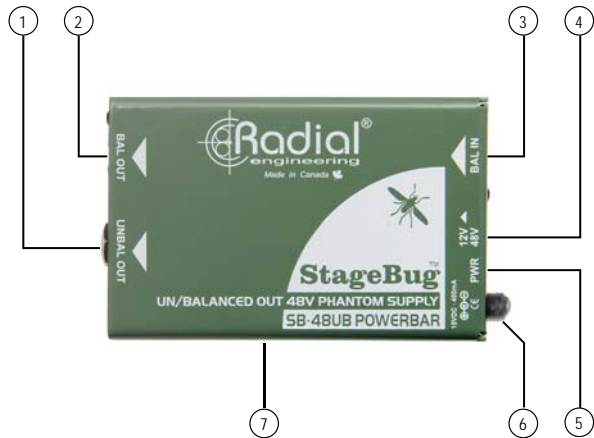


FEATURES

1. 1/4" OUT – Unbalanced 'guitar level' output used to feed a stage amp or guitar effects pedals using standard coaxial cable.
2. XLR-M OUTPUT: Used to connect the mic signal to the mixing console or preamp. Equipped with a capacitor to block other sources of phantom power to prevent damage to your mic or direct box.
3. XLR-F INPUT: Used to connect your microphone to the StageBug SB-48UB. Phantom power is generated inside the SB-48UB and injected into the mic capsule via the XLR-F connectors and mic cable.
4. +12/48V SWITCH: Used to change the phantom supply from the standard +48 volts to +12 volts for speciality microphones.
5. POWER INPUT AND LED: The power jack accepts the included 15VDC/400mA power adapter. The LED illuminates when the power supply is connected and the SB-48UB is active.
6. CABLE CLAMP: Used to lock down the power supply cable and prevent accidental disconnection.
7. FULL-BOTTOM NO-SLIP PAD: This provides electrical isolation and plenty of 'stay-put' friction to keep the SB-48UB in one place.



STAGEBUG SB-48UB SPECIFICATIONS

Circuit type:	Non-radiating phantom power supply
Number of channels:	Single channel for one microphone
XLR connector:	Lo-Z balanced microphone level output; AES standard pin-1=ground, pin-2=hot (+), pin-3=cold (-)
1/4" connector:	Hi-Z unbalanced instrument level output; tip=hot, sleeve=ground.
Phantom output:	Switchable +48 / +12 volts DC
Power supply:	15VDC / 400mA external supply included

To meet the requirements of California Proposition 65, it is our responsibility to inform you of the following:
WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.
 Please take proper care when handling and consult local government regulations before discarding.

RADIAL ENGINEERING 3 YEAR TRANSFERABLE LIMITED WARRANTY

RADIAL ENGINEERING LTD. ("Radial") 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 will repair or replace (at its option) any defective component(s) of this product (excluding finish and wear and tear on components under 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 reserves the right to replace the product with a similar product of equal or greater value. In the unlikely event that a defect is uncovered, please call 604-942-1001 or email service@radialeng.com to obtain an RA number (Return Authorization number) before the 3 year warranty period expires. The product must be returned prepaid in the original shipping container (or equivalent) to Radial or to an authorized Radial repair center 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 and transferable warranty. This 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 Radial repair center.

THERE ARE NO EXPRESSED WARRANTIES OTHER THAN THOSE ON THE FACE HEREOF AND DESCRIBED ABOVE. NO WARRANTIES WHETHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL EXTEND BEYOND THE RESPECTIVE WARRANTY PERIOD DESCRIBED ABOVE OF THREE YEARS. RADIAL SHALL NOT BE RESPONSIBLE OR LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOSS ARISING FROM THE USE OF THIS PRODUCT. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH MAY VARY DEPENDING ON WHERE YOU LIVE AND WHERE THE PRODUCT WAS PURCHASED.

