

PeakTech®

Unser Wert ist messbar...



PeakTech® 5175

Bedienungsanleitung / Operation Manual

**Digital Schalpegelmessgerät /
Digital Sound Level Meter**

1. Safety precautions

This product complies with the requirements of the following directives of the European Union for CE conformity: 2014/30/EU (electromagnetic compatibility).

The following safety precautions must be observed before operation. Damages resulting from failure to observe these safety precautions are exempt from any legal claims whatever:

- * Comply with the warning labels and other info on the equipment.
- * Do not subject the equipment to direct sunlight or extreme temperatures, humidity or dampness.
- * Do not subject the equipment to shocks or strong vibrations.
- * Do not operate the equipment near strong magnetic fields (motors, transformers etc.).
- * Keep hot soldering irons or guns away from the equipment.
- * Allow the equipment to stabilize at room temperature before taking up measurement (important for exact measurements).
- * Replace the battery as soon as the battery indicator "BAT" appears. With a low battery, the meter might produce false reading that can lead to electric shock and personal injury.
- * Fetch out the battery when the meter will not be used for long period.
- * Periodically wipe the cabinet with a damp cloth and mild detergent. Do not use abrasives or solvents.
- * Do not operate the meter before the cabinet has been closed and screwed safely as terminal can carry voltage.
- * Do not store the meter in a place of explosive, inflammable substances.
- * Do not modify the meter in any way.
- * Opening the equipment and service- and repair work must only be performed by qualified service personnel.
- * ***Measuring instruments don't belong to children hands.***

Cleaning the cabinet

Clean only with a damp, soft cloth and a commercially available mild householder cleanser. Ensure that no water gets inside the equipment to prevent possible shorts and damage to the equipment.


Introduction

This compact sound level meter is designed for the measurement of sound sources in decibels by A-weighting (dBA), which is based on the human ear.

2. Features

- ▶ 3 1/2 digit 10mm LCD display (max. 1999)
- ▶ Fast (125 ms) and Slow (1 s) measurement sequence
- ▶ Sound Level dBA rate
- ▶ Maximum value measurement
- ▶ Minimum value measurement
- ▶ Acoustic and visual alarm function in excess of a user-defined sound level in dB
- ▶ Rugged and compact housing design
- ▶ Suitable for measurements according IEC651 Type 2 & ANSI S1.4 Type 2

3. Specifications



Display	5-digit LCD
Measurement Range	40 dB bis 130 dBA
Weighting	dBA
Frequency Range	31.5 Hz ... 8.5 kHz
Linearity	50 dB
Measuring Rate	Fast (125 ms) Slow (1 s)
Accuracy	+/- 1.5 dB
Microphone	½ in – Electret Condenser
Self calibration time	10 Sek. (every power on)
Low Battery Indication	Symbol “  ” shown in the display
Auto Power Off	Off /After 10 Minutes
Power Supply	9V battery, 6F22 or equivalent
Operating Environment	0°C ~ 40°C; 10 ... 80% RH
Storage Environment	-10°C ~ 60°C; 10 ... 70% RH
Size (WxHxD)	55 x 150 x 35mm
Weight	160g

4. Panel Description



- 1) Wind shield / microphone
- 2.) ON/OFF - Power switch
- 3.) Fast/Slow Switch
- 4.) MAX/MIN Switch
- 5.) LED for Alarm function
- 6.) Meas. value display
- 7.) Battery compartment (rear)
- 8.) Thread for tripod (rear)

4.1. Display Symbols

	This icon indicates the battery-charge status. An empty battery must be replaced as soon as possible and affect the measurement results negatively
FAST	Fast time weighting
SLOW	Slow time weighting
OVER	Over-range indication
MAX	Display keeps highest maximum value
MIN	Display keeps lowest minimum value
 OFF	Auto-Power-Off deactivated
dBA	Measurement unit Decibel in A-weighting

5. Operating Instruction

1. Press the "ON" button once to turn on the unit.
2. Select the measurement functions with the selection buttons on the device side.

The four possible functions are:

Function	Description
Fast	Fast time weighting with 125 ms, which also shows short sound bursts
Slow	Slow time weighting with 1 second, which shows an average sound value over the second. Suitable for wobbling sound levels
Max	Maximum value measurement
Min	Minimum value measurement

After the desired measuring range is selected, you can start your measurements.

