

## FEATURE AND FUNCTIONS

- 1 **INPUT** - ¼" jack for instruments like guitars and bass.
- 2 **DRAG** - recessed control adjusts the amount of load on the pickups. Full clockwise is max input impedance (approximately 1MegaOhm) and produces a bright tone. Turning counter-clockwise will increase the load on the pickups and darken the tone.
- 3 **GAIN** - recessed control adjusts the level of the footswitchable power boost. Full counter-clockwise is unity-gain (no boost). Full clockwise is max boost (+15dB). The PB1

is designed to amplify the input signal without adding distortion or changing the tone.

- 4 **9VDC** - connection jack for standard 9 volt power adaptors (center tip negative).
- 5 **OUTPUT** - ¼", low impedance output for driving high capacitance loads like long cables and lots of pedals without high frequency loss.
- 6 **LED** - super-bright LED status indicator lights when power boost is active.
- 7 **FOOTSWITCH** - heavy-duty switch toggles the power boost on and off.



### BIGSHOT PB1 SPECIFICATIONS

Connections: ..... ¼" instrument in and out  
Input impedance: ..... variable Drag control (10K ~ 1meg)  
Gain: ..... unity to +15dB  
Power requirement ..... 9 Volt DC, center negative  
Current draw: ..... 40mA max with LED on  
Size: ..... 3" x 3" x 2"

### LIMITED THREE YEAR TRANSFERABLE WARRANTY

Radial Engineering warrants this product to be free from defects in material and workmanship and will remedy any such defects free of charge according to the terms of this warranty. Radial Engineering will repair or replace at its option any defective component(s) of this product, excluding the finish, the footswitch (footswitch is warranted for 90 days) and wear and tear from normal use, for a period of three (3) years from the original date of purchase. In the event that a particular product is no longer available, Radial Engineering reserves the right to replace the product with a similar product of equal or greater value. To make a request or claim under this limited warranty, the product must be returned prepaid in the original shipping container (or equivalent) to Radial Engineering or to an authorized repair centre and you must assume the risk of loss or damage. A copy of the original invoice showing date of purchase and the dealer name must accompany any request for work to be performed under this limited warranty. This limited warranty shall not apply if the product has been damaged due to abuse, misuse, misapplication, accident or as a result of service or modification by any other than an authorized repair centre.

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## BigShot PB1 Owner's Manual



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## CONGRATULATIONS

on your purchase of the Radial Bigshot PB1. Radial products are easy to use and this short manual contains all the information you need to start using your Bigshot PB1 right away. For more information on the PB1, and other Radial products, visit our website, [www.radialeng.com](http://www.radialeng.com).

## OVERVIEW

The Bigshot PB1 is a great-sounding combination Class-A active buffer and power booster. The PB1 makes it easy for players to add the benefits of signal buffering to their pedal chain.

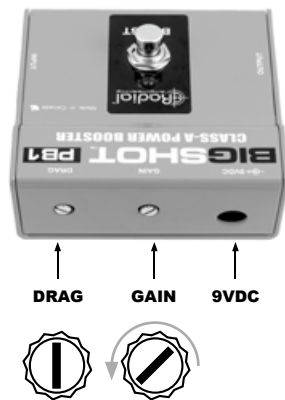
Signal buffering can reduce noise and restore the high frequencies that are lost when driving lots of effect pedals and long cables. The footswitchable power booster is designed to amplify your guitar signal up to +15dB without altering the tone of the signal. The power booster section is great for ramping up the level for solos or to push a tube amp into overdrive.

The PB1 is equipped with Radial's Drag™ control load correction. Drag allows you to dial in just the right amount of loading for your pickups to create the same impedance relationship as when plugging directly into your amplifier.

Constructed for professional stage use, the PB1 uses a tough 14-gauge steel enclosure and heavy-duty footswitch. The "set-n-forget" Gain and Drag controls are recessed on the back panel to prevent accidental movement. The PB1 is powered by a standard 9 volt adaptor (not included).

