

PeakTech P 8005

PeakTech P 8005 Sound Level Meter User Manual

Model: P 8005 | Brand: PeakTech

1. INTRODUCTION

The PeakTech P 8005 is a high-precision Class 2 sound level meter designed for accurate noise measurement and data logging. It is suitable for a wide range of applications including noise projects, quality control, disease prevention, and environmental sound measurements in factories, schools, offices, traffic, and households. This device features a 4-digit 20mm LCD multi-function display with a bargraph and backlight, a USB interface for continuous measurements, and AC/DC outputs for connection to frequency analyzers or X-Y wave recorders. This manual provides detailed instructions for the proper use, maintenance, and troubleshooting of your PeakTech P 8005.

2. SAFETY INFORMATION

Please read all safety instructions carefully before operating the device. Failure to follow these instructions may result in damage to the device or personal injury.

- Do not expose the device to extreme temperatures, humidity, or direct sunlight.
- Avoid strong vibrations or impacts.
- Do not attempt to open or modify the device. Repairs should only be performed by qualified personnel.
- Keep the device away from strong electromagnetic fields.
- Ensure proper ventilation when using the AC adapter for extended periods.
- Dispose of batteries according to local regulations.

3. PACKAGE CONTENTS

Verify that all items listed below are included in your package:

- PeakTech P 8005 Sound Level Meter
- Carrying Case
- 3m Additional Microphone Cable
- USB Interface Cable
- Software for Windows (on CD-ROM)
- Mini Tripod

- 9V AC Power Adapter
- 9V Battery
- User Manual

Inkl. folgendem Zubehör:

**Anleitung
Deutsch &
Englisch**

Koffer

Software für Windows

**3m Zusatz-
Mikrofon-Kabel**

USB-Kabel

Stativ

9V-Netzadapter

9V-Batterie

Figure 3.1: The PeakTech P 8005 Sound Level Meter with its complete set of accessories, including the carrying case, cables, software CD, tripod, power adapter, and battery.

4. PRODUCT OVERVIEW

The PeakTech P 8005 is designed for user-friendly operation while providing professional-grade accuracy. Familiarize yourself with the main components and controls.

P 8005

Schallpegel-
messgerät mit
Datenlogger



**Schallpegel:
30 -130 dB**

**Große LCD-Anzeige
mit Beleuchtung**

**Datenlogger mit
internem Speicher**

Figure 4.1: Overview of the PeakTech P 8005, showcasing its sound level measurement range (30-130 dB), large LCD display with backlight, and integrated data logger.

4.1. Main Features

- **Precision Measurement:** Class 2 sound level meter (IEC-61672-1 compliant) for accurate readings even in noisy environments.
- **Wide Measurement Range:** 30 to 130 dB across 4 ranges with 0.1 dB resolution.
- **Data Logging:** Internal memory for up to 32,000 readings (1x/sec to 1x/min).
- **Connectivity:** USB 2.0 interface for PC connection and data transfer.
- **Analog Outputs:** AC/DC outputs for connecting to frequency analyzers or X-Y wave recorders.
- **Display:** 4-digit 20mm LCD with bargraph and backlight.
- **Measurement Modes:** Fast (125 ms) and Slow (1 s) response times, A and C weighting.
- **Additional Functions:** MIN/MAX measurements, over-range/under-range indication.

Display mit Hintergrundbeleuchtung



Mit praktischem Mini-Stativ

Mit USB Schnittstelle & analogem AC/DC-Ausgang



Figure 4.2: Detailed view of the P 8005's illuminated display, USB interface, AC/DC output ports, and the practical mini-tripod for stable measurements.

5. SETUP

5.1. Battery Installation

The PeakTech P 8005 operates on a 9V battery or via the included 9V AC power adapter.

1. Locate the battery compartment on the back of the device.
2. Open the battery cover.
3. Insert the 9V battery, ensuring correct polarity.
4. Close the battery cover securely.

5.2. Powering the Device

- To power on, press the **POWER** button.

- To power off, press and hold the **POWER** button until the display turns off.
- For continuous operation, connect the 9V AC power adapter to the DC 9V input port on the side of the device.

5.3. Microphone Connection

The device comes with a built-in microphone. For remote measurements or specific setups, you can use the included 3m additional microphone cable.

1. Unscrew the microphone cap from the top of the device.
2. Connect the 3m microphone cable to the microphone input.
3. Attach the external microphone to the other end of the cable.
4. For stable measurements, attach the device to the mini tripod using the threaded mount at the bottom.



