



# User Manual

PCE-SC 43 Sound Calibrator



User manuals in various languages (français, italiano, español, português, nederlands, türk, polski, русский, 中文) can be found by using our product search on: [www.pce-instruments.com](http://www.pce-instruments.com)

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## Contents

<b>1</b>	<b>Safety notes</b> .....	<b>1</b>
<b>2</b>	<b>Specifications</b> .....	<b>2</b>
<b>3</b>	<b>Delivery scope</b> .....	<b>2</b>
<b>4</b>	<b>Device description</b> .....	<b>3</b>
<b>5</b>	<b>Start-up and operation</b> .....	<b>4</b>
5.1	Inserting and replacing the batteries .....	4
<b>6</b>	<b>Troubleshooting</b> .....	<b>4</b>
<b>7</b>	<b>Contact</b> .....	<b>5</b>
<b>8</b>	<b>Disposal</b> .....	<b>5</b>

## 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.
- Do not expose the device to shocks or strong vibrations.
- 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.
- Do not use the instrument in explosive atmospheres.
- The measurement range as stated in the specifications must not be exceeded under any circumstances.
- 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.



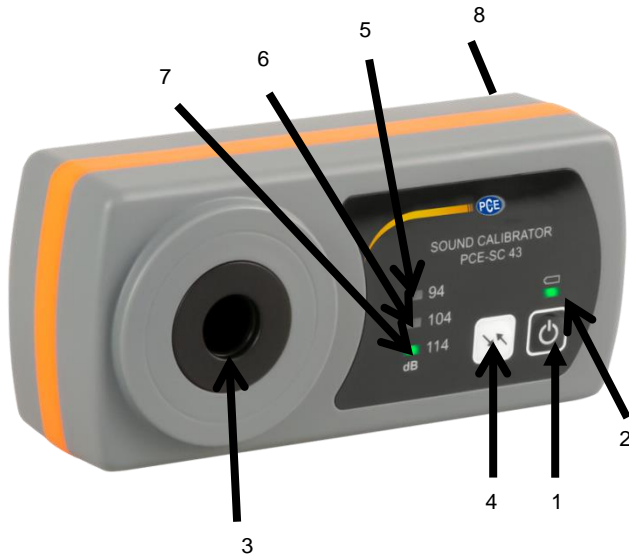
## 2 Specifications

Sound pressure level	94 dB, 104 dB, 114 dB
Accuracy	±0.4 dB
Class	2
Frequency	1000 Hz for A, B, C and D frequency weighting
Frequency accuracy	±1.7 %
Stabilisation time	10 s
Total harmonic distortion	<3 %
<b>Environment</b>	
Temperature / humidity influences	<0.4 dB at 0 ... 40°C / 32 ... 104 °F and 25 ... 90 % RH
Atmospheric pressure influence	<0.1 dB at 65 ... 108 kPa
Stability at <60 s	±0.15 dB
Stability after one year (normal use)	±0.35 dB
Operating conditions	0 ... 40 °C / 32 ... 104 °F, <25 ... 90 % RH, non-condensing
Storage conditions	-20 ... 50 °C / -4 ... 122 °F, <90 % RH, non-condensing
Automatic power off	after 20 minutes
Power supply	2 x 1.5 V AA battery
Battery life	approx. 50 h
Microphone size	1 / 2 inch
Dimensions	60 x 130 x 37.5 mm / 2.3 x 5.1 x 1.4"
Weight	400 g / 14.1 oz

## 3 Delivery scope

- 1 x PCE-SC 43
- 2 x 1.5 V AA battery
- 1 x user manual

## 4 Device description



1. On / off key
2. Operating status LED green/red
3. Test chamber
4. dB range key
5. Green 94 dB status LED
6. Green 104 dB status LED
7. Green 114 dB status LED
8. Battery compartment



## 5 Start-up and operation

Before you switch on the calibrator, it must acclimatise to the ambient conditions for at least two hours. Then connect the calibrator to a sound level meter. Make sure that the sound sensor of the sound level meter is completely inside the calibrator. Now switch on the calibrator with the on/off key. It will first carry out a function test. This process takes about 10 seconds. During the function test, the status LED flashes. As soon as the status LED glows continuously, the calibration can be carried out.

To select between the individual sound levels, press the dB range key several times until you have reached your desired sound pressure level. The sound pressure level is indicated by the status LED lighting up.

After you have calibrated the sound level meter, first switch off the calibrator by pressing the on / off key. Then you can detach the sound level meter from the calibrator.

### Note:

The calibrator must be on a straight surface during a measurement. Both calibrator and sound level meter must not move during a measurement. Make sure that the calibrator is not exposed to loud noises or general vibration during calibration. This may affect the calibration.

### 5.1 Inserting and replacing the batteries

To put the calibrator into operation, first insert the batteries into the battery compartment on the back. Use two 1.5 V AA batteries. Observe correct polarity when inserting the batteries. Then close the battery compartment. As soon as the total battery voltage is  $<2.2\text{ V}$ , the operating status LED lights up in red. Then replace the batteries for proper operation. If the operating status LED lights up in green, the calibrator is ready for operation.

## 6 Troubleshooting

Error	Cause	Solution
Function test is not completed	Hardware faulty	Contact PCE Instruments customer support.
Status LED is red	Battery voltage too low	Replace the batteries with new ones. The total battery voltage must be above 2.2 V.
Calibrator does not switch on	- Batteries completely discharged - Batteries not inserted - Hardware faulty	- Replace the batteries - Contact PCE Instruments customer support

## 7 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.

## 8 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  
Unit 11 Southpoint Business Park  
Ensign Way, Southampton  
Hampshire  
United Kingdom, SO31 4RF  
Tel: +44 (0) 2380 98703 0  
Fax: +44 (0) 2380 98703 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 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

### 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