

## 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

Time weightings	Fast (F) 125ms, Slow (S) 1 sec, Impulse (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 determination
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