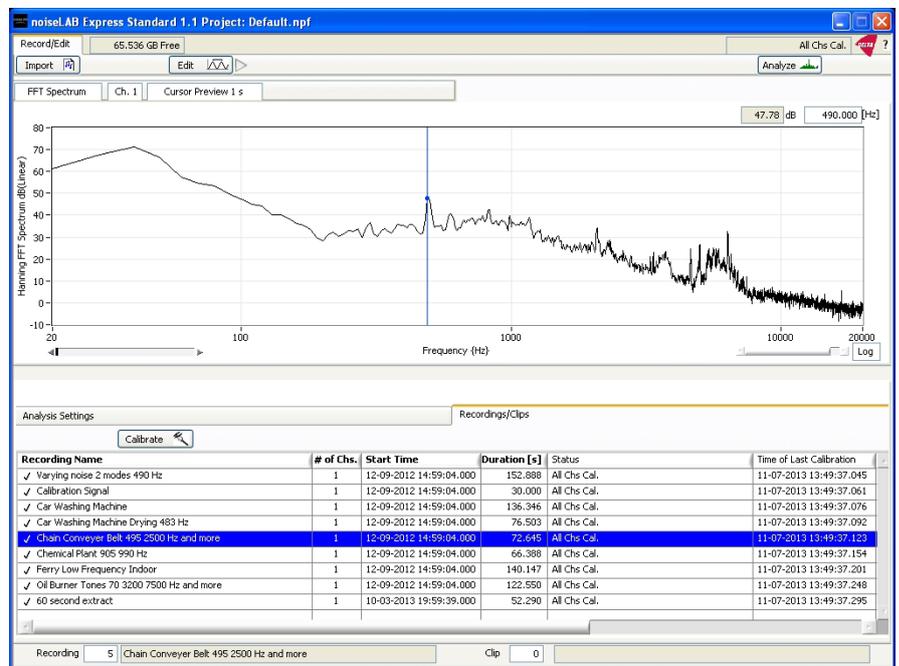# noiseLAB Express

Type 1 noise analysis of wave files

Introduction

noiseLAB Express provides easy import, calibration, and analysis of .wav files recorded by a Sound Level Meter or recorder. Third octave, FFT, and Sound Level Analysis to Type 1 standards is performed. The Editor lets you to select relevant sections of the recording.

Features

noiseLAB Express is focused on a simple workflow to quickly get the desired results.

- Octave and 1/3 octave analysis to Type 1 standards.
- FFT analysis with down to 10 Hz resolution
- Sound Level Analysis: Fast, Slow and 1 s Leq.
- Advanced cursors: Level, level difference, time difference, frequency, and automatic peak selection.
- Import of single channel recordings up to 10 minutes long
- 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 multiple clips and recordings.
- Sound playback and sound scrubbing:

- View FFT or Octave spectra as you "scrub" by moving the cursor.
- Export of results to Excel.
- Fast, streamlined operation
- Multi-core enabled for higher speed.
- Windows XP to Windows 7 compatible.
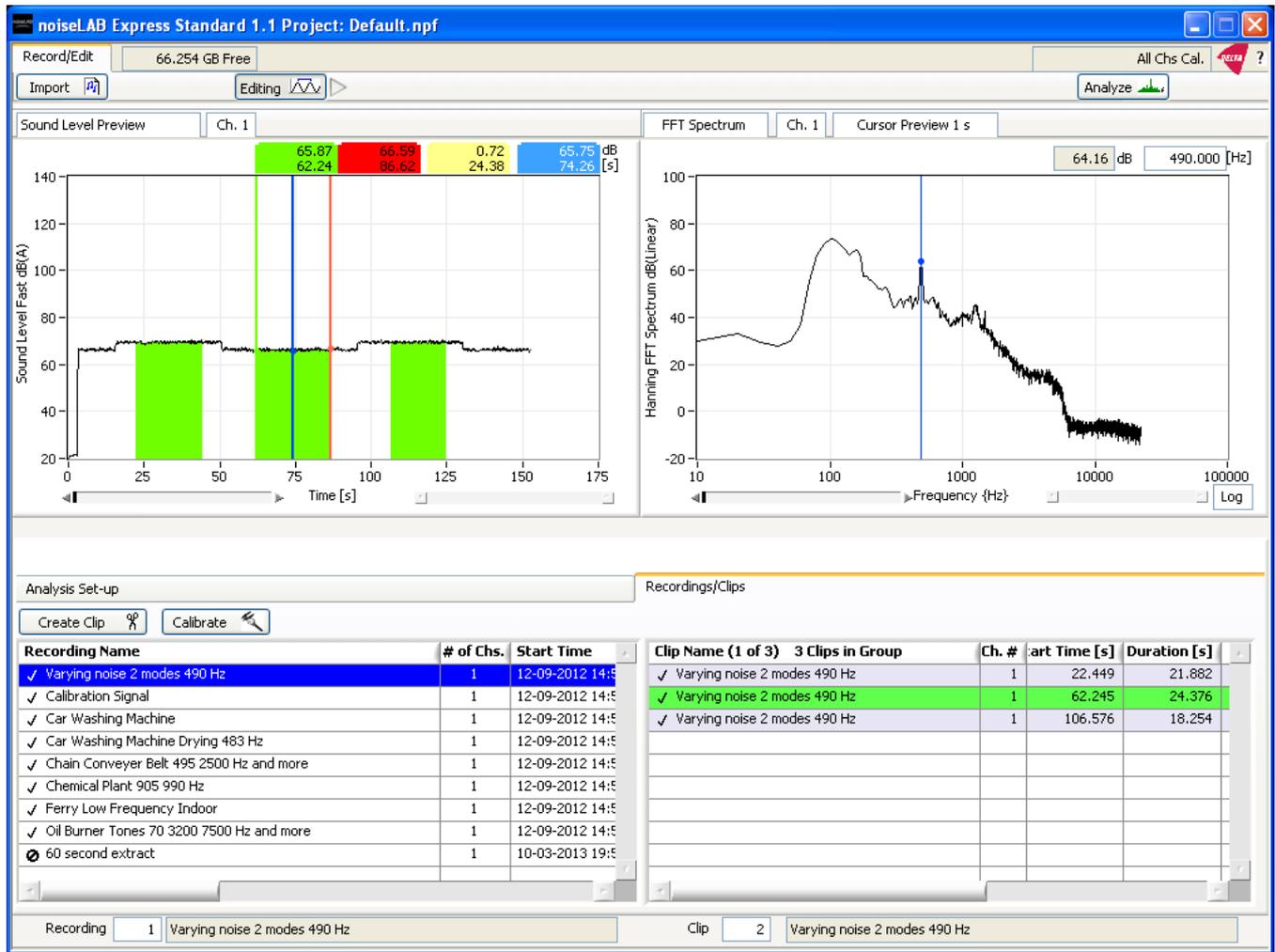
Benefits

