

SP-2SX Speaker to line level converter

- Converts any speaker or amplifier output to line level
- Delivers exceptionally low distortion down to 20 Hz
- Ruler flat frequency response from 5 Hz to 20 kHz
- Plug and play easy to use, no power required

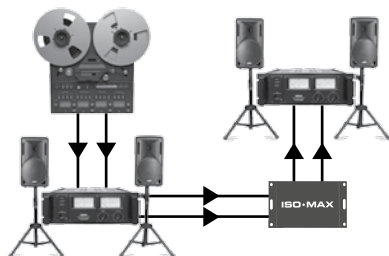


The Iso•Max SP-2SX is a two channel speaker to line level converter that lets you convert the high power signal from an audio amplifier output to a +4 dB (nominal) balanced line level for further processing or signal distribution.

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 Jensen high performance transformers that isolate the output to eliminate hum and buzz caused by ground loops while they eliminate issues with 'bridged' and 'class D' power amp outputs. A series of input pad DIP switches let you select the range to suit various power amps for at 25 W, 75 W, 250 W, or 750 W max in to 8 Ω. All types of amplifiers may be used including 25 V and 70 V line driver types.

Once connected, the SP-2SX is able to withstand signal levels to +19 dBu at 20 Hz without introducing distortion, phase shift or artifact of any kind. This opens the door to expand existing systems without having to run additional line level signals throughout a facility.

Applications



Using two amps in series

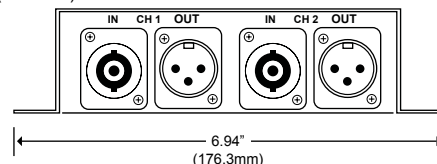
Some installations require expanding the audio system with more power to feed additional speakers to an adjacent room that may already be wired up. Use the SP-2SX to tap the signal from an existing power amplifier to feed a second system.

Add powered monitors on stage

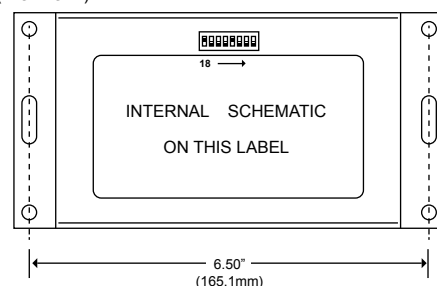
The SP-2SX lets you take the speaker output from a wedge monitor and feed it to a set of powered monitors for the drummer or side fills. Simply connect into the SP-2SX, set the power level to suit, and it will deliver a distortion-free line level signal.

Dimensions

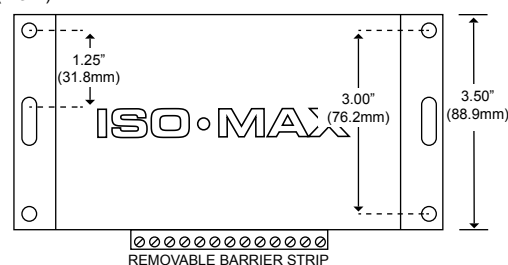
(FRONT)



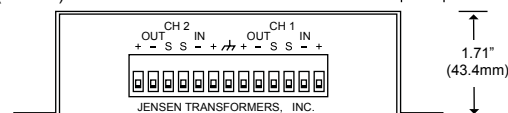
(BOTTOM)



(TOP)



(REAR)



