

## TROUBLE SHOOTING GUIDE

If for some reason your system fails to operate properly, please refer to this guide. If you are unable to resolve the problem, consult your dealer or call Precision Power toll free at 1-800-62POWER for further assistance.

No Sound	Is the power LED illuminated?	Check fuses in power wire. Be sure Turn-on lead is connected. Check signal leads. Check gain control. Check Tuner/Deck volume level. Clean contacts on fuse holder.
No sound in one channel	Check Speaker Leads	Inspect for short circuit or an open connection.
	Check Audio Leads	Reverse Left and Right cables to determine if it is occurring before the amp.
	Check Mono Bridge and Bi Amp Crossover Switches	Depress switches to ensure proper position with respect to the installation.
	If problem is with amplifier	Have your dealer inspect the unit.
Amp turning off at low volume levels	Check speakers for damage or short	Have your dealer inspect the speakers.
Amp turning off at medium or high volume levels	Check speaker load impedance	Be sure proper speaker load impedance recommendations are observed.  (If you use an ohmmeter to check speaker resistance, please remember that DC resistance and AC impedance may not be the same.)

## LIMITED WARRANTY

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Precision Power Inc., (PPI) warrants its amplifiers and accessories to be free from defects in materials and workmanship under normal use and service for a period of two years from the date of original purchase. The extent and conditions of PPI's Limited Warranty are as follows:

1. PPI warrants that it will either repair or replace at no charge, any unit which PPI's examination discloses to be defective and under warranty, provided the defect occurs within two years from the date of purchase, and the product is returned immediately to PPI.
2. The date of purchase of a PPI Amplifier and/or Accessory must be established by an original sales receipt which must accompany the article being returned for warranty work.
3. The provisions of this warranty shall not apply to any PPI unit used for a purpose for which it is not designed, which has been repaired or altered in any way, or which has been connected, installed, or adjusted other than in accordance with the instructions furnished in PPI's owner's manual. Nor shall this warranty apply to any part which has been subject to misuse, neglect, or accident.
4. PPI does not authorize any other person to assume any other liability in connection with its products. THIS WARRANTY IS THE ONLY EXPRESS WARRANTY MADE BY PPI APPLICABLE TO ITS PRODUCTS. ANY IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE APPLICABLE TO PPI'S AMPLIFIERS AND/OR ACCESSORIES IS LIMITED IN DURATION TO THE DURATION OF THIS LIMITED WARRANTY. PPI SHALL NOT BE LIABLE FOR THE INCIDENTAL, CONSEQUENTIAL, OR COMMERCIAL DAMAGES RESULTING FROM THE BREACH OF THIS WRITTEN WARRANTY. Some states or provinces do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you.
5. Your unit will be serviced on an in-warranty basis within the warranty period for the correction of warranted defects. Do not return the article to your dealer. Return the article including your name, telephone number, and return address with the description of the problem to:

Precision Power  
Warranty Department  
4829 South 38th Street  
Phoenix, AZ 85040

TO RETURN ARTICLES OUT OF WARRANTY. Return the article, postage prepaid, in the original protective carton. Include in the package a description of the problem and, if desired, a request for an estimate of repair costs. Unless a request for an estimate is included, the unit will be repaired as necessary. Fifty Dollars (\$50.00) (labor), plus parts will be charged for all product repairs. The repaired unit will be returned to the customer with an itemized statement C.O.D.

Further information regarding system design is presented in the accessory manual, which covers the use of PPI pre-amps, bridging modules, and crossovers.

Precision  
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PPI ▲ 2300M

# Precision Power

Thank you for your selection of Precision Power high performance mobile audio products. In order to achieve the best results and the utmost satisfaction, please read the accompanying manual thoroughly before installation. For further information call your dealer or Precision Power.

**WARNING**—Use of this amplifier may cause hearing loss or damage.

**WARNING**—Use of this amplifier may impair the ability to hear necessary traffic sounds and thus may constitute a traffic hazard. PPI advises use of audio components at low volume levels while driving.

