

## Decibel Meter PCE-MSL 1

### User's Manual



#### 1. Safety

Read the following safety information carefully before attempting to operate or service the meter.

Use the meter only as specified in this manual; otherwise, the protection provided by the meter may be impaired.


##### Environment conditions :

1. RH≤90RH % (Non-condensation)
2. Operating temperature:-20~60 /-4~140

##### Maintenance

1. Repairs or servicing not covered in this manual should only be performed by qualified personnel.
2. Wipe the unit with a dry soft cloth. Do not use abrasives or solvents on this instrument.

##### Safety Symbol :

 Comply with EMC

#### 2. Application

This unit adopts condenser microphone as the sensor, high configuration MCU calculation, high accuracy, fast response.


This Sound Level Meter is designed to meet the measurement requirements of safety Engineers, Health, Industrial safety offices and sound quality control in various environments like factory, school, construction, etc.

#### 3. Features

- High accuracy, fast response
- Color LCD display with backlight
- Temperature measurement
- MAX、MIN
- Data HOLD
- Wide frequency range
- Fast/slow time weighting
- Over range indication
- Enable/Disable auto power off

#### 4. Basic Operation

4.1. Open battery cover and install 3\*1.5v AAA batteries in the battery compartment.

4.2. Power on ; press  to turn on the meter, the meter conducts self-inspection, after LCD displays, it measures temperature and sound level automatically.

4.3. After testing, Press  to turn off the meter

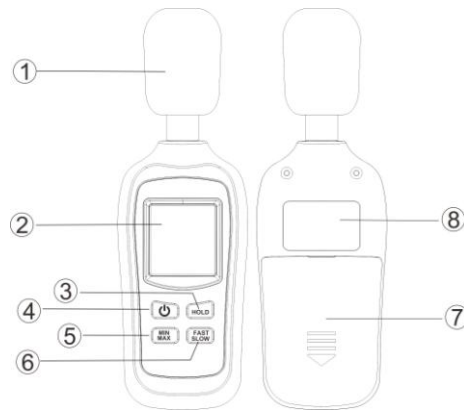
Note: Remove the battery when the meter is to be stored for long periods of time to avoid battery leakage

#### 5. Specification

Applied Standard	IEC61672-1 CLASS2
Measuring level range	35dB~135dB
Dynamic range	50dB
Frequency range	31.5Hz~8KHz
Accuracy	±2.0dB
Frequency weighting	A frequency weighting
Time weighting	FAST:125ms/ SLOW: 1s
Microphone	1/2 inch electrets condenser microphone
High/low reading indication	100dB, LCD displays "Hi" 100dB, LCD displays "LO"
Temperature range	-20 ~70 /-4 ~158
Temperature accuracy	±1.5 /2.7
Resolution	0.1
Data update	300ms
Battery life	at least 60 hours
Enable/Disable Auto power off	The meter shuts off automatically after 15 minutes inactivity under auto power off mode, disable auto power off is available
Battery	3*1.5V "AAA" batteries
Operating conditions	-20 ~60 /-4 ~140 ,10RH%~90 RH%
Storage conditions	-20 ~60 /-4 ~140 ,10 RH%~75 RH%
Dimensions	144*56*30.5mm
Weight	73g

## 6. Meter description

1. Windscreen microphone cover
2. LCD Display
3. Hold button
4. Power on/off button
5. MAX/MIN
6. Fast/ Slow selection key
7. Battery compartment
8. Nameplate



## 7. LCD display description

1. Data hold Icon
2. Auto power off Icon
3. Temperature readings
4. Sound level readings
5. Fast/Slow Icon
6. Hi/Lo Icon
7. Frequency weighting Icon
8. Temperature unit Icon
9. Low battery Icon
10. MAX/MIN Icon



## 8. Operation instruction

8.1 **Power on/off:** press to turn on/off the meter.

8.2 **Data Hold:** In measuring mode, press , “HOLD” Icon will appear on the LCD, which indicates the data is frozen, to release the held reading, press again.

8.3 **MAX/MIN:** In measuring mode, press , “MAX” will appear on the LCD, the captured maximum sound level will be displayed on the LCD, Long press , the meter exit MAX/MIN measurement mode and back to normal measuring mode.

8.4 **key;** with the meter on, press to select FAST(125s) or Slow(1s) time weighting measurement.

FAST: Fast sampling measurement, 1 time per 125ms.

SLOW: Slow sampling measurement, 1 time per second

### 8.5 Use of compound key;

8.5.1 With the meter off, press first and hold, then press to turn on the meter, it can change temperature unit( °C/ °F). °C is preset.

8.5.2 With the meter off, press first and hold, then press to turn on the meter, Icon on the LCD display disappear, which indicates the power off function is disabled, you need to turn off the meter through pressing by manual.

**Note:** When icon displayed on the screen, it indicates that the meter will automatically turn off after approx. 15 minutes of inactivity.

## 9. Notes

- 1) This meter has already been calibrated before delivery. Do not revise the calibration parameters without professional personnel and device.
- 【Note】 All products are well calibrated before delivery. Recommended recalibration cycle: 1 year.
- 2) Repairs or servicing not covered in this manual should only be performed by qualified personnel.
- 3) Wipe the unit with a dry soft cloth periodically. Do not use abrasives or solvents on this instrument.
- 4) Remove the battery when the meter is to be stored for long periods of time to avoid battery leakage.
- 5) when the battery is low, LCD display “”, A new battery is needed.
- 6) Do not store or operate the meter in high temperature or humidity.
- 7) Wind blowing across the microphone increases the noise measurement. Use the supplied windscreen to cover the microphone when appliance.
- 8) Keep microphone dry and avoid severe vibration.

## 10. Accessories:

1. User's manual
2. 3\*1.5V AAA Battery
3. Windscreen

## 11. Contact

If you have Contact questions, suggestions or technical problems, please do not hesitate to contact us. You will find the relevant contact information at the end of this user manual.

## 12. Contact

If you have any questions about our range of products or measuring instruments please contact PCE Instruments.

### PCE Instruments UK

#### By post:

PCE Instruments UK Ltd.  
Units 12/13 Southpoint Business Park  
Ensign Way, Southampton  
Hampshire

United Kingdom, SO31 4RF

### PCE Americas

#### By post:

PCE Americas Inc.  
711 Commerce Way  
Suite 8  
Jupiter  
33458 FL  
USA

#### By phone:

02380 987 035

#### By phone:

561 320 9162

## 13. Disposal

For the disposal of batteries in the EU, the 2006/66/EC directive of the European Parliament applies. Due to the contained pollutants, batteries must not be disposed of as household waste. They must be given to collection points designed for that purpose.

In order to comply with the EU directive 2012/19/EU we take our devices back. We either re-use them or give them to a recycling company which disposes of the devices in line with law.

For countries outside the EU, batteries and devices should be disposed of in accordance with your local waste regulations.

If you have any questions, please contact PCE Instruments.

