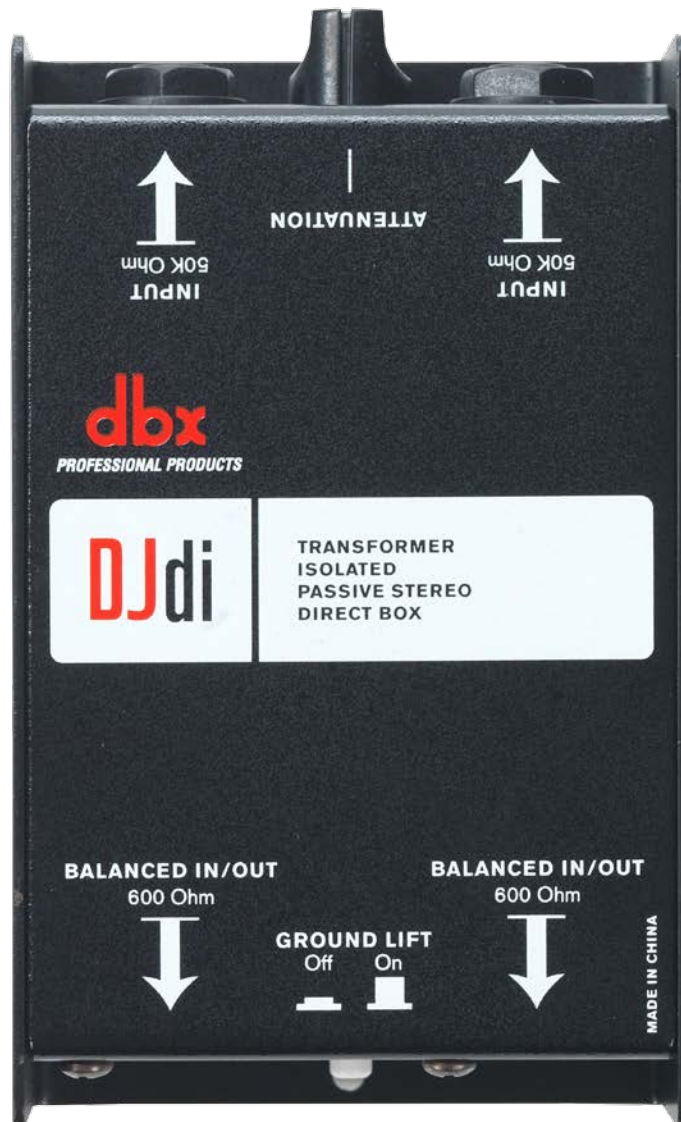




DJdi DIRECT BOX

2-CHANNEL PASSIVE DIRECT INJECTION BOX



OWNER'S MANUAL

Warranty

1. Please register your product online at www.dbxpro.com. Proof-of-purchase is considered to be the responsibility of the consumer. A copy of the original purchase receipt must be provided for any warranty service.
2. dbx warrants this product, when purchased new from an authorized U.S. dbx dealer and used solely within the U.S., to be free from defects in materials and workmanship under normal use and service. This warranty is valid to the original purchaser only and is non-transferable.
3. dbx liability under this warranty is limited to repairing or, at our discretion, replacing defective materials that show evidence of defect, provided the product is returned to dbx WITH RETURN AUTHORIZATION from the factory, where all parts and labor will be covered up to a period of two years. A Return Authorization Number must first be obtained from dbx. The company shall not be liable for any consequential damage as a result of the product's use in any circuit or assembly.
4. dbx reserves the right to make changes in design or make additions to or improvements upon this product without incurring any obligation to install the same additions or improvements on products previously manufactured.
5. The foregoing is in lieu of all other warranties, expressed or implied, and dbx neither assumes nor authorizes any person to assume on its behalf any obligation or liability in connection with the sale of this product. In no event shall dbx or its dealers be liable for special or consequential damages or from any delay in the performance of this warranty due to causes beyond their control.

Technical Support & Service

If you require technical support, contact dbx Technical Support. Be prepared to accurately describe the problem. Know the serial number of your device – this is printed on a sticker attached to the chassis.

Before you return a product to the factory for service, we recommend you refer to this manual. Make sure you have correctly followed installation steps and operating procedures. For further technical assistance or service, please contact our Technical Support Department at (801) 566-8800 or visit www.dbxpro.com. If you need to return a product to the factory for service, you MUST first contact our Technical Support Department to obtain a Return Authorization Number.

