

PI-2XX Two channel line input isolator

- Two channel isolator eliminates buzz caused by ground loops
- Delivers exceptionally low distortion down to 20 Hz
- Ruler flat frequency response from 5 Hz to 40 kHz
- Plug and play easy to use, no power required

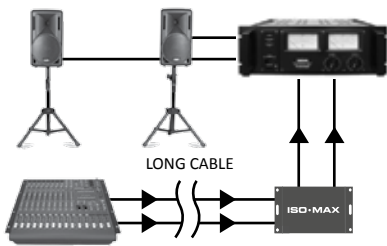


The Iso•Max® PI-2XX is a two channel line input isolator designed to eliminate noise in professional balanced audio systems by isolating the input of the connected device.

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. Plug and play easy to use, this passive interface does not require any power to work. Inside are two Jensen high performance transformers that are able to withstand signal levels to +19 dB at 20 Hz without discernible distortion. These provide galvanic isolation between the input and output to eliminate buzz and hum caused by ground loops, rejecting noise by as much as 124 dB. To further optimize the performance, a bottom mounted 8 position 'set & forget' dip switch enables the user to configure the PI-2XX grounding scheme as needed.

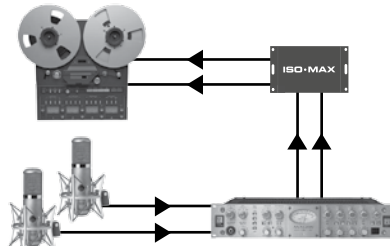
You simply connect the PI-2XX between the source and the input destination to eliminate ground loops, electromagnetic interference (EMI) and RFI problems. The PI-2XX will quietly go to work without introducing distortion, phase shift or artifact of any kind.

Applications



PI-2XX with a PA system

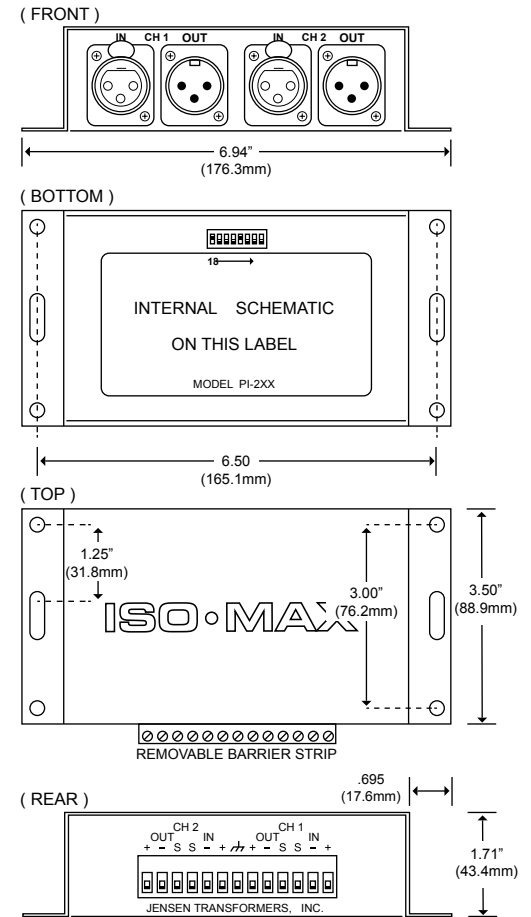
Eliminating noise in a PA system can take hours of trouble shooting, particularly when the mixer, amplifiers and speakers are distanced apart. Connect the PI-2XX at the input of your amplifier to eliminate ground loop buzz and hum.



PI-2XX in the studio

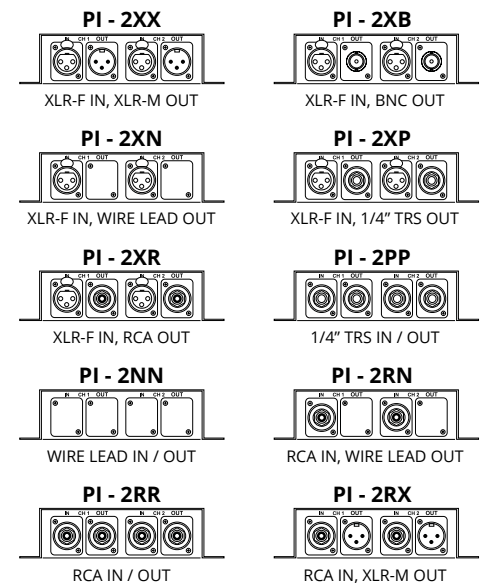
Recording and broadcast studios require a noise-free signal transfer while delivering the most accurate sound possible. The Iso-Max PI-2XX eliminates ground loops and lowers RF without introducing distortion, phase shift or artifact.

