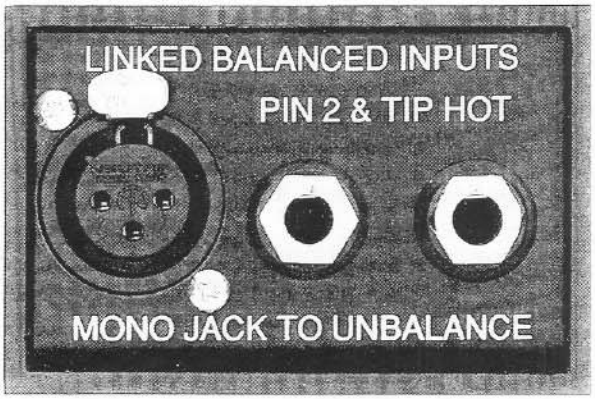
LBB100

Active DI Box

The Klark Teknik model LBB100 Direct Injection box provides high quality transformer isolation, attenuation and impedance matching of audio signals for use in live performance or in the studio.



LBB100 Front and Rear panels, shown actual size.

The high impedance input, with parallel quarter inch jacks and XLR, is transformer isolated. The quarter inch jack sockets will accept both balanced signals on a stereo jack (tip - hot, ring - cold, sleeve - ground) or unbalanced signals on a mono jack. Low noise, high current drive circuitry serves the low impedance, balanced output. Switchable input and output attenuators allow the LBB100 to accept a wide range of input signals; from low level instrument pick-ups to power amplifier loudspeaker outputs of up to 100 volts RMS. Use of phantom power from the mixer input gives reliable, convenient, low noise, high level operation not possible with conventional battery or battery eliminator set-ups.

A switchable Ground Link is provided for situations where ground isolation is not required.

The extruded aluminium case with recessed switches and connectors is a highly rugged and roadworthy construction, designed to give years of trouble free operation in the harshest touring environments.

Features

- High impedance, transformer isolated input.
- XLR plus twin quarter inch jack input connectors, all linked.
- Low impedance, active, balanced XLR output.
- Utilises 48 volt phantom power.
- Switchable 30dB input pad.
- Switchable 15dB output attenuator.
- Switchable earth link.
- High dynamic range; low distortion.
- Rugged aluminium case with recessed control and connector panels.
- LED power indicator.

KLARK TEKNIK
The first name with sound system designers

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ARCHITECTS AND ENGINEERS SPECIFICATION

The unit shall provide transformer isolation, impedance matching and attenuation for a variety of signals - from power amplifier outputs to high impedance transducers - into a low impedance balanced input. The unit shall be able to accept a maximum input level of at least 42dBu (100v RMS) provide attenuation switchable from 0 to 45dB in 15dB steps and output the signal into a balanced 600 ohm load.

Input connectors shall include two quarter inch jack sockets and one 3-pin XLR socket, all linked. Input impedance shall be 1Mohm.

The output shall be active and balanced, with a source impedance of 150 ohms, capable of driving a 10dBu signal into a 1kohm load. The output connector shall be a 3-pin XLR socket.

An earth link switch shall be provided to connect input and output grounds when required.

All controls and connections shall be recessed for physical protection.

The unit shall obtain power from a 48V phantom supply.

The unit shall achieve or exceed the following specifications:

Output noise -100dBu. 20Hz to 20kHz unweighted, with input terminated by 10kohm resistor.
Distortion 0.01% at 1kHz, 4dBu output.
Frequency response ± 1dB 20Hz to 20kHz
Power consumption < 10mA

TECHNICAL SPECIFICATION

Input	
Type	Transformer isolated, balanced or unbalanced.
Impedance	1Mohm nominal, balanced or unbalanced.
Connectors	2 quarter inch jacks and 3-pin XLR, linked in parallel.
Max. level	42dBu (100v RMS).
Attenuator	30dB, switchable.
Output	
Type	Active balanced.
Impedance	150 ohms.
Connector	3-Pin XLR.
Max. level	10dBu with load > 1kohm
Min Load	600 ohms
Performance	
Noise	-100dBu, 20Hz to 20kHz unweighted, with input terminated by 10k resistor.
Frequency response	± 1dB 20Hz - 20kHz
Distortion	<0.01% @ 1kHz, 4dBu output.
Power requirement	
Voltage	48V Phantom ± 10%
Current consumption	10mA
Weight	600g
Dimensions	
Length	135mm
Width	76mm
Height	51mm
Options	**Midas XL3** live performance mixing console.

RELIABILITY CONTROL

Even with the advanced electronic engineering incorporated in this product, each unit is given the full backing of Klark Teknik's "Reliability Control", which proves each product against a specification consistent with the highest professional standards. Precision components are used throughout and every unit is bench tested and aligned before a burn-in period and final performance test.

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