Connector options

SP - 2SP



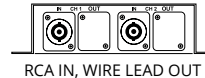
SPEAKON IN, 1/4" TRS OUT

SP - 2PP



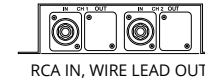
1/4" TRS IN, 1/4" TRS OUT

SP - 2SN



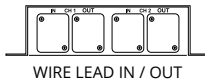
RCA IN, WIRE LEAD OUT

SP - 2PN

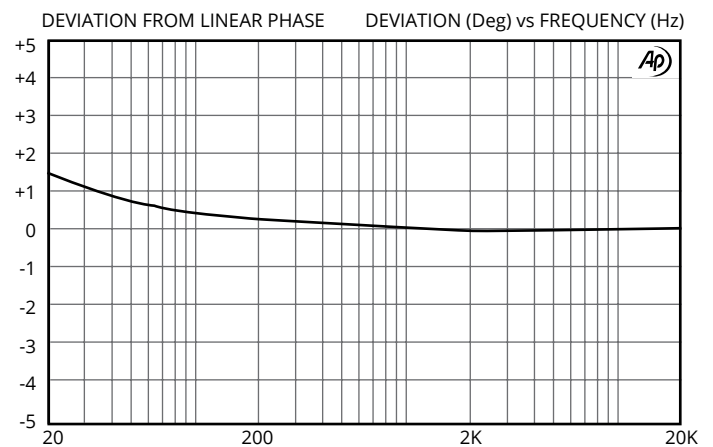
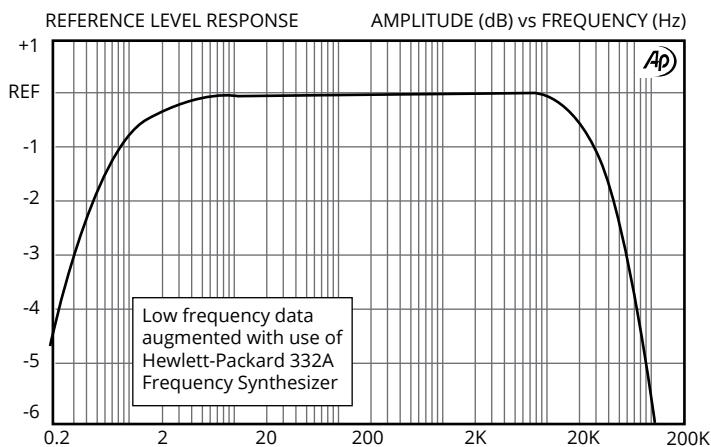
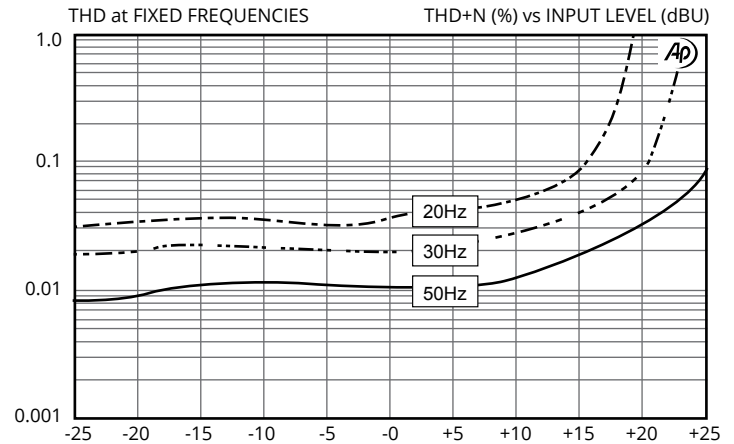
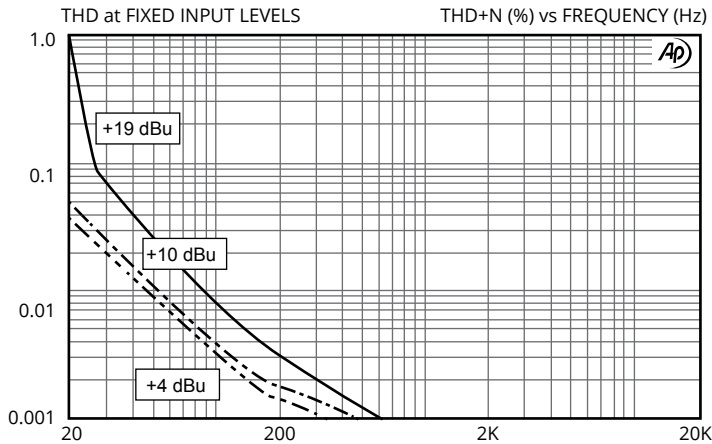


RCA IN, WIRE LEAD OUT

SP - 2NN



WIRE LEAD IN / OUT



PARAMETER	CONDITIONS	MINIMUM	TYPICAL	MAXIMUM
Input impedance, Z_i	1 kHz, 10 V, varies with power selection	1.1 k Ω		2.3 k Ω
Voltage gain	1 kHz, input voltage = rated maximum (see below)	17.5 dBu	+18 dBu	+18.5 dBu
Magnitude response, ref 1 kHz	20 Hz, 10 V	-0.15 dB	-0.03 dB	± 0.0 dB
	20 kHz, 10 V	-0.35 dB	-0.20 dB	± 0.0 dB
Deviation from linear phase (DLP)	20 Hz to 20 kHz, 10 V		+1.4/-0°	$\pm 2.0^\circ$
Distortion (THD)	1 kHz, 15 db below rated input voltage		<0.001%	
	20 Hz, 15 db below rated input voltage		0.04%	0.10%
	20 Hz, maximum rated input voltage		0.8%	1.5%
Common-mode rejection ratio (CMRR)	60 Hz		115 dB	
	3 kHz	80 dB	90 dB	
Output impedance, Z_o	1 kHz		5.3 k Ω	
8 Ω Amplifier power rating / rated maximum input voltage	S1 off, S2 off, S3 off			25 W, 14 V
	S1 on, S2 off, S3 off			75 W, 25 V
	S1 on, S2 on, S3 off			250 W, 44 V
	S1 on, S2 on, S3 on			750 W, 77V
	Any switch settings, without damage			77 V
Optimal cable length	input			
	output		1 m (3')	3 m (10')
Temperature range	operation or storage	0°C		70°C
Breakdown voltage*	speaker input to line output ground or chassis, 60 Hz, 1 minute test duration	250 V RMS		

+19 dBu on plots = max rated input voltage, Source = <100 Ω , Load = 22 k Ω 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.

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