




PeakTech 5306 Temp Meter User Manual

[Home](#) » [PeakTech](#) » PeakTech 5306 Temp Meter User Manual 

PeakTech 5306 Temp Meter User Manual

PeakTech®

Unser Wert ist messbar...



PeakTech® 5306

Bedienungsanleitung / Operation Manual

Contents

- 1 1. Safety precautions
- 2 2. Introduction
- 3 3. Controls
- 4 4. Measuring operation
 - 4.1 4.1 Carrying out a pH measurement
 - 4.2 4.2 Calibration of the device
 - 4.2.1 4.2.1 PH calibration
 - 4.2.2 4.2.2 EC calibration
- 5 5. Battery replacement
- 6 6. Specifications
- 7 Documents / Resources
 - 7.1 References
- 8 Related Posts

1. Safety precautions

This product complies with the requirements of the following directives of the European Union for CE conformity: 2014/30/EU (electromagnetic compatibility), 2011/65/EU (RoHS).

Damage caused by failure to observe the following information is excluded from claims of any kind.

For the operational safety of the device, the following safety instructions for operating the device must be observed.

- * Read these instructions carefully and make them accessible to subsequent users.
- * Use this device only within its scope and specifications. * Take all necessary safety precautions, especially when using acids.
- * Wear personal safety equipment, gloves and safety glasses when handling chemical products.
- * Never operate the device if it is not completely closed. * Do not operate the device near strong magnetic fields (motors, transformers, etc.)
- * Avoid strong vibrations of the device Before starting operation, the device should be stabilized to the ambient temperature (Important when transporting cold to warm rooms and vice versa)
- * Do not make any technical changes to the device
- * Only qualified service technicians may open the device, as well as perform maintenance and repair work

Cleaning the cabinet

Clean only with a damp soft cloth and a commercially available mild household cleanser. Ensure that no water gets inside the equipment to prevent possible shorts and damage to the equipment.

Note: Make sure that the probe is soaked in distilled water for approx. 5 – 20 minutes before it is used for the first time and if it is not used for a longer period of time. It can happen that crystals form on the probe after a longer storage time. These can be removed by soaking and cleaning the probe.

2. Introduction

The PeakTech 5306 is used to measure the pH, conductivity and temperature of various liquids and liquids. With the removable probe, it is possible after the respective measurement to thoroughly free the device and the probe from residues of the liquid and to clean them. An calibration can be carried out via two potentiometers using the attached screwdriver. To protect the measuring electrode, a protective cap is attached to the end of the P 5306 (this is removed during the measurement).

- * Digital pH meter with illuminated display
- * Conductivity measurement in $\mu\text{S}/\text{cm}$
- * Conductivity is shown as $\mu\text{S} \times 10$
- * Liquid temperature measurement ($^{\circ}\text{C}/^{\circ}\text{F}$)
- * Multi-Line, 3½-digit LC Display
- * Can be calibrated with 2 calibration points
- * Exchangeable measuring electrode (dry stored)
- * Waterproofed case
- * Electrode protective cap

3. Controls



4. Measuring operation

The pH meter is used to determine the pH values of various liquids. Thanks to the display, which has a backlight, and the intuitive handling of the device, the measurement of the pH value can be carried out quickly and in a user-friendly manner.

4.1 Carrying out a pH measurement

In order to carry out the pH measurement, the protective cap protecting the electrode of the probe must be removed. Then the device must be switched on with the on / off switch. The background lighting is permanently on during operation in order to highlight the measured value.

If the pH meter has not been used for a long time, has been in operation for a long time or if it has been used in environments in which stronger external influences can occur, it is advisable to calibrate the device (see point 4.2).

Before measuring, clean the probe with distilled water in order to exclude possible falsifications of the measured value. Carefully dry the probe with a cloth. Now the probe of the pH meter can be immersed in the liquid to be measured. Make sure that only the bottom 4 cm of the probe is immersed in the liquid.

After completing the measurement, remove the pH meter from the liquid and clean the probe again with distilled water.

If no further measurements are to be made, put the protective cap of the electrode back onto the end of the probe to protect it from contamination or damage.

Proceed as follows:

1. Remove the protective cap from electrode.
2. Clean the electrode with distilled water, and dry it well.
3. Press the “power” button to turn on the device.
4. Immerse the electrode into the test solution, and stir lightly.
5. Press EC/pH to choose “EC” or “pH” mode, Take a few seconds for final stable reading.
6. The EC value is shown as $\mu\text{S} \times 10$, so multiply the shown value with 10 to receive the actual measurement.
7. Wash electrode after use. Press “ON/OFF” to turn off.

4.2 Calibration of the device

4.2.1 PH calibration

To calibrate the pH value, a standard buffer solution pH6.86 is required, for the EC value a standard buffer solution EC 12880 $\mu\text{S} / \text{cm}$, which can be obtained from specialist dealers. A pH 4.01 and pH 6.86 buffer solution and an EC 1410 $\mu\text{S} / \text{cm}$ solution can be used for the subsequent control. Calibration is carried out using a potentiometer in the battery compartment. A corresponding screwdriver is included as an accessory.

