DB-2PX Two channel direct box

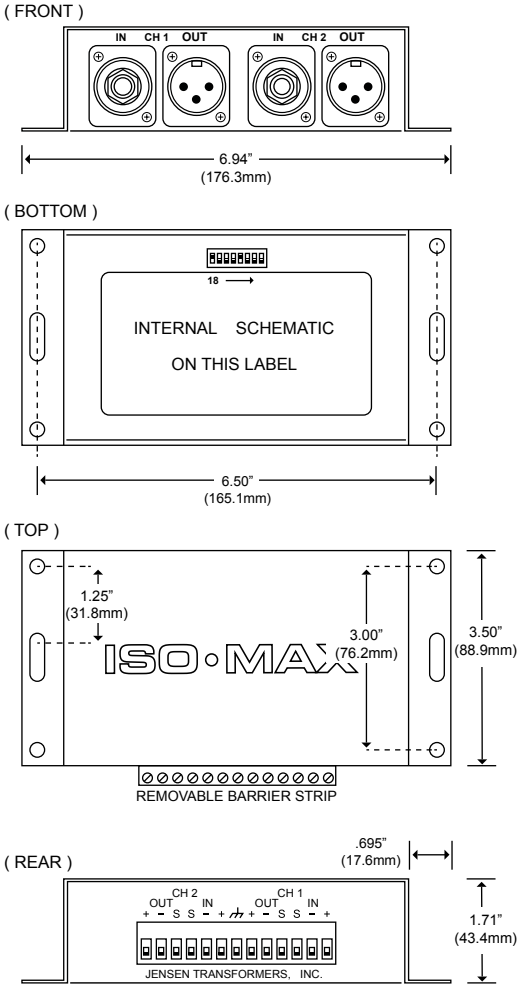
- **Converts unbalanced instrument signals to balanced**
- **Eliminates hum and buzz caused by ground loops**
- **Ruler flat frequency response from 10 Hz to 100 kHz**
- **Plug and play easy to use, no power required**

The Iso•Max DB-2PX is a stereo direct box designed to drive unbalanced instrument signals distances to 100 meters (300') or more without high frequency loss or introducing noise into the signal path.

The design begins with a flanged steel enclosure for easy mounting in a rack or under a desk. This comes standard with ¼" inputs and XLR outs along with a removable screw-down barrier strip for installers. Inside, two high-performance Jensen JT-DB-EPC transformers provide galvanic isolation as they passively lower the impedance and perform the balancing. A high 140 kΩ input impedance reduces loading, enabling low-output instruments such as a vintage Fender® bass to be connected without losing tone. As these instruments are particularly sensitive to noise, internal Faraday shields couple with the outer mu-metal can to reduce pollution from EMI and RF. This assures quiet interference-free performance even when surrounded by magnetic fields from amplifiers, power supplies and stage lighting dimmers.

With over +22 dB of signal handling capacity, the DB-2PX gracefully handles extreme signals such as those produced by digital pianos while producing a warm Bessel response that is often referred to as 'vintage' sounding. These features combine to make the DB-2PX the ideal choice for studio or live use.

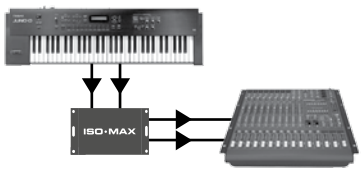
Dimensions



Connector options

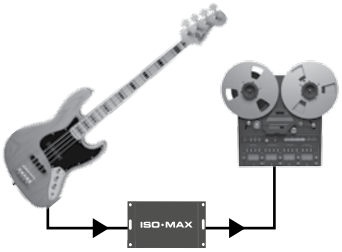
The DB-2PX comes standard with 1/4" TRS inputs and XLR outputs. It is also available special order with choice of RCA, 1/4" TRS, and others. See website for options.