## SPECIFICATIONS

Continuous Power Output (Watts per channel into 4 Ohms @ 12V, Stereo)	300W
Power Bandwidth (± 1dB)	10Hz – 50kHz
Total Harmonic Distortion (Per IHF A-202)	0.02%
Signal-to-Noise Ratio (A-Wtd)	102dB
Damping Factor (100Hz)	>500
Dynamic Headroom (4 Ohms)	2.3dB
Stereo Separation	>72dB
Input Sensitivity	0.30 – 2.0 V
Input Impedance	10k Ohms
Output Impedance (Stereo)	2 – 8 Ohms
Supply Voltage	10.5 – 16 VDC
Shipping Weight	20 lbs
Dimensions (HxWxD)	8x2.1x14
Fuse	35A

## STANDARD FEATURES

- Ultra-Wide Bandwidth Circuitry
- Gold RCA Input Connectors
- Linear Pulse Regulated Power Supplies
- Phantom Power
- Output Short Circuit Protection Circuitry
- Soft Start
- 100% Solid State
- Adjustable Input Sensitivity
- Two Year Warranty
- Manufactured in the USA

## INSTALLATION INSTRUCTIONS

### 12 VOLT PRIMARY POWER CONNECTIONS

The PPI 2300M is shipped with two 10 gauge red positive (+) primary power harnesses with four inline fuse holders, two mounted near the amplifier and the others to be mounted near the battery. The fuses near the battery offers protection against damage from shorts to the car chassis between the battery and the amplifier. The second set of fuses offers additional safety for the amplifier's dual power supplies and internal circuitry. The power harness terminates in a large ring terminal for connection directly to the positive terminal of the car battery. The amplifier is grounded by the 10 or 12 gauge black wire, with the ring terminal, extending from the amplifier chassis.

The ground wire should be connected to the welded chassis member. When connecting, use a #8 sheet metal screw, being sure to remove any paint from the surrounding metal. Do not lengthen ground wire. Failure to adhere to this procedure may result in increased system noise.

*When working on or near the car's battery, first disconnect the negative post of the battery before working on the positive terminal to prevent shorting the positive terminal to ground. Reconnect negative terminal only after all positive terminal connections have been made.*

Connect the short 10 gauge red wires with the ring terminal and fuse holder directly to the battery. Then route the long power wires starting from the amplifier,

avoiding sharp corners, creasing, and sharp car body parts. Cut off excess wire after reaching the battery fuse holder. Slip on the black fuse cap. Strip the power wires 1/8 inch. Insert the stripped wire into the silver rivet cap and thoroughly solder. After the solder dries, clean the remaining flux from the rivet cap and insert a 35 amp fuse.

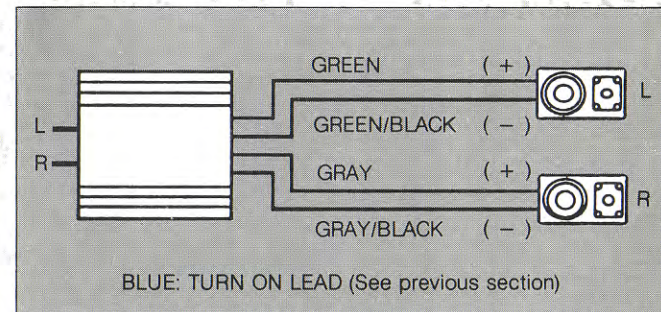
### TURN-ON CONNECTIONS

The application of 12 volts to the blue sensing wire located on the speaker harness connector will "turn on" the amplifier. The blue wire should be connected to the power antenna lead or an appropriate switched lead from the head unit. If no such connection is available a separate switch or alternate means must be used to control the amplifier.

### SPEAKER CONNECTIONS

All wires are located on the speaker harness connector. Always use 16 gauge or larger wire for all speaker connections. NEVER CONNECT ANY SPEAKER LEAD TO THE CAR CHASSIS OR TO ANOTHER LEAD. For optimum performance, speaker impedances should be 4 Ohms or greater, stereo only. **The PPI 2300M cannot be bridged.** (See Figure 1)

▲ 2300M ▲



PPI • 2300M SPEAKER CONNECTIONS

FIGURE 1

### INPUT CONNECTIONS

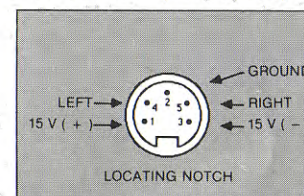
Two RCA jacks (left and right channel) and one five-pin female DIN jack provide input for low level (line out) signal connections. Both inputs (RCA and DIN) are paralleled and feature adjustable input sensitivity.

The five-pin DIN connector is intended to connect the amplifier to external Precision Power or compatible accessories requiring phantom ±15V power, such as preamplifiers, equalizers, or electronic crossovers.

*The DIN connector is not directly compatible with Kenwood or Alpine car stereo units. (See Figure 2)*

### INPUT SENSITIVITY

The slotted shaft accessible on the front of the amplifier labeled GAIN adjusts the input sensitivity from 0.3 volts to 2.0 volts. To adjust the input sensitivity, turn the control fully counter-clockwise to minimum. Adjust the radio/head unit volume knob to maximum volume, then turn the gain control on the amplifier clockwise until audible distortion occurs.



DIN CONNECTOR PIN FUNCTIONS

FIGURE 2