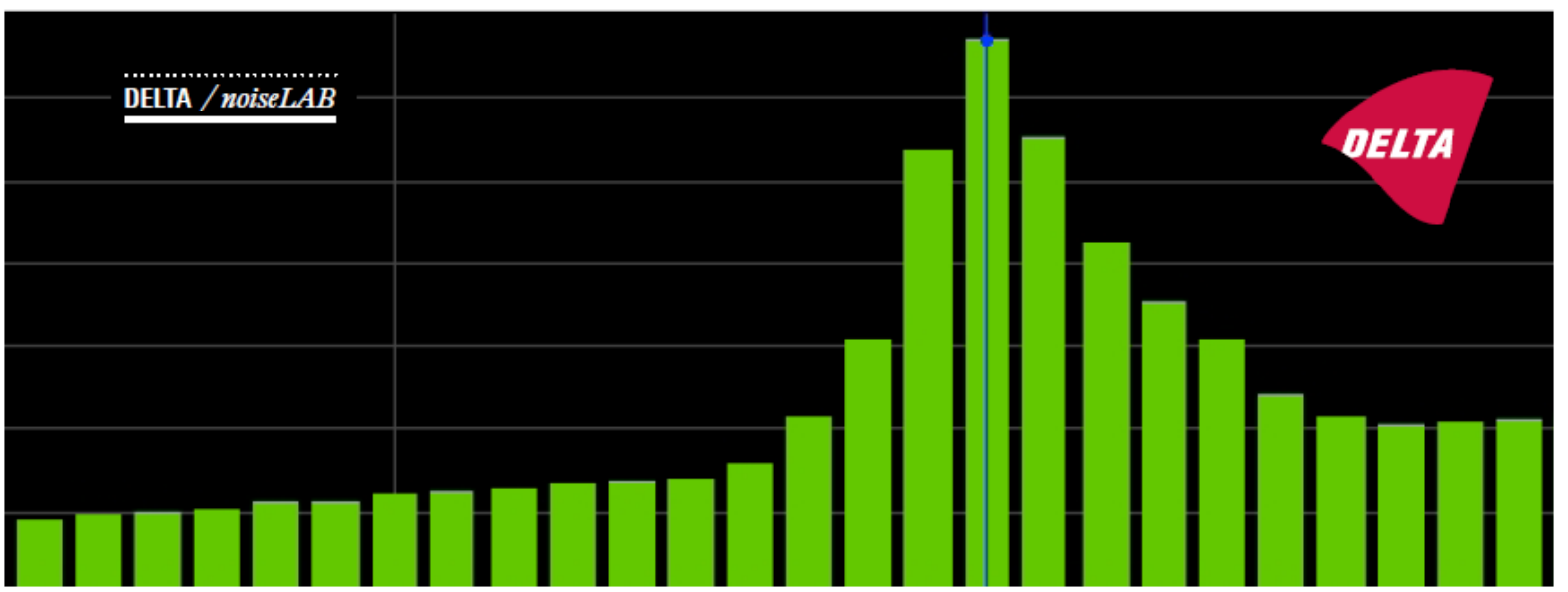
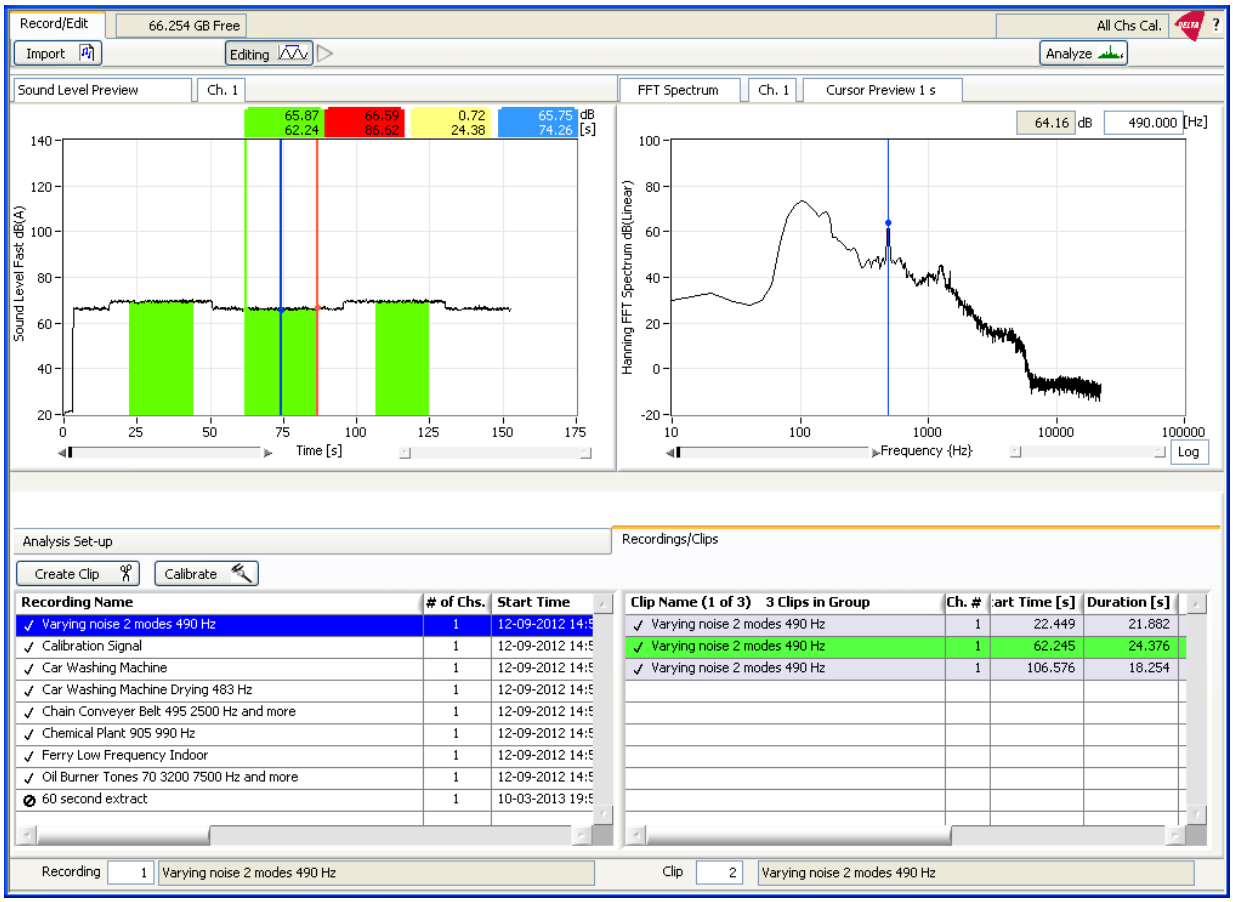


