UNiKA Pro Series Audio Interface Bluetooth Direct Box User Manual

Contents

UNiKA

UNiKA Pro Series Audio Interface Bluetooth Direct Box

Product Information

The UNiKA PRO BT5 is a passive DI box designed for playing back music from wireless mobile devices. It features a built-in Bluetooth Ver.5.0 A2DP DUAL MODE module and is powered by a 5VDC power adaptor, power bank, or USB port from a computer. The PRO BT5 includes a pair of built-in UNiKA-PROTM EI9AE3R3 1.25:1 isolation transformers, which restore high signal/noise ratio and dynamic sound, and prevent leakage caused by interference.

Product Usage Instructions

Before using the UNiKA PRO BT5, please follow these precautions

1. If using a mixer to connect to the interface, turn off the mixer power and +48V phantom power before connecting. Only turn on the power and phantom power after inserting the signal cables.
2. For passive models, do not turn on the phantom power to avoid leakage or equipment damage.
3. If using a model with a volume knob, turn the volume knob to the minimum.
4. During use, avoid plugging or unplugging wires arbitrarily to prevent signal loss.
5. Refer to the instructions for the soldering method of the plugs to ensure expected signal level and smooth transmission.

To connect and use the PRO BT5, follow these steps

1. Ensure you have a 5VDC power adaptor, power bank, or USB port from a computer to power the BT5. Note that the TYPE-C cable and power adaptor are not included.
2. Connect your wireless mobile device or Bluetooth music player to the PRO BT5 via Bluetooth synchronization. Refer to the user manual for your specific device for instructions on how to connect via Bluetooth.
3. Use the balanced output of the PRO BT5 to extend the wiring distance and block interference.

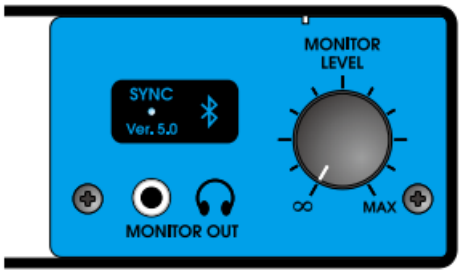
4. Monitor the content that needs to be played in advance using the built-in mini TRS headphone monitor output and monitor volume control. The monitor output can drive headphones with an impedance range of 16~300.

If you need further installation or operation guidance, please contact UNiKA's dealer or distributor, or **email** info@unikapro.com for assistance.

PRO SERIES AUDIO INTERFACE

Bluetooth DIRECT BOX

DESIGN & MADE IN TAIWAN



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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 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
info@unikapro.com

PRODUCT OVERVIEW

- PRO BT5 is a passive DI box specially designed for playing back music from wireless mobile devices and built-in Bluetooth Ver.5.0 A2DP DUAL MODE module. The balanced output level will not be affected by the potentiometer. The output side is equipped with a TYPE-C USB terminal which requires a 5VDC power adaptor, power bank or USB port from computer to power the BT5 such as the power supply method of the general mobile device. BT-5 is excluding the TYPE-C cable and power adaptor.
- The built-in Bluetooth module has BR/EDR dual-mode control function, A2DP stereo playback mode and BLE energy-saving mode. And using Qualcomm chips and DA/DSP, audio converting and sampling rate are 16bit and 44.1KHz.
- The PRO BT5 has a pair of built-in UNiKA-PROTM EI9AE3R3 1.25:1 isolation transformers. The transformer has a special copper foil layer and a dedicated grounding layer, which can restore the high signal/noise ratio and dynamic sound of the device, and avoid unnecessary Leakage caused by radio frequency interference,

grounding interference and potential difference.

- PRO BT5 is especially suitable for mobile phones, computers and any of Bluetooth music players. It converts wireless signals into low-impedance balanced signals, which is convenient for extending the wiring distance and blocking interference.
- PRO BT5 has built-in mini TRS headphone monitor output and monitor volume control, which can drive 16Ω~300Ω headphones to be allowing users to monitor the content that needs to be played in advance.

