

PRODUCT DATA

Noise Explorer — Type 7815

Noise Explorer is a Windows® based software package for the downloading and reporting of noise and vibration data measured with Brüel & Kjær Sound Level Meters, Noise Dose Meters and sound intensity measurements made with 2260 Investigator.

Noise Explorer is one of a range of software packages from Brüel & Kjær for working with data taken from Brüel & Kjær hand-held instruments. Data can be exchanged between Noise Explorer and Type 7825 Protector™ or Type 7820 Evaluator™.

Sound intensity measurements made with the 2260 Investigator based sound intensity system can be viewed and manipulated in Noise Explorer.



USES AND FEATURES

USES

- Data transfer from hand-held sound level meters and analyzers to PC
- Formatting of data for export to spreadsheets, noise mapping software or the Windows clipboard
- Displaying/printing measurement results in graphical or tabular form
- Storage and management of measurement files on a PC
- Calculation of Sound Power or Sound Reduction Index from sound intensity measurements

FEATURES

- Data transfer via RS-232 interface (up to 115200 bps) or via PC-card
- Import of data from other Brüel & Kjær software associated with hand-held sound level meters and analyzers
- Measurement, calibration, and instrument data contained in one file
- Drag and drop data export into Evaluator or Protector
- Sound recording (controlled by Type 2238 or 2260)

Introduction

Transferring your valuable noise level measurements from a sound level meter to a PC for further analysis has never been easier. Noise Explorer Type 7815 removes all problems of interfacing hardware to software as it has been developed to fully integrate into the Brüel & Kjær hand-held sound level meter program.

Noise Explorer Type 7815 is an easy-to-use tool that helps you manage measurements made with Brüel & Kjær hand-held sound level meters and analyzers^a. Noise Explorer deals with downloading data from instruments, storage on PC hard disk, printing and exporting to other programs.

You can see from Fig. 1 that Noise Explorer has many different input and output paths covering most requirements of data transfer, storage and presentation. Using Noise Explorer is easy since it uses the familiar Windows interface, and includes extensive on-line help and a detailed tutorial to get you up and running in no time.

Sound Recording

To help with documentation of a sound occurrence, and to be sure of what had caused a marked event, you can record sound directly onto your PC's hard drive.

With Noise Explorer installed on your PC, you can use 2238 Mediator or Type 2260 to control sound recording on the hard disk while making measurements. The only limit to duration is the size of the hard disk.

Sound recording can be tagged to one or more markers. There is a 60 s sound buffer in the PC to permit editing of markers up to 1 minute after the occurrence has taken place. Recordings are time-stamped and stored as .wav files. After transferring the measurement data from 2238 Mediator or Type 2260 to Noise Explorer, the data is automatically merged with the sound recordings. The sound recordings are then marked in the profile display and can be replayed. You use the cursor position in the profile display to decide which part of the recording you want to hear.

Sound recordings made with 2250 Logging or Enhanced Logging Software are fully integrated in Noise Explorer.

Functions

Data Transfer

Noise Explorer includes a data capture wizard. Simply connect your instrument^b to the PC and start the wizard. You are then guided step by step through the process for a fast transfer.

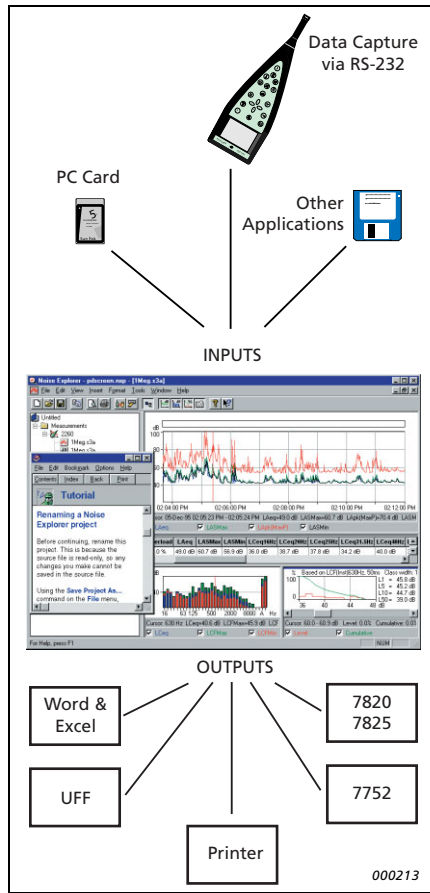
Viewing Measurements

Once measurements are in Noise Explorer, you have a set of powerful tools to select, view, and copy your results. There are five views available, depending on the source data. These are: spectrum (display of octave, 1/3-octave or FFT spectra), cumulative and level distribution, tabular results, noise profile, and surface.

a. Including Noise Dose Meter Types 4436, 4442, 4443, 4444, 4445 and 4445-E.

b. BZ-5503 Utility Software for Hand-held Analyzers (included with Type 2250) is used to transfer data from Type 2250 to an archive on the PC. Use BZ-5503 to export data from the archive to Noise Explorer.