Figure 5.1: The PeakTech P 8005 set up with its external microphone and mini tripod, ready for measurement.

Your browser does not support the video tag.

Video 5.1: An overview of the PeakTech 8005 Sound Level Meter, demonstrating its features and setup, including the use of the external

6. OPERATING INSTRUCTIONS

6.1. Basic Measurement

After powering on, the device will immediately begin measuring sound levels.

- The current sound level in dB is displayed on the LCD.
- Use the **LEVEL** button to cycle through the four measurement ranges (30-80 dB, 50-100 dB, 80-130 dB, Auto 30-130 dB).
- Press **FAST/SLOW** to switch between fast (125 ms) and slow (1 s) response times. Fast is suitable for sudden noise changes, while slow is for average noise levels.
- Press **A/C** to select A-weighting (dBA) or C-weighting (dBC). A-weighting mimics human ear response, C-weighting is for mechanical noise.



**Bewertung nach dB A (Gehör)
oder dB C (maschinelle Geräusche)**

Figure 6.1: The P 8005 can be used for various applications, including assessing noise levels for hearing protection (A-weighting) or

machinery noise (C-weighting).

6.2. Data Logging and PC Connection

The P 8005 can record up to 32,000 measurement values internally. To access and analyze this data, use the included Windows software.

1. Install the software from the provided CD-ROM onto a Windows PC (Windows 95/98/NT/2000/XP/VISTA/7/8/10 supported).
2. Connect the sound level meter to your PC using the USB interface cable.
3. Open the software. The software allows for real-time data display, data import from the device's internal memory, and export to formats like Excel for further analysis.
4. Refer to the software's help documentation for detailed instructions on data logging setup and analysis.

Mit Windows Software zum Download der Logger - Daten



Figure 6.2: The Windows software interface for the PeakTech P 8005, showing a graph of logged sound level data, enabling comprehensive analysis.

7. MAINTENANCE

7.1. Cleaning

Clean the device regularly to ensure optimal performance.

- Wipe the exterior with a soft, dry cloth.
- Do not use abrasive cleaners or solvents.
- Keep the microphone free from dust and debris.

7.2. Storage

When not in use, store the device in its carrying case in a cool, dry place, away from direct sunlight and extreme temperatures.

7.3. Calibration

The PeakTech P 8005 is a precision instrument. Regular calibration is recommended to maintain accuracy, especially for professional applications. Refer to the included test report for the last calibration date. Contact PeakTech support for calibration services.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Device does not power on.	Low or dead battery; AC adapter not connected or faulty.	Replace the 9V battery or connect the AC adapter. Ensure the adapter is working.
Inaccurate readings.	Incorrect measurement range; microphone obstructed; device needs calibration.	Adjust the measurement range using the LEVEL button. Clear any obstructions from the microphone. Consider professional calibration.
Software not recognizing device.	USB cable faulty; driver issue; software compatibility.	Try a different USB port or cable. Reinstall the software and drivers. Check software compatibility settings (e.g., Windows 98 compatibility mode for older systems).
Data logging issues.	Memory full; incorrect logging settings.	Download and clear data from the device. Review data logging settings in the software.

9. SPECIFICATIONS

Parameter	Value
Applied Standard	IEC-61672-1 Type 2, ANSI S1.4 Type 2
Accuracy (1 kHz Sine; A, C)	± 1.4 dB
Accuracy (Frequency Range)	According to EN-61672-1 Class 2, max. ± 5.6 dB
Frequency Range	31.5 Hz - 8 kHz
Dynamic Range	50 dB
Level Ranges	Low: 30 dB ~ 80 dB, Med: 50 dB ~ 100 dB, High: 80 dB ~ 130 dB, Auto: 30 dB ~ 130 dB

Parameter	Value
Response Time	Fast: 125 ms / Slow: 1 s
Microphone	½-inch Electret Condenser Microphone
Resolution	0.1 dB
Display Update	2 times/sec.
Analog Output	AC/DC Outputs, AC: 1 V _{eff} = 10 mV/dB
Operating Voltage	9V Battery or 9V AC Power Adapter
Dimensions (WxHxD)	80 x 280 x 50 mm
Weight	350 g
Data Logger Memory	Up to 32,000 readings

10. WARRANTY AND SUPPORT

PeakTech products are designed for reliability and performance. For warranty information and technical support, please refer to the documentation included with your product or visit the official PeakTech website. Keep your purchase receipt as proof of purchase for warranty claims.

Manufacturer: PeakTech

Website: [PeakTech Official Store](#)

