

## HOT SHOT ABi FEATURES AND FUNCTIONS

- 1 **PAD (INPUT-A)** inserts a -37dB PAD to lower the level of INPUT-A.
- 2 **PAD (INPUT-B)** inserts a -37dB PAD to lower the level of INPUT-B.
- 3 **TRIM (INPUT-B)** selects a -3dB reduction in level. Used to match the level of INPUT-A.
- 4 **LIFT** disconnects the ground on pin-1 of INPUT-B XLR. Used to reduce buzz and hum caused by ground loops.
- 5 **TOGGLE** heavy-duty latching footswitch selects between INPUT-A and INPUT-B.
- 6 **OUTPUT XLR** sends a balanced signal to microphone snakes and mixing consoles. Rugged glass-filled nylon connector is 100% isolated from the chassis.
- 7 **INPUT-B XLR** receives balanced signals from a microphone or other audio source. Rugged glass-filled nylon connector is 100% isolated from the chassis.
- 8 **INPUT-A XLR** receives balanced signals from a microphone or other audio source. Rugged glass-filled nylon connector is 100% isolated from the chassis.



## IMPORTANT NOTICE!



The Radial Hot Shot ABo & ABi are not intended for use with condenser microphones or active direct boxes that use phantom power. Phantom power puts voltage across the pins of the XLR jack that will create a loud transient when the Hot Shot is switched. Depending on your sound system the transient could be of significant level to damage loudspeakers. Before you start, it is important you know if phantom power is present and how to test your Hot Shot after connecting. Information in this manual will guide you how to safely use the Hot Shot ABo and ABi switchers.

You are responsible to ensure safe and proper use. Using the ABo & ABi confirms you have taken full responsibility. If you are not 100% sure of your actions, please consult a qualified technician for advice.

## RADIAL LIMITED THREE YEAR TRANSFERABLE WARRANTY

Radial Engineering Ltd. warrants this product to be free from defects in material and workmanship to the original owner 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.

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 ENGINEERING LTD. 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.



True to the Music

## Hot Shot ABi and ABo Owner's Manual



**CAUTION: PLEASE READ THE IMPORTANT NOTICE ON THE BACK COVER**

Radial Engineering Ltd.  
1845 Kingsway Ave, Port Coquitlam, BC V3C 0H3, Canada  
Tel: 604-942-1001 • Fax: 604-942-1010  
email: [info@radialeng.com](mailto:info@radialeng.com)

Radial HotShot ABi and ABo users guide V1.2 - Part #: R870 1170 00 / 02-2024  
Subject to change without notice

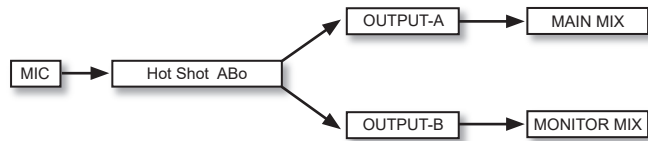
www.radialeng.com

**CONGRATULATIONS** on your purchase of the Radial Hot Shot. The Hot Shot ABo and ABi are passive devices that allows a you to select between two balanced audio sources or route a signal to different destinations with a footswitch. The Hot Shot ABo allows a signal to switch between two outputs. The Hot Shot ABi allows you to select between two inputs.

Designed for professional balanced audio equipment like dynamic microphones, passive direct boxes and line level signals. The Hot Shot ABo & ABi are completely passive, do not require any power and will not color the tone or add noise. Both the ABo and ABi incorporate features that help match levels and reduce the potential for ground loop noise.

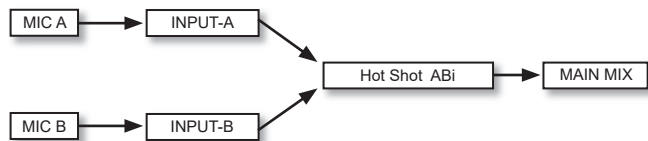
### HOT SHOT ABo

The Hot Shot ABo is a simple balanced AB switcher with one XLR input and two XLR outputs. The footswitch is used to toggle the signal between the two outputs. A microphone signal, for example, could be toggled between two different channels on a mixer with one 'normal' channel and another with effects like reverb or chorus. Alternatively, a microphone signal could be toggled between two separate PA systems such as a 'Font of House' PA for audience announcements and a 'Backstage' PA to cue performers.



### HOT SHOT ABi

The Hot Shot ABi is a simple balanced AB switcher with two XLR inputs and one XLR output. The footswitch is used to select which input is active. An application could be choosing between two mics. For example, a vocalist who plays keyboards and guitar could toggled between a mic over a piano and another setup center stage. This would save a mixer channel and eliminate having to adjust a stand during a performance.



