

The XL2 Sound & Vibration Analyzer offers the following measurement functions by default:

Sound Level Meter

- SPL actual, Leq, Lmin, Lmax, Lpeak
- Frequency weighting A, C, Z
- Time weighting: Fast, Slow
- Recording of compressed wav-files and voice notes
- 1/3 and 1/1 Octave band analysis

FFT Analysis

- Realtime FFT with Live value, Leq, Lmin, Lmax
- Three fixed frequency bandwidths

• Reverberation Time RT60

- octave bands results from 63 Hz - 8 kHz
- Polarity
- DelayTime
- Audio Analyzer
- Oscilloscope



The following options are available for the XL2 Sound & Vibration Analyzer:

Extended Acoustic Pack



• SLMeter/RTA function

- Recording of linear wav-files (24 bit, 48 kHz)
- Percentiles for wideband and spectrum with flexible setting from 0.1% to 99.9%
- Sound Exposure Level LAE
- 100 ms logging
- Spectrum logging of Lmin and Lmax
- Event-triggered audio and data recording
- Time weighting: Impulse (LxI, LxIeq with x=A, C, Z)
- True peak level in 1/1 and 1/3 octave resolution
- Clock-Impulse Maximum Level (TaktMax) and values as specified in DIN 45645-1
- Impulsiveness detection in accordance with BS4142:2014 and NordTest ACOU 112

• FFT function

 High-resolution Zoom-FFT with selectable frequency ranges and resolution up to 0.4 Hz in the range of 5 Hz to 20 kHz

• RT60 function

- Reverberation time in one-third-octave resolution

Spectral Limits Option



• FFT and 1/12 octave function

- Comparing measurement results against captures with relative or absolute curve display
- Comprehensive tolerance handling with tolerance masks based on captures for passed/failed measurements

• 1/12 octave function

- High-resolution spectral analyzer 1/12 Oct + Tol
- Selectable 1/1, 1/3, 1/6 and 1/12 octave resolution
- Frequency band listening at rear speaker and headphone
- Sound Mode: 11.5 Hz to 21.8 kHz
- Vibration mode: 0.73 Hz to 1.36 kHz

FFT function

 $\label{thm:problem} \mbox{High-resolution Zoom FFT with selectable frequency ranges and resolution up to 0.4 Hz in the range from $ \mbox{\sc from PFT with selectable frequency ranges} $ \mbox{\sc from PFT with selectable from PFT with sel$

- Sound mode: 5 Hz to 20 kHz
- Vibration mode: 1 Hz to 20 kHz

SLMeter/RTA function

True peak level in 1/1 and 1/3 octave resolution

Noise Curves

accordance to ANSI S12.2-2019, -1995 and ISO 1996

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Speech Intelligibility STIPA Option



- For Public Announcement and Evacuation Systems
- Measurement in accordance with the standards IEC 60268-16, DIN VDE 0833-4, VDE 0828-1, DIN EN 50849, AS 1670.4, ISO 7240-1, CEN/TS 54-32
- Ambient noise correction and automated averaging for repeated measurements

Type Approval Option



- Upgrades the instrument to the XL2-TA, the sound level meter for certified measurements
- Class 1 in accordance with the standards IEC 61672:2014, IEC 61260:2014, ANSI S1.4:2014 and ANSI S1.11:2014 and DIN 45657

Cinema Meter Option



- Calibration and repetitive verification in accordance with the SMPTE ST 202:2010 and SMPTE RP 200:2012 standards
- Includes the "Spectral Limits" Option

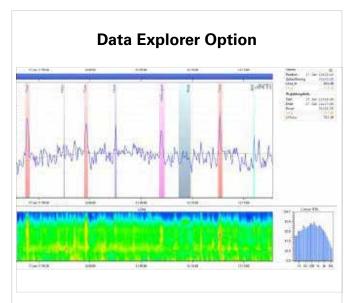
Vibration Option



- Extends the XL2 to a Vibration Meter with acceleration, velocity and displacement
- Frequency range: 0.8 Hz 2.5 kHz
- FFT analysis in selectable ranges from 1 Hz to 1.69 kHz

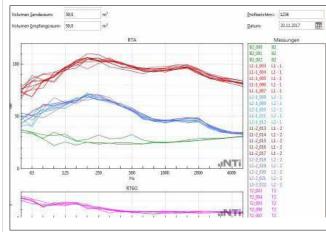
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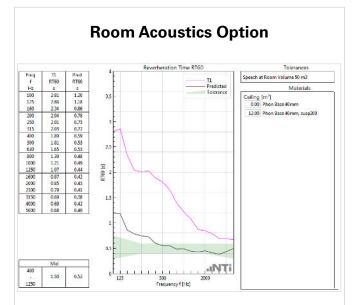


- Data Visualization
- · Audio playback synchronized to graph
- Calculates sum of frequency bands
- · Customized Reporting





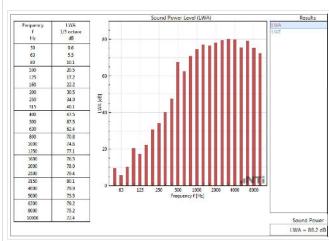
- Airborne, Impact & Facade Sound Insulation
- Standards ISO 16283, ISO 140, ISO 717, ISO 10140, DIN 4109, Document E, NEN 5077 ASTM E336, E413, E1007, E989, E966, E1332, GB/T 19889, SIA 181
- Visualization of all measurement data
- · Customized Reporting



Reverberation Time according to DIN 18041, ISO 3382, ISO 354, etc.

- Room acoustic simulation (Sabine or Eyring)
- · Import of user-defined absorber data
- Comparison before / after room treatment
- Analysis of noise spectra and Noise Curves
- Standard-compliant reporting

Sound Power Reporter Option



- Visualization of all measurements
- Customized Reporting
- Conforms to standards ISO 3741, ISO 3744, ISO 3746 and ANSI-ASA S12.51, S12.54, S12.56

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110.4dB

125.7_{dB}

Limit:

Limit:

125dB

135dB

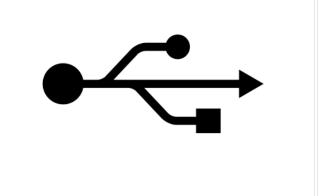
- Enables additional functions to the Projector PRO software for live sound monitoring
- "XL View" for large screen dB level display

106.5dB

116.2dB

 "Sound Level Predictor" that indicates the headroom for the next few minutes during the show

Remote Measurement Option



- Real-time acquisition of XL2 measurement data directly into a computer application via USB
- Adds a real-time acquisition facility to Sound Insulation Reporter software

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