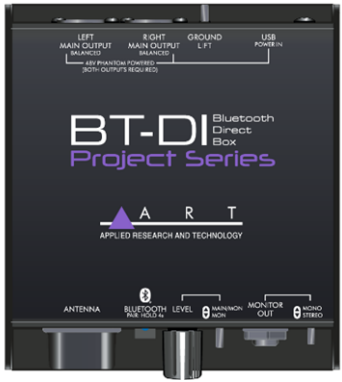
BT-DI

BLUETOOTH DIRECT BOX WITH ISOLATED OUTPUTS

Project Series



User's Manual

A R T

APPLIED RESEARCH AND TECHNOLOGY

IMPORTANT SAFETY INSTRUCTION – READ FIRST

This symbol, whenever it appears alerts you to the presence of uninsulated dangerous voltage inside the enclosure-voltage that may be sufficient to constitute a risk of shock.

This symbol, whenever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Please read the manual.

Read Instructions: Retain safety and operating instructions for future reference. Heed all warnings printed here and on the equipment. Follow the operating instructions printed in this user manual.
Do not open: There are no user serviceable parts inside. Refer any service work to qualified technical personnel only.

Environment: Protect from excessive dirt, dust, heat, and vibration when operating and storing. Avoid tobacco ash, drink spillage and smoke, especially that associated with smoke machines.

Handling: Protect the controls from damage during transit. Use adequate padding if you need to ship the unit. To avoid injury to yourself or damage to the equipment, take care when lifting, moving or carrying the unit.

Servicing: Refer servicing to qualified technical personnel.

Installation: Install the unit in accordance with the instructions printed in the user manual.

INTRODUCTION

Thank you for purchasing Applied Research and Technology's BT-DI. The ART BT-DI is a rugged and flexible Bluetooth Audio DAC. It is designed to provide a reliable Bluetooth interface to products like mixers and line level amplifiers. The thick steel case offers maximum protection for years of use.

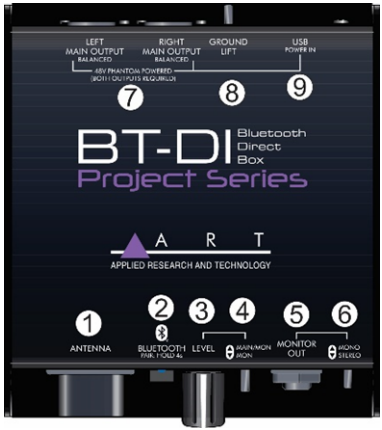
FEATURES

- Bluetooth 5.0 receiver
- External antenna for long-range operation
- Transformer isolated XLR outputs
- Headphone out
- Selectable fixed/variable Main output
- Powered by 5V external USB supply OR Phantom Power
- Headphone out can be summed Mono
- Compact rugged package, extruded chassis
- Designed and developed in the USA

CONNECTIONS

Power

The BT-DI can be powered from a USB source or the unit can be powered from two phantom power sources. This unit will require two phantom sources to power the unit fully.



1. **Bluetooth Antenna:** This antenna extends the audio Bluetooth operational distance.
2. **Bluetooth pairing switch and indicator LED:** This is the Pairing switch for initializing the pairing or unpairing

function. The indicator LED shows the pairing status of the BT-DI.

3. **Level control:** This pot varies the output level.
4. **Main/Monitor Switch:** In the down position, the Level control is bypassed on the Main output.
5. **Monitor Out:** The TRS ¼" jack, allows monitoring of the input signal. Connect this jack to a pair of headphones out or to a line level input.
6. **Mono/Stereo Switch:** Toggles the signal on the Monitor Out between Stereo and Mono.
7. **Main Outputs:** Left and Right XLR Balanced Output jacks. The BT-DI can also be powered by a pair of +48V phantom power lines through the XLR jacks, typically supplied on microphone input channels on a mixer.
8. **Ground Lift Switch**: This switch lifts the ground when the unit is powered over USB to avoid any ground noise coming from a computer.
9. **USB Jack:** The BT-DI can be powered from a USB 5V DC USB A to USB B source. The BT-DI can also be powered via phantom power applied to both XLR outputs. The USB port does not pass any audio data between the BT-DI and a computer.

INSTALLATION and OPERATION

BLUETOOTH

Bluetooth™ Section

The BTDI is capable of receiving streaming audio over Bluetooth™ from devices such as smartphones and laptops. Pairing your device with the BTDI is simple and gives you the freedom to play your music wirelessly.

1. Pairing / Bluetooth™ Pair Button. When the Pair Button is pressed for 4sec, the Bluetooth™ audio connection is available for pairing. After pressing the Pair Button, go to the Bluetooth™ menu on your streaming audio device. You will see a device named “BT-DI_vx”. Select this device to initiate pairing. Once you see the “BT-DI_vx” device connected, you will be able to stream audio to the BT-DI.