Note: Since the device does not include charging identification IC, some of power bank with QC function may not be available or may stop supplying power halfway because the IC is not detected.
On the other hand, the power bank with automatic stand by mode is not recommended.

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.

CAUTION
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, and fill in the details, and get a valid stamp or signature of the dealer or distributor.

Note: There is a part of acrylic materials on the surface of the device, which is to allow the Bluetooth signal to spread well without the need for an external antenna. When in use, please do not cover any metal objects on it, so as not to affect the quality of the reception.

FEATURES

- **Built-in UNiKA-PROTM EI9AE3R3 1.25:1** isolation transformer for each channel
- Built-in headphone amplifier with independent mini TRS jack and volume control
- 16bit convert rate and 44.1KHz over sampling
- Compatible with Windows, Mac OS, iOS and Android systems
- Ver 5.0 Bluetooth module with BR/EDR dual mode control and A2DP/AVRCP/HFP/HSP/HOGP/PBAP/SPP profiles support and BLE mode

- Type-C USB power supply terminal to be supplied power by external 5VDC poweradaptor, power bank or USB port from computer.
- The output is equipped with a GND/LIFT switch

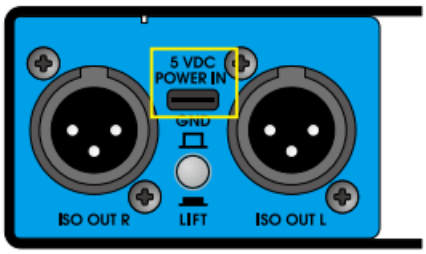
APPEARANCE PARTS & FUNCTIONS

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 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. **5VDC power in**: Users can choose a general 5V mobile device power supply or power back to connect TYPE-C USB cable to supply power.
5. **Power indicator:** When the TYPE C terminal receives the externally provided 5V power, the indicator light will keep on.

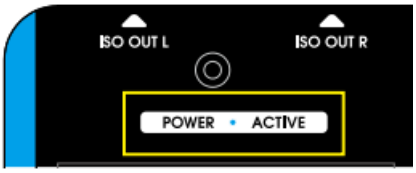
6. **Bluetooth synchronization:** After 5VDC power is connected, the “SYNC” indicator will flash intermittently. When the mobile device searches for “UNiKA BT5” and is successfully paired, the indicator light will remain on. As long as the mobile device turns on the Bluetooth function the next time it is turned on, it will be paired automatically.
7. **Headphone monitor output**: The mini TRS can be connected to 16Ω to 300Ω headphones.
8. **Monitor level adjustment**: You can adjust the volume of the monitor headphone without affecting the level of the balanced output.

POWERED TERMINAL
The output side is equipped with a TYPE C USB terminal, and an external switching power supply or mobile power supply can be used to provide 5VDC voltage to make the Bluetooth module work normally.

Note: Since the device does not include charging identification IC, some of power bank with QC function may not be available or may stop supplying power halfway because the IC is not detected. On the other hand, the power bank with automatic stand by mode is not recommended.

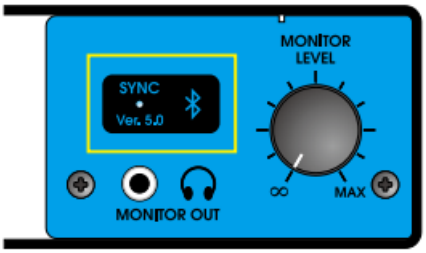


POWERED INDICATOR
After the power supply is connected correctly, the “POWER ACTIVE” indicator on the surface will light up.