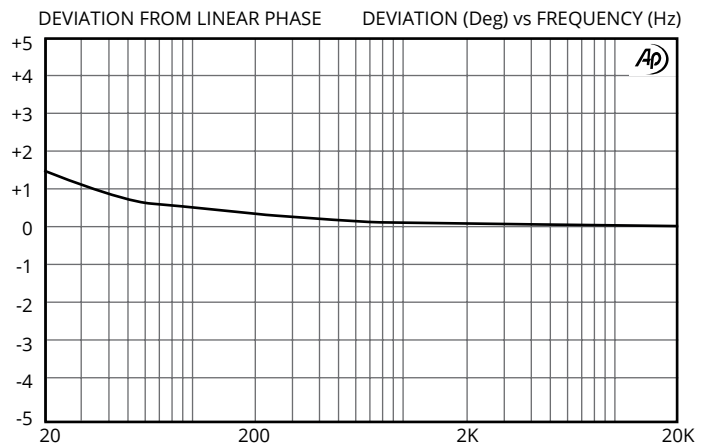
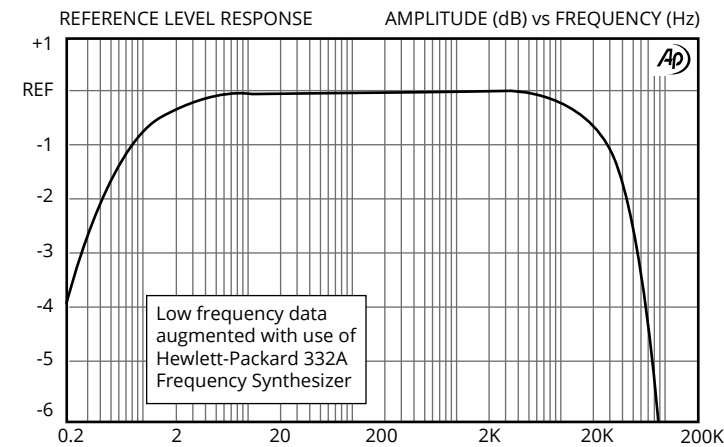
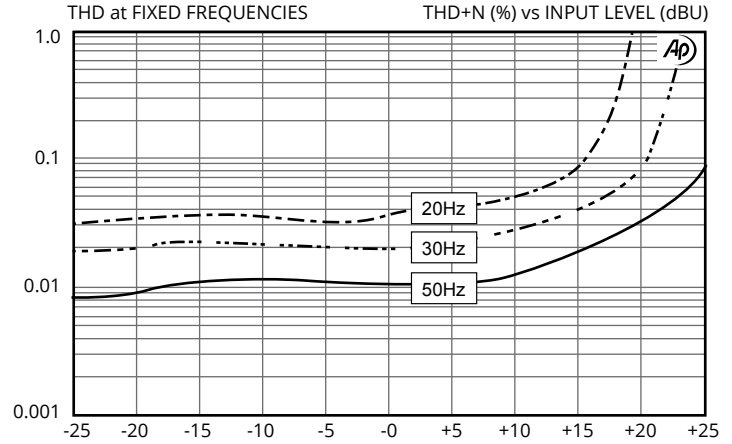
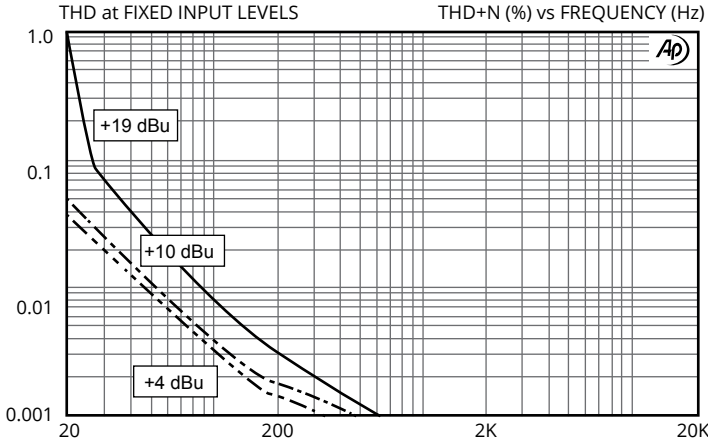
Dimensions



Connector options

The PI-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.

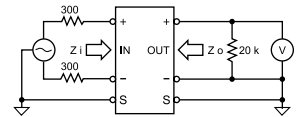




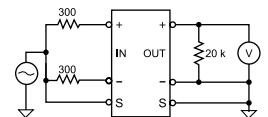
PARAMETER	CONDITIONS	MINIMUM	TYPICAL	MAXIMUM
Input impedance, Zi	1 kHz, +4 dBu, test circuit 1	22.0 kΩ	23.5 kΩ	25.0 kΩ
Insertion loss	1 kHz, +4 dBu, test circuit 1		1.6 dB	2.0 dB
Magnitude response, ref 1 kHz	20 Hz, +4 dBu, test circuit 1	-0.15 dB	-0.03 dB	±0.0 dB
	20 kHz, +4 dBu, test circuit 1	-1.0dB	-0.70 dB	±0.0 dB
Deviation from linear phase (DLP)	20 Hz to 20 kHz, +4 dBu, test circuit 1		+1.4/-0°	±2.0°
Distortion (THD)	1 kHz, +4 dBu, test circuit 1		<0.001%	
	20 Hz, +4 dBu, test circuit 1		0.04%	0.10%
Maximum 20 Hz input level	1% THD, test circuit 1	+17 dBu	+19 dBu	
Common - mode rejection ratio (CMRR) 600 Ω balanced / unbalanced source	60 Hz, test circuit 2 / 3		124 dB / 95 dB	
	3 kHz, test circuit 2 / 3	85 dB	95 dB / 85 dB	
Output impedance, Zo	1 kHz, test circuit 1		4.65 kΩ	
Allowable source impedance	(output impedance of device driving the ISO-MAX input)	0	600 Ω	2 kΩ
Allowable load impedance	(input impedance of device loading the ISO-MAX output)	10 kΩ	20 kΩ	∞
Allowable load capacitance	(cable & input capacitance loading the ISO-MAX output)	0	50 pF	100 pF
Optimal cable length			1 m (3.3')	3 m (9.8')
Temperature range	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			24 V RMS 34 V peak

All levels are input unless noted, +4 dBu = 1.23 V RMS

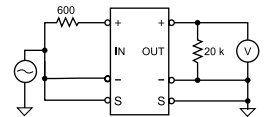
Test Circuit 1:



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.