Fig. 1
Data paths for Noise Explorer



Post-processing

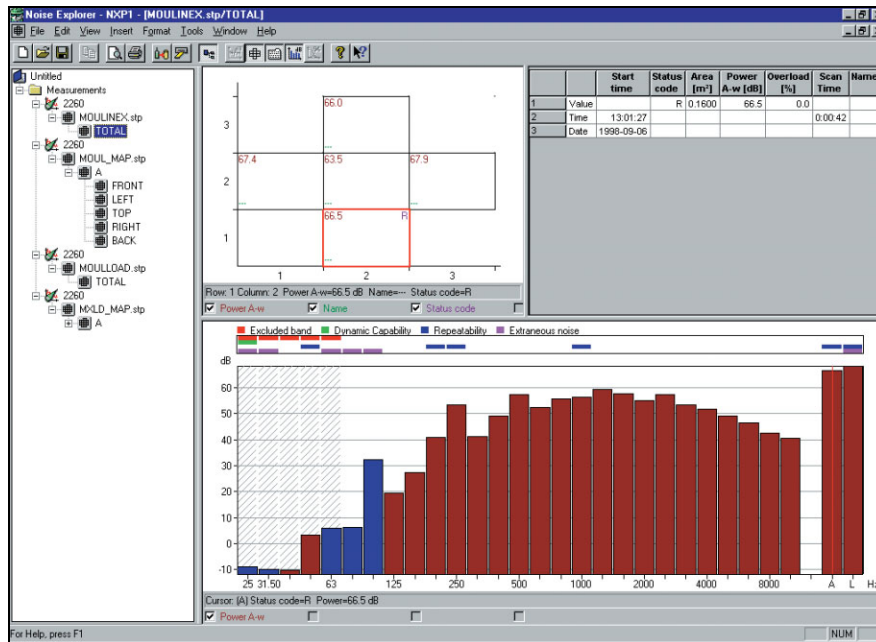
Measurements from the 2260 Investigator hand-held sound intensity system, Sound Intensity Probe Type 3595, and Sound Intensity Software BZ-7205 allow you to calculate sound power levels and sound reduction indices.

Once your measurements are in Noise Explorer, you can view your results in detail for each measurement segment or on the total surface. Frequency bands can be excluded from calculations.

Output and Export

Measurement data can be copied to the Windows clipboard for easy export to other Windows applications. You can also use the export function to produce tab-delimited ASCII files (.txt) or .xls files for direct import into a Microsoft® Excel or similar spreadsheet programs. Intensity data from a surface can be output in UFF format to be mapped in Noise Source Identification Software Type 7752.

Fig. 2
1/3-octave sound intensity spectrum with segment data viewed in Noise Explorer



Specifications – Noise Explorer Type 7815 (version 4.11)

Input

RS–232 interface: 1200 bps to 115200 bps

PC-card: Files stored on S-RAM or ATA Flash cards by 2260 Investigator

Import: From files generated by software Types 7694, 7696, 7697, BZ-5503 and BZ-7028

Output

Windows® Clipboard: As either a metafile for graphical data or text for tabular data

Printer: To any Windows® compatible device

Export: To Excel spreadsheet file in .xls format or to tab-separated ASCII file and in .uff format to 7752 mapping software

Calculation Standards

Calculations based on sound intensity data from 2260/BZ-7205 can be made according to the following standards:

- **Sound Power:** ISO 9614–2:1996, ECMA–160 (1992), ANSI S12.12–1992

- **Sound Reduction:** ISO/DIS 15186–1 and ISO 717–1:1996
Frequency bands or whole segments can be excluded from calculation

Sound Recording

USING TYPES 2238 AND 2260

Input: Audio

Control: From 2238 Mediator, Type 2260 or directly from Noise Explorer

Output Format: .wav

Display: As marker

Replay: Controlled by profile cursor

Recording Quality: High (86 kbyte/s/ch.), Medium (43 kbyte/s/ch.), Low (21.5 kbyte/s/ch.)

Input Selector Left: Line, Microphone, or None

Input Selector Right: Line, Microphone, or None

USING TYPE 2250

Sound recordings made with 2250 Logging or Enhanced Logging Software are integrated in profile

Display of Data

- Spectrum view
- Cumulative and level distribution
- Profiles
- Surface view
- Tabular results
- Extensive zoom and cursor read-out facilities

Language Versions

English, French, German, Italian, Slovenian and Spanish

Supported Instruments

- Type 2236 (all variants)
- Type 2237 (A and B variants)
- Type 2238 (all variants)
- Type 2239 (A and B variants)
- Type 4436
- Type 4442
- Type 4443
- Type 4444
- Type 4445
- Type 4445-E
- Type 2231 with BZ-7112
- Type 2260 with BZ-7201/02/03/05/06/08/10/19
- Type 2250 with BZ-7222/23/24/25/26 via BZ-5503

Platform

32-bit software written for Windows® 2000/XP

Recommended Computer

Pentium® III (or equivalent) PC, 256 MB RAM, SVGA graphics display/adaptor, sound card, CD ROM drive, mouse, USB and Windows® XP

Note: A PC-card slot is necessary to make PC-card data transfers

Ordering Information^{1/2}

Type 7815 Noise Explorer software

Optional Accessories

For use with Types 2236, 2237, 2238, 2239 and 2260:

AO-1442-Y-XXX^a RS–232 cable for Types 2236, 2237, 2238, 2239 and 2260

AO-0586-Y-XXX^a Cable from 2260 to Audio input on a PC

AO-0585 Cable from 2238 to Audio input on a PC, 3 m (10 ft.)

For use with Type 4436:

AO-0498 LEMO to 25-pin Interface Cable

AO-0507 LEMO to LEMO Interface Cable

a. Cables are available in different lengths, specified by Y-XXX, where:

Y = D (decimetres) or M (metres)

XXX is the length in the given units

Please specify

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