



DC Connect™ DC Power Supply and Monitor

DC Connect is a hardware product that enables the SoundCheck audio test system to work with DC signals in a variety of test situations. It's a box instrument, the same size as the SoundConnect™ microphone power supply. It connects to the device-under-test via a single XLR, TRS balanced connector, which can act as a

- DC voltage source, with current measurement
- DC current source, with voltage measurement
- DC voltmeter
- DC ammeter

The level of voltage or current output from DC Connect is computer controlled, either via a command from USB port or via an AC voltage from a soundcard. The output level can be rapidly changed by the computer, as may be required in fast, complex test sequences.



DC CONNECT™ is a USB controlled precision power supply and current monitor⁵⁰

Features

- Measure current consumption of battery operated and other low voltage devices such as hearing aids
- Test a device over the voltage descent of a battery's lifetime
- Measure resistance, capacitance, and inductance
- Apply a voltage or current ramp
- Acquire the current vs. voltage characteristic curve of a device
- Measure current draw synchronized with an audio stimulus
- Acquire a current draw vs. audio level curve
- Measure the dynamic response of current draw to a step in audio level
- Monitor test point voltages and currents
- USB or sound card control
- Current limiting
- ±10V with 1mV resolution (adjustable polarity)
- 3 to 300mA with 0.1mA resolution

Specifications

Source or Monitor Type	Control/Monitor Method	Accuracy	Nominal Resolution
Voltage, 10 V max.	USB	± 0.1% ± 1 mV	1 mV
Voltage, 10 V max.	Analog	± 0.3% ± 1 mV	1 mV
Current, 3 mA max.	USB	± 0.1% ± 1 µA	0.1 µA
Current, 3 mA max.	Analog	± 0.3% ± 1 µA	0.1 µA
Current, 30 mA max.	USB	± 0.1% ± 4 µA	1 µA
Current, 30 mA max.	Analog	± 0.3% ± 4 µA	1 µA
Current, 300 mA max.	USB	± 0.2% ± 20 µA	10 µA