



## SoundCheck® 9.0 New Features

SoundCheck® 9.0 offers a host of new features designed to offer ease of use, increased measurement accuracy, and simpler analysis and presentation of data.

### AmpConnect™ Support

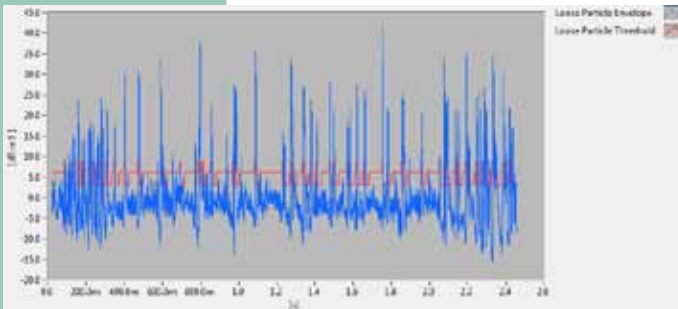
SoundCheck® 9.0 supports AmpConnect™, Listen's new integrated hardware box which replaces a power amplifier, microphone power supply, impedance box and digital I/O card in your testing setup. AmpConnect can be fully controlled either via the sequence editor, or directly via a control panel that replicates the appearance of the front of the hardware.



AmpConnect control panel within SoundCheck

### SoundCheck ONE™

SoundCheck ONE™, the low cost production test version of SoundCheck 9.0 consists of SoundCheck ONE software bundled with AmpConnect. Anyone who purchases / upgrades to SoundCheck 9 and purchases an AmpConnect within 6 months will have their SoundCheck 9.0 key programmed to also work in SoundCheck ONE mode. This enables the user to switch between SoundCheck 9.0 and SoundCheck ONE, so that sequences for SoundCheck ONE can be written without purchasing another system.



New Loose Particle Algorithm

### Loose Particle Algorithm

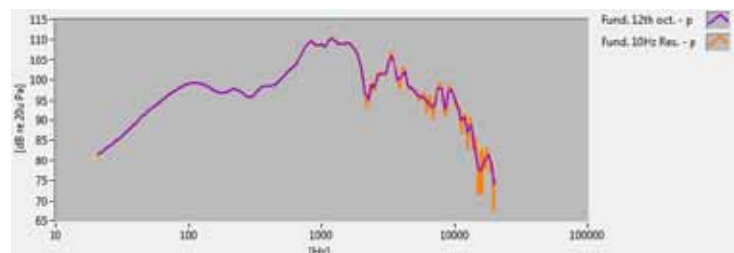
The improved Loose Particle Algorithm offers better noise immunity in production and other noisy environments as limits float with the normalized background noise rather than being set absolutely. In addition to simplifying limit setting, false rejections due to sudden increases in background noise are less likely. There is now also a setting for choosing a maximum stimulus frequency, above which the loose particle envelope is not calculated. As loose particles tend to present themselves during the low frequency portion of a stimulus sweep, this feature further prevents false rejects.

### Curve Smoothing

Curve smoothing with Nth octave resolution is now built into the analysis editor. Many measurements require the collection of large volumes of data, particularly at high frequencies where constant bandwidth analysis functions such as FFT and Log TSR are used. While such data quantities are essential for certain measurements, reducing the volume of data using curve smoothing offers three advantages.

- since the number of data points is reduced, post-processing is faster, thus reducing the overall test time
- data can be reduced to a common resolution to easily compare different algorithms
- it produces smoother curves which looks good on data sheets and marketing materials.

This feature is available in the Time Selective Response, Spectrum, Transfer Function, and Multitone analysis types.



New Curve Smoothing



## SoundCheck® 9.0 New Features (cont.)

### TSR Algorithm Maximum Harmonic Indicator

Log TSR sweeps are a popular test method, but inexperienced users may inadvertently miss important measurement details by sweeping too fast. For example, a given combination of window size and speed may be adequate for measuring Rub & Buzz, but insufficient to enable analysis of individual harmonics. The new indicator shows the maximum harmonic that can be selected independently of its neighbors. The indicator, while it does not place any restrictions on the user's ability to define the speed and window size, will offer an advisory when the settings are such that individual harmonics will not be accurately calculated.

