

PB-2XX Two channel universal line isolator

- Eliminates hum and buzz caused by ground loops
- May be used anywhere in the signal chain
- Ruler flat frequency response from 1 Hz to 200 kHz
- Plug and play easy to use, no power required

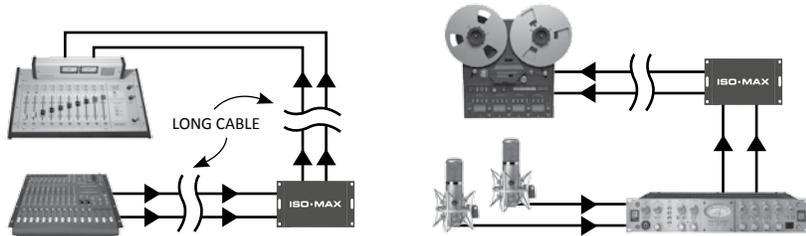


The Iso•Max PB-2XX is a two-channel universal isolator that gives you the freedom to solve noise problems anywhere in the signal chain.

The design begins with a rugged flanged enclosure that comes standard with gold plated XLRs and a removable screw-down barrier strip for easy installation in NEMA enclosures and 19" racks. Plug and play easy to use, this passive interface does not require any power to work. Inside are two specially designed Jensen multi-tap isolation transformers that provide unity gain, signal boost or level attenuation depending on how they are terminated. These are able to withstand signals in excess of +24 dB without discernible distortion while delivering a fabulously linear response to 200 kHz. This provides galvanic isolation between the input and output to eliminate hum and buzz caused by ground loops, rejecting noise by as much as 125 dB. To further optimize the performance, a bottom mounted eight position 'set & forget' dip switch enables the user to configure the PB-2XX grounding scheme as needed.

You simply connect the PB-2XX anywhere you like between the source and destination and the PB-2XX will quietly go to work, eliminating ground loops, electromagnetic interference (EMI) and RFI problems. This makes the Iso•Max PB-2XX a superb choice for the most demanding studio, broadcast and performance venue installations.

Applications



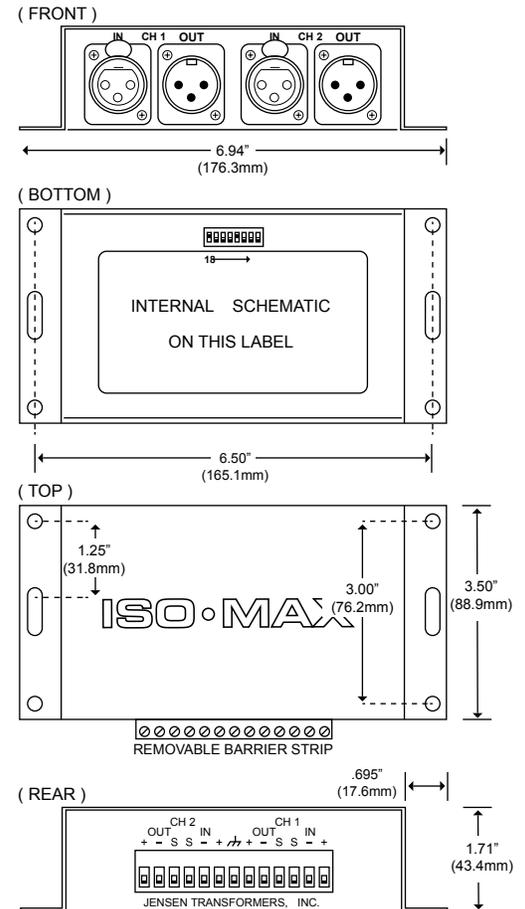
PB-2XX as a universal isolator

The PB-2XX may be connected anywhere in the signal chain. This makes it a great choice for machine rooms in a broadcast facility where different varying power systems throughout can introduce noise.