1. Immerse the electrode into pH 6.86 (under the temperature of 25) standard calibration solution. Stir lightly.
2. Press EC/pH to choose pH. Turn the “pH7” trimmer (right potentiometer front view) with a screwdriver until the value corresponding to the 6.86pH.
3. Recheck: Clean the electrode with distilled water. Immerse the electrode in pH4.01 or pH9.18 the standard buffer solution. After about one minute, the value correspond to the 4.01pH or pH9.18.
4. Showing value and buffer solution's value is within error range.

Note: For an even more precise calibration, fill the respective buffer solution into two different beakers. One is only used to clean the electrode and the other is only used for calibration. This allows the contamination by foreign matter to be reduced to a minimum.

Note: Perform a calibration if:

- the electrode has been replaced.
- no calibration has been carried out for a long time.
- the device has been used often and for a long time.
- a particularly high measurement accuracy is required.

4.2.2 EC calibration

1. Press “EC/pH” to choose “EC” mode. Immerse EC electrode into 12880us/cm standard buffer solution, and stir lightly.
2. Adjust “EC” button until it shows 12880us/cm when the showing value is stable, . Wash electrode in distilled water and dry it well.
3. Immerse the electrode into 1410 us/cm standard solution. If the reading is within the allowed error range,

calibration is finished.

NOTE:

1. Stir electrode while testing, to avoid the bubbles occurs on the surface of electrode. Bubbles on the electrode have bad effect on the accuracy of value.
2. If the error value is large or EC value not go back to 0 us/cm. Immerse the electrode into ethyl alcohol and stir for 5 to 10 seconds.

5. Battery replacement

The PeakTech 5306 is a battery operated measuring device. After a certain period of use of the device, it may happen that the capacity of the batteries is used up and new batteries have to be inserted. This becomes visible when the display gets darker or looks a little blurry. To change the batteries, make sure that the device is switched off. Remove the upper screw cap of the device and remove the batteries from the battery compartment. Now insert the new batteries of the appropriate polarity (which is shown in the housing) into the battery compartment. Make sure to use the correct batteries that the measuring device requires (4 x 1.5V AG13 button cells). After changing the battery, put the screw cap on the device and screw it back on.

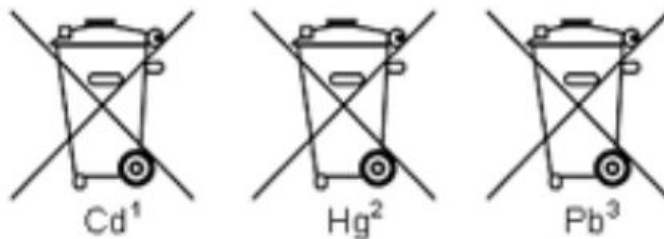
6. Specifications

Display	3 ½-digit, LCD-display max 1999 counts		
Functions	PH: 0.00 to 14.00 pH	Temperature: 0.0°C to 50.0°C	EC: 0 to 19999 µS/cm
Resolution	0,01 pH	0,1°C	10 µS/cm
Accuracy	± 0,1pH	± 1 °C	+/- 2% full scale
Sampling rate	1 – 2 x Sec.		
Calibration	With potentiometer		
Operation temperature	0°C...+50°C (32°F...122°C); < 80% RH		
Power Supply	4 x 1,5V Batteries (AG-13)		
Dimensions (WxHxD)	188 x 35 x 35 mm		
Weight	80 g		
Accessories	Manual, 4 x 1,5V Batteries (AG-13), Screwdriver		

Notification about the Battery Regulation

The delivery of many devices includes batteries, which for example serve to operate the remote control. There also could be batteries or accumulators built into the device itself. In connection with the sale of these batteries or accumulators, we are obliged under the Battery Regulations to notify our customers of the following:

Please dispose of old batteries at a council collection point or return them to a local shop at no cost. The disposal in domestic refuse is strictly forbidden according to the Battery Regulations. You can return used batteries obtained from us at no charge at the address on the last side in this manual or by posting with sufficient stamps. Contaminated batteries shall be marked with a symbol consisting of a crossed-out refuse bin and the chemical symbol (Cd, Hg or Pb) of the heavy metal which is responsible for the classification as pollutant:



1. "Cd" means cadmium.
2. "Hg" means mercury.
3. "Pb" stands for lead.

All rights, also for translation, reprinting and copy of this manual or parts are reserved.

Reproduction of all kinds (photocopy, microfilm or other) only by written permission of the publisher.

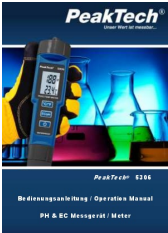
This manual considers the latest technical knowing. Technical changings which are in the interest of progress reserved.

We herewith confirm, that the units are calibrated by the factory according to the specifications as per the technical specifications.

We recommend to calibrate the unit again, after 1 year.

PeakTech Prüf- und Messtechnik GmbH Gerstenstieg 4 DE-22926 Ahrensburg / Germany +49-(0) 4102-97398
80 +49-(0) 4102-97398 99
info@peaktech.de www.peaktech.de

Documents / Resources

	<p>PeakTech 5306 Temp Meter [pdf] User Manual 5306 Temp Meter, 5306 Temp Meter, Temp Meter, Meter</p>
---	---

References

- [P Home](#)
- [P Home](#)