

Passive DI-Box "D-10"

SIMPLE TO USE:

The unbalanced cable from the instrument or amp output is connected to the input socket of the DI box. Now balanced, the signal is emitted from the **BALANCED OUTPUT**, ready for feeding into the balanced microphone input; it can also be transmitted over long distances, e.g. via a multicore system.

The second jack output (**PARALLEL OUT**) is required if the instrument is used with an additional amplifier as a monitor.

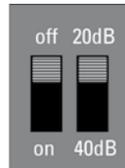
- D-10 DI Box requires no external power source or batteries and is always ready for use.
- D-10 DI Box features dielectric strength of 2500 V in compliance with prevalent safety regulations.
- With its ultra-robust die-cast housing and recessed switches, KLOTZ D-10 can easily withstand the rigors of stage and touring.

ADDITIONAL FUNCTIONS:

ATTENUATOR: a "reducer" enabling input levels on the DI box to be aligned to almost any signal source.

OFF Mode

Selected when non-amplified (weak) signals, e.g. passive guitar and bass, are used.



ON / 20dB Mode

For high-level (line) signals, e.g. keyboards, active instruments, effects pedals, tape decks etc.



ON / 40dB Mode

For fully amplified signals, e.g. amplifier speaker outputs.



GROUND LIFT - HUM CANCELLING

Hum occurs when two devices, e.g. a mixer and guitar amp, which are operated on differing earth potentials via the PG contacts in power sockets, are additionally connected by the signal cable shields.

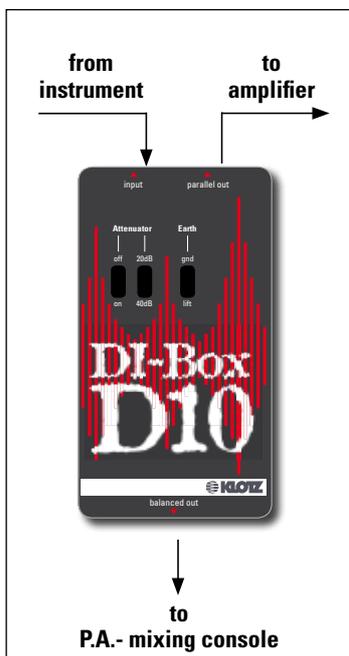
Mode gnd

The **GROUNDLIFT** switch is a simple but effective method of breaking the circuit that causes the hum.



Mode lift

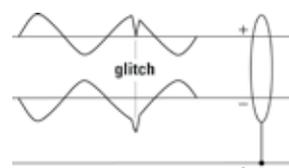
The full galvanic isolation achieved is also a significant safety factor.



Balanced – unbalanced?

In balanced signal transmission, the voltage generated by the twisted pair (+ and - pole) is always balanced to the base line. Interference affecting the cable is eliminated since the voltage on both wires is subtracted by the balanced inputs (differential inputs).

balanced



For this reason balanced signals can be transmitted relatively interference-free over long distances. Balanced cables ("microphone cables") always have 3-pin connectors.

In unbalanced signal transmission the reference potential is limited to a single signal wire and shield, so that interference which penetrates the shield is amplified along with the signal; this is particularly common with low frequency-interference (network frequency). Unbalanced cables always have 2-pin connectors, generally jack or cinch-type.

unbalanced

