



# User Manual

PCE-GM 75 Gloss 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](http://www.pce-instruments.com)

Last change: 2 December 2019  
v1.0



## Contents

<b>1</b>	<b>Safety notes</b> .....	<b>1</b>
<b>2</b>	<b>Applications</b> .....	<b>2</b>
<b>3</b>	<b>Instrument Characteristics</b> .....	<b>2</b>
<b>4</b>	<b>Specifications</b> .....	<b>2</b>
<b>5</b>	<b>Display descriptions</b> .....	<b>2</b>
<b>6</b>	<b>Operation instructions</b> .....	<b>3</b>
<b>7</b>	<b>Menu instructions</b> .....	<b>3</b>
<b>8</b>	<b>Modifying the calibration value</b> .....	<b>3</b>
<b>9</b>	<b>Setting the time</b> .....	<b>4</b>
<b>10</b>	<b>Important notice</b> .....	<b>4</b>
<b>11</b>	<b>Contact</b> .....	<b>4</b>
<b>12</b>	<b>Disposal</b> .....	<b>4</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 Applications

- For the measurement of surface gloss for printing ink, paint, baked lacquer, coating and wood
- For the measurement of surface gloss for construction decoration materials such as: marble; granite; glass; chemically polished or pottery brick
- For the measurement of surface gloss for plastic and plastic sheets
- For the measurement of surface gloss for other non-metal materials

## 3 Instrument Characteristics

- Fine, light, stylish appearance and easy to carry
- Completely intelligensised 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

## 4 Specifications

Measuring 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	Ø4.5 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
Weight	100 g / < 1 lb
Standards	GB9754-88, GB9966.5, ISO2813, JJG696-2002

## 5 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

## 6 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.

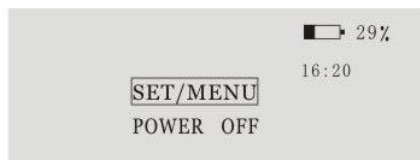
(If you choose the skip the calibration process, simply wait ~20 sec. until the display shows "ready".)

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.

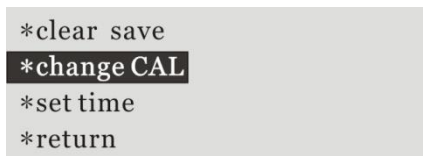
The device will shut down automatically after ~50 sec. of not being used.

## 7 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:



## 8 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".



## 9 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.

## 10 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.

## 11 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.

## 12 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 reuse 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 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

### Germany

PCE Produktions- und  
Entwicklungsgesellschaft mbH  
Im Langel 26  
D-59872 Meschede  
Deutschland  
Tel.: +49 (0) 2903 976 99 471  
Fax: +49 (0) 2903 976 99 9971  
info@pce-instruments.com  
www.pce-instruments.com/deutsch

### 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

### United States of America

PCE Americas Inc.  
711 Commerce Way 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

### 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

### 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

### China

PCE (Beijing) Technology Co., Limited  
1519 Room, 6 Building  
Zhong Ang Times Plaza  
No. 9 Mentougou Road, Tou Gou District  
102300 Beijing, China  
Tel: +86 (10) 8893 9660  
info@pce-instruments.cn  
www.pce-instruments.cn

### 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

### 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

### 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

### 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