English



User Manual

PCE-PH 30 pH Meter

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

Last change: 1 July 2021
v1.0

© PCE Instruments

Contents

1 Safety notes 1

2 Features 1

3 Specifications 2

3.1 Delivery contents 3

4 Device 3

5 Operation 4

5.1 pH calibration 4

5.2 Calibrate conductivity 4

5.3 pH measurement 4

5.4 Conductivity measurement 5

5.5 Redox measurement 5

6 Key functions 5

7 Battery 6

8 Contact 6

9 Disposal 6

© PCE Instruments

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 Features

- 6 in 1 pH tester
- IP57 housing
- Automatic temperature compensation
- Battery operation
- 3-point pH calibration
- Exchangeable electrodes
- Max-Min hold function
- Automatic electrode recognition

3 Specifications

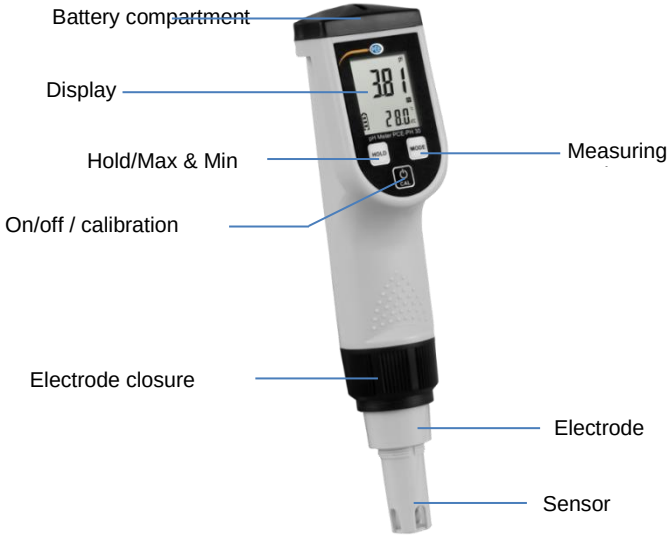
Measuring function	**pH**
Measurement range	-2 ... 16 pH
Resolution	0.01 pH
Accuracy	± 0,01pH + 1 dgt
ATC	0 ... 90°C / 32 ... 194°F
Calibration	pH 4, 7, 10
Measuring function	**Redox**
Measurement range	± 1000 mV
Resolution	1 mV
Accuracy	± 2 mV + 1 dgt
Measuring function	**Conductivity**
Measuring range	0 ... 2000 µS, 2 ... 20 mS
Resolution	1 µS, 0.01 mS
Accuracy	± 2% of measurement range
ATC	0 ... 50°C / 32 ... 122°F
Calibration	0 µS, 1413 µS, 12.88 mS
Measuring function	**TDS**
Measurement range	0 ... 1300 ppm, 1.3 ... 13 ppt
Resolution	1 ppm, 0.01 ppt
Accuracy	± 2% of measurement range
ATC	0 ... 50°C / 32 ... 122°F
Measuring function	**Salinity**
Measurement range	0 ... 1000 ppm, 1 ... 12 ppt
Resolution	1 ppm, 0.01 ppt
Accuracy	± 2% of measurement range
ATC	0 ... 50°C / 32 ... 122°F
Measuring function	**Temperature**
Measurement range	0 ... 90°C / 32 ... 194°F
Resolution	0.1°C / 0.18°F
Accuracy	± 0.2°C / 0.36°F + 1 dgt
Display	LCD
Power supply	4 x 1.5V AAA battery
Dimensions	195 x 40 x 36 mm / 7.7 x 1.6 x 1.4 in
Weight	About 135 g / < 1 lb

3.1 Delivery contents

1 x pH meter PCE-PH 30
1 x pH electrode
1 x conductivity electrode
1 x pH 4 calibration liquid
1 x pH 7 calibration liquid
1 x 1413 µS / cm calibration liquid
1 x storage solution
1 x wrist strap
4 x 1.5 V AAA battery
1 x user manual



4 Device



pH electrode	Conductivity electrode
	

5 Operation

Remove the black protective cap from the device and optionally unscrew the electrode cap if you want to use a different electrode. To change the electrode, you can simply remove it and attach another one.

