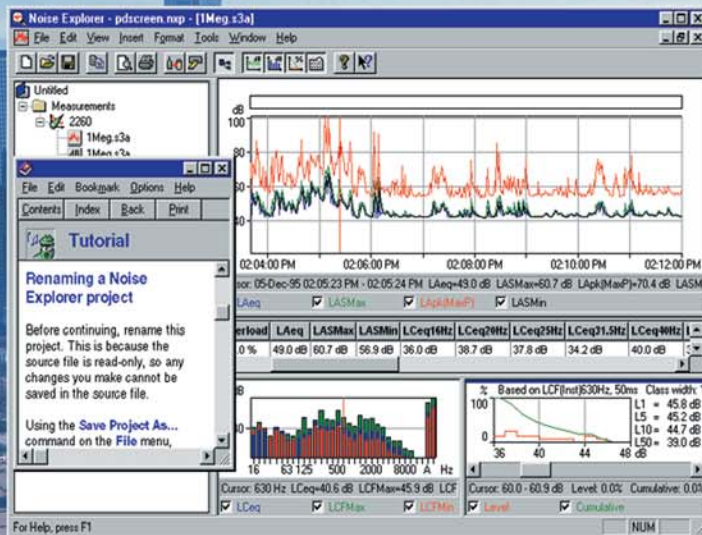# PRODUCT DATA

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 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.

7815

- ❍ 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

- ❍ Data transfer via RS-232 interface (up to 115 200 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 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[1]. 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

With Noise Explorer, you can record sound directly on to your PC's hard drive. You can use 2238 or 2260 to control sound recording while making measurements. Recordings are time stamped and stored as .wav files. After transferring the measurement data from 2238 or 2260 to Noise Explorer, the data are automatically merged with the sound recordings. The sound records are then marked in the profile display and can be played from the current cursor position.

---

[1] Including Noise Dose Meter Types 4436, 4442 and 4443
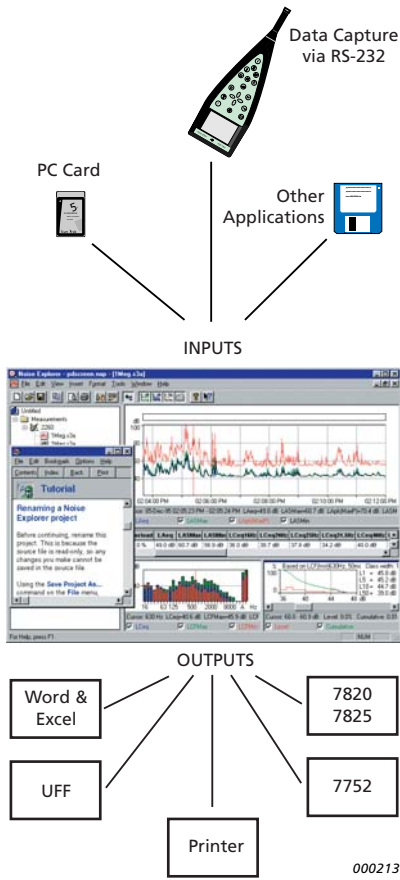
Functions

Data Transfer

Noise Explorer includes a data capture wizard. Simply connect your instrument 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.

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.
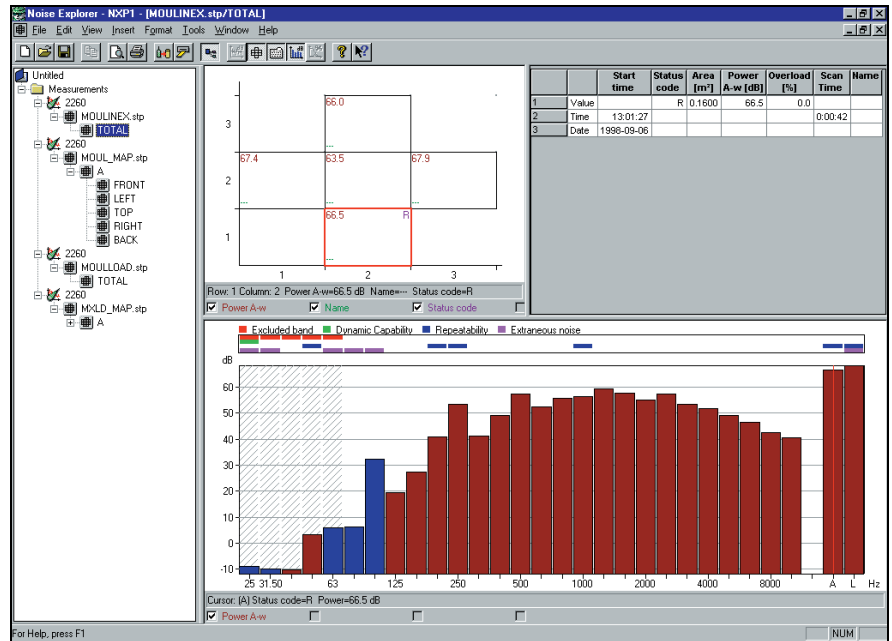
Specifications – Noise Explorer Type 7815 (version 4.0)

Input

RS–232 interface: 1200 bps to 115 200 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 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

Input: Audio
Control: From 2238, 2260 or directly from 7815
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

Display of Data

• Spectrum view
• Cumulative and level distribution
• Profiles
• Surface view
• Tabular results
• Extensive zoom and cursor readout facilities

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 2231 with BZ 7112
Type 2260 with BZ 7201/02/03/05/06/08/10

Platform

32-bit software written for Windows 95/98/ME/NT 4.0/2000/XP

Recommended Computer

Pentium® (or equivalent) PC, 128 Mbyte RAM, SVGA graphics display/adaptor, sound card, CD ROM drive and mouse
Note: A PC-card slot is necessary to make PC-card data transfers

Ordering Information

Type 7815   Noise Explorer software

Optional Accessories

For use with Types 2236, 2237, 2238, 2239 and 2260:
AO 1442   9-pin to 25-pin Interface Cable
AO 0586   Cable from 2260 to Audio input on a PC
AO 0585   Cable from 2238 to Audio input on a PC

For use with Type 4436:
AO 0498   LEMO to 25-pin Interface Cable
AO 0507   LEMO to LEMO Interface Cable

Brüel & Kjær reserves the right to change specifications and accessories without notice.