USER PRODUCT MANUAL



NUHL

NUHL

MAGIC DI

DISCRETE ACTIVE DIRECT INJECTION DEVICE



PAD HPF GND

Indino

TEEGARDEN AUDIO

MAGIC DI ACTIVE DIRECT BOX





Thank you choosing the TEEGARDEN AUDIO Magic DI Active Direct Box

Your Teegarden Audio Magic DI was carefully assembled, tested and packed at our facility in Brentwood, TN. This manual will give you important user information as well as usage tips and warranty details.

To avoid damage to your Magic DI or other equipment, please read the entire manual prior to using the direct box for the first time.

Direct Injection Devices, also known as a Direct Box or DI, are devices that allow various electronic instruments or acoustic instruments with magnetic and piezo transducers (pickups) to be interfaced with recording consoles, microphone preamps and sound mixer inputs. Normally an instrument level signal is a high impedance, unbalanced source and in order to transmit the signal long distances, without picking up electromagnetic or radio frequency interference and losing high frequency information, it must be converted to a low impedance, balanced signal. There are numerous methods of electronic design to accomplish this task, each with its own set of advantages and disadvantages. We believe the Teegarden Audio Magic DI to be the best sounding and most advantageous form of Direct Injection on the market today.

Overview ///

Imagine having state-of-the-art vintage styled discrete electronics in a modern phantom powered active direct injection device. This is what you get with the Teegarden Audio Magic DI. The openness and transparency is unparalleled from any other device in its price range. The Teegarden Audio Magic DI is a transformerless, balanced, active, direct injection device that offers maximum headroom, low distortion and pristine sound quality. It can accept input levels from passive guitar pickups or piezo transducers up to line level console or preamp levels (-40dBu to +4dBu).

The Magic DI was fine tuned to excel on acoustic guitar & stringed instruments, but sounds equally stellar on keyboards and bass guitar.

The flexible Combo XLR/1/4" input jack, combined with the Pad and the Active Buffered Thru can be used to reduce line level signals to instrument level and function as a ReAmp type device.

Pure. Simple. It's Magic!

Features ///

- All Discrete Design
- Transformerless balanced XLR Output
- +48v Phantom Powered
- 2 Thru Outputs Active Buffered and Parallel
- Combo 1/4" & XLR Input Jack
- Hi-Pass Filter (Low Cut)-3dB Corner @ 50 Hz, -20dB @ 20 Hz
- -20dB Capacitive Pad
- Ground Lift
- Rugged, sturdy construction.
- Hand Built in the USA

Specifications ///

- Frequency Response: 20Hz 20kHz (+/- 0.25dB)
- Input Impedance: 1000 MOhms
- Output Impedance: Less than 100 Ohms
- THD+N: Less than 0.02% @1KHz (-20dBu IN)
- Power Req.: 48v Phantom from mic pre or console
- Current Draw: less than 10mA
- Dimensions: 4 x 5 x 1.7 inches

If you have further questions contact Teegarden Audio Tech Support at: (615) 454-3981

USER GUIDE & MANUAL

QUICK START

To get started with your Magic DI, please follow these simple guidelines:

- **1.** Make sure the channel on the mixer or microphone preamp you intend to use with the Magic DI is muted or turned down before connecting the output of the Magic DI.
- **2.** Connect all cables from your instrument to the Magic DI and from the Magic DI XLR OUTPUT jack to the INPUT connector of your mic pe or mixer channel.
- **3.** The output level of the Magic DI will probably be much louder than traditional passive or active direct boxes you may have been used to using. Our circuitry transfers your instrument signal at close to the same level that it generates. Most other DIs reduce the gain considerably before it gets to the microphone preamp or console input and have to amplified with gain to a usable operating level. This is not the case with the Magic DI. Care must be taken to set your console input or mic preamp gain to a lower level. Operating at this higher level gives you a better signal-to-noise ratio and allows you to use less preamp gain thus reducing the amount of noise that is amplified by the console/mixer preamp. We suggest gradually increasing the gain or preamp level on your mixer until it is at the desired listening level - free from distortion.
- **4.** The PAD may be engaged if your instrument has active electronics or a preamp built in. Many modern acoustic guitars and basses have active electronics which produce a louder output level. The pad is a -20dB cut in audio level and can help you if you feel you are getting any undesired distortion or "break-up" in your tone.
- **5.** The HPF button engages the High Pass Filter, sometimes known as a rumble filter. If you are having problems with low frequency feedback in monitor wedges or feel like your instrument is producing too much in the low frequency range, the HPF function will give you up to a -20dB reduction in frequencies below 50Hz.

