

Base Analyzer (標準機能)

- Modes: Real-time mode with data buffering (optional modes: recording and post-processing)
- Channels: Single channel measurements (optional: dual channel measurements & analysis)
- Views: Time Series, Spectrum and Phase (optional: 3-D Surface, Spectrogram)
- Settings: up to 16 bit/48kHz, FFT sizes thru 32768 (optional: 24 bit/200kHz, FFT sizes to 1048576 pts)
- Scaing: Linear, Log, Narrowband, 1/1 and 1/3 Octave (optional: up to 1/96 octave, Power Spectral Density)
- Calibration: V, mV, dBV, dBmV, dBu, PA, psi, SPL, acceleration (optional: velocity or displacement)
- Measurements: peak frequency and amplitude, total power, cursor measurements, right click action menus
- Configuraton Files: quick test setup/recall for increased productivity
- Printing, Annotation, Triggering, Markers and clipboard operations

Opt/01

Dual Channel Processing: adds dual channel operations - Real and Complex Transfer Functions, Coherence, Average, Cross Spectrum and cross channel delay compensation. Time domain measurements (Left, Right, L/R, L-R, R-L, L+R, X/Y, Y/X) and cross-channel delay compensation.

Opt/02

Recording and Post Processing Modes: adds direct hard disk recording and playback. Post Processing mode provides comprehensive analysis from WAV files. Also adds precision digital filtering of wave files; includes Low Pass, High Pass, Bandpass, Notch and User Defined filter response. Includes flexible File Import/Export capabilities.

Opt/03

Signal Generator Utility: adds single and multitone tone, pink or white noise, noise burst, frequency sweep, frequency step, level sweep, pulse, saw, triangle, square, IMD test tones, DTMF, digital zero, and user defined WAV source. Can generate independent signals for left and right channels (requires dual channel option).

Opt/04

Spectrogram View: displays the spectrum versus time for advanced joint time-frequency analysis. Magnitude represented by grey scale, full or custom color palette and selectable scroll direction (up/down, left/right). Ideal for detailed noise source identification, sound & vibration, voice analysis, sonogram and sound signature analysis.

Opt/05

3-D Surface View: displays the spectrum versus time in a 3-Dimensional perspective format. Includes solid or multicolor format. Provides an effective analysis tool for analyzing complex spectrum content over time.

Opt/06

Distortion Analysis: adds on-the-fly real-time analysis for THD, THD+N, IMD, SNR, SINAD, and noise figure (NF) measurement utilities. Also adds a dedicated THD+N versus Frequency Utility that allows you to quickly and conveniently measure the distortion characteristics of your device over a range of frequencies.

Opt/07

High Resolution Analysis: adds 24 bit sampling precision and sampling rates up to 200kHz (sound card dependent). Adds FFT sizes up to 1,048,576 points, and Octave scaling to 1/96.

Opt/08

Advanced Scaling and Calibration: adds independent channel calibration and scaling for left and right channels with separate views for each. Useful for applications requiring separate channel scaling and calibration such as simultaneous sound and vibration measurements. This option also includes calibration conversions from Acceleration to Velocity or Displacement; also adds Power Spectral Density scaling option for accurate noise measurements.

Opt/09

- Acoustic Toolset: adds the following tools and utilities:
- Reverberation Time (RT60) utility features bar graph of reverberation time versus frequency band, 3-D Surface plot of the decay versus frequency and individual decay plots versus time.
 - Delay Finder measures delay between two channels in milliseconds, feet or meters. Speed of sound - converts the delay value between milliseconds, feet or meters.
 - Equivalent Noise (Leq) utility provides comprehensize noise level calculations for LeqT, Leq, Lpk , Lsel, Lmax, Lmin, L10, L50, L90.
 - Stereo Phase Scope for real-time monitoring and analysis of signal phase. Phase scope mode displays a standard oscilloscope X-Y orientation (lissajous pattern) for analysis of phase, polarity, missing channel detection and stereo separation monitoring.

Opt/10

- Automation Toolset: adds the following tools and utilities:
- Macro Command Processor utility allows you to easily automate measurements, record SPL and spectral data at user specified intervals/duration with time/date stamp, save files with user-defined names using a script-based programming language. It uses the underlying DDE syntax for an automation solution without requiring a third party program.
 - Dynamic Data Exchange (DDE) allows the capability for an external program to control and read results from the analyzer in real time. Works with any program that supports DDE such as C++, VB, Excel, Access and others.
 - Data Logging utility produces an output text file containing selected spectral parameters + time-stamp for dynamic signal tracking and "unattended" event monitoring.