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## Technical Sound Meter PCE-432

### Sound Level Meter with GPS PCE-432 (Class 1)

**Handheld Sound Level Meter / Octave band filter / A, B, C and Z Rating / Filter can be upgraded / Fast, Slow and Pulse rating / Datalogger / USB**

The class 1 Sound Level Meter PCE-432 meets all requirements for noise measurement and frequency analysis. The noise meter is equipped with a GPS receiver as well as the sound measuring function. The GPS function allows the user to assign the measured values to an exact position.

This integrated precision impulse sound level meter follows all applicable standards and guidelines (Class 1 EN / IEC 61672, ANSI S1.4-1983, ANSI S1.43-1997 EN / IEC61260, etc.) The sound level meter PCE-432 has a very large illuminated display. The display from the sound level meter displays the sound pressure level numerically and graphically in real time. The professional sound level meter has an integrated data logger. The measurement data are stored on a micro SD card. This card can be read directly in the PC. The sound level meter can also be connected to the PC via USB and the memory can be read directly. The post-processing software from the sound level meter allows comfortable measurement data analysis. Typical applications for this device are in the measurement of workplace noise, compliance with regulations, environmental noise assessment, selection of ear protection equipment, selection of appropriate noise control measures and assessment of noise exposure.

The pulse function of the PCE-432 noise measurement device makes it possible to record short-term sound events. Thanks to the integrated octave band function, even the slightest differences in the frequency band can be detected. The frequency filter can be optionally upgraded. The measuring range of this professional sound level meter ranges from 22 ... 136 db (A) at a frequency of 3 Hz ... 20 kHz.

- 1/1 octave band and optional 1/3 octave band
- Accuracy class 1
- Integrated GPS receiver
- A, B, C & Z frequency evaluation
- Fast, slow, pulse and peak timing
- Statistics function
- Display of sound as a graph
- 3 adjustable measuring profiles
- Low noise recognition

- ICCP microphone 40 mV / PA
- Adjustable alarm level
- Ideal for airport and air force base noise monitoring programs

#### Technical specifications:

Measuring range	22 ... 136 dbA
Accuracy	Class 1
Frequency range	3 Hz ... 20 kHz
Standards	GB/T3785.1-2010 GB/T3785.2-2010 IEC60651:1979 IEC60804:2000 IEC61672-1:2013 ANSI S1.4-1983 ANSI S1.43-1997
Frequency analysis	Octave filter: 8 Hz ... 16 kHz 1/3 Octave filter: 6.3 Hz ... 20 kHz
Microphone	1/2" Measuring microphone Class 1 Sensitivity: 40 mV/PA Frequency range: 3 Hz ... 20 kHz Connection: TNC Power supply: ICCP Standard
Integral time measurement	1 s ... 24 h (adjustable)
Measurement functions	LXY(SPL), LXeq, LXYS, LXSEL, LXE, LXYmax, LXYmin, LXPeak, LXN.  X = Frequency rating: A, B, C, Z; Y = Time rating: F, S, I; N = Statistics in %: 1 ... 99 %
24 hour measurement	Automatic measurement with data storage
Frequency rating	A, B, C, Z
Time rating	Fast (F), Slow (S), Pulse(I), Peak
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
Sample rate	Standard: 48 kHz LN Mode: 20 ms
Measurement display	Numerical Bar graph Graphical
Display	160 x 160 Pixel LCD with lighting
Memory	4 GB Micro SD card
Interface	USB (Memory readable via software or directly as mass storage) RS232

Voltage output	AC 5V RMS DC 10 mV/db
Alarm	Adjustable alarms
GPS	GPS receiver for location determination
Power supply	4 x 1.5 V AA Batteries 12 V / 1 A Power plug 5 V / 1 A USB
Operating time in battery operation	min. 10 h
Dimensions	70 x 300 x 36 mm (W x H x D)
Weight	ca. 620 g incl. batteries

**Delivery contents:**

- 1 x Sound Level Meter PCE-432
- 1 x 1/2" measuring microphone Class 1
- 1 x Wind noise suppressor (foamball)
- 1 x USB interface cable
- 1 x Software
- 1 x Power supply
- 1 x Carrying case
- 1 x Instruction manual

Note: The sound level meter is supplied with an octave band filter. Optionally an upgrade to a 1/3 octave band filter is possible (see selectable option).