Your wave 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. noiseLAB Express files are compatible with more advanced versions of noiseLAB for a broader range of analysis, including tone analysis and sound quality.

- 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.

Ordering information

Purchase noiseLAB Express from www.noiselab.dk or download a free 30-day demo.

The full editions of noiseLAB are also available via the above web-site.

1601.1.13

noiseLAB Express Standard 1.1 Project: Default.npf

Record/Edit | 66.254 GB Free | All Chs Cal. | ?

Import | Editing | Analyze

Sound Level Preview | Ch. 1 | FFT Spectrum | Ch. 1 | Cursor Preview 1 s

| 65.87 | 66.59 | 0.72 | 65.75 dB |
| 62.24 | 86.62 | 24.38 | 74.26 [s] |

64.16 dB   490.000 [Hz]

Sound Level Fast dB(A) — Time [s]

Hanning FFT Spectrum dB(Linear) — Frequency {Hz} — Log

Analysis Set-up | Recordings/Clips

Create Clip | Calibrate

Recording Name	# of Chs.	Start Time
✓ Varying noise 2 modes 490 Hz	1	12-09-2012 14:5
✓ Calibration Signal	1	12-09-2012 14:5
✓ Car Washing Machine	1	12-09-2012 14:5
✓ Car Washing Machine Drying 483 Hz	1	12-09-2012 14:5
✓ Chain Conveyer Belt 495 2500 Hz and more	1	12-09-2012 14:5
✓ Chemical Plant 905 990 Hz	1	12-09-2012 14:5
✓ Ferry Low Frequency Indoor	1	12-09-2012 14:5
✓ Oil Burner Tones 70 3200 7500 Hz and more	1	12-09-2012 14:5
⊘ 60 second extract	1	10-03-2013 19:5

Clip Name (1 of 3) 3 Clips in Group	Ch. #	Start Time [s]	Duration [s]
✓ Varying noise 2 modes 490 Hz	1	22.449	21.882
✓ Varying noise 2 modes 490 Hz	1	62.245	24.376
✓ Varying noise 2 modes 490 Hz	1	106.576	18.254

Recording 1 | Varying noise 2 modes 490 Hz

Clip 2 | Varying noise 2 modes 490 Hz

- 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.

About DELTA

noiseLAB is developed by DELTA, building a on rich tradition of 70 years of expertise in acoustics, psychoacoustics, and noise measurements. DELTA has pioneered the development of the psychoacoustic methods for tone analysis, which is now embodied in IEC 1996-2 Standard. In addition, it has developed methods for Impulse detection which are now included in the JNM2 (Joint Nordic Method) and are being considered for international standardization. DELTA is also developer of the internationally recognized Nord2000 Sound Propagation method and has made significant contributions to IEC 61400-11 for wind turbine noise measurements.

The driving force behind noiseLAB is to create a tool that is easy to learn to use, and efficient in its daily operation. We focus on simplicity and operational speed.

noiseLAB is developed based on feedback from DELTA's own field noise consultants, who spend thousands of hours in the field every year. They are our toughest and most demanding customers, and their uncompromising requirements are "baked" into the new editions of noiseLAB.

For further information please contact

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