Listen

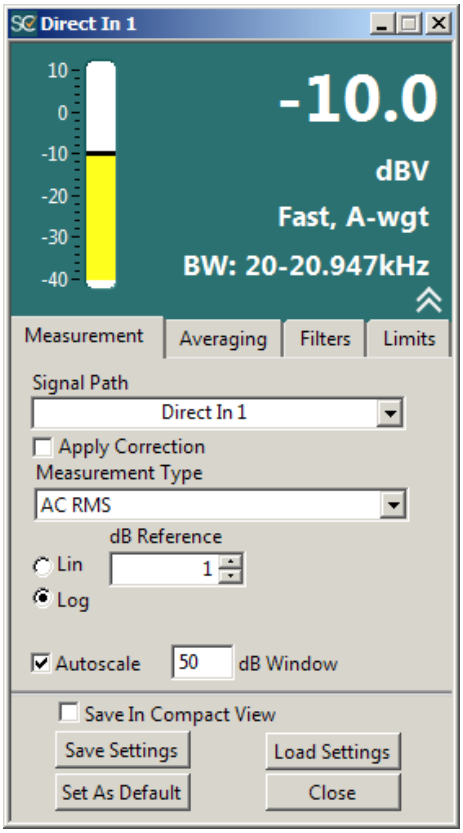
SoundCheck®
Audio Test and Measurement System

SoundCheck 15 New Features

SoundCheck 15, a simultaneous Windows/Mac release contains features which expand the testing capability of SoundCheck with additional external control, calibration, audio mixing and hardware integration. This release also sees the first in our redesigned virtual instruments, the multimeter.

More Powerful Control with TCP/IP

External control of SoundCheck is simpler, yet more powerful with the new TCP/IP control. This offers many advantages over the previous Active X controls (still available), such as the ability to connect to SoundCheck via any programming language, on any operating system, either locally or through a network. It also features a more powerful and expandable command format for interacting with SoundCheck. This is extremely valuable for anyone who needs to control SoundCheck from an external program, for example as part of an overall test plan or factory automation. Using this feature, a single computer can control multiple SoundCheck systems, simplifying production line measurements.



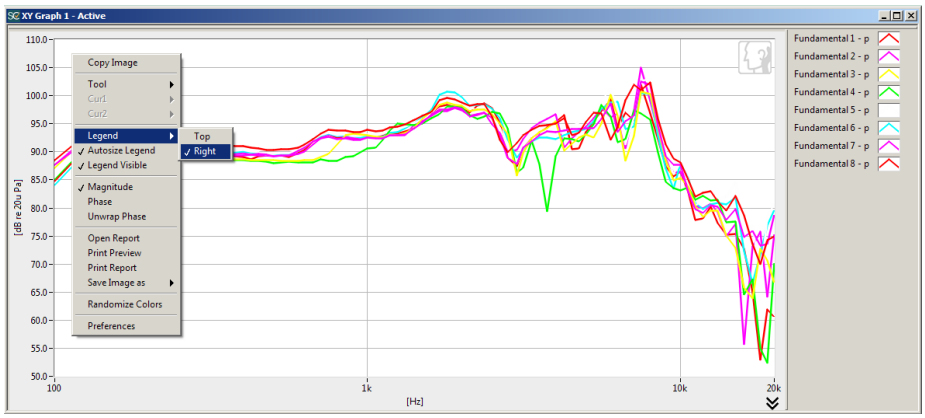
New Multimeter

SoundCheck's multimeter has been completely re-designed to offer additional functionality as well as ease of use. An expandable window enables a compact 'meter' view, or an expanded detailed 'settings' view. In 'meter' view, a clear, simple level meter is displayed, which changes color to warn of overload or near overload values. The value is shown in a clear numerical readout, with a choice of linear or log values. The averaging type, weighting type and bandwidth are also displayed.

In 'settings' view, 4 different tabs for measurement, averaging, filters and limit setting are visible, and options such as linear/log scale, filtering and weighting options, etc. can be selected. Enhancements to the multimeter's capabilities include the ability to measure DC voltage in addition to AC voltage, enabling SoundCheck to be used with a DC coupled interface (e.g. the NI 4461) for making DC audio electronic measurements. The addition of high and low pass filters is useful for removing electrical noise for electronic measurements and low frequency background noise for acoustic measurements. A new 'autoscaling' option automatically adjusts the range of the display based on the signal. The multimeter can also now read the dB ref from the memory list. Multimeter settings (range, filters, averaging, etc.) can be saved, loaded and set as default, making it quick to recall commonly used meter settings. The multimeter settings can also be combined with other virtual instruments and the complete virtual instrument set-up saved.