StageBug™

SB-48UB POWERBAR

UNBALANCED/BALANCED
48V PHANTOM SUPPLY



USER GUIDE

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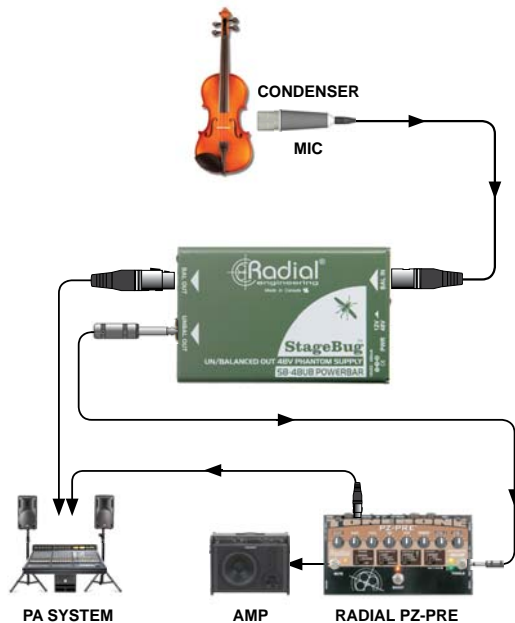
www.radialeng.com

INTRODUCTION

Thank you and congratulations on your purchase of the Radial StageBug SB-48UB hi-Z to lo-Z signal converter and phantom power supply. The StageBug SB-48UB is a unique device that makes it easy to interface phantom powered microphones and direct boxes with guitar-centric boxes of all types.

As most users will likely be familiar with the use of phantom power, this manual has been kept short and to the point. We do however suggest that you take a moment to give it a quick read so that you familiarize yourself with the features that are built into the SB-48UB. For more detailed information, please visit the FAQ section on the Radial website. This is where we post questions and answers that come from users after the product is released. If you do not find an answer, we invite you to send us an email at info@radialeng.com and we will do our best to answer your query in short order.

The SB-48UB features a balanced microphone input with 48V phantom to power a condenser microphone. What makes it unique is that it is equipped with both balanced XLR and unbalanced 1/4" outputs. The unbalanced 1/4" output enables the artist to connect a condenser microphone directly to devices that do not supply phantom power such as the Radial PZ-Pre instrument preamp, a guitar effects pedal, or a stage amplifier. Since both outputs may be used concurrently, you can also send the dry mic signal directly to the PA system using the XLR output.



GETTING SET

Before connecting the StageBug SB-48UB make sure the sound system and/or stage amplifier is turned off and all levels are set to zero. This will avoid loud transients caused by the phantom voltage that could damage equipment downstream such as loudspeakers and tweeters. Do not turn up the volume until all connections are made and the power supply is plugged in.

There is no power switch. As soon as you plug in the power supply, the SB-48UB will spring to life and the front panel LED will illuminate. As an added safety feature, the SB-48UB is equipped with a locking cable clamp that lets you secure the power supply cable so that it will not accidentally be dislodged. After use, remember to turn down the volume levels on the PA and/or stage amp before you disconnect cables or the power supply.



USING THE 12/48V SWITCH

You can change the phantom power voltage from 48 volts to 12 volts using the set & forget recessed 12/48V switch on the side of the SB-48UB. Use a small screwdriver to access the switch.

When the switch is in the outward position, the SB-48UB will supply 48 volts of phantom power. This is the normal setting for the majority of condenser microphones. There are however, some miniature clip-on mics that are designed for use with 12 volt supplies. Pushing the 12/48V switch inward will supply the mic with 12 volts of phantom power. Check the microphone manufacturer's specification to ensure this switch is set accordingly.



MAKING CONNECTIONS

Connect the source microphone to the SB-48UB's balanced XLR input.

There are two audio outputs to choose from. The unbalanced 1/4" output is designed for guitar type devices such as effects pedals or stage amplifiers. It employs a step-up transformer to optimize the impedance and signal level.



Using the unbalanced 1/4" output with an instrument amplifier.

The balanced XLR male output follows the AES standard with pin-1 ground, pin-2 (+), pin-3 (-). This would be used when the PA or recording system cannot deliver its own phantom power to your condenser microphone.



Using the balanced XLR output to feed the PA system.

Once all of the connections are made and the power is on, slowly turn up the volume to test and make sure everything is working. It is good practice to always test at low volumes as this can further avoid loud transients from harming your audio system should a connection be faulty.