

# PC SOFTWARE

## NOISE EXPLORER TYPE 7815

Noise Explorer™ is a Windows®-based software package for downloading and reporting noise and vibration data measured with Brüel & Kjær hand-held instruments. Sound intensity measurements made with the 2260 Investigator sound intensity system can be viewed and manipulated in Noise Explorer. With Noise Explorer, you can also record sound directly onto your PC's hard drive.

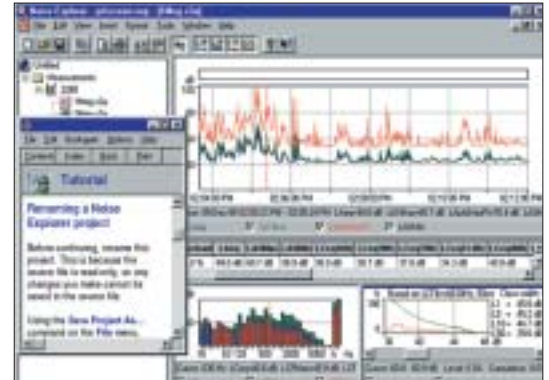
### USES

- Formatting data for export to spreadsheets, noise mapping software or the Windows® clipboard

- Displaying/printing measurement results in graphical or tabular form
- Calculating Sound Power or Sound Reduction Index from sound intensity measurements.

### 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 2250** (via PC Software)
- Type 2260** with BZ 7201/02/03/05/06/08/10



### ORDERING INFORMATION

**Type 7815:** Noise Explorer

**AO 1442:** Serial Interface Cable

**AO 0586:** Cable from 2260 to Audio Input on a PC

**AO 0585:** Cable from 2238 to Audio Input on a PC

### Optional Accessories

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

## EVALUATOR TYPE 7820

### Calculation of Rating Level

Evaluator™ Type 7820 and Evaluator Light Type 7821 are Windows®-based software packages for environmental noise evaluation. They provide versatile tools for analysing measured data from Brüel & Kjær Sound Level Meters, and are a complete solution for the determination of Rating Levels according to various national standards. Evaluator boasts many advanced features, including recording and replaying sound, tonal assessment using FFT spectra and the option of remote downloading data from Brüel & Kjær Sound Level Meters through a modem connection.

### ORDERING INFORMATION

- Type 7820:** Evaluator software
- Type 7821:** Evaluator Light software
- Type 7820-X-100:** Upgrade from Type 7696 to Type 7820
- Type 7820-X-200:** Upgrade from Type 7821 to Type 7820

### Optional Accessories

- AO 0586:** Cable from 2260 to Audio Input on a PC
- AO 0585:** Cable from 2238 to Audio Input on a PC
- ZE 0770:** PCI Soundcard (for desktop PCs)
- ZE 0770A:** PCM-CIA Soundcard (for laptop PCs)



### Supported instruments

Type Number	7820	7821
Type 2236 (all variants)	x	x
Type 2237 (A and B variants)	x	x
Type 2238 (all variants)	x	x
Type 2239 (A and B variants)	x	x
Type 2231 with BZ 7112	x	
Type 2250	x	
Type 2260 Observer with BZ 7219	x	
Type 2260 Investigator		030253

# PC SOFTWARE

## PROTECTOR TYPE 7825

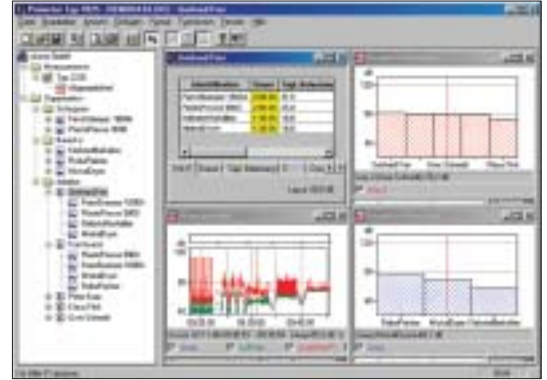
### PC Software for Calculating Personal Noise Exposure

Protector™ is a Windows®-based software package for post-processing, simulating and archiving noise exposure data. Designed to work with Brüel & Kjær sound level meters, noise dose meters and sound level analyzers, Protector allows you to quickly download sample noise profiles for specific locations or persons. Protector can use this data to calculate noise exposure for people or positions under investigation. Protector calculates noise exposure according to ISO 9612-2. For situations where only work-point noise measurements are avail-

able, and workers move about, Protector can combine work-point measurements with a profile of a person's movements, to simulate their personal noise exposure.

