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Manual
Moisture Meter PCE-PMI 2

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Contents

1 Introduction

Thank you for purchasing a moisture meter from PCE Instruments.
With the PCE-PMI 2 you can measure the moisture contents of different materials quickly and easily. There is a variety of pre-set densities available for different materials like cork, different types of wood or cement. You can also set up threshold levels which trigger an optical alarm signal when exceeded. This makes the moisture meter an ideal measuring tool for applications where quick moisture measurements are needed, for example in quality control.

2 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. There is no warranty of damages or injuries caused by non-observance of the manual.

- This device may only be used in the way specified in this manual. If used otherwise, this may cause dangerous situations.
- Do not expose the device to extreme temperatures, direct sunlight, extreme air humidity or moisture.
- The case should only be opened by qualified personnel of PCE Instruments.
- Do not touch the instrument with wet hands.
- You should not make any technical changes to the device.
- The appliance should only be cleaned with a damp cloth / use only pH-neutral cleaner without solvents or abrasives.
- The device must only be used with original PCE accessories or equivalent.
- Before each use, please inspect the case for damage. In case of any visible damage, please do not use the device.
- The device must not be used be used when the environmental conditions (temperature, air humidity,…) are outside the limit values stated in the specifications.
- Do not expose the instrument to explosive atmospheres.
- The instrument should never be placed with the user interface facing an object (e. g. keyboard side on a table).

This user's handbook is published from PCE Instruments without any guarantee.
We expressly point to our general guarantee terms, they can be found in our general terms of business.
If you have any questions please contact PCE Instruments.

3 Specifications

3.1 Technical Specifications

Measuring range	0 … 200 digits
Accuracy	± (0.5 % of reading + 0.5 digits)
Resolution	0.1 digits
Measuring depth	50 mm
Measuring principle	capacitive
Sensor	Metal spheroid
Display	LCD
Power supply	4 x 1.5 V AAA batteries
Operating conditions	0 … +50 °C < 90 % RH
Dimensions	165 x 62 x 26 mm
Weight	119 g (without batteries)

3.2 Delivery contents

1 x PCE-PMI 2
4 x 1.5 V AAA batteries
1 x carrying case
1 x instruction manual

4 Operation

4.1 Start-up procedure

Before you can use the device, you have to install the batteries. To do so, take the device and open the battery compartment on the back. Take the 4 x AAA batteries, which are included in the package, and install them as shown on the illustration inside of the battery compartment. After that, close the battery compartment. The device is now ready to use.

4.2 Take a measurement

To take a measurement, turn on the moisture meter by pressing the “Power” button. Once the device is turned on, you can hold the metal spheroid against a surface in order to measure its moisture content. The reading is shown on the display of the moisture meter.
Note: *The readings can be falsified if your hand is close to the metal spheroid sensor when taking a measurement. To prevent this from happening, try to hold the device as far on the bottom side as possible, when taking a measurement.*

4.2.1 Max hold function

By using the max hold function, the display shows the maximum value of the measurement (since the function has been activated). To activate the max hold function, simply press the “HOLD” button on the device. Now you can see a “max” indication on the display, which means that the max hold function is active. To deactivate it, just press the “HOLD” button again.

4.2.2 Zeroing / self-calibration

To perform a self-calibration, turn on the device and hold it away from yourself and from any objects. Now, press and hold the “ZERO” button, until the status LED glows green. The device now has calibrated itself.

Note: *It is recommended to perform a self-calibration after every turn-on procedure, in order to prevent the readings from being falsified.*

4.2.3 Select the density

To select the density of the material to be measured, press the “SEL” button. Now the display shows a code, for example “Cd 12”. Press the “HOLD” button to go to the next code or press the “ZERO” button to go to the previous code. Once you have your desired code selected, press the “SEL” button to confirm the selection.
The following table shows the different codes and their densities:

Code	Density in kg/m³	Material
01	200	
02	220	
03	240	Cork
04	320	
05	400	
06	440	
07	480	Spruce
08	520	Pine
09	560	
10	600	
11	800	Beech, oak, paper
12	1000	Rubber, lime
13	1200	Plaster
14	1400	Bituminous coal
15	1600	
16	1800	Concrete, bricks
17	2000	
18	2200	Graphite
19	2500	Sandstone, granite
20	3000	Cement

4.2.4 Alarm function

You can set up threshold levels, which trigger an alarm signal (LED indication) when exceeded. To do so, press and hold the “SEL” button and release it, once “AL1” or “AL2” appears on the display. “AL2” is the high threshold level and “AL1” is the low threshold level. Now you can use the “HOLD” and “ZERO” buttons to increase/decrease the threshold value. Press the “SEL” button to confirm the input.
When both threshold levels are set, the LED glows green, while the reading is below the lower level. When the reading is between the lower and the higher threshold level, the LED glows orange and when the reading is above the higher threshold level, the LED glows red.

4.2.5 Battery indication

Once the battery voltage is low, a low battery indication appears on the display. When this is the case, you should replace the batteries in order to be able to continue measuring. To do so, turn off the device and open the battery compartment on the back of the housing. Remove the old batteries and put in 4 x new 1.5 V AAA batteries. Mind the correct polarity. After that, close the battery compartment and turn the device back on.

4.2.6 Auto power-off function

Besides turning it off manually by using the “Power” button, the device also comes with an automatic power-off function for saving battery power. The power-off function turns the device off after 5 minutes of inactivity.

5 Disposal

For the disposal of batteries, 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.

If you have any questions, please contact PCE Instruments.

6 Contact

If you have any questions about our range of products or measuring instruments please contact PCE Instruments.

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