Improved Plot Legend Flexibility

Additional plot legend options have been added. A toggle makes the plot legend visible or invisible, the legend can be placed at the top or the right of the graph. A new auto-size option re-sizes the plot legend area to show the entire curve or waveform names. When not auto-sized, placing the pointer over a curve or waveform name will display the entire name.



SoundCheck® 15.0 New Features (cont.)

Auto-Mode in Hardware Editor

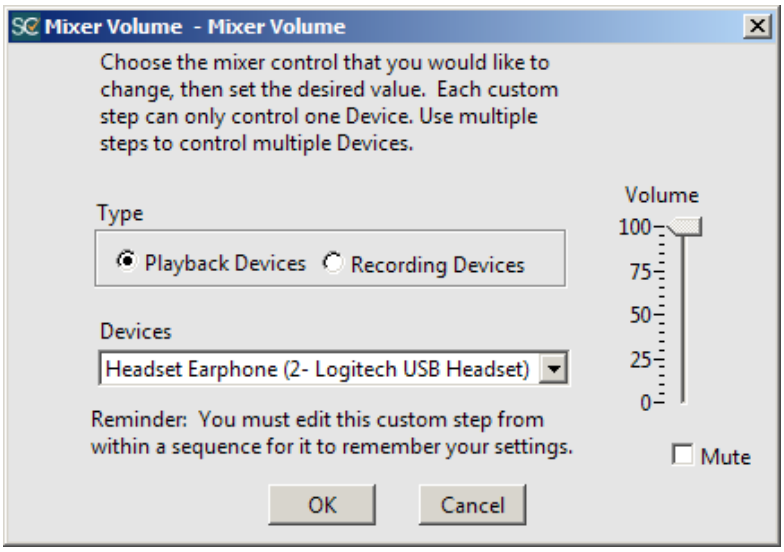
When automode is checked, the audio table is automatically refreshed as hardware is plugged and unplugged, without the need to close and reopen the hardware editor to see the changes updated. This makes system set-up faster and simpler.

Control of Bluetooth Interface

Various improvements in the BTC control include faster response, better abort handling and the ability to detect when a connection has failed so that the sequence can decide whether to try again or not.

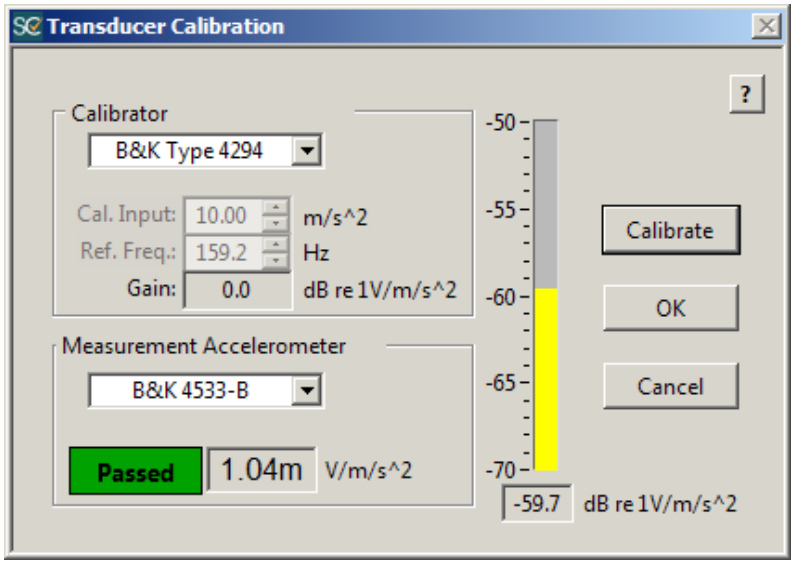
Improved Audio Mixer

The Windows & Mac OS Audio Mixer custom VI has been updated to work with the latest versions of both Windows and Mac OS. This enables controls of any audio input or output via steps in SoundCheck. For example, the volume of a headset may be controlled while testing it, or the levels of a WDM audio device can be fixed at unity gain for consistent calibration.



Support for Accelerometer Calibration and Force Measurement

Accelerometer and other vibration transducer calibration and related force units (dB re 1 m/s2, dB re 1 N and dB re 1 g) are now supported. This enables measurement of linear motors such as those used in haptic devices.



Faster Setup with Automatically Selected Status.dat

If the status.dat path is pointed to a folder containing multiple status.dat files, the software will automatically load the one that corresponds to the currently plugged in hardware key. This is useful for customers who are setting up multiple SoundCheck computers, as a single computer image can be created with SoundCheck pre-configured rather than having to set up each individual key on the corresponding computer.