

PRODUCT DATA

Enviro Noise Partner for B&K 2245 and HBK 2255 Sound Level Meters

Perform noise measurement surveys the first time, every time – without hassle

Enviro Noise Partner, together with a sound level meter, provides a reliable solution to easily conduct and report on environmental noise surveys to ensure regulations compliance and investigate noise complaints.

Enviro Noise Partner is available both as an iOS-based app for mobile measurement control, display and data transfer, and a PC-based application for analysis and documentation.



Uses and features

Uses

- Noise complaint investigations
- Measurements to verify compliance with state, regional and local noise regulations
- Ambient noise measurements for pre-project planning
- Operational noise management measurements (industry, traffic and recreational noise)
- Building site noise control measurements

Features

Mobile App

- Remote measurement control
- Real-time, interactive interface to sound level meter
- Ability to add and edit markers to identify and isolate sounds
- Ability to create custom checklists to ensure consistent measurement procedures
- Embedded annotations: photos, video, voice commentary, and text notes
- Live measurement audio streaming
- Simple, login-free project sharing via HBK's cloud

PC App

- Simple, file-based data storage
- Graphical marker editing
- Measurement profile search for level, weather and tonality events
- Third-octave band based tonality assessment
- Measurement annotation viewing and export
- Measurement audio playback and export
- Simple report generation in Microsoft® Word or PDF
- Data export in Microsoft Excel® format, with master file templates for complex user-defined reporting
- Simple, login-free project sharing via HBK's cloud

The sound level meter

The sound level meter is ergonomically designed with a dust- and water-resistant body that is rubberized for a secure grip.

The sound level meter can be used as a stand-alone noise measurement device or with specially-created apps designed to streamline measurement, analysis and documentation. The licences installed on the sound level meter unlock functionality and enable connection to the apps.

The Enviro Noise Partner licence enables all the measurement capabilities you need for environmental noise surveys using either B&K 2245 or HBK 2255.



Overview of capabilities

		B&K 2245	HBK 2255
Frequency analysis			
Full- or third-octave band		✓	✓
Logging	Broadband levels	✓	✓
	Min. interval of 1 second	✓	✓
Fast logging	Broadband levels		✓
	Min interval of 1 millisecond		✓
Audio recording			
24-bit compressed MP3		✓	✓
Statistics	Broadband	✓	✓
	User-defined percentiles		✓

The mobile app

Be in control

Wireless remote control of one or more sound level meters.

- **Set up measurements:** Access every measurement setting from the mobile app.
- **Measure from a distance:** Minimize your influence on the measurement.
- **Connect to multiple sound level meters:** Make simultaneous measurements at multiple locations.

Keep an eye on things

Feel close to your measurements, even at a distance.

- **Powerful, live measurement views:** Profile views show how sound levels change over time, even for individual frequency bands.
- **Intuitive touch controls:** Pan and zoom to explore your measurements and inspect events in detail.

Make your mark

Exclude the barking dog from total levels or identify and isolate different operating modes of a machine using markers.

- Add and edit markers during or after measurements.
- Adjust start and end points with simple touch controls.
- View total levels of marked sections instantly.
- View and compare spectral totals for two different markers.

Document your work

Embed photo, video, text and voice annotations in your measurements.

Listen up

Record audio to help identify noise sources or to help communicate noise issues with stakeholders.

- **Recorded audio:** Play back recordings after measuring.
- **Live audio:** Stream audio to your mobile device when you cannot be near the measurement position.

Set your parameters

- **Moving averages:** Monitor when a sound source is approaching a regulatory limit with a moving average of any broadband parameter with a custom duration.
- **Differences:** The difference between two standard parameters can help identify characteristics of the measured sound. For example, L_{Ceq} – L_{Aeq} can be used to identify strong low-frequency noise components.

Work as a team

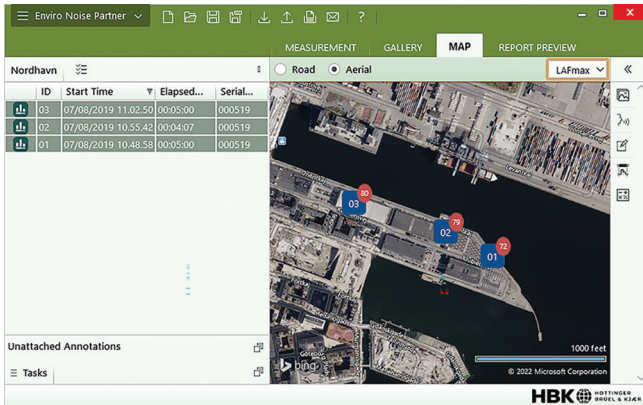
- **Templates:** Reuse checklists and measurement settings to ensure consistency.
- **Simple, login-free cloud-sharing tool:** Share measurement and projects with colleagues and stakeholders from the field.