PB-2XX in the studio

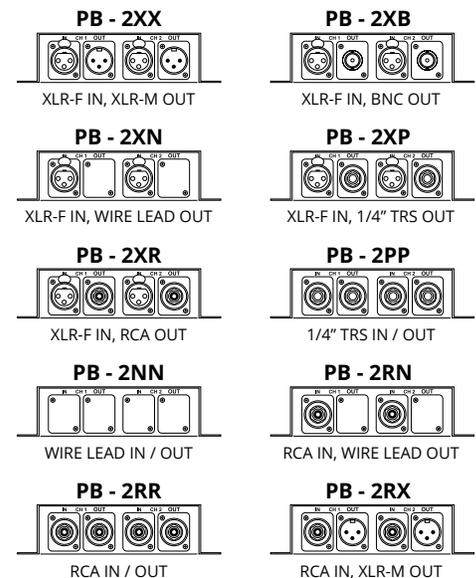
Recording and broadcast studios require noise-free signal transfer while delivering the most accurate sound possible. The PB-2XX eliminates ground loops and lowers RF without introducing distortion, phase shift or artifact.

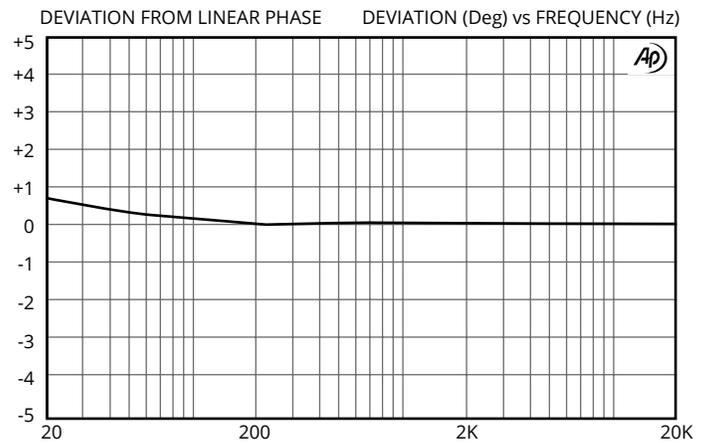
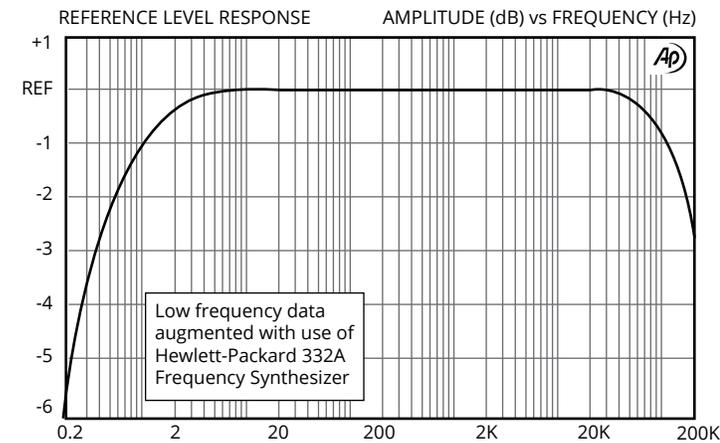
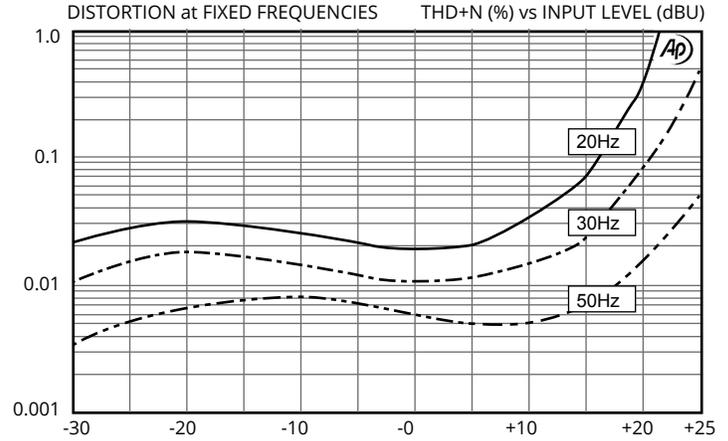
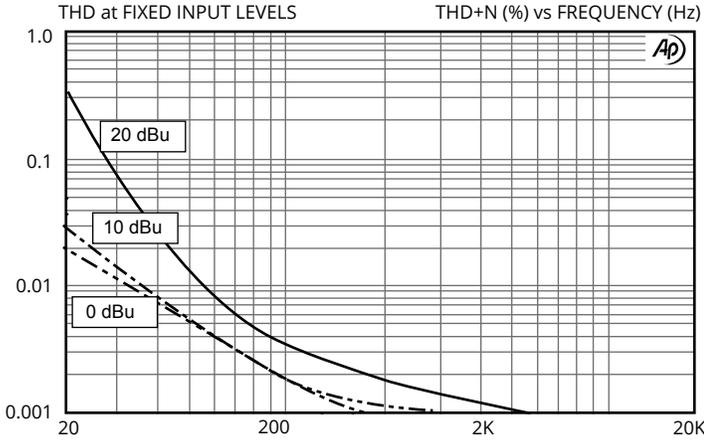
Dimensions



