



 Made in Switzerland

Building Acoustics MEASUREMENT SOLUTIONS



XL3 OR XL2 SOUND LEVEL METER
DS3 DODECAHEDRON SPEAKER
PA3 POWER AMPLIFIER
TM3 TAPPING MACHINE
SOUND INSULATION REPORTER PC SOFTWARE

Building Acoustics Solutions

To precisely assess the acoustic characteristics of a building, such as the effectiveness of the insulation of sound between rooms, you need tools that measure in accordance with standards. These tools should be robust, transportable and easy-to-use so that you can perform your tasks effectively, even in harsh environments.

The building acoustics kit from NTi Audio fulfils all requirements in a convincing manner. It includes:

- XL3 or XL2 Sound Level Meter
- DS3 Dodecahedron Speaker with a PA3 Power Amplifier
- TM3 Tapping Machine
- Sound Insulation Reporter PC Software

In addition, two further sound sources supplement the portfolio: The lightweight and easy-to-use Impact Ball IB01 and the δ -Clapper (pronounced delta-Clapper). These products provide professional airborne, impact and facade sound insulation measurements in accordance with the standards. The robustness, modest dimensions, and low weight of these devices, as well as the effortless operation afford a particular advantage.



TM3 Tapping Machine



IB01 Impact Ball



δ -Clapper



DS3 Dodecahedron Speaker and
PA3 Power Amplifier



XL3 – the latest generation in acoustic analyzers!

The XL3 Sound Level Meter provides the heart of building acoustics. In sound insulation measurements, for example, the device measures and records the background noise level as well as the spectral sound levels in the transmitting and receiving rooms, calculating the sound attenuation from the difference. In addition, the XL3 measures the reverberation time in octave or third octave resolution. The device triggers automatically to the gated pink noise from the DS3 dodecahedron loudspeaker or to an impulsive sound source such as the NTi δ -Clapper or a bursting balloon.

The automatic naming helps to label the measurement files according to their sequence or the respective room. This is particularly convenient for post-processing when several measurements have to be performed in the receiving and transmitting rooms.

The evaluation and visualisation of the measurement series up to the final result (e.g. D, Dn, DnT, R') takes place within the XL3 immediately after completion of the measurements, so that the experienced building acoustician can immediately check the plausibility of the measurement data, before leaving the location. Finally, the Sound Insulation Reporter PC software creates standard-compliant measurement reports.

- > Easy to use
- > Indisputable accuracy
- > Removable SD card
- > Expandable measurement functions
- > Type-approved Sound Level Meter
- > Network-compatible via (W)LAN



XL3 Sound Level Meter

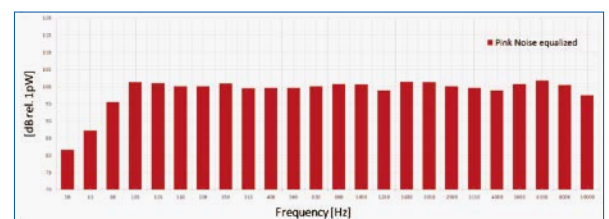
Dodecahedron Speaker Kit DS3 + PA3



Precision Measurements with the DS3 Dodecahedron Speaker

The DS3 Dodecahedron Speaker boasts impressive specifications; low weight, robust construction and compact dimensions, making it the ideal sound source for acoustic measurements. The PA3 Power Amplifier plays an important role, as it quietly and reliably delivers an amplified, equalized test signal to the DS3, ensuring that the pink noise signal is reproduced in accordance with the standards. The convenient radio remote control is an appreciated feature for switching the PA3 & DS3 on and off remotely e.g. from the reception room.

- Compact and lightweight (7.5 kg / 16.5 lbs)
- Maximum sound power level 120.5 dB
- Power compression < 1 dB
- Equalized frequency response acc. to ISO 16283, ISO 3382
- Wireless remote control



Equalized frequency response of DS3



DS3 Dodecahedron Speaker and PA3 Power Amplifier

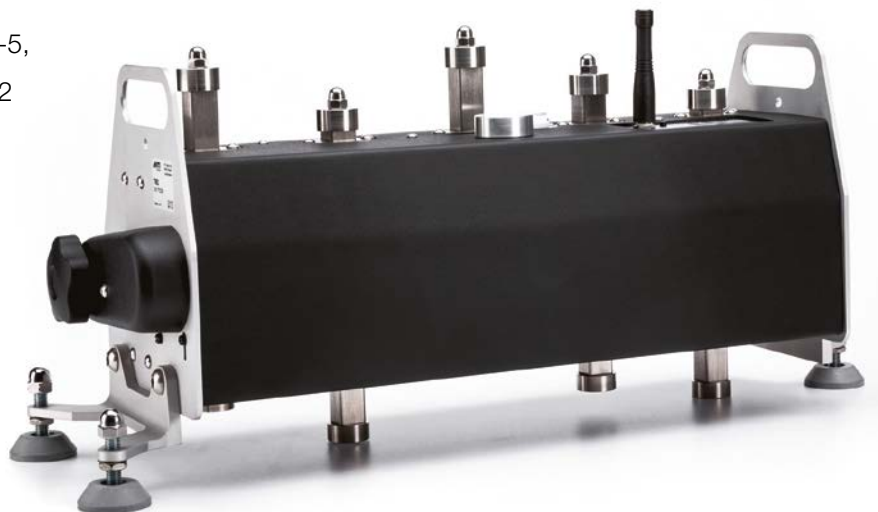
TM3 Tapping Machine



TM3 Tapping Machine – Reliability. Quality. Efficiency.