Manage your project

- **Download measurements:** Save your project, with all measurements and annotations in a single file.
- **Review data:** View measurement data in graphical or tabular formats, and see measurement location, levels and annotations on a map.
- **Share a project:** Send a project to a colleague or stakeholder with login-free cloud sharing that automatically generates an email with a link to download the file.

Fig. 1 The Map tab shows the measurement location, the measurement number and the measured level for the selected parameter



Make the most of markers

- View and edit markers made with the mobile app.
- Add and edit new markers. Use the marker buttons to apply markers with one click.
- Select a marker to change its endpoints, view its level evolution and its frequency analysis
- Apply markers to profile search results.

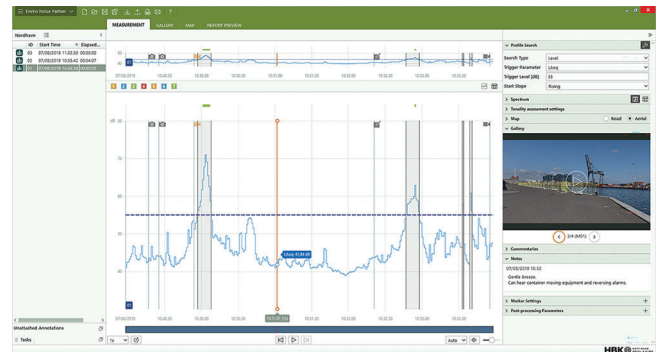
Fig. 2 Select a marker in the logging profile to view its level evolution and frequency analysis



Search logged data

- Find events based on sound level, weather data or tonality.
- Watch the results change instantly as you adjust the search criteria.
- Convert search results to markers.

Fig. 3 A search of the logging profile for levels above the set level



Look for tones

Analyze data for tonality according to standards or customize your own criteria.

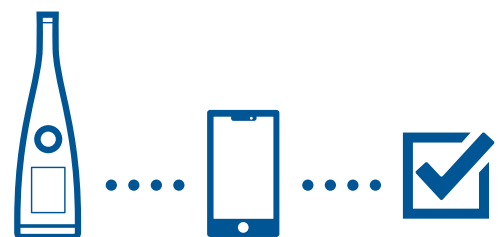
Fig. 4 The Spectrum tab includes a tone assessment tool



Create reports

- Quickly generate a basic report in Microsoft Word format.
- Drag and drop or copy and paste annotations into other applications.
- Copy and past graphs as scalable vector graphics, which print much better than bitmaps.
- Export data to Microsoft Excel with master files, which allow you to create your own custom report template and to include your own calculations on exported data.

Job done.



Sound level meter specifications

For specifications of the sound level meter, see the following product data:

- B&K 2245: [BP 0029](#)
- HBK 2255: [BP 2679](#)

System requirements for apps

Use the mobile app to set up and control (start, stop, pause) the sound level meter remotely, and to review measurement data.

Use the PC app to analyse data in detail, to generate reports and to export data to other formats.

All mobile apps are available for free download via the App Store®.

All PC apps can be downloaded at www.bksv.com/2245-updates.

PC OPERATING SYSTEM	Windows® 10 or 11 (64-bit)
PC FRAMEWORK*	Microsoft® .NET 4.7.2
MOBILE DEVICE	iOS-based phone or tablet
iOS	See supported iOS versions for current app version in the App Store, under Enviro Noise Partner > Information > Compatibility

* The software will check if pre-installed. If it is not, it will start auto-installation. Accept the installation to run the app.

Recommended PC for PC app

Intel® Core™ i5 or better	8 GB of memory
Sound card	At least one available USB port
Solid State Drive	Microsoft Office 2016 (32-bit) or later

Wireless communication interface

Connect the mobile and PC apps to the sound level meter wirelessly.

Connect the mobile app to one or more sound level meters simultaneously.

OPERATING FREQUENCY	2.4 GHz
DATA RATE	IEEE 802.11n: Up to 300 Mbps IEEE 802.11g: Up to 54 Mbps IEEE 802.11b: Up to 11 Mbps
ENCRYPTION/AUTHENTICATION	64/128-bit WPA-PSK, WPA2-PSK, TLS, SSL
RANGE	The range is similar to a standard WLAN unit, typically from 10 to 50 m (33 to 164 ft), depending on the environment and the number of other WLAN transmitters in the area (smartphones, Wi-Fi, etc.)
BLUETOOTH CONNECTION	Bluetooth® Low Energy (BLE) to discover and connect HBK 2255, allowing for simpler connections on Wi-Fi, etc. Not used for transporting measurement data or audio

Wired communication interface

Use a cable to connect the PC app to the sound level meter.