Applications



Passive Direct box with PA
Connect the hi-Z output from your keyboard to the DB-2PX and it will lower the impedance and balance the signal for long cable runs. It also eliminates hum and buzz caused by ground loops.

Laptop DI to PA system
Send the stereo output from your laptop, CD player or DJ mixer to the DB-2PX and it will deliver a balanced mic level output to feed a mic splitter or the mic input of your mixing console without noise or distortion.

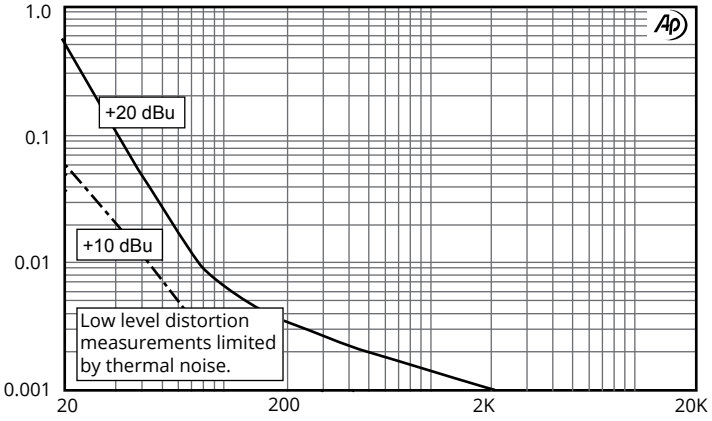


DB-2PX in the studio
The high input impedance, exceptional signal handling and broad frequency response make the DB-2PX a great choice for interfacing electric bass or acoustic guitar to the PA or recording system.

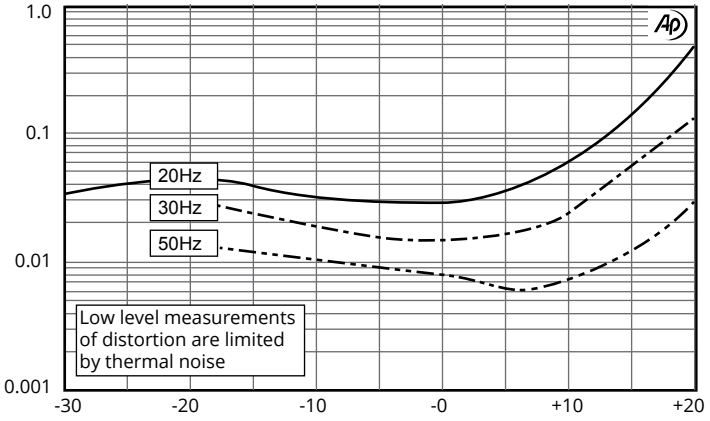
jensen transformers — ISO•MAX® — DB-2PX

Jensen...The Worlds Finest Audio Transformers

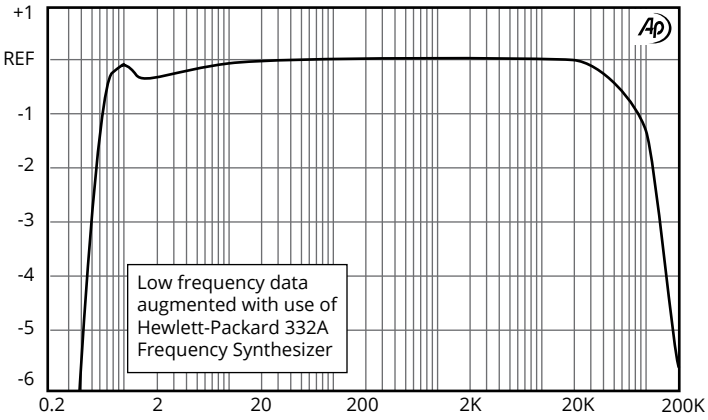
THD at FIXED INPUT LEVELS — THD+N (%) vs FREQUENCY (Hz)



