# SUB-1RR Sub-woofer isolator

- Eliminates hum and buzz caused by ground loops
- Extended low frequency response down to 1 Hz
- Less than 0.01% distortion at 20 Hz
- · Plug and play easy to use, no power required

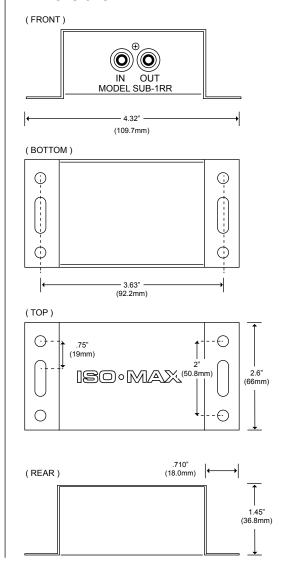


The Iso•Max SUB-1RR is a single channel low-frequency isolator designed especially for use with sub-woofers to eliminate hum and buzz caused by ground loops.

Inside, a specially designed Jensen audio transformer with extended sub sonic response delivers powerful and articulated bass for maximum impact. Even when being subjected to extremes, the SUB-1RR is able to gracefully handle low frequencies down to 20 Hz with less than 0.01% distortion and less than 1° of phase shift. And with better than 100 dB of common mode noise rejection, it solves the most difficult installation problems so that you can enjoy the full performance of your audio system without noise.

Housed in a heavy duty steel enclosure, the SUB-1RR is equipped with a 'screw down flange' for easy mounting inside an equipment rack, under a shelf or directly on the sub woofer. Gold plated RCA connecters ensure optimal signal transfer and will not corrode over time. The passive design does not require any power. You merely plug in and it goes to work without artifact or signal degradation. These combined features make the Iso•Max SUB-1RR ideal for home theater, studio and car audio installations.

### **Dimensions**



## **Applications**



#### SUB-1RR in a HI-FI system

Connect the SUB-1RR right before your active sub-woofer to eliminate hum and buzz problems in your hi-fi, audiophile or home theater system.



## SUB-1RR in your car

The SUB-1RR isolates your car audio receiver system from your sub amp to eliminate nasty sounding ground loops as it delivers full, accurate bass.

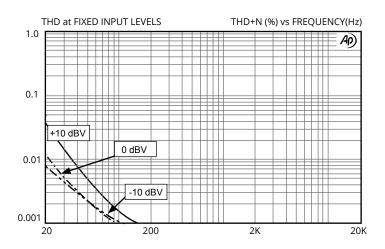


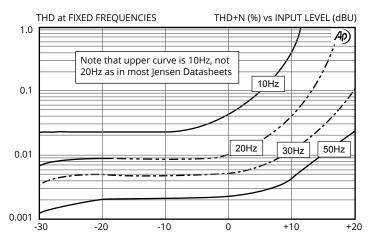
## SUB-1RR in the studio

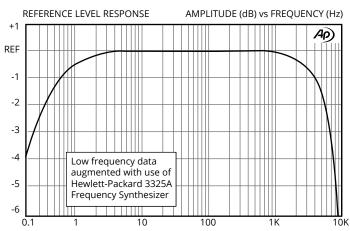
The SUB-1RR is the perfect interface to quiet down your monitoring system when recording. Pristine signal path assures a pure signal flow without artifacts.

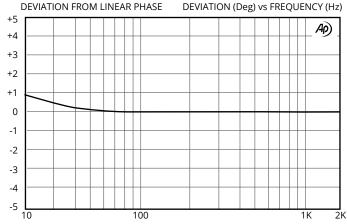






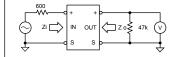




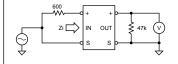


PARAMETER	CONDITIONS	MINIMUM	TYPICAL	MAXIMUM
Input impedance, Zi	100 Hz, -10 dBV, test circuit 1	39.0 kΩ	39.4 kΩ	39.8 kΩ
Insertion loss	100 Hz, -10 dBV, test circuit 1	-0.30 dB	0.00 dB	.30 dB
Magnitude response, ref 100 Hz	2 Hz, -10 dBV, test circuit 1	-0.25 dB	-0.11 dB	-0.00 dB
	2 kHz, -10 dBV, test circuit 1	-0.8 dB	-0.65 dB	-0.50 dB
Deviation from linear phase (DLP)	10 Hz to 2 kHz, -10 dBV, test circuit 1		+0.7/-0°	±2.0°
Distortion (THD)	100 Hz, -10 dBV, test circuit 1		<0.001%	
	20 Hz, -10 dBV, test circuit 1		0.01%	0.05%
Maximum 20 Hz input level	1% THD, test circuit 1	+16 dBV	+18 dBV	
Common - mode rejection ratio (CMRR)	60 Hz, test circuit 2		105 dB	
	3 kHz, test circuit 2	50dB	65 dB	
Output impedance, Zo	100 Hz, test circuit 1		5.00 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)	20 kΩ	47 kΩ	∞
Allowable load capacitance	(cable & input capacitance loading the ISO-MAX output)	0	50 pF	1000 pF
Optimal cable length	output		1 m (3')	3 m (10')
Temperature range	operation or storage	0°C		70°C
Input to output voltage difference*	input to output shield or either shield to chassis, 60 Hz			24 V RMS 34 V peak

Test Circuit 1:



Test Circuit 2:



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<sup>\*</sup> 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.



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