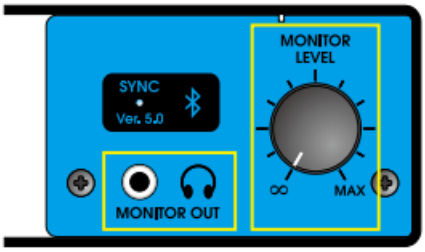


BLUETOOTH

SYNCHRONIZATION METHOD
After the power supply is connected, the Bluetooth synchronization indicator light will continue to flash. Please turn on the Bluetooth of your mobile device and search for “UNiKA BT-5” and join the synchronization. If the synchronization is successful, the synchronization indicator light will remain on and no longer flash.

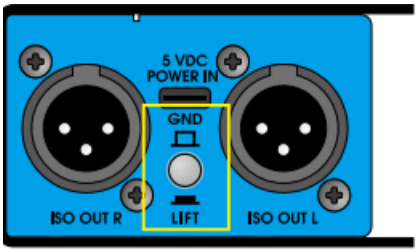


MONITOR
Equipped with a mini TRS headphone output jack and a monitoring volume knob at the bottom and right of TYPE-C, 16Ω~300Ω headphones can be inserted for advance and real-time monitoring. The volume knob does not affect the level of the balanced output at the back of the isolation transformer.



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 ground when pressed.



SEARCH AND CONNECT YOUR PRO BT5

When you use your computer, mobile phone, multimedia device to search and connect to PRO BT5 via Bluetooth 5.0 or higher version, please connect the power of PRO BT5 first, then the power light on the upper cover will light up, and the SYNC indicator on the front side will flash. Please find the following names on your mobile device search list,

