

# Sound Level Meter PCE-TSM 5 User's Manual



*Please read this user manual thoroughly before using this unit  
and keep it properly for your future reference.*

# Catalogue

1、 Safety.....	2
2、 Applications.....	2
3、 Features .....	3
4、 Specifications .....	4
5、 Meter Description.....	6
6、 Display Description .....	7
7、 Function Operation Description .....	7
8、 Notes.....	11
9、 Accessories.....	13
9、 Disposal.....	13

## 1、 Safety


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

### ▲ Environment conditions

1.  $RH \leq 90\%$  (Non-Condensation)
2. Operating Temperature:  $-20 \sim 60^{\circ}\text{C} / -4 \sim 140^{\circ}\text{F}$

### ▲ Maintenance

1. Repairs or servicing 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

 Comply with EMC

## 2、Applications

This instrument adopts the capacitive microphone as the sensor, and is equipped with high-configuration MCU

calculation, with high measurement accuracy and quick response. Suitable for noise engineering, quality control, health prevention and control and various environmental sound measurement, such as construction engineering, factory, school, hospital, library, office, home

### **3、 Features**

- large HD color LCD display
- Wide frequency response range and high accuracy
- Light and voice alarm functions
- Alarm value can be set
- Preset six countries warning language optional
- 15S Self defined recording broadcast duration 15S
- Screen locking function
- Remote control and remote operation
- Audio output function

## 4、Specifications

Measuring range	35dB ~ 135dB
Dynamic range	50dB
Frequency response	31.5Hz ~ 8KHz
Accuracy	±2.0dB
Frequency weighting	A weighted network
Microphone	1/2 inch electret condenser microphone
Value update	500ms
six Languages	English, Spanish, French, German, Japanese, Chinese
Recording function	15S
Over range prompt	> 135DB, "Hi" symbol is displayed; < 35 DB, "LO" symbol is displayed
High alarm value setting	√
Audio output function	√
Volume adjustment	√
Remote control	√

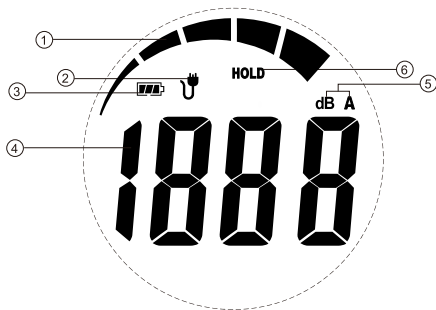
Battery life	60hours
Power	Adapter; DC 9V/1A, outer diameter 5.5mm, inner diameter 2.0mm, central positive pole
	AA LR6 1.5V ×6
Operating temperature and humidity	-20°C ~ 60°C/-4°F ~ 140°F,10%RH ~ 90%RH
Storage temperature and humidity	-20°C ~ 60°C/-4°F ~ 140°F,10%RH ~ 75%RH
Size	197*176*49mm
Weight	623g

## 5、Meter Description





- (1) Display screen
- (2) Recording hole
- (3) Function keys
- (4) Horn
- (5) Infrared receiving hole
- (6) Function keys
- (7) Noise detection sensor
- (8) Noise correction fine adjustment hole
- (9) Audio output hole
- (10) Adapter jack
- (11) Hanging hole
- (12) Battery compartment

## 6、 Display Description



- (1) Volume identification symbol
- (2) Adapter access prompt symbol
- (3) Low voltage prompt symbol
- (4) Noise value display area
- (5) Noise unit symbol
- (6) Screen lock symbol

## 7、 Function Operation Description

- 1) **On/off function;** Press the "" button to start the meter, and press the "" button for 3 seconds to shut down the machine





## 2) Alarm function

a. Yellow light alarm, in the measurement mode, when the measurement value is greater than the reported value, the yellow light flashes continuously.



b. Red light alarm. in measurement mode, when the measurement value is greater than the alarm value set by the red light, the red light is continuously flashing and the voice is reported (please be quiet).

## 3) Screen lock function; in the measurement state,



press the "" key, the "HOLD" symbol appears at the top of the screen to indicate that the instrument locks the

current screen display, and again, the "" key to cancel the function


## 4) Recording function; in measurement mode, press


the " " button, and hear the "drop", indicating that the recording begins, release " " the key, and hear the two sounds of "drop" and "drop", indicating the end of the recording. The instrument will automatically broadcast a recording content.


**5) Volume adjustment function;** in measurement


mode, press " " to increase the volume and " " to reduce the volume.

