



SoundConnect 2™

2 Channel Microphone Power Supply and Conditioning Amplifier

Introduction

SoundConnect 2 is a compact and rugged USB controlled microphone power supply and conditioning amplifier. It can power either one or two microphones, so it is a great choice for audio test applications where two microphones need to be powered simultaneously, for example headphone testing, stereo measurements, or when you need a reference microphone as well as your DUT microphone for substitution measurements.

Features

USB Control: SoundConnect 2 features full USB control from within SoundCheck in addition to the manual interface.

Powers most test microphones: Two powered BNC connectors on the rear panel provide 10 VDC power for Listen SCM microphones, and IEPE power for IEPE microphones or accelerometers. Optional LEMO connectors are available for powering microphones that require 200V polarization. It is fully TEDS compatible* for seamless communication of calibration data to your measurement device.

Wide frequency response: SoundConnect 2 has a bandwidth greater than 100kHz, and offers gain control from -20dB to +40dB in 10dB increments. User-selectable low pass (22.4kHz and 120 kHz) and high pass (1Hz, 10Hz, 20Hz and 100Hz) 2nd order Butterworth filters with -1dB corners, permit the frequency response to be tailored for a wide variety of applications. Each channel is independently configurable, and the configurations can be stored for later recall.

Low Self-Noise: SoundConnect 2 offers excellent dynamic range and low distortion. Balanced inputs and outputs offer excellent noise rejection and ground loop immunity.

Simple User Interface: The front panel features simple push buttons for power and gain control; multi-colored level indicators and a 2-line LCD display offers a clear readout of settings.

Compact and Lightweight: The unit is compact and lightweight, measuring just 4 3/8" wide and 2 units high. Up to four units can be mounted side by side in a 19" x 2U rack.



SoundConnect 2

Excellent Value: SoundConnect 2 is less than half the price of other microphone power supplies that offer similar functionality.

* Feature under development. Available soon as a software upgrade.