noiseLAB Pro

Powerful tools for Type 1 noise analysis



Introduction

noiseLAB Pro provides advanced, easy-to-use sound, vibration, and psychoacoustic analysis to Type 1 standards. For noise analysis, 1/1 to 1/24 octave analysis is provided along with FFT spectrum analysis with resolution from 1 Hz to 100 Hz. Also included is Sound Level (Z, A, B, C weighting) with choice of integration time constant, Impulse, Peak, and statistical analysis, Leq and LE. In addition, noiseLAB also provides low frequency A weighting and Infrasound G weighting

Vibration Analysis

Vibration analysis is based on accelerometer signals, which with integration provides velocity and displacement in a variety of units, displayed with linear or logarithmic X and Y scales. Both Peak, Peak to Peak, and RMS (with selectable time constant) is available for vibration analysis.

Ensuring Quality with non-destructive editing

- Record or import sound files.
  noiseLAB Pro provides a powerful front-end for sound recording, calibrating, and editing of multi-channel sound files. Signals may be recorded using National Instruments hardware or .wav files may be imported from external sound level meters or recorders.
- Audit and edit
  The noiseLAB Editor lets you listen to or scrub sound files while viewing their spectra, and edit the files to only include relevant sounds. This ensures higher quality of measurements. The non-destructive editing also lets you go back at any time, adjust the edit, or make different analyses.

Time and Frequency Slice Analysis

Time Slice analysis lets you perform any analysis type in in user-defined slices, for example to see the 1/3 octave spectrum in 10 second intervals. In addition, by placing the cursor on any frequency spectrum component you can view its value as a function of time.

Psychoacoustics

The human impact of noise and vibration is a major new addition to noiseLAB. In addition to Tone Analysis, the classic sound quality metrics of harshness, roughness, loudness (stationary and time-varying), sharpness and fluctuation strength are also provided.

DELTA developed the tone analysis method (ISO 1996-2 Second Edition Annex C) and is now supplemented by two new experimental metrics for wind turbines: the Pedersen method for low frequencies and the LeGarth method for swish analysis of wind turbines.

Additional Features

- Import of multi-channel recordings .wav recordings
- Automatic application of calibration settings from Svantek Instruments.
- Manual calibration by applying the value from an imported calibration tone to other recordings.
- User-friendly non-destructive editing of recordings.
- Multiple Clips per Recording
- Batch processing of unlimited number of clips and recordings.
- Analysis of any or all analysis functions in parallel.
- Sound playback and sound scrubbing: View FFT or Octave spectra as you “scrub” by moving the cursor.
- Export of results to Excel.
- Storage of time waveforms in .tdms format
- Fast, streamlined operation
- Multi-core enabled analysis for higher speed.
- Windows XP to Windows 7 compatible.

Benefits

Your sound files can be edited to select precisely the sound of interest. This gives more accurate measurements, and lets you perform additional analysis at a later time.

- No regrets: You can always go back, check for errors, or make new analyses.
- Wider range of analysis choices: You are only limited by the software on your PC. As new methods become available, you can apply them to existing files.
- Better documentation: If your measurement ever is challenged you can always go back to the original recordings for independent audit.
- Improved accuracy by automatic or manual calibration with associated time-stamping.
- Faster, more flexible analysis than most sound level meters or analyzers.
- Highly interactive editor lets you quickly see, hear and select the relevant signals by “scrubbing” the data.

Ordering information

noiseLAB Pro is available from DELTA or its distributors: www.noiselab.dk

noiseLAB Pro is available in three editions with different functions and channel count. See the above link for more information.

Specifications subject to change without notice

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