English



User Manual

PCE-MSV 10 Sound Level Meter

User manuals in various languages (Deutsch, français, italiano, español, português, nederlands, türk, polski, русский, 中文) can be downloaded here:

www.pce-instruments.com

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English

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1 Safety notes

Please read this manual carefully and completely before you use the device for the first time. The device may only be used by qualified personnel and repaired by PCE Instruments personnel. Damage or injuries caused by non-observance of the manual are excluded from our liability and not covered by our warranty.

- The device must only be used as described in this instruction manual. If used otherwise, this can cause dangerous situations for the user and damage to the meter.
- The instrument may only be used if the environmental conditions (temperature, relative humidity, …) are within the ranges stated in the technical specifications. Do not expose the device to extreme temperatures, direct sunlight, extreme humidity or moisture.
- If you do not use the meter for a longer period of time, charge the battery before you store the device in order to avoid deep discharging.
- If the device is exposed to wind, the measured value will be higher.
- Keep the microphone dry, do not expose the device to shocks or strong vibrations.
- Do not drop the instrument.
- The case should only be opened by qualified PCE Instruments personnel.
- Never use the instrument when your hands are wet.
- You must not make any technical changes to the device.
- The appliance should only be cleaned with a damp cloth. Use only pH-neutral cleaner, no abrasives or solvents.
- The device must only be used with accessories from PCE Instruments or equivalent.
- Before each use, inspect the case for visible damage. If any damage is visible, do not use the device.
- Non-observance of the safety notes can cause damage to the device and injuries to the user.

We do not assume liability for printing errors or any other mistakes in this manual.

We expressly point to our general guarantee terms which can be found in our general terms of business.

If you have any questions please contact PCE Instruments. The contact details can be found at the end of this manual.

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2 Specifications

2.1 Technical data

Measurement range	30 … 130 dB A
Frequency range	20 … 20000 Hz
Focal range	Automatic 0.2 m … 5 m
Manual 0.2 m … 50 m	
Frames per second	4 frames per second
Display diagonal	10“ – HD display
Resolution	1280 x 800
Video memory	Approx. 60 minutes
Data transfer	W-Lan
Memory	1 GB
Battery life	Continuous operation: approx. 4 h
Intermittent operation: approx. 15 h	
Mains adaptor	Input voltage: 110 … 240 V AC; 50 … 60 Hz; 0,5 A

2.2 Delivery content

1 x sound level meter PCE-MSV 10
1 x sound measuring microphone class 2
1 x stereo headset
1 x mains adaptor
1 x protective carrying case
1 x user manual

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3 System description

3.1 Operating elements and connections



1. Audio jack 3.5mm
2. Communication cable sensor / tablet
3. Reset key
4. Charging socket
5. On / off key; standby
6. Back key
7. Microphone jack
8. Intensity evaluation
9. Recording mode
10. Key lock left-hand menu block
11. Sonometer
12. Distance setting
13. Battery capacity
14. Settings
15. Key lock right-hand menu block
16. Scan mode
17. Sampling rate
18. Back key
19. No function
20. No function
21. Decrease volume
22. Increase volume
23. Hide system keys

Any other connections have no function.

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3.2 Start-up

In order to use the device, take it out of the carrying case and hold it with both hands. Place the device on a table to make sure you do not drop it. You can then switch on the device with the On / off key. When switched on, the device will open the menu.

3.3 Measuring surface

To start a measurement now, press “Start Sound Viewer” in the middle of the display. You will then enter measurement mode. Where you have several options.

3.3.1 Intensity

In the upper left corner, you will find the intensity evaluation which depends on the sensitivity of the sensors. Over time, the sensitivity automatically adapts to the current background noise. If the cursor is in the blue or red area, it is not recommended to make a measurement as in this case, the measurement values may be outside the common tolerances.

3.3.2 Data record

Under “Record” on the left side of the display, you can select the memory format, e. g. image, video or Data to export You can find some more detailed information in chapter 3.3.7 data records.

3.3.3 Sonometer

The sonometer function which you can find below the data record on the left-hand side of the display, has 3 different modes:

- “Off” if you want to ignore this function
- “On – A filter” if you want to carry out a general sound level measurement using the A filter which is adapted to the human auditory system
- “On – linear filter” if you want to measure the sound level without any filter in order to get absolute values

3.3.4 Distance

The distance setting can be found in the lower left corner of the display. You can select between two modes.