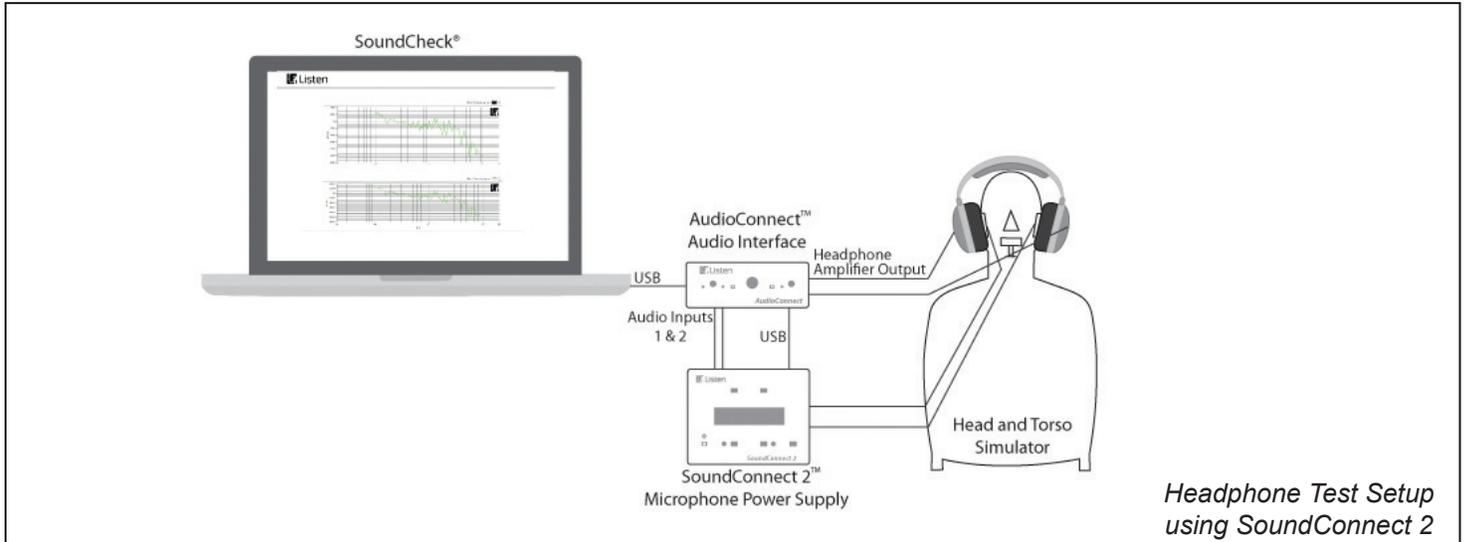


SoundConnect 2 Rear View



SoundConnect 2™ (cont.)

Setup Diagram



Headphone Test Setup using SoundConnect 2

Specifications

INPUTS

Line Input

Connector: 1/4" Tip-Ring-Sleeve (TRS) jack, balanced and unbalanced
Input Impedance: 200kΩ in parallel with ≤ 500pF
CMRR at 1kHz: ≥65dB at 0dB gain; ≥100dB at +40dB gain
Maximum input voltage: 80V RMS

BNC Mic Input

Connector: BNC Connector, compatible with SCM 2/3 microphones and accelerometers
Input Impedance (bias off): 200kΩ in parallel with ≤ 500pF
Bias Supported: Constant Voltage, Constant Current (IEPE), or none
Constant Voltage / Electret Bias: Open Circuit Voltage: Preset to +10VDC (Each channel internally adjustable from 100mV to 12VDC); Resistive Feed: 7.5kΩ or 2.2kΩ selections for each channel via front panel or USB (+/- 1%);
Constant Current / IEPE Bias: Open Circuit Voltage: +22VDC; Continuous Output Current: 4mA and 10mA, selections for each channel via front panel or USB ±5%

LEMO (Polarized) Mic Input

Connector: Lemo 1B series, type 307 receptacle. Compatible with pre-polarized and condenser microphones
Bias Voltage: +200VDC, Enabled or disabled via front panel or USB. Stability: ±0.5%
Bias noise: ≤100μV unweighted 20kHz BW; spectra ≤1μV 3.16Hz BW
Output Impedance: 20MΩ
Preamplifier Supply Voltage: ±15VDC; maximum supply current: 25mA

SIGNAL AMPLIFICATION

Gain: -20dB to +40dB in 10dB steps
Tolerance: ±0.1dB from -20 to +20dB; ±0.2dB +30dB & +40dB
Flatness, 20Hz – 20kHz: ±0.05dB
Frequency Response: ≤0.8Hz to ≥140kHz, -3dB
SNR (Noise – RTI, 20kHz BW unweighted, all filters off, output gain +6dB): -20dB: ≥90dB; 0dB: ≥120dB; +20dB: ≥110dB; +40dB: ≥90dB

SIGNAL FILTERING (channels independently configurable)

High Pass Filters: Frequencies: -1dB at 1Hz, 10Hz, 20Hz, 100Hz; Butterworth, 40dB/decade (2nd Order)
Low Pass Filters: Frequency: -1dB at 22.4kHz or 120kHz, Butterworth, 40dB/decade (2nd Order)

OUTPUTS

Balanced and unbalanced: all outputs are short circuit and over voltage protected
Gain: 0dB or +6dB, selections via front panel or USB to match various balanced input stages
THD: -20dB to -10dB: ≤0.01%; 0dB to +20dB: ≤0.0006%; +30dB: ≤0.001%; +40dB

PHYSICAL

Dimensions: 4.375" (111mm) W x 3.5" (89mm) H x 8.25" (210mm) D
Weight: 810g
Power: 24 VDC, 700mA power input (Supplied with regionally approved 110/220V, 50/60 Hz power adapter)

OPTIONAL ACCESSORIES

Rackmount shelf with mounting points for 1/4 rack width Connect series products. Part # 4901

NOTE: Specifications are subject to change. Please contact Listen for current information or questions.