Note: Do not touch the sensors of the electrodes!

5.1 pH calibration

Since the electrode is subject to a time drift, it should be calibrated regularly. The interval depends on the intended use and the required accuracy.

- Make sure that the pH electrode is mounted and the pH icon is shown on the display.
- Clean the electrode with distilled water.
- Immerse the electrode in the calibration solution pH 7, stir carefully and wait until the value has stabilized.
- Press and hold the CAL key until "Cal" and the calibration value are displayed.
- Calibration is performed automatically and is finished when "End" is displayed. The instrument returns to measuring mode.
- Clean the electrode with distilled water.
- Now repeat the calibration with the pH 4 calibration solution.

Notes:

- Always carry out a two-point calibration. Start at pH 7, followed by pH 4 (or 10).
- When not using the pH electrode, always keep the electrode moist with the storage liquid.

5.2 Calibrate conductivity

1. Make sure that the conductivity electrode is mounted to the instrument. The display shows COND, TDS or Salt.
2. Immerse the conductivity electrode in the 1413µS/cm calibration solution and wait until the measured value has stabilized.
3. Press and hold the CAL button until "Cal" is displayed and the calibration value flashes. Calibration is performed automatically and is finished when "End" is displayed. The instrument returns to measuring mode.

Notes:

- A calibration with 12.88mS/cm can also be performed optionally. It is suitable for measurements with high conductivity.
- If the measured value is not 0µS/cm in air after calibration, calibrate the instrument in air.

5.3 pH measurement

1. Clean the pH electrode with distilled water.
2. Dip the electrode tip into the liquid to be examined and move the tip slightly back and forth.
3. Wait briefly until the display shows a stable pH value.

5.4 Conductivity measurement

1. Clean the conductivity electrode with distilled water.
2. Dip the electrode tip into the liquid to be examined and move the tip slightly back and forth.
3. Wait briefly until the display shows a stable value.

Notes:

- The display shows "----- " if the value exceeds the measurement range.
- The measuring unit changes automatically depending on the measurement range.
- Clean the electrode with distilled water after the measurement.

5.5 Redox measurement

1. Make sure that the Redox electrode is mounted on the instrument. The display automatically shows "ORP". Calibration is not necessary but can be performed to check the ORP electrode with the appropriate calibration solution.
2. Clean the electrode with distilled water and immerse it in the liquid to be measured.
3. Wait for a short time until a stable value is displayed.

Notes:

- The display shows "----- " if the value exceeds the measurement range.
- When not using the electrode, always keep the electrode moist with the storage liquid.
-

6 Key functions

On/off / calibration key

1. Press and release the key to switch the unit on or off.
2. Press and hold the key while the instrument is switched on to enter calibration mode.

Measuring key

1. Press the key to switch between the measuring functions conductivity, TDS and salinity. **This is only possible with the conductivity electrode!**
2. Press and hold the key to toggle between degrees Celsius and degrees Fahrenheit.

Hold/Max&Min key

1. Press and release the key to freeze the displayed value.
2. Press and hold the key to enter the max/min selection. Press and release the key again to toggle between Max and Min.
3. Press and hold the key again to exit the Max/Min mode.

Note:

- The display does not switch off automatically in Max/Min mode.

7 Battery

When the battery icon flashes, replace the batteries as follows:

1. Loosen the 2 screws at the top of the battery compartment.
2. Open the battery compartment and replace the 4 AAA batteries. Observe correct polarity.
3. Close the battery compartment and tighten the screws.

8 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.

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.

www.pce-instruments.com

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
23, rue de Strasbourg
67250 Soultz-Sous-Forets
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 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

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

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

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

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

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

© PCE Instruments