Sound Level Meter **PCE-432**



PCE-432

PCE-432 is a class 1 data-logging sound level meter that meets IEC 60651:1979, IEC 60804:2000, IEC 61672-1:2013, ANSI S1.4-1983 and ANSI S1.43-1997 requirements. This portable high-accuracy sound level meter is equipped with GPS functionality, allowing measured values to be assigned to an exact geographic location.

The meter has a large easy-to-read illuminated LCD screen that displays the sound pressure level (SPL) numerically and graphically in real time. Thanks to octave band filtering, even the slightest difference in frequency is detected. The handheld meter also functions as a data logger, recording measurements at an adjustable interval from 1 s ... 24 h and storing the recorded measurement data to a micro SD card memory. The SD card can be removed from the meter and inserted into the SD card reader of a PC. Alternatively, the decibel meter can be connected directly to a PC via USB. The provided PC-compatible software allows for quick and easy data analysis.

This device measures from 22 ... 136 db(A) at a frequency of 3 Hz ... 20 kHz. The meter features A, B, C and Z frequency weightings as well as fast, slow and impulse time weightings. The PCE-432 decibel meter is commonly used by professionals to ensure compliance with environmental noise regulations and workplace noise permissible exposure limits. It is also ideal for airport and air force base noise monitoring programs.

- Accuracy class 1
- Integrated GPS functionality
- A, B, C and Z frequency weightings
- Fast, slow and impulse time weightings
- 1/1 octave band filter (optional 1/3 octave band filter upgrade see accessories tab)
- Adjustable data-recording interval from 1 s ... 24 h
- Real-time numerical and graphical LCD display
- Adjustable alarm
- Includes factory calibration certificate according to ISO 9001

General Features PCE-432

| Measuring range | 22 136 db(A) |
|--------------------|--|
| Accuracy | Class 1 |
| Frequency range | 3 Hz 20 kHz |
| Standards | GB/T 3785.1-2010 |
| | GB/T 3785.2-2010 |
| | IEC 60651:1979 |
| | IEC 60804:2000 |
| | IEC 61672-1:2013 |
| | ANSI S1.4-1983 |
| | ANSI S1.43-1997 |
| Frequency analysis | 1/1 Octave band filter: 8 Hz 16 kHz |
| | 1/3 Octave band filter: 6.3 Hz 20 kHz |

| Microphone | 1/2" |
|-----------------------|--|
| | Microphone Class: 1 |
| | Sensitivity: 40 mV/PA |
| | Frequency range: 3 Hz 20 kHz |
| | Connection: TNC |
| | Power supply: ICCP Standard |
| Data-logging interval | 1 s 24 h (adjustable) |
| Measuring functions | LXY (SPL), LXeq, LXYSD, LXSEL, LXE, LXYmax, LXYmin, LXPeak, LXN |
| | X = Frequency weighting: A, B, C, Z |
| | Y = Time weighting: F, S, I |
| | N = Statistics in %: 1 99 % |
| Frequency weightings | A, B, C, Z |
| | |



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| Time weightings | Fast (F) 125ms, Slow (S) 1 sec, Im- pulse (I) 35 ms |
|-------------------|---|
| Inherent noise | Microphone: 19 db(A), 25 db(C), 31 db(Z) |
| | Electronics: 13 db(A), 17 db(C), 24 db(Z) |
| AD converter | 24 Bit |
| AD Sample rate | Standard: 48 kHz |
| Measuring display | Numerical |
| | Bar graph |
| | Graphical |
| Display | 160 x 160 pixel LCD with backlight |
| Memory | 4 GB Micro SD card |
| Interface | USB (Memory readable via software or directly as mass storage) |
| | RS-232 |
| Voltage output | AC 5V RMS |
| | DC 10 mV/db |
| Alarm | Adjustable |
| GPS | Yes, GPS receiver for location de- termination |
| Power supply | 4 x 1.5 V AA Batteries |
| | 12 V / 1 A Power plug |
| | 5 V / 1 A USB |
| Battery life | Min. 10 h continuous use |
| Dimensions | 70 x 300 x 36 mm / 2.76 x 11.81 x 1.42" (W x H x D) |
| Weight | Approx. 620 g / 1.4 lbs incl. batteries |

Subject to change