#### 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 2250 (via PC Software)
- Type 2260 with BZ 7201/02/03/06/10



#### ORDERING INFORMATION

Type 7825: Protector

#### Optional Accessories

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

AO 1442: Serial Interface Cable

For use with Type 4436:

AO 0498: LEMO to 25-pin

Interface Cable

AO 0507: LEMO to LEMO

Interface Cable

## QUALIFIER TYPE 7830, 7831

### PC Software for Calculating Reverberation Time and Building Acoustics

Qualifier™ Type 7830 works with the same bookkeeping system as Type 2260. This means that when data has been transferred to the PC, you see the same results as in Type 2260, including selected standard, excluded positions and other setup parameters. Using Qualifier's spreadsheet-like data sheets, it is also possible to manually adjust data used in calculations, for example, to change levels or reverberation times. The result can be observed immediately. Reverberation times can be modified by drawing a new slope line with the mouse across a displayed decay curve. For diagnostic purposes, the reduction curve

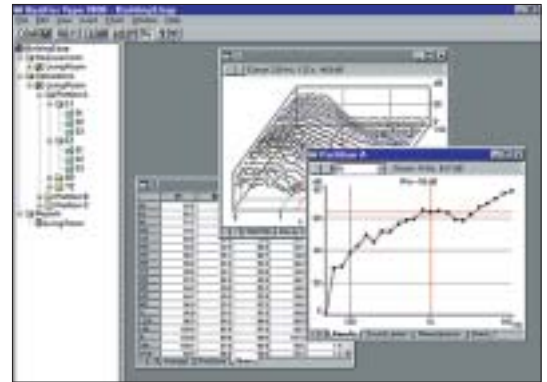
can be modified and the single value will adjust accordingly. And because manual input of data is possible, modifications for walls and rooms can be simulated.

#### FEATURES (7830)

- Calculates sound insulation curves and indexes
- Edits measurement results, including manual input of data
- Documentation and reporting facilities

#### FEATURES (7831)

- Calculates reverberation time
- Edits measurement results, including manual input of data
- Documentation and reporting facilities



#### Supported Instruments

Type 7830: 2260 Investigator with BZ 7204/07

2260 Observer with BZ 7220

Type 7831: 2260 Investigator with BZ 7207

2260 Observer with BZ 7220

#### ORDERING INFORMATION

Type 7830: Qualifier

Type 7831: Qualifier Light

## ACOUSTIC DETERMINATOR TYPE 7816

### Software for the Determination of the Sound Power Level of Industrial Sources based on Noise Measurements

Acoustic Determinator calculates the sound power level in real-time and checks if the entered data meets the restrictions of the method used.

With the built-in acoustic spreadsheet it is possible to collect, save and process spectral noise levels – for example, to energetically add, average or subtract two spectra. This data can be entered manually, imported using extensive clipboard possibilities, or imported directly from 2260 Investigator/Observer. With the clipboard

functionality, data can be entered, saved, printed and exported. It is also possible to copy selected data from other spreadsheet programs, word-processing programs, and from measurements in Acoustic Determinator itself. Once processed in Acoustic Determinator, sound power levels can be exported to prediction software for use in environmental noise calculations.

#### FEATURES

- Complies with ISO 3744, ISO 3746, ISO 8297, HMRI-II.2/3/4/6/7
- Well-organised data management
- Import of measured data from 2260 Investigator/Observer

## DIRAC TYPE 7841

### Room Acoustic Measurements using DIRAC

DIRAC is PC software for measuring room acoustic parameters using MLS, sweep or impulsive sources. It employs a PC soundcard for single or dual-channel signal input and output. A sound level meter is well suited as a front-end for DIRAC.

#### USES

- Room acoustic measurements including STI and RASTI
- Scale model measurements

#### FEATURES

- Measures room acoustic parameters according to ISO 3382
- Measures STI and RASTI according to IEC 60268-16
- MLS, sweep and impulsive source signals

