PCE Instruments PCE-GM 80 Gloss Meter User Manual

Instruments PCE-GM 80 Gloss Meter

User Manual

User manuals in various languages can be found by using our product search on: **www.pce-instruments.com**

Contents

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.

Instrument Characteristics

- Fine, light, stylish appearance and easy to carry

- Completely intelligenised design, single key operation, convenient to use

- Automatically adjustable

- Capable of measuring from multiple different angles

- Long lifespan lamp

- High measurement precision

- Backlit LCD digital display with accurate battery life and time display

- Auditory feedback during operation

- Automatic shutdown

- USB interface for PC connection

- Stores up to 1245 measurements

Specifications

Measurement range	0 … 99.9 GU
	100 … 1000 GU
Resolution	0.1 GU
	1 GU
Repeatability	< 0.45 GU
	0.5%
Accuracy	< 1 GU
	1%
Measurement geometry	60°
Measuring surface	04.5 mm
Data storage	1,245 measured values
Interface	Micro USB
Power supply	2 x 1.5V AAA batteries
Environmental conditions	0 … 40°C / 32 … 313°F, < 85% rH non-condensing
Dimensions	115 x 65 x 25 mm/4.5 x 2.6 x 1 in
Sensor cable length (PCE-GM 80 only)	approx. 50 cm
Weight	100 g / < 1 lb
Standards	GB9754-88, GB9966.5, IS02813, JJG696-2002

Delivery contents

1 x gloss meter PCE-GM 75 or PCE-GM 80
1 x external sensor (PCE-GM 80 only)
1 x calibration standard
1 x micro USB cable
1 x cleaning cloth
2 x 1.5 V AAA battery
1 x user manual

Display descriptions

- "GU" – Gloss Unit

- "calibrate" – Runs the calibration process

- "clear save" – Clears the saved measurements

- "Change CAL" – Modifies the calibration value

- "Set time" – Modifies the time display

Operation instructions

Press the button to start the device. The display will now show "Calibrate?" Place the device, with the measurement window into the calibration slot, in the case of the device and press the button again to confirm the

calibration process. The device now calibrates automatically. Once calibrated, the display shows "calibrate ok" and then "ready". The device is now in the working condition and is ready for use.
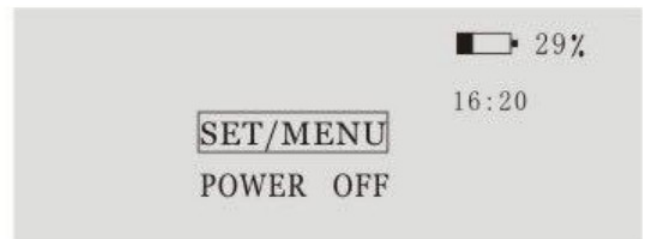
(If you choose the skip the calibration process, simply wait ~20 sec. until the display shows "ready".)

Now place the device with the measurement window onto the surface you wish to measure and press the button to begin. With a "beep" the device displays the gloss value of the measured surface.
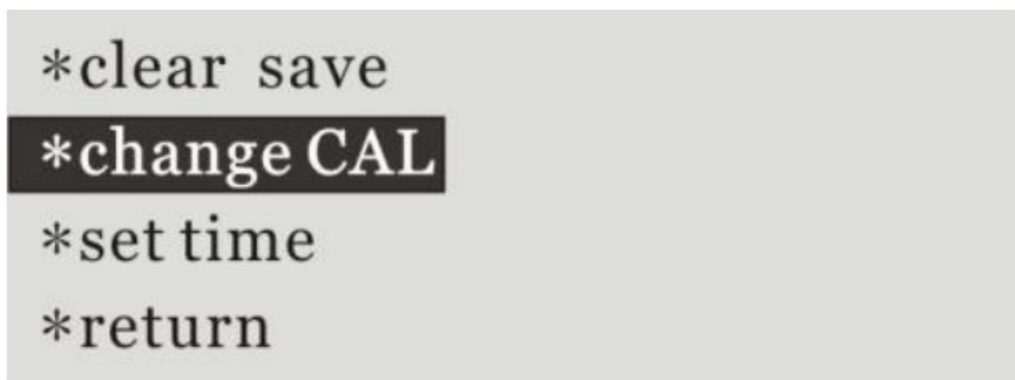
The device will shut down automatically after ~50 sec. of not being used.

Menu instructions

When the device is ready for use, press and hold the button until the display changes and "SET/MENU" is highlighted. Release the button to enter the next screen. The display change looks as follows:

The cursor now cycles (top to bottom) the options of the next menu. Press the button when the desired option is highlighted in order to select:

Modifying the calibration value

If you wish to replace the standard plate (black quartz crystal plate), you must then change the calibration value. In order to do this, you must press the button when "change CAL" is highlighted inside the "SET/MENU" screen (refer to picture above). The display now shows "change CAL?" Press the button again to confirm and begin the process (if no new value is needed, do not press the button, after ~20 sec. the device will return to the screen displaying "ready"). The device now begins to count up from 80. Press the button at the desired value to confirm it. The device will now return to the working condition and display "ready".

Setting the time

If you wish to change the time displayed on the device, press the button when "set time" is highlighted inside the "SET/MENU" screen (refer to picture in point 7 Menu Instructions). The highlighted area (beginning with the year) now begins to count up, press the button again to confirm the desired value. After confirmation, the next value will be highlighted and begin to count up (month). Repeat the process until you have the desired date and time set.

Important notice

- Avoid direct sunlight; otherwise it can affect the measurement accuracy.
- The standard plate should be kept clean. Avoid touching it with your fingers. If there is dust on the plate, it can affect the measurement accuracy. Wipe it with the provided cloth or absolute alcohol.
- When the battery level is less than 20%, the batteries need to be replaced. Open the battery cover and replace the old batteries with new ones. Please note the polarity of the contact wires.
- The batteries should be replaced when depleted, otherwise long-term storage may cause liquid to leak out and damage the device. If the device will not be used for a longer period of time, the batteries should be taken out and kept in a safe place.

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.

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.
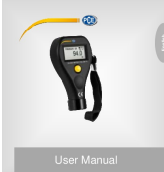If you have any questions, please contact PCE Instruments.

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Documents / Resources

PCE Instruments PCE-GM 80 Gloss Meter [pdf] User Manual
PCE-GM 75, PCE-GM 80 Gloss Meter, PCE-GM 80 Gloss Meter, Gloss Meter, Meter

References

- **France.fr : Actualités, destinations et infos du tourisme en France**
- **iberica.es**
- **Make an offer on the domain instruments.co.uk - Domains.co.uk**
- **Computer Instruments | Home**
- **Discover Italy: Official Tourism Website - Italia.it**
- **Industrial Measurement Products and Solutions | PCE Instruments**
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- **PCE Brookhuis B.V. | PCE Instruments**
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