2. Disconnecting the paired device requires the pairing button to be pressed for 4sec. The blue LED will turn off for 1sec, then blink fast waiting to be paired to another device.

3. Bluetooth™ Status Indicator. The blue status indicator alerts the user to the current status of the Bluetooth™ connection. A fast-blinking light indicates an available, unpaired connection. Constant steady Blue light means there is an active connection. A slow blinking

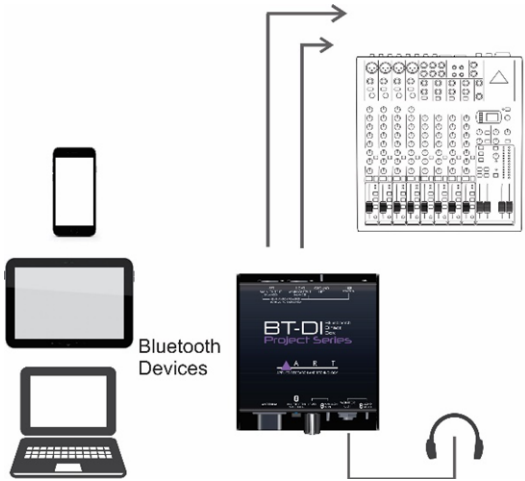
light means that the Bluetooth™ connection has been lost.

4. Bluetooth™ Level Control. Use this control to set the audio level for the Bluetooth™ connection. Level can also be controlled directly at your streaming device.

The BTDI Bluetooth™ operating range is rated for 30 meters (100 feet) line of sight. The quality of the link can be affected by an excess of traffic in the 2.4GHz band or structures between the streaming device and the BT-DI unit.

APPLICATIONS

The BT-DI Works well with computers, Bluetooth capable tablets and various mobile devices (cell phones). This extends your signal distance without the use of cabling and offers a balanced low impedance audio path for your audio source.



WARRANTY INFORMATION

Limited Warranty

Applied Research and Technology will provide warranty and service for this unit in accordance with the following warrants:

Applied Research and Technology, (A R T) warrants to the original purchaser that this product and the components thereof will be free from defects in workmanship and materials for a period of **three** years from the date of purchase. Applied Research and Technology will, without charge, repair or replace, at its option, defective product or component parts upon prepaid delivery to the factory service department or authorized service center, accompanied by proof of purchase date in the form of a valid sales receipt.

Exclusions

This warranty does not apply in the event of misuse or abuse of the product or as a result of unauthorized alterations or repairs. This warranty is void if the serial number is altered, defaced, or removed.

A R T reserves the right to make changes in design or make additions to or improvements upon this product without any obligation to install the same on products previously manufactured.

A R T shall not be liable for any consequential damages, including without limitation damages resulting from loss of use. Some states do not allow limitations of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific rights and you may have other rights, which vary from state to state.

For units purchased outside the United States, an authorized distributor of Applied Research and Technology will provide service

Fill in the following information for your reference:

Date of purchase _____

Unit serial number _____

SERVICE

The following information is provided in the unlikely event that your unit requires service.

1. Be sure that the unit is the cause of the problem. Check to make sure the unit has power, all cables are connected correctly, and the cables themselves are in working condition. You may want to consult with your dealer for assistance in troubleshooting or testing your particular configuration.

2. If you believe that the ART unit is at fault, go to www.artproaudio.com.

3. Select "*Support*", then "*Return Authorization Request*" to request a return authorization number.

4. If you are returning the unit for service, pack the unit in its original carton or a reasonable substitute. The original packaging may not be suitable as a shipping carton, so consider putting the packaged unit in another box for shipping. Print the RA number clearly on the outside of the shipping box. Print your return shipping address on the outside of the box.

5. Include, with your unit, a note with the RA number and your contact information, including a return shipping address (we cannot ship to a P.O. box) and a daytime phone number, and a description of the problem, preferably attached to the top of the unit. Also include a copy of your purchase receipt.

SPECIFICATIONS

Main Output Connections	XLR (2) main output, transformer coupled, switchable ground.
Main Output Impedance	300 Ohms.
Headphone Output	33 Ohms, 18mw/Channel max.
Maximum Output Level	0 dBu balanced Main output, 0 dBu Headphone output.
Signal to Noise Ratio	-90dB unweighted typical.
THD	<0.05% typical
Bluetooth	Version 5.0, up to 50m, Class 2 device (BDR/EDR)
Supported Audio CODEC's	SBC, AAC
Power Requirements	5V USB (80ma) or +48V Phantom power w/both XLR's connected.
Dimensions (HxWxD)	1.6-inch x 5.0-inch x 5.5-inch (36 x 126 x 140 mm)
Weight	2.0 lbs. / 0.91 kg

www.artproaudio.com

E-mail: support@artproaudio.com

© 2022 Applied Research & Technology / Yorkville Sound