6. Performing Measurement

General:

1. Turn off the machine using the ON button (2).
2. Press the "FAST / SLOW" button (3) to switch the desired term evaluation.
3. Press the "MAX / MIN" button (4) to switch to the maximum value mode. The meter is now renewed only if the current measured value exceeds the highest previous reading.
4. Press the "MAX / MIN" button (4) again to switch to the minimum value mode. The meter is now renewed only if the current measured value is less than the lowest previous reading
5. Press the button (4) again to switch back to the normal measurement mode.


Automatic Power Off

If the device is not used, it automatically turns off after 10 minutes.

For continuous measurements, the automatic shutdown can be disabled:

1. Turn off the unit (if necessary) with the ON button (2)
2. Turn on the unit again with the ON button (2) and hold the button for about 5 seconds while the device starts
3. The system displays the \mathfrak{S}_{OFF} symbol in the display for a second
4. Release the ON button (2) and turn the power off again
5. The next time the device is switched on, the \mathfrak{S}_{OFF} icon appears in the display

7. Alarm dB function

- 1.) Press “”-key to power on. Press the “MAX/MIN” –key 3 times, LCD display “OVER”. The unit is into MAX, alarm mode (Fig. 4).



When the sound level will be detect over the set value, the unit will alarm & LED flash (01 = alarm mode) or only LED flash (02 = alarm mode). Alarm will stop continue 15 seconds. After stop 5 seconds. If unit detect the sound level over set value, the unit will alarm again. In this mode the unit will not automatic power off. Press “MAX/MIN”-key again cancel alarm mode. See Fig. 5.



fig 5



fig 6



fig 7



fig 8

2.) Alarm Set the dB value and select the alarm mode:

Press the " MAX/MIN" button to turn the unit on.

Press the "MAX/MIN" button twice, then press and hold the MAX/MIN button until the display shows a stable value.

Press the "FAST/SLOW" button to set the alarm value (40-130dB) to increase the alarm values of 0.1dB. Continuous pressing increases the value in 1dB steps.

Press „MAX/MIN“-key to confirm.


3) Select the alarm mode

To select the alarm mode, press the "MAX/MIN" button 2 times, then press and hold the MAX / MIN button until the display shows a stable value. Then press the "FAST/SLOW" button to select the alarm mode.

- "01" Alarm mode: audible and visual signal
- "02" Alarm mode: only visual signal (flashing LED)


Press the "MAX / MIN" button and leave this mode, see Fig. 8.

8. Battery Replacement

If the sign "" appears on the LCD display, it indicates that the battery should be replaced. Remove screws on the back cover and open the case. Replace the exhausted battery with new battery.

Batteries, which are used up dispose duly. Used up batteries are hazardous and must be given in the - for this being supposed - collective container.

NOTE

1. Keep the instrument dry.
2. Keep the probes clean.
3. Keep the instrument and battery out of reach of infant and child.
4. When the symbol "" appears, the battery is low and should be replaced immediately. When you install battery, ensure the polarity connections are correct. If you will not use the instrument in a long period of time, remove the battery.

8.1. Notification about the Battery Regulation

The delivery of many devices includes batteries, which for example serve to operate the remote control. There also could be batteries or accumulators built into the device itself. In connection with the sale of these batteries or accumulators, we are obliged under the Battery Regulations to notify our customers of the following:

Please dispose of old batteries at a council collection point or return them to a local shop at no cost. The disposal in domestic refuse is strictly forbidden according to the Battery Regulations. You can return used batteries obtained from us at no charge at the address on the last side in this manual or by posting with sufficient stamps.

Contaminated batteries shall be marked with a symbol consisting of a crossed-out refuse bin and the chemical symbol (Cd, Hg or Pb) of the heavy metal which is responsible for the classification as pollutant:



1. "Cd" means cadmium.
2. "Hg" means mercury.
3. "Pb" stands for lead.

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This manual is according the latest technical knowing. Technical alterations reserved.

We herewith confirm that the unit is calibrated by the factory according to the specifications as per the technical specifications.

We recommend to calibrate the unit again, after one year.

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