StageBug™ SB-6 Stereo Line Isolator

USER GUIDE

Thank you for purchasing your very own StageBug SB-6 signal line isolator! Although the SB-6 is easy to use, please take a minute to read this short manual. It will give you insight on how to get the most out of your Radial product. If you have any questions, feel free to drop us a note at info@radialeng.com and we will do our best to reply in short order.

The SB-6 is a passive audio isolator designed to be inserted into the signal chain to block hum and buzz caused by ground loops. The SB-6 accepts both unbalanced or balanced signals and is equally suitable for electric guitar, stereo keyboard, consumer electronics and professional line-level devices. The two channels operate independently for dual mono or stereo and since the circuit is passive, no power is required. Whether you are connecting an unbalanced or balanced signal, the SB-6 will automatically convert the signal depending on the type of cable and connector you are using. You simply plug in and start enjoying!

MAKING CONNECTIONS

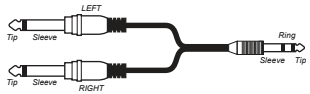
As with any audio system, it is good practice to turn volume levels down or audio systems off to prevent plug-in transients from damaging more sensitive components such as loudspeakers and headphones. Begin by setting all four SB-6 switches to their outward positions.

Depending on the type of cable you use, the SB6 will automatically enter into either a balanced or unbalanced mode.

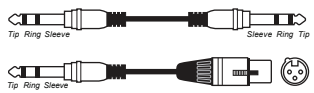
- When interfacing musical instruments such as guitars, keyboards and other unbalanced signals, connect to-and-from the SB-6 using standard ¼" TS (tip/sleeve) cables.

- When connecting consumer audio devices such as CD or DVD players, connect to-and-from the SB-6 using an RCA to ¼" adaptor cable.

- If using the headphone output from a laptop, smart phone or tablet, connect to-and-from the SB-6 using an a stereo 'Y' cable with 3.5 mini TRS jack at one end and left/right ¼" jacks at the other.



- Balanced signals usually come in the form of XLR or ¼" TRS connectors. If you wish to retain the balanced format, the SB-6 requires ¼" TRS input and output connectors.



USING THE -15dB PAD SWITCH

A pad is essentially a resistive circuit that reduces the sensitivity at the input to enable more powerful signals to be used without causing the transformers to saturate and add distortion. If you hear distortion, try depressing the PAD switch. This will reduce the sensitivity by -15 dB.

USING THE GROUND LIFT

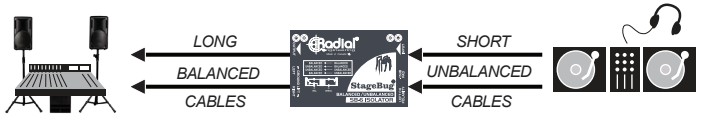
The SB-6 is equipped with a ground lift switch that disconnects the audio signal ground between the input and output for full isolation. If you encounter noise, try pushing the left/right ground lift switches to the inward position.

USING THE LEFT PHASE REVERSE

The SB-6 is equipped with a 180° polarity reverse switch that inverts the phase of the LEFT channel when depressed. You can use it to phase align a stereo signal or prevent phase cancellation when driving two guitar amps.

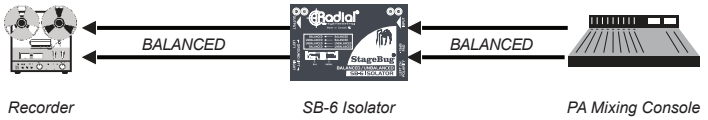
CONNECTING THE UNBALANCED OUTPUT FROM A DJ MIXER TO A CONSOLE

Unbalanced DJ mixers can often introduce hum and buzz when connected to a balanced PA system due to ground loops and long cables. To eliminate the noise connect the output of the DJ mixer to the SB-6 with unbalanced cables. To run long cables to the PA system connect the output of the SB-6 to the PA system with balanced cables up to 100 meters (300').



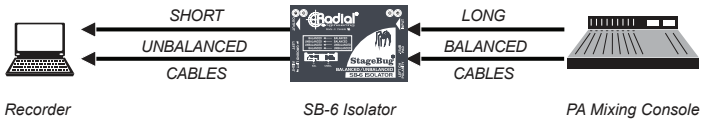
USING THE SB-6 TO ISOLATE BALANCED LINES

Often when interfacing equipment that is distanced far apart, such as a mixer and digital audio recorder, the devices will derive their AC power from different legs on the AC distribution box. This can often lead to ground loops and excessive system noise. Use the SB-6 to isolate the two devices by inserting it in between with balanced cables. The SB-6 introduces a magnetic bridge that blocks stray DC current (noise) and isolates the ground loop.



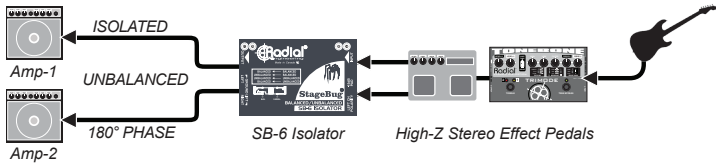
SENDING A BALANCED LINE OUTPUT TO A LAPTOP

A common challenge is interfacing a professional balanced audio device with an unbalanced device like a laptop or hand-held recorder. These kind of consumer devices are easily overloaded and running long unbalanced cables to them can introduce noise. To convert the signal use balanced cables to connect the output of the mixer to the SB-6 and unbalanced cables to connect the input of the digital recorder. To deliver a safe signal level to your unbalanced device depress the -15dB PAD switch. The PAD reduces the input sensitivity and prevents overload.



USING THE SB-6 TO ISOLATE HI-Z GUITAR SIGNALS

Connecting two guitar amps to a stereo effect pedal often causes severe hum and buzz caused by ground loops. To eliminate the noise insert the SB-6 after the stereo effect pedal with standard ¼" guitar cables. The SB-6 will isolate the ground loop and eliminate the problem.



To view the 3-year transferable warranty details and product specifications please visit ***www.radialeng.com***