# MIA-1.0
# Musical Instrument Adaptor.

## The Ultimate Direct Box.

**ISSUE 1 JULY 2001.**

### Buzz Audio MIA-1.0 Musical Instrument Adaptor. Specifications.

**Measured connected to a Buzz Audio MA-2.2 True Class A Microphone Amplifier with +20dB gain.**

**Gain.**
**HI-Z in +6dB, LO-Z in 0dB, AMP in -35dB.**

**Maximum Recommended Output Level.**
**0dBu (0.3% THD).**

**Frequency Response.**
**6Hz to 250kHz, +0/-3dB.**

**Harmonic Distortion.**
**Typically less than 0.07% -100Hz to 10kHz @ -20dBu input level.**

**Signal to Noise Ratio.**
**-83dBu, 10k source Z, A wtg.**

**Input Impedance.**
**HI-Z in 1Meg ohms, LO-Z in 20k ohms, AMP in 27k ohms.**

**Output Impedance.**
**BUFFER out = 2k ohms, BAL out = 150 ohms.**

**Controls and Indicators.**
**+48V Phantom Power LED and Ground OFF-ON switch.**

**Connectors.**
**Inputs - TRS ¼" jacks, Tip hot, Ring grounded (except AMP in).**
**Unbalanced Outputs – TRS ¼" jacks, Tip hot, Ring grounded.**
**BAL out - XLR3F pin 2 hot.**

**Size (mm) = 145W x 44H x 126D not including feet of 10mm height.**
**Weight = 0.8kg**

**Power requirements.**
**+48V phantom @ 8mA current consumption.**

**Warranty.**
**Buzz Audio guarantees this MIA-1.0 Musical Instrument Adaptor to be free of defective materials and/or workmanship for a period of 2 years from the date of sale, and will replace defective parts and repair malfunctioning products under this warranty when the defect occurs under normal installation and use – provided the unit is returned to our factory (or duly authorised service centre) via prepaid transportation with a copy of the proof of purchase, ie, sales receipt. This warranty provides that examination of the returned product must indicate, in our judgement, a manufacturing defect. This warranty does not extend to any product which has been subjected to misuse, neglect, accident, improper installation, or where the date code has been removed or defaced.**

**Disclaimer.**
**Buzz Audio is not liable for any damage to instruments, amplifiers, consoles, speakers or any other equipment and/or electric shock to humans that is caused by negligence or improper installation and/or use of the MIA-1.0 Musical Instrument Adaptor.**

**Designed and manufactured in New Zealand by Buzz Audio.**
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# Instructions for Use.

## Thank you for choosing the Buzz Audio MIA-1.0 Musical Instrument Adaptor.

### Please read the following instructions before use to ensure you are familiar with all the features of the MIA-1.0.

**The MIA-1.0 is used to convert unbalanced instrument inputs into balanced mic level signals and is designed to operate with a companion microphone preamplifier such as the Buzz Audio MA-2.2.**

### 1. POWER.

**The MIA-1.0 requires +48V phantom power from the connected microphone preamplifier to operate. Current consumption is 8mA. Most modern preamplifiers can supply this amount of current, however some may not, causing the MIA-1.0 to distort at lower than normal output levels. The yellow LED should light when phantom power is present.**

### 2. INPUTS.

**3 input sockets are provided. The inputs are automatically selected. The Hi-Z in takes priority over the Lo-Z in which takes priority over the Amp in.**

**AMP IN – this input should be used to connect loudspeaker level signals, eg, the output of a bass or guitar amplifier. The signal is attenuated 35dB and is available at this attenuated level on the Hi-Z Out and Buffer Out (see section 3).**

**!! CAUTION !! – when inserting a jack plug into a jack socket, the jack Tip will touch the socket Ground on it's way in. This is potentially a short circuit situation. Ensure the source amplifier is either turned down or off before connecting to prevent damage to the output stage.**

**LO-Z IN – this input should be used to connect the output of a keyboard or sampler or other devices such as CD players, DJ mixers etc. The signal is attenuated 6dB and is also available at this lower level on the Hi-Z Out and Buffer Out.**

**HI-Z IN – this input should be used for the connection of high impedance sources such as bass or guitar pickups, acoustic pickups etc. The signal is available on the Hi-Z Out and Buffer Out at the original level. The Bal Out is amplified 6dB.**

### 3. OUTPUTS.

**3 outputs are provided on the MIA-1.0.**

**HI-Z OUT – this is a hardwire "loop" of the Hi-Z input and is used to loop onto an instrument amplifier if required. Signals from the Lo-Z in and Amp in are also available on this jack socket at –6dB and –35dB respectively and is therefore useful for "re-amping". Note that any heavy loading on this output may affect the performance of the input device or pickup in which case it is better to use the...**

**BUFFER OUT – carries the same unbalanced type signal as the Hi-Z output but via the FET input buffer amplifier. Using this output to feed an additional device will prevent loading on the input source, retaining the best possible performance.**

**BAL OUT – the main balanced output to the microphone preamplifier and +48 volts phantom power source. Note that a 1 pair + shield mic cable fully wired both ends is necessary to connect to the preamplifier.**

### 4. GROUND OFF-ON.

**In some cases it is necessary to isolate the input earth or ground from that of the microphone preamplifier to avoid hum and buzz. Use this switch to find the quietest mode of operation.**

**Generally speaking, if the MIA-1.0's unbalanced inputs or outputs are connected to another device that has a mains earth, this switch will need to be in the OFF position to prevent an earth loop with the mic preamp. Conversely, if the only unbalanced connection is say an acoustic bass pickup, the switch should be ON for best noise performance.**

### 5. ABOUT THE MIA-1.0.

**Unlike most other direct boxes, the MIA-1.0 does not use an audio transformer to achieve ground isolation. Instead we have built in a small hi-frequency power supply and put the transformer there !! This means the signal is free of the low frequency distortion and hi-frequency speed limitations inherent in typical direct box transformers. This feature, coupled with the unique FET input Class A balanced output amplifier ensure an extended frequency response with minimal distortion. We reckon you will immediately notice the difference these parameters make to the sound of all your bass, guitar and keyboard tracks. Enjoy.**