NO RETURNED PRODUCTS WILL BE ACCEPTED AT THE FACTORY WITHOUT A RETURN AUTHORIZATION NUMBER.

Please refer to the Warranty information, which extends to the first end-user. After expiration of the warranty, a reasonable charge will be made for parts, labor, and packing if you choose to use the factory service facility. In all cases, you are responsible for transportation charges to the factory. If the product is still under warranty, dbx will pay the return shipping.

Use the original packing material if it is available. Mark the package with the name of the shipper and with these words in red: DELICATE INSTRUMENT, FRAGILE! Insure the package properly. Ship prepaid, not collect. Do not ship parcel post.

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Overview

Introduction

Congratulations on your purchase of the dbx DJdi Direct Box. The 2-channel passive DJdi is designed to be used as a standard tool for many audio applications. Offering two channels, the DJdi easily solves the problem of converting unbalanced signals into balanced output suitable for use with mixers, PAs, recording consoles and more. The DJdi's continuously variable input signal attenuator can accommodate a wide range of signal levels and its passive design means clean, quiet and uncolored operation with no power required.

We hope your new dbx DJdi will serve as an indispensable creative tool for your sound processing and music production needs. Thank you for choosing dbx.

Every effort has been made to ensure all information provided in this manual is accurate at the time of writing.

dbx Professional Products is not liable for any incorrect information contained in this manual and extends no liabilities in regard to this manual other than those required by local law.

dbx Professional Products may update the contents of this manual at any time without prior notice. The latest version of this manual is available from the dbx Professional Products website at all times.

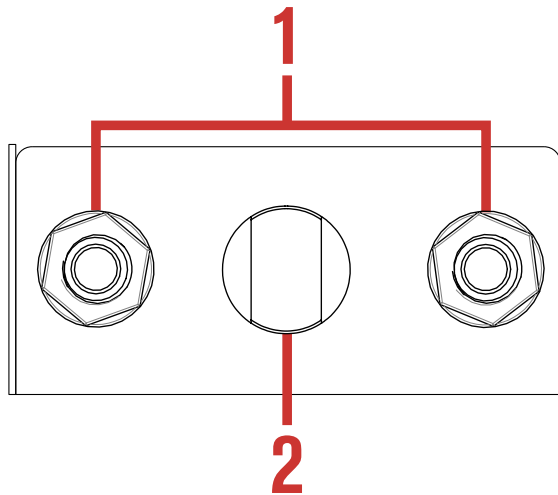
<http://www.dbxpro.com>

Features

- *Dual Channel*
- *(2) 1/4" 50k Ohm TS Inputs*
- *(2) XLR Transformer-Isolated 600 Ohm Input/Outputs*
- *Passive Circuit Design*
- *Continuously Variable Input Attenuator*
- *Ground Lift Switch*

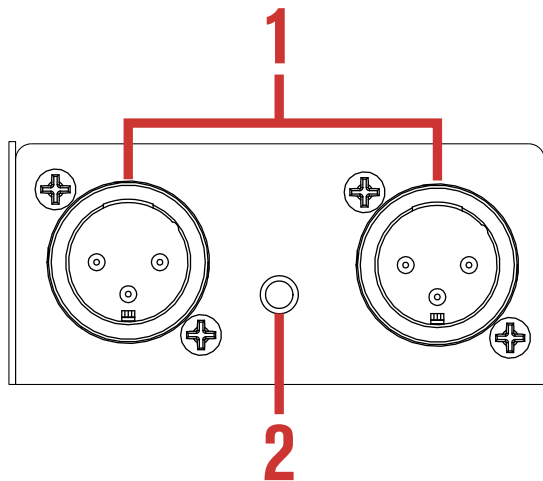
DJdi DIRECT BOX

Front Panel



1. INPUTS - Connect your signal sources to these 1/4" unbalanced TS connectors
2. VARIABLE INPUT ATTENUATOR CONTROL – Use this control (if necessary) to attenuate high signal level sources.

Rear Panel



1. BALANCED OUTPUTS - Connect these balanced XLR connectors to an XLR input on your mixer
2. GROUND LIFT SWITCH – By switching this out to the ON position, the internal connection to the output pin 1 is removed, isolating the DJdi's grounding system from the rest of the system. This eliminates many "hum" or "buzz" problems due to ground loops.

