



AmpConnect 621™

High resolution multichannel audio interface with 6 inputs, 2 line outputs, 1 amplifier output (plus everything else you need for audio testing!)

Introduction

AmpConnect 621 simplifies your multichannel audio test with 6 inputs, 2 line outputs and one amplifier output, along with microphone power, full TEDS support, impedance measurement and digital I/O in a single USB-connected unit. With sample rates up to 192kHz, it is ideal for the measurement of high resolution audio devices.



Seamless Integration

AmpConnect 621 integrates seamlessly with SoundCheck® (version 18 and higher). Setup is fully automatic; plug and play functionality autopopulates all the input channels in the software with sampling rate, calibration values etc.

TEDS Support

TEDS support enables automatic identification, configuration and calibration of microphones and accelerometers. This saves time during initial setup and any time hardware is changed, as such data does not need to be entered manually.

Error-free Operation

Control is via the software only, either via a test sequence or from a dedicated control panel. This eliminates the possibility of accidental change to the settings as there are no buttons on the front panel, making it an ideal choice for production line applications. Front panel LEDs offer a clear visual indication that microphone, DUT, and power amplifier levels are all operating within maximum dynamic range, and show which amplifier output is selected.

Inputs

Multiple inputs make this interface ideal for any application where multiple microphones are needed, from the R&D lab to the production line. It is the ideal partner to a 6-microphone array for automotive measurements or sound power measurements. Other applications include, for example, measuring devices with multiple speakers such as smart phones or sound bars.

Outputs

Two line outputs and one amplifier output enable stereo signal output, and enable the signal to be routed to either powered signal sources (e.g. powered artificial mouths, speakers, headphones, stereo amplifiers, automotive head

units) or unpowered sources such as speakers that require an amplifier. This makes the interface extremely flexible for use in a wide variety of test configurations.

Impedance Measurement

AmpConnect 621 features Listen's unique high-accuracy impedance measurement system. This is carried out entirely within the unit, and configured via the software; no external connections are required. It does not require any of the input channels to be used, so all 6 remain free for audio measurements.

Rugged

Like all Listen test hardware, AmpConnect 621 is designed for production environments. It is 17" wide by 2-Units (3.5") high x 11.5" deep, and may be rack mounted (optional rack-mounting kit available). There are no buttons on the front, avoiding accidental changes to settings, and fingerprint-resistant matte finish ensures that it always looks great!