- Export to ODEON Room Acoustics Modelling software Types 7835, 7836, 7837

#### BRIEF SPECIFICATIONS

**Internal Source Signals:** MLS, lin-Sweep, e-Sweep

**External Source Signals:** MLS, lin-Sweep, e-Sweep, Noise, Impulse

**MLS and Sweep Lengths:** 0.34 – 21.8s

**Pre-average:** 1 – 999 times

**Filters:** None, Pink and Blue, Female, Male, RASTI

**Frequency Range:** 1/3-octave 31.5 Hz to 16 kHz, 1/2-octave 20 Hz to 20 kHz

**Calibrations:** Soundcard, System, Speech Level, Input Level

**Results:** EDT, T10, T20, T30, G, Grel, SPL, Ts, C80, D50, LF, LFC,



- Acoustic spreadsheet for processing sound levels
- Export to other Windows® applications

#### ORDERING INFORMATION

**Type 7816:** Acoustic Determinator

#### Optional Accessories

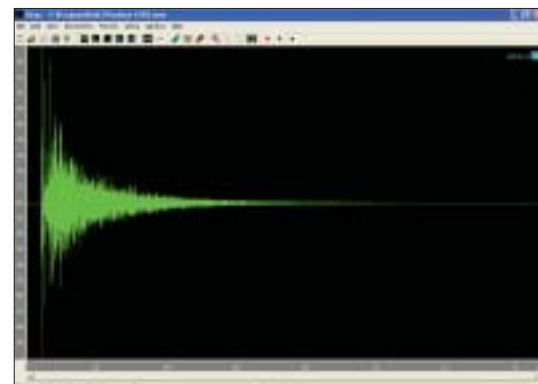
**M1 – 7816:** Software Maintenance, Upgrade and Support

**Type 2260:** Investigator

**Type 2260:** Observer

**Type 7810:** Predictor Software

**Type 7812:** Lima Software



IACC, STI, RASTI, STITEL, ALC, STearly, STlate, STtotal, INR, SNR

#### ORDERING INFORMATION

**Type 7841:** DIRAC

**Optional Accessories**

**ZE 0770:** PCM-CIA Sound Card

**Type 2238 Mediator:**

Integrating Sound Level Meter

**Type 2239:** Integrating Sound Level Meter

**Type 2260 Investigator:** Modular Precision Sound Analyzer

**AO 0585:** 3 m Cable for Types 2238, 2239

**AO 0586:** 3 m Cable for Type 2260

**AO 0592:** 10 m Extension

Cable for AO 0585 and AO 0586

# PC SOFTWARE

## CLASSIFIER TYPE 7842

### Building Acoustics Measurements using Classifier

Classifier Laboratory Type 7842 A and Classifier Field Type 7842 B are two versions of a PC-based software package for building acoustics measurements using the Brüel & Kjær PULSE platform.

### USES

- Measurement of Airborne Sound Insulation
- Impact Sound Insulation
- Reverberation Time
- Absorption Coefficient

### FEATURES

- Supports a comprehensive selection of national and international standards
- Multichannel support
- Controls rotating microphone boom(s)
- Intensity method (7842 A Classifier Laboratory)
- Maximum Length Sequence (MLS) methods

### This PULSE-based solution particularly suits:

- Proving facilities
- Research laboratories
- Consultants
- Larger industries with own test facilities
- Universities
- Field measurement use where a PC-based solution is preferred

Comprehensive validation features combined with a high degree of automation ensure that final results, including report/documentation are obtained quickly.

Using a multichannel setup can significantly reduce the measurement time as several positions in different rooms can be measured simultaneously. In laboratory environments, a fixed installation will also aid in the task of making reproducible measurements.

Wireless LAN can also be used to simplify cable installations. Especially in field measurements, the potential problem of getting cables from one room to another can be solved quickly and easily with a wireless connection between the PC and one or more PULSE front-ends (multiple PULSE front-ends will be supported in future versions).

### BRIEF SPECIFICATIONS

For detailed specifications of the recommended PULSE hardware, please refer to the System Data for PULSE Hardware, BU 0228.

### Measurements and Calculation Standards

Classifier Type 7842 measures according to various national and international standards: ISO (International), JIS (Japan), CNS

(China), SS (Sweden), DIN (Germany), ÖNORM (Austria), BS (UK), Sia (Switzerland), UNI (Italy), NF-S31 (France), NBE (Spain), NEN (Netherlands), ASTM (USA).

### ORDERING INFORMATION

**Type 7842 A-N:** Classifier Laboratory version – 5-channel version optimised for laboratory measurements

**Type 7842 B-N:** Classifier Field version – 2-channel version optimised for field measurements

### Services Available

**M1-7842-A:** 1-year Software Maintenance & Support Agreement for Classifier Laboratory version

**M1-7842-B:** 1-year Software Maintenance & Support Agreement for Classifier Field version

