CI-RJ2R Two channel RCA to CAT-5 exender

- **Stereo audio 'baluns' for RCA inputs using CAT-5/6 cable**
- **Lets you run cables to 100 meters (350') without loss**
- **Ruler-flat frequency response from 5 Hz to 20 kHz**
- **Superior noise rejection from ground loops & magnetic fields**

CI-RJ2R-T

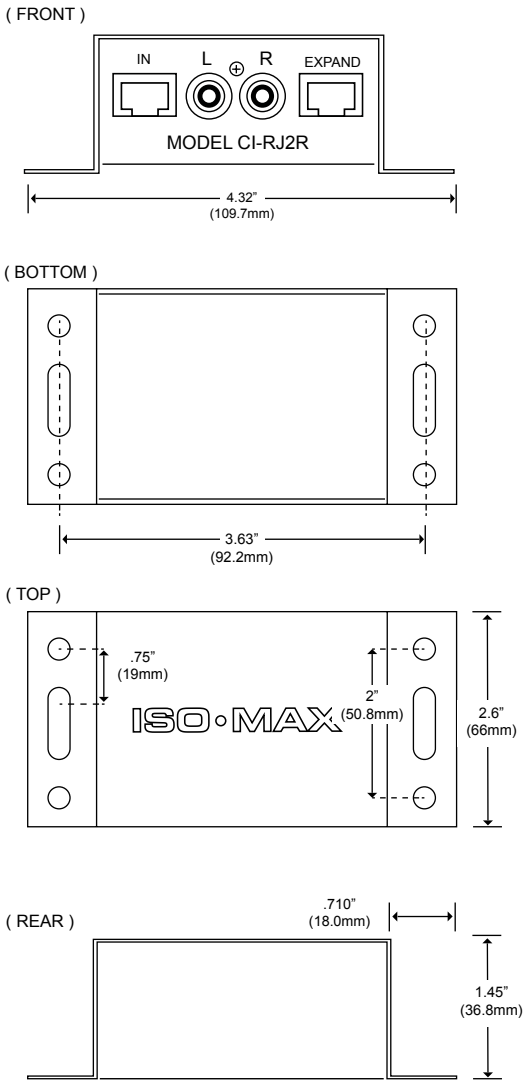
CI-RJ2R-R

The Iso•Max CI-RJ2R is a two channel input isolator that lets you extend unbalanced signals to 100 meters (350') using standard CAT-5 or CAT-6 balanced twisted pair Ethernet cable.

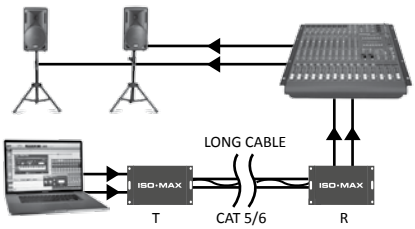
Sold as a 'transmit and receive' set, the design begins with two rugged flanged steel enclosures for easy mounting under a desk or inside a rack or NEMA enclosure. Each end is equipped with RCA inputs and outputs with a standard Ethernet RJ45 type connector in between. One merely connects the source and destination devices using the RCAs and bridges the two units using off the shelf CAT-5 or CAT-6 cable. This enables the system designer to employ pre-wired network cable to run analog audio throughout a facility without having to fish new wires.

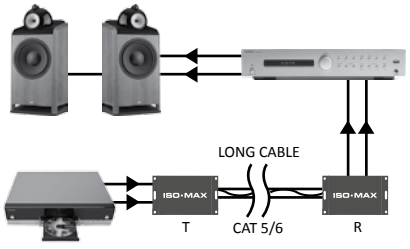
Plug and play easy to use, this passive interface does not require any power to work. Inside the receive module are two Jensen high performance transformers that are able to withstand signal levels to +19 dBv at 20 Hz without any discernible distortion. These provide galvanic isolation between the input and output to eliminate hum and buzz caused by ground loops, rejecting noise by as much as 124 dB. Once installed, the CI-RJ2R will quietly go to work without introducing distortion, phase shift or artifact of any kind.