**6) Alarm value adjustment function;** in the


measurement mode, press the " " button, the instrument can enter the "Yellow Light Alarm Value Adjustment", "Red Light Alarm Value Adjustment", "Green Light Self Test", "Yellow Light Self Test", "Red

Light" mode, and press the "" button again to return to the measurement mode. In the alarm value adjustment

mode, press "" key to adjust the large value and

press "" key to adjust the small value.


**7) Broadcast voice selection;** in measurement mode,

press "" to select the required broadcast language,

then select in English, Spanish, French, German,

Japanese, Chinese, homemade recording content.

Note: After pressing the "" key, a voice will be

broadcast. After the voice is played, press the "" key

within 3 seconds to jump to the next voice play. If more

than 3 seconds, play the selected voice

**8) Correction method;** Open the power switch of the standard sound source (94 dB @ 1 KHZ), close the standard source to the induction hole of the noise detection sensor, and rotate the potentiometer in the adjustment hole on the right side of the instrument to display the LCD as 94.0dB.


## **8、 Notes**

The instrument has been calibrated before leaving the factory. Without any professional equipment and personnel, please do not easily modify the calibration parameters

[Note] The instrument has been corrected before leaving the factory, and the recommended correction period is one year.

1) Repairs or servicing 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
- 3) Remove the battery when the meter is to be stored for long periods of time to avoid battery leakage.
- 4) When the battery runs out, the LCD displays the "" symbol, and the new battery must be replaced.
- 5) Use adapters to power as much as possible
- 6) Do not use it in places with high temperature and high humidity
- 7) Do not tap the microphone head and remain dry.

## 9、 Accessories

- 1 x PCE-TSM 5 sound level meter
- 1 x 9 V 1 A plug-in mains adaptor
- 1 x remote control
- 1 x screwdriver
- 6 x 1.5 V AA battery
- 1 x user manual
- 1 x mounting material

## 9、 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.



# PCE Instruments contact information

## Germany

PCE Deutschland GmbH  
Im Langel 26  
D-59872 Meschede  
Deutschland  
Tel.: +49 (0) 2903 976 99 0  
Fax: +49 (0) 2903 976 99 29  
info@pce-instruments.com  
www.pce-instruments.com/deutsch

## United Kingdom

PCE Instruments UK Ltd  
Trafford House  
Chester Rd, Old Trafford  
Manchester M32 0RS  
United Kingdom  
Tel: +44 (0) 161 464902 0  
Fax: +44 (0) 161 464902 9  
info@pce-instruments.co.uk  
www.pce-instruments.com/english

## The Netherlands

PCE Brookhuis B.V.  
Institutenweg 15  
7521 PH Enschede  
Nederland  
Telefoon: +31 (0)53 737 01 92  
info@pcebenelux.nl  
www.pce-instruments.com/dutch

## France

PCE Instruments France EURL  
23, rue de Strasbourg  
67250 Soultz-Sous-Forêts  
France  
Téléphone: +33 (0) 972 3537 17  
Numéro de fax: +33 (0) 972 3537 18  
info@pce-france.fr  
www.pce-instruments.com/french

## Italy

PCE Italia s.r.l.  
Via Pesciatina 878 / B-Interno 6  
55010 Loc. Gragnano  
Capannori (Lucca)  
Italia  
Telefono: +39 0583 975 114  
Fax: +39 0583 974 824  
info@pce-italia.it  
www.pce-instruments.com/italiano

## United States of America

PCE Americas Inc.  
1201 Jupiter Park Drive, Suite 8  
Jupiter / Palm Beach  
33458 FL  
USA  
Tel: +1 (561) 320-9162  
Fax: +1 (561) 320-9176  
info@pce-americas.com  
www.pce-instruments.com/us

## Spain

PCE Ibérica S.L.  
Calle Mula, 8  
02500 Tobarra (Albacete) España  
Tel. : +34 967 543 548  
Fax: +34 967 543 542  
info@pce-iberica.es  
www.pce-instruments.com/espanol

## Turkey

PCE Teknik Cihazları Ltd.Şti.  
Halkalı Merkez Mah.  
Pehlivan Sok. No.6/C  
34303 Küçükçekmece - İstanbul  
Türkiye  
Tel: 0212 471 11 47  
Faks: 0212 705 53 93  
info@pce- cihazlari.com.tr  
www.pce-instruments.com/turkish

## Denmark

PCE Instruments Denmark ApS  
Birk Centerpark 40  
7400 Herning  
Denmark  
Tel.: +45 70 30 53 08  
kontakt@pce-instruments.com  
www.pce-instruments.com/dansk