Connector options

The PB-2XX comes standard with XLR inputs and outputs. It is also available special order with the following connector configurations for use with both balanced and unbalanced systems.

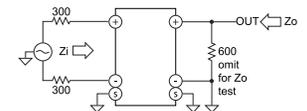




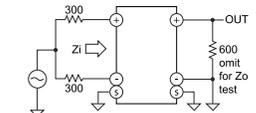
| PARAMETER | CONDITIONS | MINIMUM | TYPICAL | MAXIMUM |
|---|---|-----------|-------------|--------------|
| Input impedance, Zi | 1 kHz, +4 dBu, test circuit 1 | 743 Ω | 750 Ω | 757 Ω |
| Voltage gain | 1 kHz, +4 dBu, test circuit 1 | -2.1 dB | -1.9 dB | -1.7 dB |
| Magnitude response, ref 1 kHz | 20 Hz, +4 dBu, test circuit 1 | -0.2 dB | -0.06 dB | ±0.0 dB |
| | 20 kHz, +4 dBu, test circuit 1 | -1.0dB | -0.02 dB | +0.1 dB |
| Deviation from linear phase (DLP) | 20 Hz to 20 kHz, +4 dBu, test circuit 1 | | +0.6/-0° | ±2.0° |
| Distortion (THD) | 1 kHz, +4 dBu, test circuit 1 | | <0.001% | |
| | 20 Hz, +4 dBu, test circuit 1 | | 0.025% | 0.10% |
| Maximum 20 Hz input level | 1% THD, test circuit 1 | +19 dBu | +21 dBu | |
| Input common mode rejection ratio (CMRR) 600 Ω balanced source | 60 Hz, test circuit 2 | | 125 dB | |
| | 3 kHz, test circuit 2 | 75 dB | 95 dB | |
| Output common mode rejection ratio (CMRR) 600 Ω balanced load | 60 Hz, test circuit 3 | | 110 dB | |
| | 3 kHz, test circuit 3 | | 80 dB | |
| Output impedance, Zo | 1 kHz, test circuit 1 | | 750 Ω | |
| Turns ratio | primary to secondary | 0.999:1 | 1.000:1 | 1.001:1 |
| | input | | 50 m (165') | 200 m (650') |
| Optimal cable length | output | | 30 m (100') | 100 m (325') |
| | operation or storage | 0°C | | 70°C |
| Input to Output Voltage Difference* | any input to any output shield or any shield to case, 60 Hz | 250 V RMS | | |

1:1 series/series configuration, all levels are input unless noted

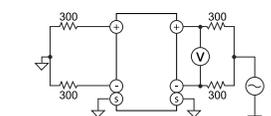
Test Circuit 1:



Test Circuit 2:



Test Circuit 3:



All minimum and maximum specifications are guaranteed. Unless noted otherwise, all specifications apply at 25°C. Specifications subject to change without notice. All information herein is believed to be accurate and reliable, however no responsibility is assumed for its use nor for any infringements of patents which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of Jensen Transformers, Inc.

* 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.