### CONNECTING THE RADIAL HOT SHOT ABo AND ABi

Before making any connections, please confirm the sound system is powered off and the volume controls are turned down. Use standard microphone cables to connect the Hot Shot's balanced XLR jacks. Unbalanced signals may also be connected by using adaptors.

**!** **Make sure the 48V phantom power is turned off on the channels that you are connecting the ABo & ABi to.** Phantom power could cause loud transients in your sound system when the ABo & ABi are switched. Testing at a low volume level first will ensure you do not cause damage to loudspeakers. If you do hear pops or clicks while testing, check to make sure phantom power is turned off before increasing the level.

### USING THE HOT SHOT ABo & ABi FEATURES

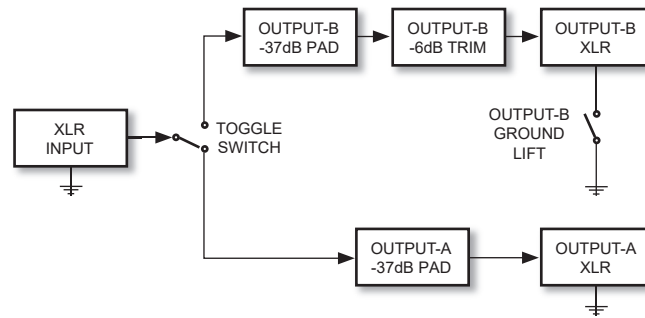
**LIFT** - The LIFT switch disconnects pin-1 at the XLR connectors and is used when ground loop noise is a problem. If you hear buzz or hum try engaging the LIFT switch.

**PAD** - The PAD switch inserts a -37dB signal reduction and is used to lower the level of line level signals to mic level, for connection to mic inputs on mixing boards. The ABo uses PADs on its outputs while the ABi places PADs on the inputs.

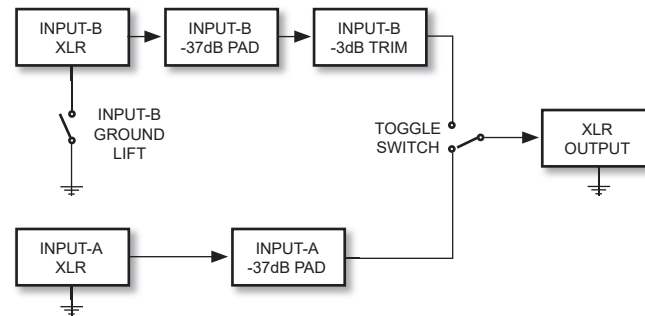
**TRIM** - The TRIM switch inserts a -6dB signal reduction on the B channel and is used to match levels between the A and B inputs/outputs.

**TOGGLE SWITCH** - The footswitch selector on both models are latching type, which means that the unit will toggle each time the footswitch is depressed.

### HOT SHOT ABo BLOCK DIAGRAM



### HOT SHOT ABi BLOCK DIAGRAM



### USING THE ABo & ABi AS A COUGH MUTE

The ABo can be used as a cough-mute by simply not connecting OUTPUT-B. The ABi can also be used as a cough-mute by not connecting INPUT-B. The microphone can now be muted whenever the footswitch is depressed. A simple solution for headset and lavalier mic users!

### HOT SHOT ABo FEATURES AND FUNCTIONS

- ① **PAD (OUTPUT-A)** inserts a -37dB PAD to lower the level of OUTPUT-A.
- ② **PAD (OUTPUT-B)** inserts a -37dB PAD to lower the level of OUTPUT-B.
- ③ **TRIM (OUTPUT-B)** selects a -6dB reduction in level. Used to match the level of OUTPUT-A.
- ④ **LIFT** disconnects the ground on pin-1 of OUTPUT-B XLR. Used to reduce buzz and hum caused by ground loops.
- ⑤ **TOGGLE** heavy-duty latching footswitch selects between OUTPUT-A and OUTPUT-B.
- ⑥ **INPUT XLR** receives a balanced signal from a microphone or other audio source. Rugged glass-filled nylon connector is 100% isolated from the chassis.
- ⑦ **OUTPUT-A XLR** sends a balanced signal to microphone snakes and mixing consoles. Rugged glass-filled nylon connector is 100% isolated from the chassis.
- ⑧ **OUTPUT-B XLR** sends a balanced signal to microphone snakes and mixing consoles. Rugged glass-filled nylon connector is 100% isolated from the chassis.