Using a Direct Box

First, a direct box converts the audio signal originating from an unbalanced device (like a guitar) to a balanced audio signal for transmission over a longer distance than is recommended for an unbalanced signal to travel. As audio industry people know, the advantage of a balanced signal is realized at the receiving end (audio input) of the balanced cable, typically in the form of a mic pre-amp input on a mixing console. The mic pre input circuitry consists of a “differential amplifier” whose job it is to “accept” the audio portion of input signal and “reject” the noise portion of the signal. The noise portion happens to be roughly equivalent on (or “common to”) both the “+” and “-” balanced conductors in the mic cable, since external electromagnetic fields are induced onto both conductors in a roughly similar fashion. Since the conductors are always in a “twisted pair” configuration, they “see” the same noise field. Thus, this is known as “common-mode noise”. Another type of common-mode noise somewhat evenly-induced onto both conductors is due to the inherent physics of connecting two pieces of equipment together and the resulting flow of electrons due to noise voltages present at each piece of equipment. The ability of a balanced input to reject common-mode noise is measured in dB and called its “common-mode rejection ratio”, or CMRR.

The second function of a direct box is to convert from a high-impedance output – on an instrument such as electric guitar with passive pickups, for instance – to a low-impedance output. A cable driven by a high-impedance output is more susceptible to signal loss and noise pickup than a cable driven by a low-impedance output. Thus, using a direct box again improves, for a different reason, the ability to run longer distances due to the impedance conversion from high to low-impedance.

Third, at the heart of the direct box is an isolation transformer that allows complete “galvanic” isolation, if desired, between the equipment plugged into either end. This eliminates the hum and buzz present in the system due to ground loops.

Operating the DJdi

The DJdi offers a variety of DI solutions for live sound and recording applications. You can connect all kinds of audio signals like guitars, keyboards, outboard signal processors and even the high-powered speaker output from an amplifier. The DJdi is also very useful for connecting unbalanced signals from sources like DJ equipment and sub-mixers, effects processors and keyboards to a main PA or recording mixer. While the DJdi’s balanced outputs provide a clean signal at a low level so long runs of cable are possible.

Direct Insertion of an Instrument into a PA System

One of the most common applications for using a DI box is getting the signal from a bass guitar into the PA system. Simply put, the low frequencies produced by bass are difficult to mic, so use of a DI box is almost always preferable.

Additionally, the signal going to the PA system can be adjusted by the FOH (front of house) engineer without affecting the sound the musician dial up on stage. You can use the DJdi to plug a guitar directly into the PA system as well. This is especially useful for acoustic guitars with pickups or when using guitar signal processors. Follow these steps to connect a guitar to a PA mixer:

1. Mute or turn down the volume/gain on you mixer before making connections
2. Connect the output of the guitar or bass to the 1/4" input on the DJdi
3. Connect the DJdi's XLR output to the input of the PA mixer
4. Adjust the mixer's volume/gain to your liking

Converting the Output of Unbalanced Devices

The DJdi can be quite useful on stage, or in a studio when connecting unbalanced devices, particularly keyboards. The low output signal levels of many keyboards can benefit greatly by connecting their unbalanced outputs to the DJdi. By doing so, the signal can then be sent cleanly for long distances and utilize the low noise common mode rejection provided by the DJdi's balanced low-level output.

Specifications

CIRCUIT:

Type: Passive

INPUTS:

Number of Connectors: 2
Connection: 1/4" TS (Tip Hot, Sleeve Ground)
Type: Unbalanced, RF Filtered
Input Impedance: 50 kOhm

OUTPUTS:

Number of Connectors: 2
Connection: Male XLR, Balanced, Pin 2 hot
Output Impedance: 600 Ohms
Noise Level: -104dBu (22Hz -22kHz, Input Shorted)
THD+N (10Hz-22kHz): 0.23% typical @ +4dBu @ 1kHz
Insertion Loss: 21dB typical

PHYSICAL:

11.98cm (W) x 13.99cm (L) x 3.98cm (H)
4.72" (W) x 5.51" (L) x 1.57" (H)

dbx is constantly striving to maintain the highest professional standards. As a result of these efforts, modifications may be made from time to time to existing products without prior notice. Specifications and appearance may differ from those listed or shown.



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DJdi Owner's Manual

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