Dimensions



Applications

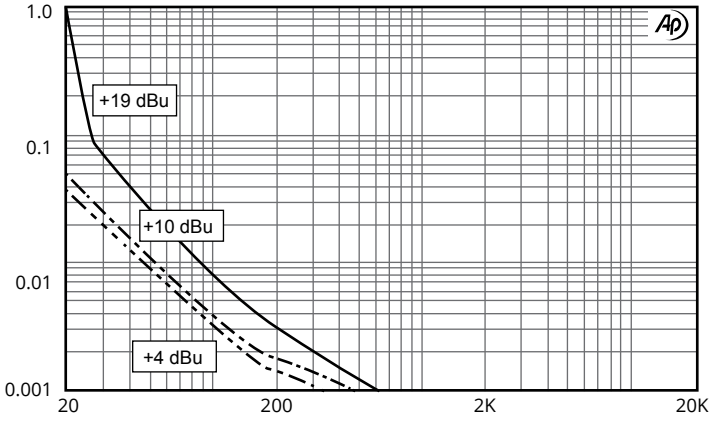




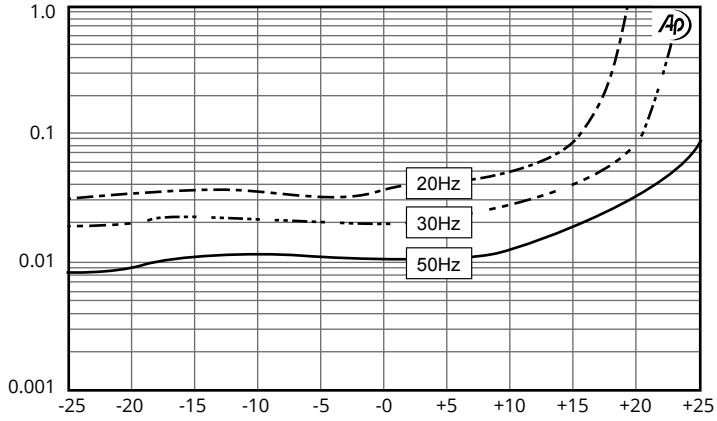
Connecting a laptop computer
The CI-RJ2R makes it easy for presenters to play audio tracks from their computer to a PA system. Connect the audio output from the computer to RCA inputs on the CI-RJ2R transmitter and the CI-RJ2R receiver will deliver the audio without distortion or artifact.

Connecting a CD player
Certain installations require connecting unbalanced consumer audio devices that may be distanced apart. The CI-RJ2R lets you use pre-existing CAT-5 network cable in between the transmit and receive modules and send the signal up to 100 meters (350') without noise.

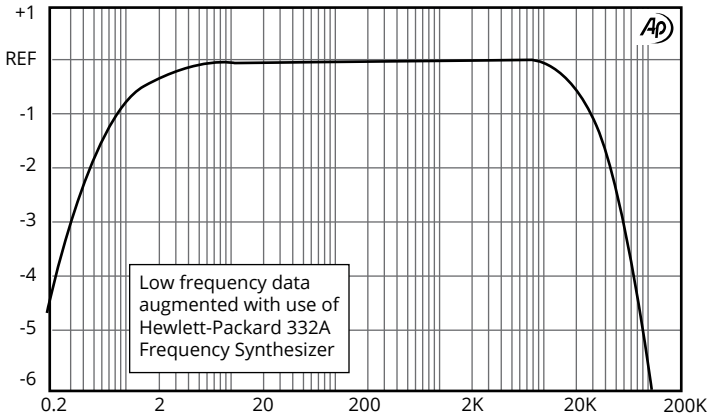
THD at FIXED INPUT LEVELS — THD+N (%) vs FREQUENCY (Hz)



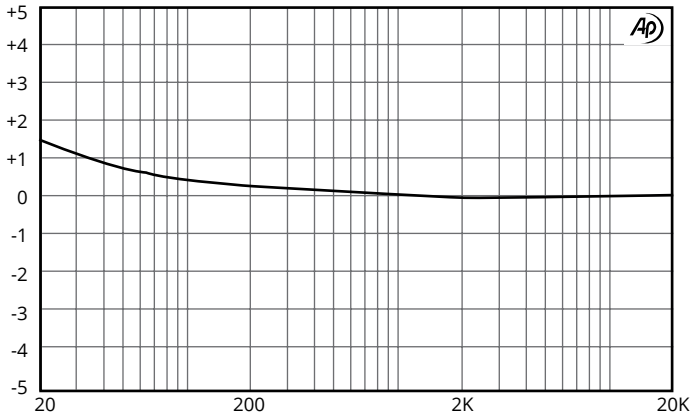
THD at FIXED FREQUENCIES — THD+N (%) vs INPUT LEVEL (dBU)



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, -10 dBV		22 kΩ	
Voltage gain	1 kHz, -10 dBV	-2.0 dB	-1.65 dB	-1 dB
Magnitude response, ref 1 kHz	20 Hz, -10 dBV	-0.15 dB	-0.03 dB	±0.0 dB
	20 kHz, -10 dBV	-0.35 dB	-0.20 dB	±0.0 dB
Deviation from linear phase (DLP)	20 Hz to 20 kHz, -10 dBV		+1.4/-0°	±2.0°
Distortion (THD)	1 kHz, +2 dBV		<0.001%	
	20 Hz, +2 dBV		0.04%	0.10%
Maximum 20 Hz input level	1% THD	+14 dBV	+17 dBV	
Common - mode rejection ratio (CMRR)	60 Hz		115 dB	
	3 kHz	80 dB	90 dB	
Output impedance, Zo	1 kHz		5.3 kΩ	
Cable length effect on 20 kHz response in dB (cable at 15 pF per foot)	8 m (25') / 375 pF		0 dB	
	15 m (50') / 750 pF		0 dB	
	30 m (100') / 1.5 nF		-0.2 dB	
	80 m (250') / 3.75 nF		-1.0 dB	
	100 m (350') / 5.25 nF		-1.7 dB	
Temperature range	operation or storage	0°C		70°C
Breakdown voltage*	transmitter to receiver ground references, 60 Hz, 1 minute test duration	250 V RMS		

-T and -R units connected by 15 m (50') CAT-5 cable, source = 600 Ω, Load = 22 kΩ unless noted

* 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.