CONNECTIONS	USB-C, Ethernet over USB
DATA RATE	150 Mbps
ENCRYPTION/AUTHENTICATION	TLS, SSL

Project management

PROJECTS	Projects store one or more measurements Projects store marker, post-processing parameter and checklist settings Create projects using the mobile app or the PC app
MARKERS	Apply markers using the mobile or PC app Available markers: Ambient, Residual, Background, Exclude, None Add and edit markers during or after a measurement Adjust start and end points View total levels of marked sections instantly View and compare spectral totals for two different markers
POST-PROCESSING PARAMETERS	Add moving average and difference calculations to broadband and/or statistical parameters Add post-processing parameters using the mobile or PC app
CHECKLIST	Create one custom checklist per project Create and use checklists using the mobile app
TEMPLATES	Templates store project and measurement settings Create one or more templates using the mobile app
ANNOTATIONS	Photos, videos, text and voice notes made using the Enviro Noise Partner mobile app are embedded into measurement data and stored on the instrument

Measurement control

MEASUREMENT MODES	Single or logging
LOGGING INTERVAL	1, 5, 10, 30 or 60 s intervals
BROADBAND FAST LOGGING INTERVAL	HBK 2255 only 1, 2, 4, 8, 16, 32, 64, 125, 250, 500 or 1000 ms
SPECTRUM FAST LOGGING INTERVAL	HBK 2255 only 4, 8, 16, 32, 64, 125, 250, 500 or 1000 ms
FREE SETTING	Manually controlled measurement
PRESET SETTING	Preset measurement time from 1 second to 31 days in 1 s steps (exactly 31 days, 23 hours, 59 minutes and 59 seconds, that is 31.23.59.59)
MANUAL CONTROLS	Start, Pause, Continue and Stop the measurement manually
BACK-ERASE	Single Measurements Only: The last 1 to 10 s of data can be erased without resetting the measurement

Analysis

DETECTORS

Parallel detectors on every measurement

A, B, C or Z	B&K 2245: Two simultaneous broadband frequency weightings and one frequency analysis frequency weighting HBK 2255: Three simultaneous broadband frequency weightings and two simultaneous frequency analysis frequency weightings F, S and I exponential time weightings, linear averaging and peak detector simultaneously for each frequency weighting
Overload detector	Monitors the overload outputs of all the frequency weighted channels

MEASUREMENT PARAMETERS

X = frequency weightings A, B, C or Z

Y = time weightings F or S

	Measurement	Sound input	Frequency analysis
Display and storage	Start time Stop time	L _{Xeq} L _{Al_{eq}} L _{AF_{Teq}} L _{X_{peak}} L _{XE} L _{XY_{max}} L _{XY_{min}} L _{Al_{max}} L _{AN1-5} L _{AYN1-5}	L _{Xeq} L _{XY_{max}} L _{XY_{min}} * L _{XYN1-5} *
Display only As numbers or quasi-analogue bars		L _{XY} L _{XY(SPL)} L _{X_{Peak,1s}} * L _{XYN1-5}	
Display only			L _{XY}

* HBK 2255 only

SAMPLING FOR BROADBAND STATISTICS

Statistics can be based on either L_{AF}, L_{AS} or L_{Aeq}.
Full distribution saved with measurement.

Statistics L _{AFN1-5}	L _{AF} sampled every 16 ms into 0.2 dB-wide classes over 130 dB
Statistics L _{ASN1-5}	L _{AS} sampled every 125 ms into 0.2 dB-wide classes over 130 dB
Statistics L _{AN1-5}	L _{Xeq} sampled every second into 0.2 dB-wide classes over 130 dB

SAMPLING FOR SPECTRAL STATISTICS

For HBK 2255 only

Statistics can be based on either L_{XF} or L_{XS}.
Full distribution saved with measurement.

Statistics L _{XFN1-5}	L _{XF} spectrum sampled every 16 ms into 0.1 dB-wide classes
Statistics L _{XSN1-5}	L _{XS} spectrum sampled every 125 ms into 1.0 dB-wide classes
Statistics L _{XN1-5}	L _{XF} spectrum sampled every second into 1.0 dB-wide classes