The TM3 Tapping Machine is used to determine impact sound insulation. This device also delivers on practicality, precision and robustness. This is particularly evident during setup, made easier with the built-in spirit level, distance gauge and manual access to the drive shaft. The supplied radio remote control and the integrated lead gel battery, which allows up to two hours of continuous operation, complete the picture.

- Radio remote control
- Built in battery for autonomous operation
- PTB type-approved
- Complies to
ISO 16283-2, ISO 717-2, ISO 10140-3/-4/-5,
ISO 140-6/-7/-8, DIN 52210-6, ASTM E492
and ASTM E1007



TM3 Tapping Machine

Sound Insulation Reporter Software



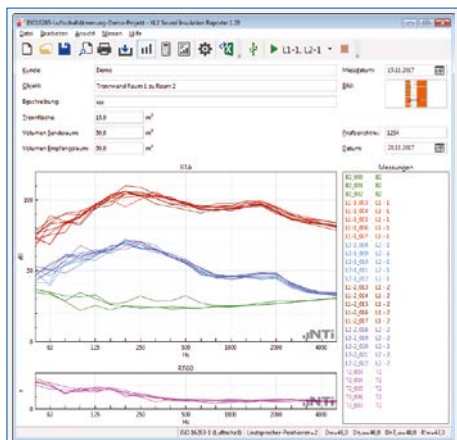
Sound Insulation Reporter PC Software

When all of the measurements have been done, a meaningful, professional measurement report is needed. The Sound Insulation Reporter PC software is specially designed for acoustic consultants. The software reads the measurement results directly from the XL3 or the XL2 and automatically assigns this data to the respective rooms. After averaging the raw data, the software then delivers a standards-compliant, graphic analysis of all measurement positions. Furthermore, the software is able to control two or more sound level meters simultaneously directly via USB or WiFi, allowing time-saving parallel measurement in the transmitting and receiving room.

Test this intuitive software without an obligation to buy! The package is freely available together with demo data. To test this solution in a real environment with your own XL3 or XL2, you can get a 7-day trial license free of charge from your NTi Audio sales partner.

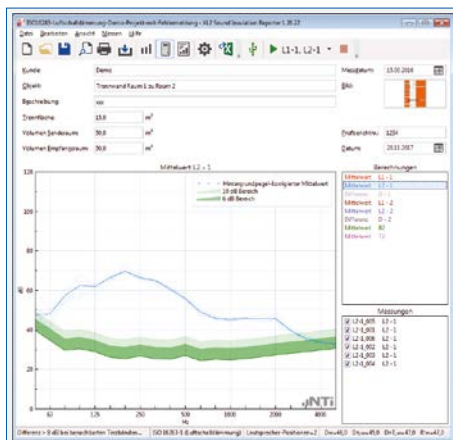
- Airborne Sound Insulation
- Impact Sound Insulation
- Facade Sound Insulation
- Visualization of all measurements
- Customized Reporting
- Standards ISO 16283, ISO 140, ISO 717, ISO 10140, DIN 4109, Document E, ASTM E336, ASTM E413, ASTM E1007, ASTM E989, ASTM E966, ASTM E1332, GB/T 19889, SIA 181

Simultaneous measurements in sending/receiving room



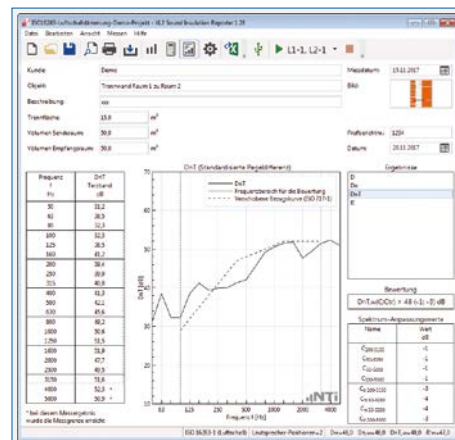
Measurements View

Drag & drop the measurement data into the software or perform remote-controlled measurements by connecting one or more Sound Level Meters via USB, LAN or wireless. All measurement data is automatically assigned to the corresponding sending or receiving room, as well as the speaker position, for the sound insulation calculation.



Calculations View

Evaluate the individual data sets for each room and speaker position. The colored background noise correction areas provide the relevant information at a glance.



Results View

The results view displays the calculated sound insulation in a table and the standardized chart from 50 Hz to 5 kHz. The single-number rating and the spectrum corrections are shown as applicable.

Complete the header data and print your standards-compliant report – that's all!



All information is subject to change without notice.
XL2, XL3, DS3, PA3, TM3, IB01, δ -Clapper and Sound Insulation Reporter
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