### Choice of Impedance Measurement Method

SoundCheck® 9.0 supports the measurement of impedance using a resistor before the load (as used in AmpConnect) or after the load (as when using a Listen impedance box).

### Advanced View for Stimulus Editor and Limits Editor

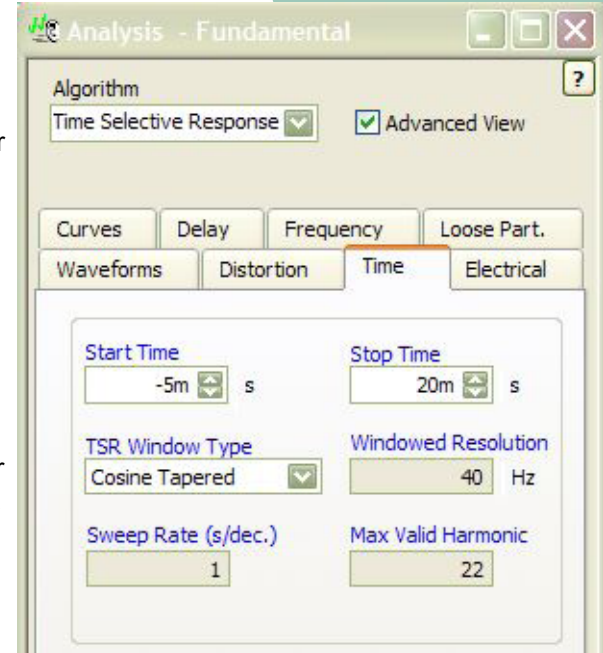
Both the Stimulus and Limits Editor menus now offer two views, basic and advanced. The basic views feature only the commonly adjusted settings, and by clicking on the advanced tab, many more are revealed. This keeps the software simple for novice and production line users while retaining the flexibility demanded by R&D applications.

### Option to Switch to Demo Mode

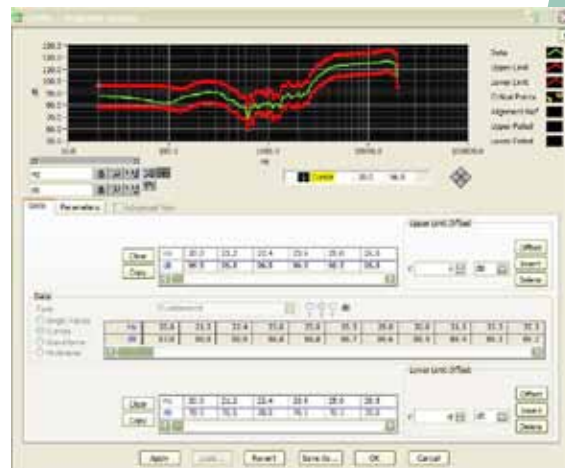
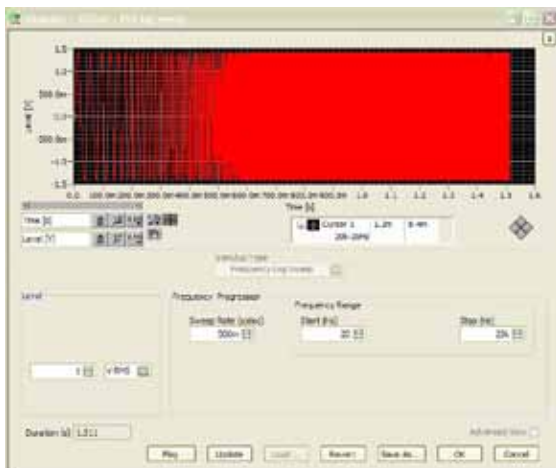
SoundCheck can now be switched to Demo Mode without the need for a new hardware key. Running in demo mode will randomize data, but will allow the user to view and experiment with all modules and analysis algorithms prior to purchasing them. Users have the choice of launching the full version of SoundCheck or SoundCheck ONE in demo mode.

### Simultaneously open multiple DAT Files

Several DAT files can now be opened at once from the Memory List. This is convenient when running statistics on a batch of curves and working with large numbers of files



Maximum Harmonic Indicator for TSR Algorithm



Simple View for Stimulus and Limits Editors