Displays on mobile app

XL TOTAL VIEW	One quasi-analogue instantaneous bar and one broadband value
TOTAL LIST VIEW	One quasi-analogue instantaneous bar and five broadband values
TOTAL SPECTRUM VIEW	One quasi-analogue instantaneous bar broadband level bar and a 1/1- or 1/3-octave spectrum column graph with cursor readout – for two parameters simultaneously. Configurable Y-axis
BROADBAND LOGGING VIEW	Graphical profile for one broadband parameter at a time. Touch controls to zoom and pan profile
BROADBAND LOGGING LIST VIEW	Graphical profile for three simultaneous broadband parameters. Touch controls to zoom and pan profile
SPECTRUM PROFILE VIEW	Linked 1/1- or 1/3-octave spectrum column graph and graphical profile for one full- or third-octave parameter at a time. Cursor on spectrum column graph determines which frequency band is displayed on the profile

Audio

LIVE AUDIO	Stream live audio to mobile device during a measurement
AUDIO RECORDING	Listening-quality MP3, compressed to 3% of original signal. 24-bit covering full measurement range. Records entire measurement when enabled
STORAGE	Audio recordings are stored on instrument and transferred with measurement to PC app
FILE SIZE	Variable bit-rate, approximately 22 MB per hour
PLAYBACK	Via app

Report generation

Relevant views and sheets can be printed or exported to the clipboard:

- Reports in Microsoft® Word format or PDF
- Tables can be copied to clipboard as text (CSV)
- Graphs can be copied to clipboard as bitmaps (PNG) or vector graphics (SVG)

Data transfer

Via USB, Wi-Fi, Ethernet or login-free cloud-sharing tool

Enviro Noise Partner bundles

		Type 2245-E-S SLM with Enviro Noise	Type 2245-E-SC SLM with Enviro Noise & Calibrator	Type 2255-E-S SLM with Enviro Noise	Type 2255-E-SC SLM with Enviro Noise & Calibrator
SLM	B&K 2245 Sound Level Meter	✓	✓		
	HBK 2255 Sound Level Meter			✓	✓
SOFTWARE	BZ-7300 Noise Partner	✓	✓	✓	✓
	BZ-7301 Enviro Noise Partner	✓	✓	✓	✓
	BZ-7302 Work Noise Partner				
	BZ-7303 Product Noise Partner				
	BZ-7304 Exhaust Noise Partner				
	BZ-7400 Open API Interface	✓	✓	✓	✓
	KE-1038 Hard-shell case for SLM and accessories	✓	✓	✓	✓
	Type 4231 Sound Calibrator		✓		✓
	Type 4966 ½" Free-field Microphone	✓	✓		
	Type 4966-Z-041 ½" Free-field Microphone with Pre-amplifier			✓	✓
ACCESSORIES	ZG-0486 Mains Power Supply	✓	✓	✓	✓
	AO-0821-D-010 USB 3, USB C to USB A Cable	✓	✓	✓	✓
	UA-1650 90 mm dia. Windscreen with AutoDetect	✓	✓	✓	✓
	DH-0819 Wrist Strap, for sound level meter	✓	✓	✓	✓
	UA-2237 Mobile Phone Holder Kit	✓	✓	✓	✓

Software modules available separately

Purchase licences separately to build a custom solution

BZ-7300	Noise Partner Licence (see product data BP 2683)
BZ-7300-UPG	Upgrade from Exhaust Noise Partner to Noise Partner
BZ-7301	Enviro Noise Partner Licence (included)
BZ-7302	Work Noise Partner Licence (see product data BP 0031)
BZ-7303	Product Noise Partner Licence (see product data BP 2643)
BZ-7350	Building Acoustics Partner Licence (HBK 2255 only) (see product data BP 2680)
BZ-7400	Open Interface Licence (see product data BP 2635)
BZ-7401	Extended Broadband Analysis Licence
BZ-7402	Logging Licence
BZ-7403	Frequency Analysis Licence
BZ-7404	MP3 Audio Licence
BZ-7450	Advanced Logging Licence (HBK 2255 only), requires the basic logging capabilities included in the Enviro Noise Partner, Work Noise Partner or Logging licences
BZ-7451	Analysis-quality Audio Licence (HBK 2255 only)

All mobile apps are available for free download via the App Store.

All PC apps can be downloaded at www.bksv.com/2245-updates.

Accessories available separately

MICROPHONES FOR HBK 2255

Type 4952	Outdoor Microphone
Type 4966-Z-041	½-inch Free-field Microphone with Pre-amplifier

INTERFACING

UL-1073	4.7 in App Control Unit, 32 GB
AO-0846	USB-C™ to AC or DC Output Cable, with power
AO-0414	Microphone Extension Cable, up to 30 m

CALIBRATION

Type 4231	Sound Calibrator (fits in transport case)
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MOUNTING

UA-0750	Tripod
UA-0801	Lightweight Tripod
UA-1651	Tripod Extension

NOTE: Wear and tear on parts like windscreens and cables are not covered by the Standard Product Warranty or Extended Warranty.

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