

GroundBreaker

Audio Isolation Unit User Guide



The bhi **GroundBreaker** unit isolates the grounds on your ancillary equipment from those of the radio system, removing ground loops and associated RFI problems from getting into your audio.

Note: Ensure that you have the correct bhi **GroundBreaker** unit to suit your connections and impedance.

Installation

The bhi GroundBreaker is easy to use and simply connects between your radio and the audio input side of your bhi audio DSP/ancillary equipment using 3.5mm connections. The unit works both ways round.

The **GroundBreaker** can also be used to isolate headphones when plugged into the headphone socket on the radio.

Balanced to Unbalanced audio systems

Most audio amplifiers used in radios are Class A or AB. They normally have a single ended (unbalanced) output that works against ground, however, some manufacturers have started using balanced audio amplifiers and Class D (switch mode) amplifiers. These present a different problem as most audio ancillary products on the market (unless they are for professional audio) use unbalanced inputs. The **GroundBreaker** can be used to isolate the balanced audio output of the set and allow the ancillary unbalanced input to be unaffected.

Maximum Power Handling

The **GroundBreaker** does have limits to its power handling. The 600 Ohm and 10k Ohm devices are capable of handling the normal audio levels that can be found in most audio systems. The 8 Ohm device is only meant to be used at powers up to 0.5 Watts to allow interfacing to most bhi audio DSP products and is not meant for the transfer of power into un-powered speaker units. So the **GroundBreaker** should only be connected between the extension speaker output of the radio or audio equipment and the input of the bhi DSP unit.

Product Code	Type	Maximum power
GB8M	3.5mm 8 Ohm Mono	500mW
GB600M	3.5mm 600 Ohm Mono	100mW
GB10KM	3.5mm 10 k Ohm Mono	100mW
GB8S	3.5mm 8 Ohm Stereo	500mW/Channel
GB600S	3.5mm 600 Ohm Stereo	100mW/Channel
GB10KS	3.5mm 10 k Ohm Stereo	100mW/Channel

Select the relevant **GroundBreaker** unit above to suit your connection type and impedance.

WEEE Statement



Weee Statement for correct disposal of this product: (Applicable in the European Union and other European countries with separate collection systems). This marking shown on the product or its literature, indicates that it should not be disposed of with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.