

## Trouble Shooting Guide

*If the unit does not power up .....*

- Verify the +12V is hot and within 11-16 Volts. Make sure fuse is good.
- Verify the Ground is securely grounded.
- Verify the Remote is hot when the source unit turned on.

*If the sound is too loud, too low or distorted:*

- Too loud - Turn down the Master Gain on the remote, lower the Boost Level, or lower Boost Limitation jumper.
- Too low - Duh! Do the opposite of above.
- Too distorted - Same as too low ...

*If there is engine noise or alternator whine:*

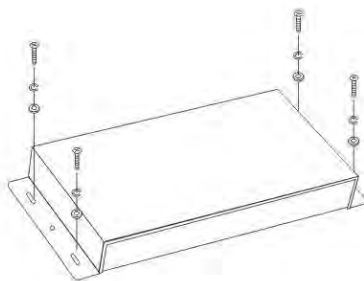
- Check ground connect to chassis.
- Verify that power and ground cables are adequate gauge and that the ground is not too long.
- Experiment with Ground Isolation jumper.

## Installation

TAPPING SCREW

SPRING WASHER

PLAIN WASHER



- end -

# Precision**Power**<sup>®</sup>

## **BP.8**

### **BASS SIGNAL PROCESSOR**

**Owner's Manual  
and  
Installation Guide**

## Congratulations!

The **Precision Power BP.8** is a fun and useful processor for processing your sub bass signal. If you're lacking bass in the bottom octave, the **BP.8** has you covered. If you suffer from iPod filtering, you'll love what the **BP.8** does for your system. Or if you are an SPL competitor, this toy is a dream come true!

**Caution!** Listening to music at high volumes for long periods of time can damage your hearing, permanently! While this processor will greatly enhance your sound system, if used carelessly, permanent damage will be done to your hearing and your subwoofers.

## Features

**Dash Mount Remote Control** - This unit is easily adjustable from the driver's seat with the supplied remote. The two controls are for subsonic filtering and master gain. The subsonic filter blocks damaging or unwanted subsonic frequencies. The master gain gives you instant control over the sub bass volume.

**Line Driver** - On the back of the unit is a selector switch that allows you to set the output voltage limit to 2.5V, 5V, 7.5V or 10V.

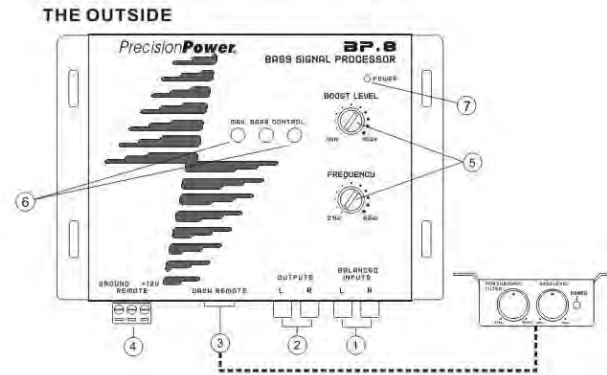
**Bass EQ** -The circuit is a 1-band parametric equalizer. The center frequency is selectable between 27Hz and 63Hz and is infinitely variable. The boost level is also infinitely variable.

**Max Bass Indicator** -There 3 LEDs flash when the Bass EQ circuit is activated.

**PFM Subsonic Crossover Control** -This filter has the ability to protect your subs instantly while sitting in the driver's seat. It blocks very low notes that could be harmful and avoids wasting power on these frequencies that we cannot hear anyway.

**Boost Voltage Control** -Too much of a good thing can actually be bad! For every 3dB of boost you supply to the woofers, they receive *double the power* at that frequency. 4x the power at 7dB and so on! Protective limitations are good. The 4 available settings provide you with appropriate options for limiting the amount of boost signal to the amp. For example, you may set this at 2.5V for a pair of 8" subs and at 10V for a pair of 18" subs. But at the same time, while a pair of 12" may be set at 5V, you might want to set it a 7.5V if you have four 12". It is best to start low and work your way up as you listen critically for mechanical problems within the woofer and make sure nothing starts to stink!