## CONNECTING THE BIGSHOT PB1

Before connecting the Bigshot PB1, make sure the amplifier is turned off and all volume levels are set to zero. This will avoid any loud pops that could cause speaker damage. For the first use, set the DRAG control at 12 o'clock and the GAIN control at full counter clock-wise.



Connect the guitar to the PB1 input. Connect the output of the PB1 to the next device in the signal chain like an effect pedal or amplifier. Like many effect pedals, the PB1 may be powered by a standard 9V adaptor with a negative center conductor. The PB1 will be active the moment a 9VDC power supply is connected. There is no power switch and leaving the PB1 on for long periods of time will not cause damage.



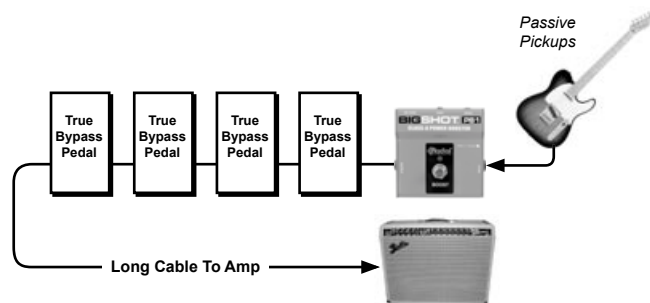
Confirm the power booster is bypassed (LED is off) before continuing. Turn on your amp and slowly turn up the volume. If all is working the next step is to set the DRAG control. With DRAG at the 12 o'clock position turning it clockwise will brighten the tone while counter-clockwise will darken it. Strum a chord and slowly turn the DRAG control until the tone matches that of a direct connection to your amp.

All that's left is to set the power boost gain. Step on the BOOST footswitch and confirm the LED is on. Slowly turn the GAIN control clockwise until the desired amount of signal boost is achieved. The PB1 is now ready to use.

## SIGNAL CHAIN PLACEMENT

The PB1 can be placed at different points in the signal chain depending on the type of pickups and effect pedals it will be used with. Places where the PB1 could be used include; before long cable runs; before a chain of effect pedals; and before the signal is split to feed more than one input or amplifier.

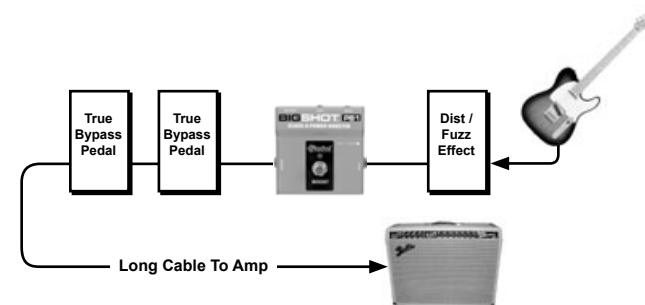
As you add more effect pedals and patch cables to your signal chain you may start to notice your guitar sound becoming dull. It may sound much more dull than it does when your guitar is plugged straight into your amp. This high frequency loss is caused by high capacitance and resistance from the extra



cables and jacks in your complex signal chain. Placing the PB1 directly after the guitar and before other pedals can restore the clarity and impact lost to capacitance.

Certain effects like delay, flange and chorus can cause a drop in volume when engaged. This happens when the pedal has a lower impedance when engaged than when bypassed. A buffer before the offending pedal can solve this problem and keep your level constant as well.

Some vintage wah-wah and fuzz pedals require the guitar to be connected directly without a buffer in between. This usually only applies to some vintage pedals. If not sure if your pedals are compatible with the PB1, try connecting them in a chain with the PB1 as the first pedal. If a pedal following the PB1 creates excess noise or hiss it should be moved ahead of the PB1 in the chain.



The PB1 should be placed ahead of any passive splits in the guitar signal such as "Y" cables or passive ABY amp switchers. Buffering the signal allows it to be split and sent to two or more devices, like a tuner and a couple of amps, without loading down the pickups. For example, the Radial BigShot ABY is a passive amp switcher that can split the signal three ways to feed two amps and a tuner as shown below.