- **6.** The GND Lift (Ground Lift) feature is most often NOT needed but can sometimes help in a situation where there is excessive hum or interference. No GND lift switch on any DI device is 100% effective, especially on active powered DIs because the unit depends on an electrical ground for +48v phantom power operation. In some situations the GND switch in Lift position can help reduce any hum noises you may encounter. Other times it requires using different power sources for connected equipment or using higher quality cabling.
- **7.** The PARALLEL or PASSIVE THRU is a straight connection from the input jack and can be used to send your instrument signal to an amplifier, monitor system or tuner.
- 8. The ACTIVE BUFFERED THRU derives its signal from the Magic DI internal electronics and isolates the signal from the input. This allows your signal to be split to other devices, signal processors or amplifiers without impedance shifts or losing any high frequency information that sometimes plagues a straight passive thru. However, keep in mind the ACTIVE THRU follows the INPUT LEVEL and PAD, so if the PAD switch is engaged, the level at the ACTIVE THRU will be down by -20dB.
- **9.** A COMBO INPUT JACK has been provided to offer a wide range of connecting possibilities. Either a ¼" phono plug or an XLR connector may be used to get your input signal into the Magic DI. Using the XLR portion along with the PAD switch will permit you to use the Magic DI as a device to send Line Level Console or DAW (Digital Audio Workstation) Interface Outputs back into instrument level effects pedals or guitar amplifiers. Keep in mind the Magic DI will still need to be supplied phantom power (+48v) from the console in order to function in this capacity.





Limited 2 Year Warranty ///

TEEGARDEN AUDIO products purchased in the USA are warranted by Teegarden Audio, LLC to be free from defects and materials and workmanship for the period of 2 years to the orginal purchaser. In the event of such defects, the Teegarden Audio product will be repaired without charge or, at our option, replaced with a new one. All returned items must be delivered to Teegarden Audio with shipping prepaid, together with the sales slip or other proof of purchase. The warranty excludes problems due to normal wear, abuse, shipping damage or failure to use the product in accordance with the specifications. This warranty does not apply if the product has been damaged by accident or misuse, or as a result of repair or modification by anyone other than a Teegarden Audio customer service facility authorized to service this product.

All parts except tubes (120 days) are covered under this Limited 2 Year Warranty.

Teegarden Audio, LLC shall not be liable for damages based on inconvenience, loss of use of the product, loss of time, interrupted operation or commercial loss or any other damages, whether incidental, consequential or otherwise. This warranty gives you specific legal rights, and you may have other rights, which will vary from state to state.

Specifications and prices are subject to change without notice or obligation.

Important Safety Information ///

WARNING: TO AVOID ELECTRIC SHOCK HAZARD, DO NOT EXPOSE THIS APPARATUS TO WATER, RAIN OR MOISTURE



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Do not attempt to service this unit yourself, as it will void the warranty. Please check your unit carefully upon receipt and return to place of purchase immediately if there are problems with the product. After that, the standard TEEGARDEN AUDIO Limited 2-Year Warranty will apply to defects in materials and workmanship.

(U.S.A.) Should your TEEGARDEN AUDIO device require service, please contact us at (615) 454-3981-or- email us at info@ teegardenaudio.com

To claim warranty in the USA, equipment and accessories must be delivered in their entirety to TEEGARDEN AUDIO, freight prepaid, IN PROPER/SAFE PACKAGING. All returns must have prior authorization before shipping. Please contact TEEGARDEN AUDIO for a Return Authorization Number (RA).

Hand-built for the pursuit of excellence.



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