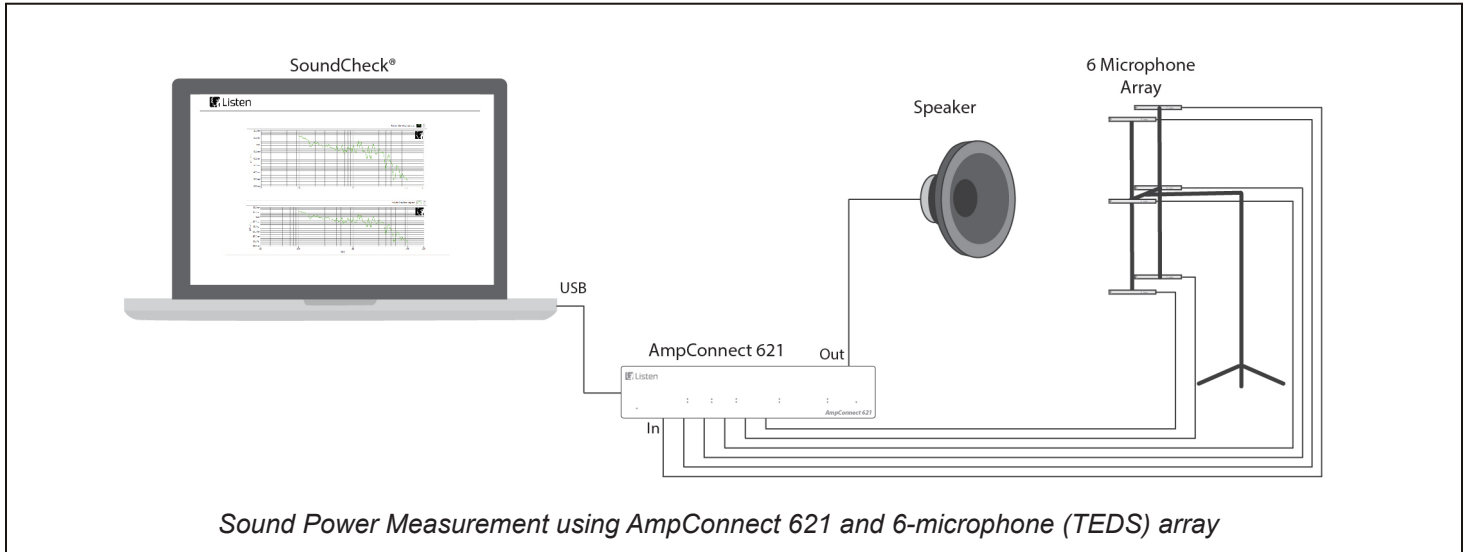
Feature Overview

- 6 channels of audio test in a single unit with just one USB connection to the computer
- Unique high accuracy impedance measurement independent of your input channels
- Line and Amplifier outputs and Digital I/O
- Plug-and-play setup with SoundCheck and TEDS support
- Error-free operation with all control via SoundCheck - no buttons!
- Clear visual level indicators on front panel
- Excellent ground loop immunity compared to discrete components
- Rugged and rack-mountable for demanding production environments



AmpConnect 621 (cont.)

Setup Diagram



Specifications

USB Audio Interface

USB 2.0, Windows and macOS HID compliant
 ASIO low-latency audio driver (Windows only)
 USB Audio Class 2 (macOS, Windows 10)
 Sample Rates: 44.1, 48, 88.2, 96, 176.4 & 192 kHz; 24 bits

Mic/Line Inputs

Connectors: 6 BNC unbalanced inputs
 TEDS Support (IEEE 1451.4)
 Maximum Input Level: 20 Vp (14 Vrms) at -20 dB gain
 Input Impedance: 100 kΩ
 Gain Settings: -20, 0, +10, +20, +30 dB
 Bias Settings: Off / SCM / IEPE
 SCM (Electret) Bias: 10 VDC, 7.5 kΩ
 IEPE Bias: 28 VDC @ 4 mA constant current
 Frequency Response: 20 Hz - 20 kHz +0.1/-0.4 dB;
 10 Hz - 90 kHz +0.1/-1.1 dB
 Equivalent Input Noise*: <14 uV
 THD+N*: < -80 dB at -1 dBFS, 44.1 kHz sample rate, 0 dB gain
 Crosstalk: >100 dB at 10 kHz
 Inter-channel Phase*: ±0.15°

Line Outputs

Connectors: 2 BNC unbalanced outputs
 Maximum Output Level: 4 Vp (2.82 Vrms)
 Frequency Response: 20 Hz - 20 kHz ± 0.1 dB;
 10 Hz - 90 kHz +0.1/-2.0 dB
 THD+N*: < -98 dB at -1 dBFS, 44.1 kHz sample rate
 Crosstalk: >110 dB at 10 kHz, 0 dB gain
 Inter-channel Phase*: ± 0.15°

Amplifier Output

Number of Outputs: 2, in parallel, switchable (Off, A, B, A+B)
 Connectors: 4 binding posts (A: Red/Black; B: Yellow/Black)
 Output Power: 50 W RMS into 4 Ω, 25 W RMS into 8 Ω
 Frequency Response: 20 Hz - 20 kHz ± 0.1 dB;
 10 Hz - 90 kHz +0.1/-1.0 dB
 THD+N*: -82 dB (0.008%) typical @ 1 W, 8Ω;
 -90 dB (0.003%) typical @ 25 W, 8Ω

* at 20 Hz - 20 kHz BW

Loudspeaker Impedance Measurement

Measurement range 2.5-250 Ω

Physical

Without rack mounting flanges: 17"/432mm wide x
 3.5"/90mm (2-U) high x 11.5"/292mm deep
 Weight: 7.275 lbs (3.3kg) approx.
 Power: 100-240 VAC 50/60 Hz, 140 Watts



AmpConnect 621 Rear View

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