

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.

PPI BGM ▲ 100

Precision Power

INSTALLATION INSTRUCTIONS

BGM-100

Congratulations on your selection of Precision Power high performance mobile audio products. For the best results and the utmost satisfaction, please read the accompanying manual thoroughly before installation and retain it for future reference. Please note that **speaker wiring changes** when using the BGM-100. The speakers must be connected as detailed in the Speaker Wiring Guide.

CAUTION—Use of a high power stereo system may cause hearing loss or damage.

CAUTION—Use of a high power stereo system 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

Input Range:	0.1—5.0 Vrms
THD:	< 0.008% (1 kHz, 1 Vrms)
Signal-to-Noise Ratio:	> 102 dB
Frequency Response:	10 Hz—100 kHz
(± 1 dB)	
Input Impedance:	10 kOhms
Maximum Output:	8.0 Vrms
(10 k Ohm load)	
Power Requirements:	± 15 volts, 10 mA
(Via DIN connector)	
Dimensions:	12.2" H x 3.7" W x 3.0" D

FEATURES

- Ultra-Wide Bandwidth Circuitry
- Three Outputs
- Gold RCA Input Connectors
- Mono Bridging
- Phantom Powered
- 100% Solid State
- LED Power Indicator
- Two Year Warranty
- Manufactured in the USA

CONNECTIONS

Amplifier Bridging installations typically are more complicated than normal stereo systems, and it is recommended that they be attempted only by experienced installers. If you encounter difficulties, please consult your Precision Power dealer for professional installation assistance.

INTRODUCTION

Bridging is a special way of connecting two channels of an amplifier to drive a single (usually mono) speaker system. When an amplifier is bridged, it delivers the sum of the left and right channels power to a single load.

The standard method for bridging requires the use of a bridging module such as the BGM-100 or a special crossover with bridging capabilities. The input signal to the amplifier is usually mono. The bridging module or crossover inverts one of the channels, making it identical in amplitude but 180 degrees out of phase with the opposing channel. The amplifier's output is now taken across the *driven* output terminals of the amplifier. This doubles the available output voltage (one terminal is going positive and the other is going negative) and also doubles the current to the load. This, in theory, provides four times the total stereo power into the same load impedance. The additional power does not come without penalty. When bridged, the amplifier runs as if it were driving half of the speakers impedance; this means the amplifier will be far more particular about speaker impedances. And since the amplifier is delivering more power to the load, it will also run much hotter.

AMPLIFIER BRIDGING — SPEAKER WIRING GUIDE

When using the BGM-100, DPX-222, or QMX-232 to bridge an amplifier, the amplifier's output is taken across the *driven* output terminals of an amplifier. Typically, the speaker's positive terminal (+) is connected to the left positive output (+) of the amplifier, and the speaker's negative terminal (-) is connected to the amplifier's right positive output (+); the amplifier's negative (-) leads are left unconnected (insulated or cut off).

Outputs—Three outputs are available, meaning that up to three amps may be bridged with a single BGM-100. Using a DIN cord, simply connect the desired output DIN to the DIN input of an amplifier.

Power—The BGM-100 is phantom powered; it receives ± 15 VDC from an external source through any of its DIN connectors. Any Precision Power amplifier will automatically provide phantom power to the BGM-100 if it is connected by a DIN cable. Since the BGM-100 is powered by the amplifier, it will turn on and off simultaneously with the amplifier. If the BGM-100 is used in a system without a Precision Power amp, a Phantom Supply Module (Precision Power FSM-100) must be used. The FSM-100 supplies ± 15 volts to the BGM-100 and also adapts the DIN output connector to standard RCA phono jacks.

WHEN USING THE BGM-100, AMPLIFIERSPEAKER CONNECTIONS ARE DIFFERENT FROM STANDARD INSTALLATION. Check the speaker wiring guide in this manual for more information.

The **Precision Power 2000M** (MOSFET POWER) series are internally bridgeable and do not require the use of a bridging module in bridging applications—to bridge the **2000M** series of amps, refer to the information shipped with these amplifiers. The **PP4050** is also internally bridgeable (on the low end only). The **Precision Power 2200, 2200M, 2300, and 2300M** are **NOT** bridgeable.