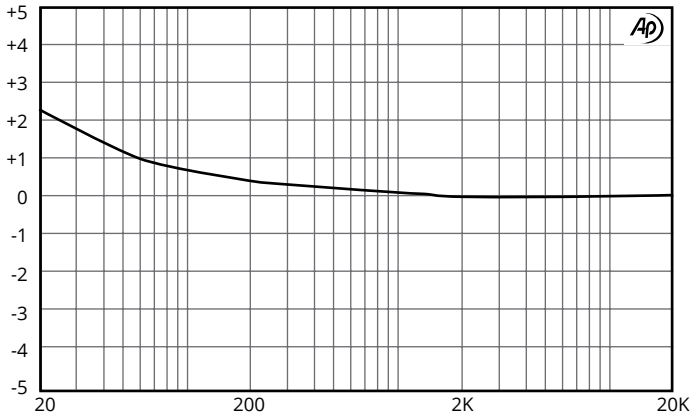
DISTORTION at FIXED FREQUENCIES — THD+N (%) vs INPUT LEVEL (dBU)



REFERENCE LEVEL RESPONSE — AMPLITUDE (dB) vs FREQUENCY (Hz)



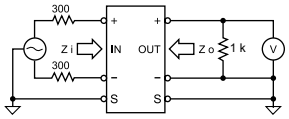
DEVIATION FROM LINEAR PHASE — DEVIATION (Deg) vs FREQUENCY (Hz)



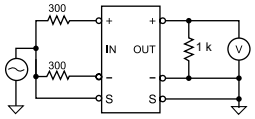
PARAMETER	CONDITIONS	MINIMUM	TYPICAL	MAXIMUM
Input impedance, Zi	1 kHz, 0 dBu, test circuit 1	92 kΩ	97 kΩ	102 kΩ
Voltage gain	1 kHz, 0 dBu, test circuit 1	-40.0 dB	-38.6 dB	
Magnitude response, ref 1 kHz	20 Hz, +4 dBu, test circuit 1	-0.25 dB	-0.08 dB	0.0 dB
	20 kHz, +4 dBu, test circuit 1	-0.25 dB	-0.07 dB	+0.1 dB
Deviation from linear phase (DLP)	20 Hz to 20 kHz, +4 dBu, test circuit 1		+1.2/-0°	±2.0°
Distortion (THD)	1 kHz, +4 dBu, test circuit 1		<0.001%	
	20 Hz, +4 dBu, test circuit 1		0.036%	0.10%
Maximum 20 Hz input level	1% THD, test circuit 1	+19.5 dBu	+21.5 dBu	
Input common mode rejection ratio (CMRR) unbalanced source	60 Hz, test circuit 2		80 dB	
	3 kHz, test circuit 2	40 dB	45 dB	
Output impedance, Zo	1 kHz, test circuit 1	145 Ω	150 Ω	155 Ω
Optimal cable length	input		3 m (10')	15 m (50')
	output		30 m (100')	150 m (500')
Temperature range	operation or storage	0°C		70°C
Breakdown voltage*	primary or secondary to shield and case, 60 Hz, 1 minute test duration	250 V RMS		

All levels are input unless noted

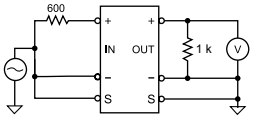
Test Circuit 1:



Test Circuit 2:



Test Circuit 3:



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* IMPORTANT NOTE: THIS PRODUCT IS NOT INTENDED FOR USE IN CIRCUMSTANCES WHERE THE DC OR PEAK AC VOLTAGE BETWEEN INPUT AND OUTPUT CONNECTIONS EXCEEDS 34 VOLTS OR WHERE ITS FAILURE COULD CAUSE INJURY OR DEATH.

jensen transformers

Jensen Transformers Inc., 9304 Deering Ave. Chatsworth, CA 91311
P: (818) 374-5857 F: (818) 374-5856 info@jensen-transformers.com

jensen-transformers.com