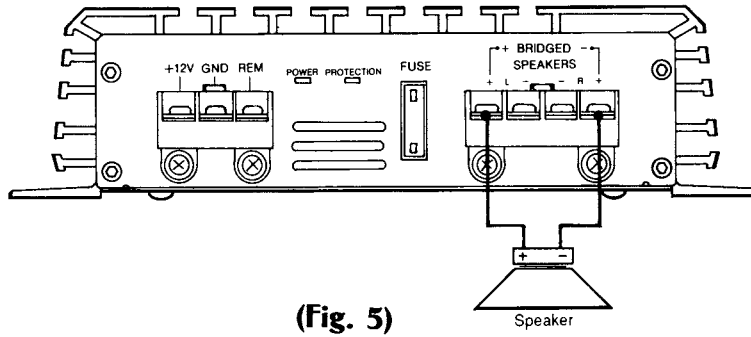
C. SPEAKER CONNECTION

1. Stereo Amp System
   Connect the two pair of output terminals to corresponding LEFT and RIGHT Speakers. (Fig. 4)



(Fig. 4)

2. Mono Amp System
   The PLMRA200 amplifier is bridgeable from a 2 channel amplifier to a one channel amplifier. The ideal speaker impedance for optimum operation is 4 ohms. The amplifier will provide stable operation when operated between 2 and 8 ohms loads. The minimum recommended speaker load is 2 ohms for each channel in normal operation.
   When operating in the bridged mode the minimum recommended speaker load is 4 ohms for each bridged channel. Operation of the amplifier below this impedance load can damage both the amplifier and your speaker and will void your warranty.



(Fig. 5)

SPEAKER NEGATIVE TERMINALS ON AMPLIFIER ARE NOT USED IN BRIDGED MODE. BRIDGING IS DONE BY SUMMING POSITIVES. CONNECT THE NEGATIVE SPEAKER TERMINAL TO THE POSITIVE TERMINAL OF R-CH ON THE AMPLIFIER BE SURE TO SELECT BRIDGED SWITCH KNOB FOR PROPER OPERATION. (Fig. 5)

D. POWER CONNECTION

1. Connect the B+12V pole of power supply directly to the battery (+) position terminal.
2. Connect the GND pole of power supply directly to the (−) negative ground battery terminal or car chassis.
3. To make a good grounding and prevent motor boating noise problem connect another 12 gauge minimum wire from the (−) negative battery terminal to chassis of stereo unit.
4. Connect the 'Remote' pole to external switch for positive 12V ON/OFF. This may be connected to the receiver power antenna lead.

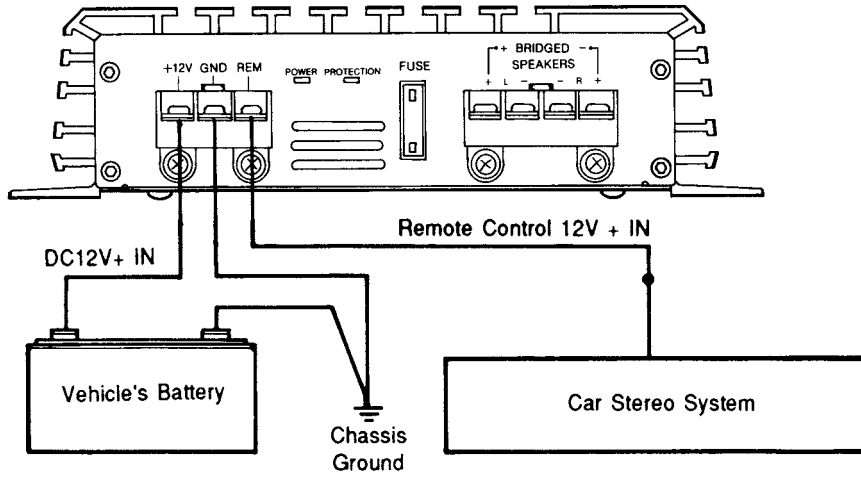


Fig. 6

MAINTENANCE

Your PYLE power Amplifier is an example of superior design and craftsmanship. The fllowing suggestions will help you care for your amplifier so you can enjoy it for years.



Keep the amplifier dry. If it gets wet, wipe it dry immediately. Liquids can contain minerals that corrode electronic circuits.



Use and stre the amplifier only in normal temperature envi-ronments. Temperature extremes can shorten the lile of electronic devices and distort or melt plastic parts.



Handle the amplifier gently and carefully. Dropping it can damage circuit boards and cases and can cause the amplifier to work improp-erly.



Keep the amplifier away from dust and dirt. which can cause prema-ture wear of parts.



Wipe the amplifier with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong deter-gents to clean the amplifier.

TESTING AND SPECIFICATIONS

1. After all the connections have been made, turn on your stereo and listen for the amplifier to turn on. If there are any unusual noises from the speakers then turn the system off and recheck all the wiring.

2. After you have connected your radio or equalizer to the amplifier, you may adjust the gain control to match the output level of your radio.
   (A) Set the volume control on your radio to 2/3 position.
   (B) Adjust the gain control for an average listening level.
   (C) Turn the radio volume all the way down and listen for background noise.
   (D) Start your vehicle and listen for electrical noise.
   (E) Making fine adjustments to the sensitivity can reduce background noise and some engine noise.
   (F) CAUTION: Never turn the sensitivity up any farther than you need to get clear sound at 2/3 volume.
   (G) This adjustment only needs to be made once.

3. NOTE: CARE MUST BE TAKEN AGAINST BATTERY OVER-DISCHARGE CAUSED BY LONG OPERATION OF THE SET AT A HIGH SOUND LEVEL WHEN THE ENGINE IS NOT RUNNING OR IDLING.

SPECIFICATIONS

1. Output Power @ 14.4V DC 1 KHz	200W × 2 MAX, 100W × 2 RMS
2. Bridged Mode	400W MAX, 200W RMS
3. Frequency Response	10-30,000 Hz ± 3dB
4. Input Impedance	10K ohms
5. Input Sensitivity	250mV-1V
6. Power Supply Voltage	DC 14.4V negative ground (10.5-16V)
7. Matching Speaker Impedance	4-8 ohms
8. Maximum Current Draw	15A
9. Dimensions	7.87"W x 2"H x 10"L
10. Net Weight	4.20 (lbs)

limited warranty policy

amplifiers

You must also include the following items:

- A copy of your sales receipt or other proof of purchase
- A brief letter indicating the problem you are experiencing
- include in your letter your return address, daytime phone number, and R.A. number
- also include a check or money order for $18.00 for return shipping, handling, and insurance, or provide your Visa/MC number with expiration date.

Our obligation under this warranty is limited to the repair or replacement of the defective unit when it is returned to us prepaid. This warranty will be considered void if the unit was tampered with, improperly serviced, or subject to misuse, neglect, or accidental damage.

All Pyle products are carefully constructed and thoroughly tested before shipment. Products purchased in the USA are warranted to be free of defects in material and workmanship for two (2) years from the date of purchase. This warranty is limited to the original retail purchase.

Should the product fail due to factory defects in material or workmanship, your unit will be repaired or replaced at the sole discretion of Pyle.

To obtain warranty service you must first call our Consumer Return Hotline number at (718) 236-6948 to obtain a Return Authorization number. This R.A.# must appear on the outside of your package and on all paperwork relating to your return.

When returning a product to us for warranty service it must be carefully packed and shipped prepaid to:

R.A.#_____
Pyle Service Center
1600 63rd Street
Brooklyn, NY 11204

www.pyleaudio.com