## Functions



**1) Inputs:** These noise-rejecting balanced inputs accept the RCA cable directly from the radio. Any and all other processors come afterwards. Will accept up to 15V signal input.

**2) Outputs:** The processed signal is sent out of these RCA connections to the next processor, or amplifier.

**3) Dash Mounted Remote Control:**

- Block frequencies from 35Hz -80Hz with the infinitely variable control.
- Adjust the master level of the sub bass signal.

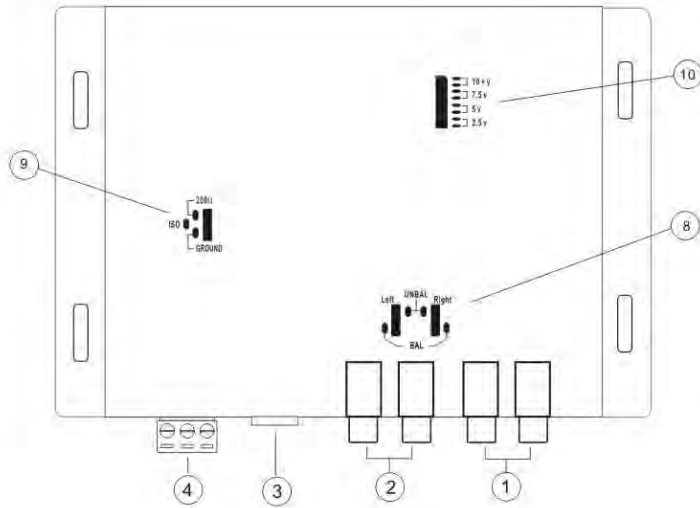
**4) Power Connection Terminal**

**5) Parametric Bass EQ:** There are two primary functions that differentiate a parametric EQ vs. a graphic EQ. A graphic EQ just allows a boost at a set frequency. A parametric EQ allows you to set the center frequency of the boost.

**6) Peak Boost Indicator:** These lights will flash when the Bass EQ is in effect and processing according to the music/sinewaves being used.

**7) Power On LED.**

## THE INSIDE



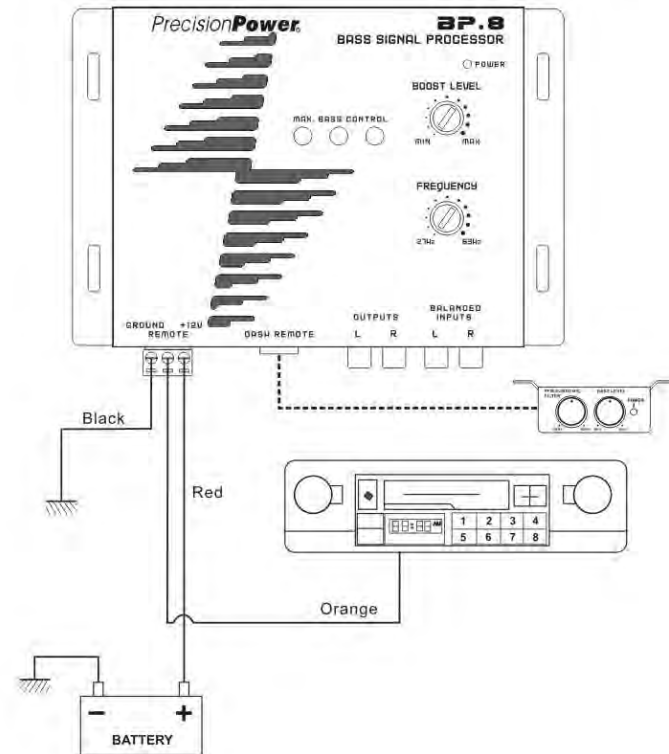
**8) Input Grounding:** Leave in the Balanced position. Only if your source unit searches for ground via RCA connections should you switch over the Unbalanced

**9) Ground Isolation:** In the event that your source unit may require a different type of grounding, you may use the jumper provided to address this issue. **TURN OFF THE SYSTEM** when making any adjustments!

