

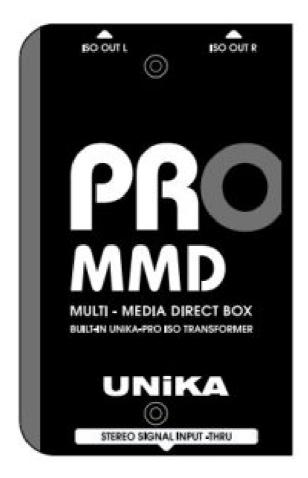
UNIKA 117004 PRO-MMD Passive Stereo Multimedia-DI-Box with custom Isolation Transformers User Manual

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117004 PRO-MMD Passive Stereo Multimedia-DI-Box with custom Isolation Transformers
User Manual







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GENERAL PRECAUTION BEFORE USE

Thank you for purchasing the UNiKA PRO SERIES AUDIO INTERFACE. Before using, please read this manual carefully and pay attention to every detail that you must pay attention to. If you use a mixer to connect to this interface, please turn off the mixer power and +48V phantom power before connecting, and then turn on the power and phantom power after inserting the signal cables. For passive models, please do not turn on the phantom power to avoid leakage or damage to the equipment.

If using a model with a volume knob, turn the volume knob to the minimum. During use, please do not plug or unplug the wires arbitrarily to avoid signal loss. Please refer to the following instructions for the soldering method of the plugs to ensure the expected level and keep the signal smooth.

If you need further installation or operation guidance, please directly contact UNiKA's dealer or distributor, or write to the following mail address for help:



PRODUCT OVERVIEW

PRO MMD is a dedicated DI box for passive multimedia, without the need to install a battery or provide phantom power.

PRO MMD has a pair of built-in UNiKA-PRO El30A10E 1+1:1+1 isolation transformers which has a special copper foil layer and a dedicated ground layer, which allows this device to restore high signal/noise ratio and dynamic sound, and can avoid unnecessary leakage caused by radio frequency interference, ground interference, and potential difference.

PRO MMD is particularly suitable for play deck, computer, and video equipment. It converts high-impedance signals into low-impedance balanced signals which are convenient for extending the wiring distance and blocking interference.

The input end of PRO MMD adopts two TRS sockets, a pair of RAC sockets, and a mini TRS socket, anyone socket can be used as input or throughout. In addition, it is equipped with a 0/-20dB attenuation switch, which is suitable for various types of audio signals with high and low impedance. The output terminal is also equipped with a ground/floating button, in order to quickly eliminate ground noise.



This product has undergone rigorous inspection before leaving the factory. If customers encounter failures during use, please contact your local dealer or distributor for replacement or repairing, do not disassemble the case or

replace parts by yourself, which will invalidate the warranty.

For details, please refer to the warranty regulations in the enclosed warranty card, fill in the details, and get a valid stamp or signature of the dealer or distributor.

PARAMETER TEST CONDITIONS

In the development and manufacturing process, Audio Precision's 2700 series and 500 series are used to test and verify electrical characteristics.

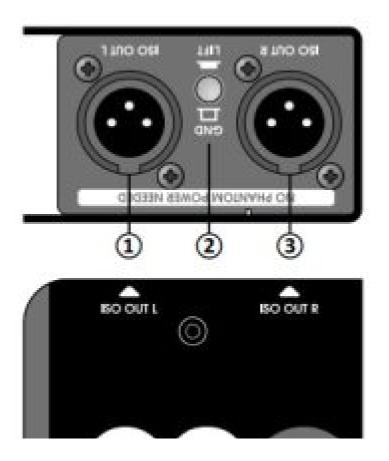
FEATURES

- Built-in UNiKA-PRO™ El30A10E isolation transformer for each channel
- The input socket uses a pair of TRS jacks, a pair of RAC, and a mini TRS.
- All input jacks can be used throughout.
- There is 0dB/-20dB input signal attenuation switch
- · The output is equipped with a GND/LIFT switch

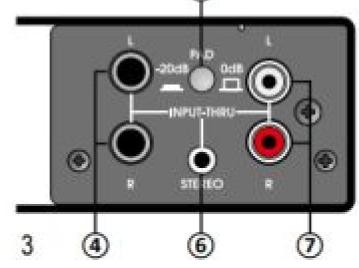
APPLICATIONS

- Convert unbalanced signals of various audio equipment into balanced signals, such as the headphone or line output of computers, play decks, or mobile devices.
- Convert the unbalanced signal of the electronic musical instrument into a balanced signal and send it to the mixer.
- Isolate the leakage and hum be generated by potential when two different systems are connected but powered by a separate power system or power generator