- The standard setting is “Auto”. This mode allows the device to determine the distance within a range of 25 cm and 5 m.
- In “Manual” mode, you can set the distance manually to up to 50 m by 2-finger zoom.

3.3.5 Scan mode

You can find the scan mode option in the lower right corner of the display. If this option is activated, four images are taken during the period of use. These show the highest measurement values of the period of use. You can interrupt this process by using the “Play / pause” button. This means that no measurement value and no image is taken until the option is reactivated.

3.3.6 Sampling rate

The possible settings for the sampling rate are “High Speed” or “Stable”. If you expect huge differences or irregularities, the “High Speed” setting is recommended. If you expect the noises to be stable, select the “Stable” setting. This will help you to get more accurate readings.

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3.3.7 Data records

The main function of the acoustic camera is to take recordings. You have three options:

Image: The image mode is similar to any other camera. The only difference is that the source of the loudest noise is indicated.

Video: The video mode has the same function as the image mode. The difference is that in video mode, you can record videos of up to 60 minutes.

Data to export Data can be exported by using the software. In the data export document, additional data such as the distance can be saved. These allow a better evaluation of the measured values.

3.4 Settings

The settings can be found below the three spots in the upper right corner of the display. By entering settings mode, you can view and enter different menus. These are shown in the following chapters:

3.4.1 WiFi

Under “WiFi”, you can find the setting for the WLAN connection. Select WLAN. In case you have chosen a password, you will be asked to enter your password in the following.

3.4.2 Preferences

Under “preferences”, you can change the menu language. You can select one of the following languages: English, German, Spanish, French, Italian, Japanese, Korean and Chinese.

3.4.3 Time zone

You can specify your time zone to be able to assign the data correctly.

3.4.4 Info

“Info” gives you the contact details of PCE Instruments. If you have any problems using the device, you can contact us.

3.5 Data export

In order to be able to transfer the data, your computer and the PCE-MSV 10 must be connected to the same network. When you see the start-up screen of the PCE-MSV 10, press “Start Record Transfert”. The device will then show you an address to enter in your browser. The address can look as follows: http://192.168.1.130:54321
You can now select individual data in your browser or download the complete data record.

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4 Contact

If you have any 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.

5 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.





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PCE Instruments contact information

Germany
PCE Deutschland GmbH
Im Langel 4
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

France
PCE Instruments France EURL
76, Rue de la Plaine des Bouchers
67100 Strasbourg
France
Téléphone: +33 (0) 972 3537 17
Numéro de fax: +33 (0) 972 3537 18
info@pce-france.fr
www.pce-instruments.com/french

Spain
PCE Ibérica S.L.
Calle Mayor, 53
02500 Tobarra (Albacete)
España
Tel. : +34 967 543 548
Fax: +34 967 543 542
info@pce-iberica.es
www.pce-instruments.com/espanol

United States of America
PCE Americas Inc.
711 Commerce Way 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

United Kingdom
PCE Instruments UK Ltd
Units 12/13 Southpoint Business Park
Ensign Way, Southampton
Hampshire
United Kingdom, SO31 4RF
Tel: +44 (0) 2380 98703 0
Fax: +44 (0) 2380 98703 9
info@industrial-needs.com
www.pce-instruments.com/english

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

The Netherlands
PCE Brookhuis B.V.
Institutenweg 15
7521 PH Enschede
Nederland
Telefoon: +31 (0) 900 1200 003
Fax: +31 53 430 36 46
info@pcebenelux.nl
www.pce-instruments.com/dutch

Chile
PCE Instruments Chile SPA
RUT 76.423.459-6
Badajoz 100 oficina 1010 Las Condes
Santiago de Chile / Chile
Tel. : +56 2 24053238
Fax: +56 2 2873 3777
info@pce-instruments.cl
www.pce-instruments.com/chile

Hong Kong
PCE Instruments HK Ltd.
Unit J, 21/F., COS Centre
56 Tsun Yip Street
Kwun Tong
Kowloon, Hong Kong
Tel: +852-301-84912
jyi@pce-instruments.com
www.pce-instruments.cn

China
Pingce (Shenzhen) Technology Ltd.
West 5H1,5th Floor,1st Building
Shenhua Industrial Park,
Meihua Road,Futian District
Shenzhen City
China
Tel: +86 0755-32978297
lko@pce-instruments.cn
www.pce-instruments.cn

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

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