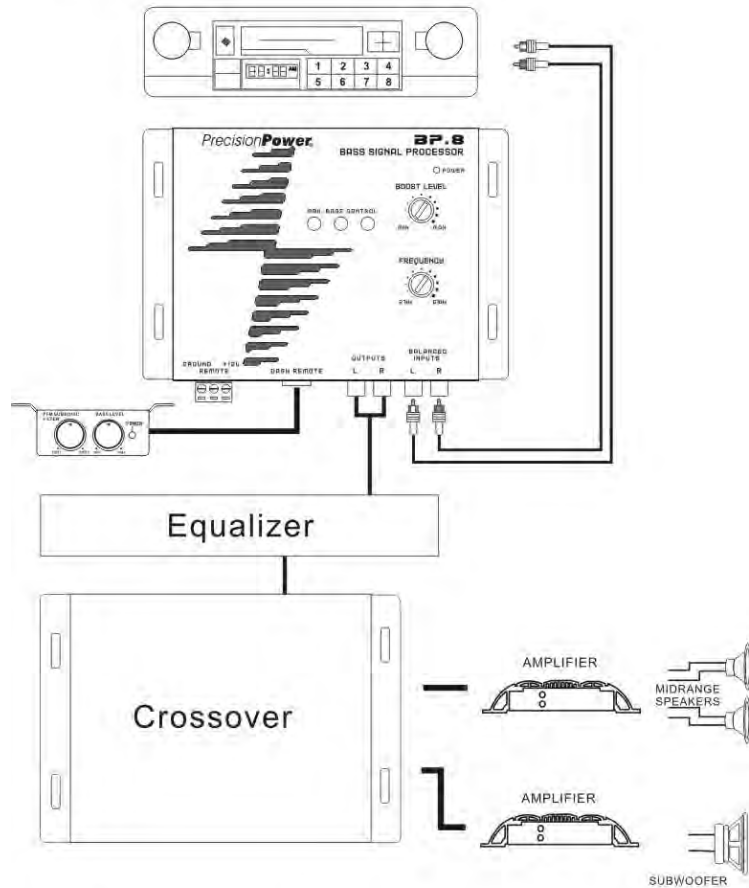
**10) Boost Limitation:** This jumper allows you to limit the amount of boost available for the Bass EQ. Huge systems may benefit from the 10V setting while modest systems may benefit from the 2.5V setting. If the subwoofer(s) seem to be under excessive stress, move to the jumper to the next level down.

## Power & Signal Connections

- +12V: Connect directly to the battery or other stable power source.
- Remote: Connect to the switched + output wire of the source unit.
- Ground: Connect to a chassis ground free of paint, debris, and grease.



## Signal Connection



**NOTE:** For signal connection, the output RCA connectors should be connected to the next component after the **BP.8**, such as a crossover, equalizer, or amplifier. Just remember, the **BP.8** should go inline before a crossover.

## Setting the Bass EQ Controls

Proper setting of the Bass EQ is not difficult, but it will take some experimenting. For example, if a vehicle is running a single subwoofer in a sealed enclosure, the sound may not drop as low as desired. The Bass EQ Frequency can be set to 30Hz with  $\frac{1}{4}$  to  $\frac{1}{2}$  gain on the Boost Level. This makes the system sound more tonally balanced with a tactile gain as well. For an SPL competitor that only uses his/her system with a single test tone, you can use a multi-meter to measure the AC voltage coming out of the BP.8 RCA connections and sweep the Frequency until you see a peak on the meter. Now that the Frequency is perfectly set, the Boost Level can be set appropriately.

## Specifications

Maximum Input Level .....	15 V rms
Maximum Output Level .....	13.5V peak
Frequency Response .....	10Hz - 100KHz ; +/-1dB
Total Harmonic Distortion .....	0.003%
Signal to Noise Ratio .....	130dB
Balanced Input Noise Rejection .....	>60dB
Input Impedance .....	10 Kohm
Output Impedance .....	150 Ohms
Power Supply .....	High headroom PWM
Power draw .....	150mA
Recommend fuse rating .....	1 Amp