APPEARANCE PARTS & FUNCTIONS





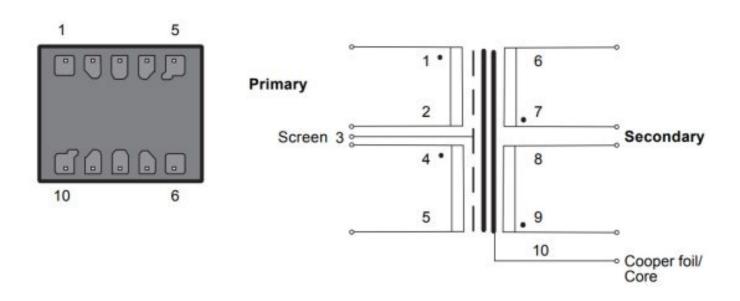


- 1. Left channel signal output: XLR terminal, isolated transformer's balanced output, no need to use +48V phantom power.
- 2. Output grounding/floating switch: when the switch is not pressed, the first pin (PIN-1) of XLR is grounded. PIN-1 will be disconnected from the ground after pressing. This button should depend on the system. Used in the situation, in order to isolate the ground loop noise or leakage.
- 3. Right channel signal output: XLR terminal isolated transformer's balanced output, no need to use +48V Phantom power.
- 4. L/R TRS input and throughout: balanced or unbalanced input, used to connect electronic musical instruments or audio playback equipment and can be used as a through the output of Mini TRS and RCA.
- 5. PAD input attenuator switch: provide two 0/-20dB Options, when input signals of various impedances and levels.
 - It can be attenuated by 20dB to avoid overload or clipping.

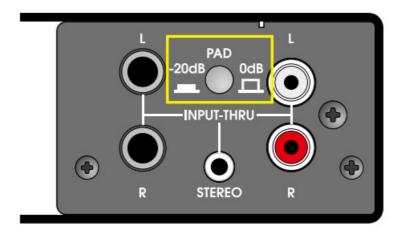
- 6. Mini TRS input and throughout: Mini TRS input to connect to mobile devices or computers, and can be used as a through the output of Mini TRS and RCA.
- 7. Stereo RCA input and throughout: Used to connect to consumer playback equipment or professional video card, and can be used as a through the output of L/R TRS and Mini TRS.

ISO TRANSFORMER SCHEMATIC

UNIKA-PRO™ EI30A10E



INPUT PAD ATTENUATION



The most widely used DI box is to connect electronic musical instruments, sound source broadcasting Amplifiers, and computers, convert their output signals into balanced signals, and then extend the transmission distance. The most ideal state is to set the attenuator to 0dB position (button up). For some high-level output signals, you can press the button to make the signal is attenuated by 20dB to avoid clipping caused by signal overload. When the button is pressed, the PAD indicator on the right will light up.

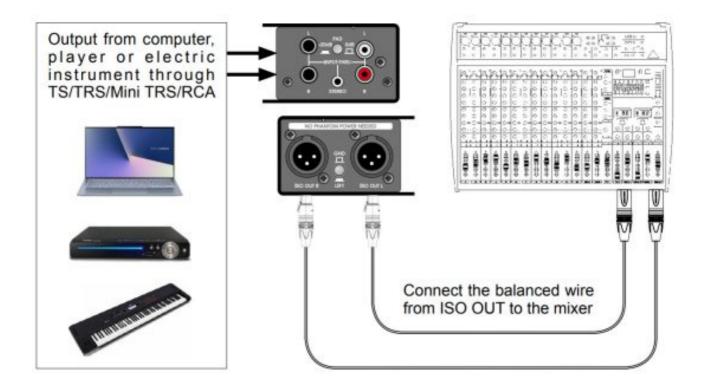
ELIMINATING GROUND LOOP NOISE



The built-in channel-independent balanced isolation transformer has solved the potential difference leakage problem. When the system causes a ground loop due to poor wiring, the noise can be eliminated through the GND/LIFT button.

The GND/LIFT button determines whether pin-1 of the output XLR is grounded, grounded when it bounces, and disconnected from the ground when pressed.