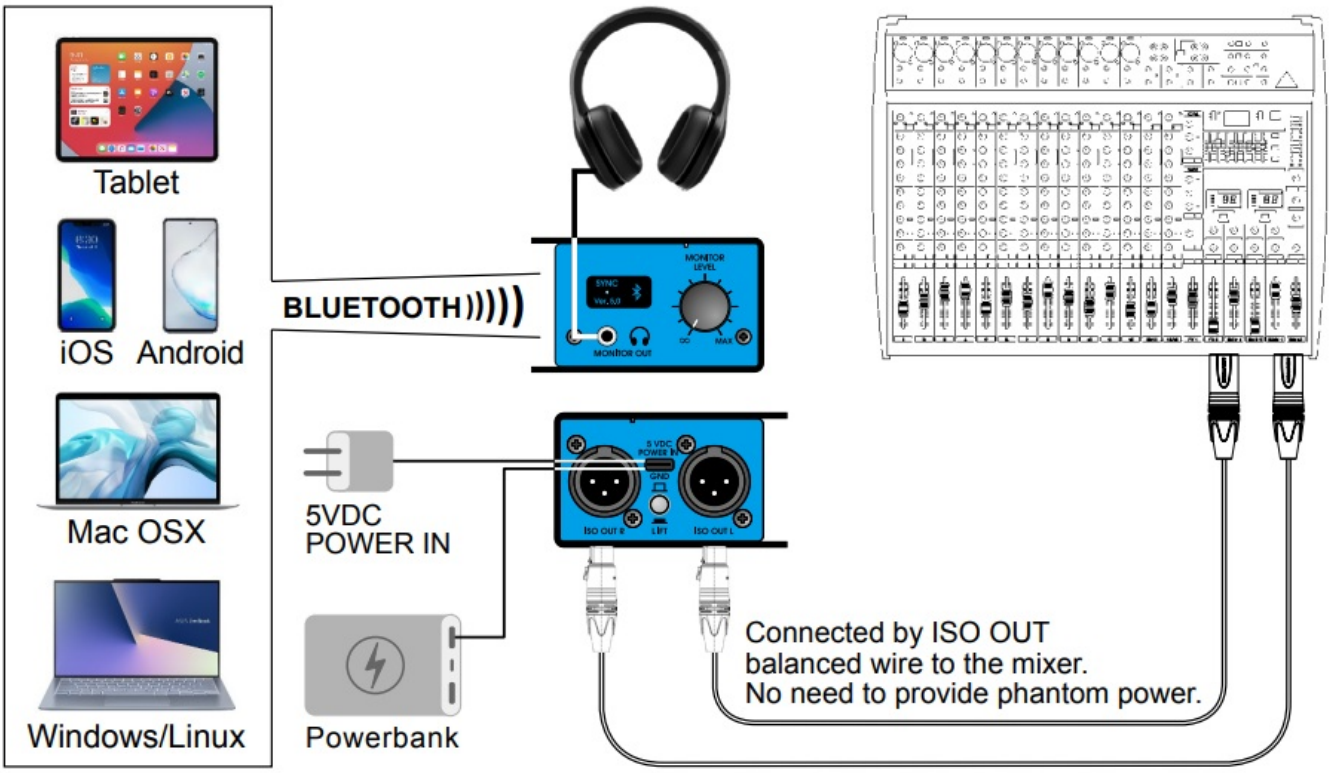
UNiKA PRO-BT5-XXXX

Where “XXXX” is the last four digits of the device’s MAC* address which is factory preset. For example, if the MAC address of the device is (DC:00:30:00:1E:1A), you will see UNiKA PRO-BT5-1E1A in the list of connectable devices. If there are multiple PRO BT5 nearby simultaneously power on, you will see the last four digits of a different MAC, such as PRO-BT-5-1E13, but it may have been connected by other mobile devices, so if your mobile device is connected to this device, it will show that it cannot be connected, otherwise it will It displays words such as successful connection or successful connection as an audio playback device.

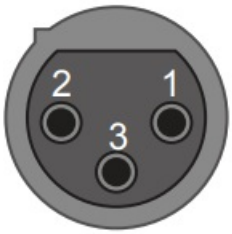
About MAC address

A media access control address (MAC address) is a unique identifier assigned to a network interface controller (NIC) for use as a network address in communications within a network segment. This use is common in most IEEE 802 networking technologies, including Ethernet, Wi-Fi, and Bluetooth. Within the Open Systems Interconnection (OSI) network model, MAC addresses are used in the medium access control protocol sublayer of the data link layer. As typically represented, MAC addresses are recognizable as six groups of two hexadecimal digits, separated by hyphens, colons, or without a separator.

SYSTEM CONNECTION GUIDE



XLR-Female connector



XLR-Male output jack

TYPE-C Connector to supply 5VDC

1. Shield pin
2. Hot pin
3. Cold pin

SPECIFICATIONS

PRO BT5	
Circuit principle	Passive/Transformer balance output
Bluetooth Version	Ver 5.0 A2DP DUAL MODE with BLE, DID list ready
On board DA convert & sample rate	16bit / 44.1KHz
Communication codec	SBC / AAC, A2DP standard
Power supply	5VDC supplied from external power supply or power bank through Type-C connector with LED status indicator
Blue-tooth syncronization indicator	LED
Actual transmission distance	25~35 meters tested by Android & iOS
Output connector	2 x Male XLR through ISO Transformer
Output GND/LIFT switch	Shared push button
Max Output level	0.99Vrms
Headphone power output	30mW per channel into 32Ω, 5mW per channel into 600Ω
Frequency response	20Hz-20KHz, ±0.5dB
S/N ratio @20Hz~20KHz un-weight	>95dB
T.H.D. @1KHz 0dBV output	<0.005%
Transformer Ratio	1:25:1
Output impedance	50Ω, transformer balance
Chassis	1.6mm/1.2mm steel cabinet and chassis plus acrylic to improve wireless penetration
Surface finished	Durable complex painting
Dimension (W x D x H)	78 x 124 x 46 mm
Weight	0.61kg
Shipping weight	0.65kg
Packing per carton	20pc/13.60kg
Shipping dimension per carton	305 X 283 X 195 mm

Documents / Resources

UNiKA Pro Series Audio Interface Bluetooth Direct Box [pdf] User Manual

Pro Series, Pro Series Audio Interface Bluetooth Direct Box, Audio Interface Bluetooth Direct Box, Bluetooth Direct Box, Direct Box