

The GigRig Humdinger Instruction Manual

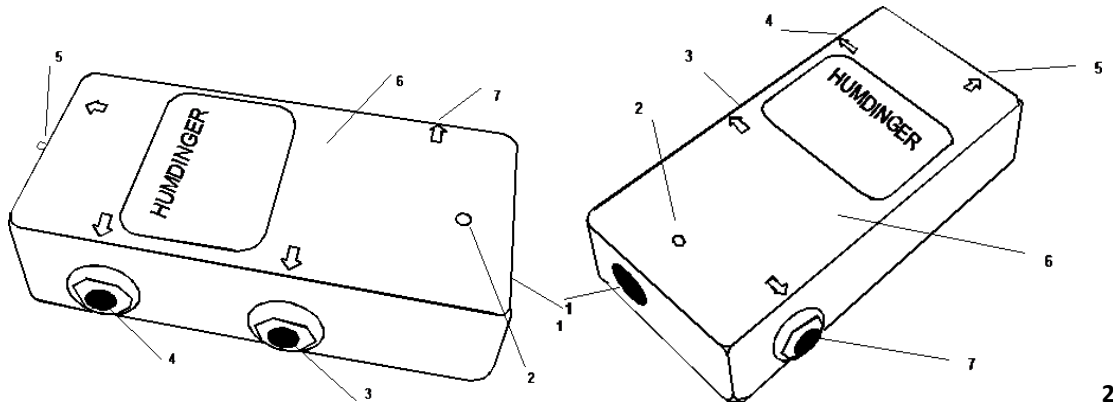


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1. Introduction

The GigRig Humdinger is the ultimate driver and isolator aiding in pure hum free tone and Safety. Your Humdinger provides:

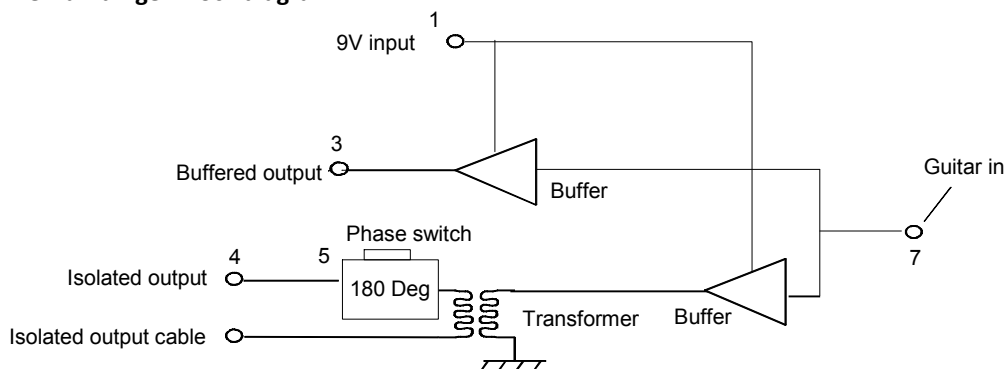
- One isolated Output to drive a second amplifier or other equipment.
- One Buffered output to drive the primary amplifier and compensate for long leads.
- One Phase correction switch to give brilliant tone when using two amplifiers.



. The GigRig Humdinger Diagram:

- | | |
|--------------------|--|
| 1. 9V input | (Standard 9V centre negative 100mA) |
| 2. On indicator | (LED showing power is connected) |
| 3. Buffered out | (Buffers signal to compensate for long cables) |
| 4. Isolated output | (Transformer isolated to kill hum) |
| 5. Phase switch | (Reverses phase of isolated output 180°) |
| 6. Strong case | (Dye cast alloy) |
| 7. Guitar input | (Standard ¼ inch Jack Socket) |

3. The Humdinger Block diagram.



4. Buffered output

This is an 'in' phase class 'A' buffered output, ideal for driving long leads etc. This buffering will improve your tone and sustain as it will drive the capacitance of long leads or the poor input impedance of some effects pedals.

5. Isolated output... Output 2

If you have a single guitar into one effects pedal into one amp, you won't get hum. Your effects power supply is also isolated from the mains so this won't create a path to earth. Therefore, your precious guitar signal has just one path to ground; through the screen of your lead, into your amp and through to the mains ground.

The hum problem occurs when you have more than one path to ground for your signal. Using two amplifiers has always been an issue because they both must be connected to mains ground for safety; however, you only want one signal ground for your audio or you get hum!

The GigRig HumDinger has a special output for your second amplifier or any other earthed equipment that you need to feed with your signal. (Front of house etc). This output also protects you from electrical shock from faulty stage electrical connections or faults. 1000V protection.

Only use the isolated output when you have already used the Buffered output, or when you have some other single earth to your pedals. The Buffered output will provide your one and only signal ground.

6. Phase Switch

With the same sound going to two amplifiers of different types, the amplifier speaker cones could be both moving forward at the same time (in phase). On the other hand, one may be moving forward whilst the other is moving backwards (out of phase). If your amplifiers are out of phase, the sound waves can cancel at some positions in the room giving a reduced and strange tone.

To Change the Phase to correct this problem: Just flick the phase switch.

When the switch is UP everything is in Phase with your input. When the switch is down the buffered out remains in phase with the input; however, the isolated output is in reverse phase.

7. Important Safety information

TheGigRig HumDinger is a low voltage device and so it is completely electrically safe; however, this is not true for some of the old guitar amplifiers.

[The GigRig HumDinger is NOT for use with two pin mains plug amplifiers.](#)

All Your amplifiers must have an earth connection. Some vintage amplifiers were fitted with a 'ground lift switch' to reduce earth loops and reduce hum. This switch is now commonly known as the Death switch. If your amplifier has such a switch, immediate service is advised.

If the HumDinger accidentally gets wet, it should be left in a warm dry place with the back cover removed for 24 hours before it is used or stored.

8. The HumDinger Technical Specification:

AC output impedance of the Buffered output = 500 Ohm with a flat bandwidth 75Hz to 100kHz
(Compensates automatically for cable capacitance.)

Isolated out AC impedance =10K Ohms, with a bandwidth of 75Hz to 30KHz.

External power supply: Minimum 200mA regulated at 9V. Continuous Current consumption is approximately 100mA.
(The GigRig Generator is a suitable supply for this and all your effects.)

Disposal: Do not dispose of electronic equipment in household waste.

Dimensions: 110mm X 57mm X 32mm. (including external components)

Legal Information:

This product is protected under patents for TheGigRig

Protected by copyright, moral rights, patent and design registration.

Patent Pen 0321552.2 USA Patent Pending US10/937,997

Design Registration # 3014412 'GigRig' is a stylised trademark. No 2343300

No responsibility will be taken for errors or omissions in the above specification.

This product conforms to the Rohs standard . This product conforms to the safety standard EN 60950 (low voltage devices.)

Please return to The GigRig LTD for disposal.

Warranty:

TheGigRig HumDinger is covered by a standard warranty of one year from the purchase date; however, the GigRig Ltd will abide by the warranty period for electrical and electronic equipment stated within your country.



www.thegigrig.com