CONNECTION GUIDE



XLR-Female connector



XLR-Male output jack

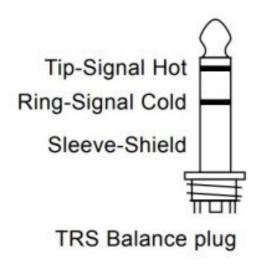


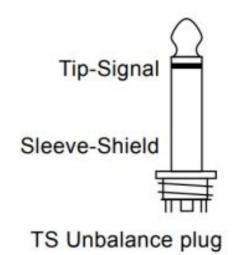
1-Shield pin

2-Hot pin

3-Cold pin

The unbalanced connection, pin-2 is hot, pin-3 is shield paralleled with pin-1.





SPECIFICATIONS

(Specifications are subject to change without notice.)

| PRO MMD | | |
|----------------------------------|---------------------------------------|--|
| Circuit principle | Passive/Transformer balance output | |
| Input connector | 2 x TRS, 1 x Mini TRS, 1 pair of RCA | |
| Thru connector | Any one of the input sockets | |
| Input pad switch | 0/-20dB push button | |
| Output connector | 2 x Male XLR through ISO Transformer | |
| Output GND/LIFT switch | Shared push button | |
| Input impedance | 1KΩ / 0dB & -20dB | |
| Output impedance | 50Ω | |
| Max. input level before clipping | +22dB | |
| Max Output level | +22dB | |
| Frequency response | 20Hz-20KHz, -0.3/0.9dB | |
| S/N ratio @20Hz~20KHz un-weight | >120dB | |
| T.H.D. @1KHz 0dBV output | <0.02% | |
| Transformer Ratio | 1:1+1:1 | |
| Chassis | 1.6mm/1.2mm steel cabinet and chassis | |
| Surface finished | Durable complex painting | |
| Dimension (W x D x H) | 78 x 124 x 46 mm | |
| Weight | 0.63kg | |
| Shipping weight | 0.66kg | |
| Packing per carton | 20pc/13.80kg | |
| Shipping dimension per carton | 305 X 283 X 195 mm | |

EU DECLARATION OF CONFORMITY



1. Equipment

| Product name | Single passive direct box |
|--------------|---------------------------|
| Model | PRO-ONE |
| EAN Code | 4711064410242 |

2. Manufacturer

| Manufacturer | UNiKA Electronic Co., Ltd. |
|--------------|--|
| Address | 6F, No.168, Xinhu 2nd Road, Nei-Hu, Taipei, Taiwan |

- 3. This declaration of conformity is issued under the sole responsibility of the manufacturer.
- 4. The object of the declaration, Product: Direct box for musical instrument and A/V device.
- 5. The object of the declaration described in point 4 is in conformity with the relevant Union harmonization legislation 2014/30/EU The Electromagnetic Compatibility Directive
- 6. References to the relevant harmonized standards used, or references to the specifications in relation to which conformity is declared:

| EMI: | |
|--------------------|------------------------------------|
| EN 55032:2015 | IEC 61000-4-3:2006+A1:2007+A2:2010 |
| EN 61000-3-3:2014 | IEC 61000-4-42012 |
| EN 61000-3-3:2013 | IEC 61000-4-5:2014+A1:2017 |
| EMS: | IEC 61000-4-6:2013/CORE1:2015 |
| EN 55035:2017 | IEC 61000-4-8:2009 |
| IEC 61000-4-2:2008 | IEC 61000-4-11:2-4+A1:2017 |

- 7. Where applicable, the above equipment will be tested and revision of existent certificate by WH Technology Corp. (TAF Accreditation Number:2954) for compliance With EMC requirements set forth in the EUROPEAN COUNCIL DIRECTIVE 2014/30/EU and the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same esults due to production tolerance.
- 8. The technical file is available from the manufacturer at the address above

| Signed for and on behalf of: | UNiKA Electronic Co., Ltd. |
|------------------------------|----------------------------|
| Place of issue: | Taipei |
| Date of issue: | May 03th, 2021 |

Name: Yung-Ho Hsu

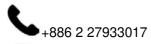
Position: Marketing & Product director

Signature:

UNIKA Electronic Co., Ltd.

www.uunniikappro.com

6F, No.168, Xin-Hu 2nd Rd. Nei-Hu District, Taipei City. 11494. Taiwan, R.O.C.







Documents / Resources



<u>UNiKA 117004 PRO-MMD Passive Stereo Multimedia-DI-Box with custom Isolation Trans</u> <u>formers</u> [pdf] User Manual

117004, PRO-MMD Passive Stereo Multimedia-DI-Box with custom Isolation Transformers

Manuals+,