

PCE Americas Inc.  
711 Commerce Way  
Suite 8  
Jupiter  
FL-33458  
USA  
From outside US: +1  
Tel: (561) 320-9162  
Fax: (561) 320-9176  
info@pce-americas.com

PCE Instruments UK Ltd.  
Units 12/13  
Southpoint Business Park  
Ensign way  
Hampshire / Southampton  
United Kingdom, SO31 4RF  
From outside UK: +44  
Tel: (0) 2380 98703 0  
Fax: (0) 2380 98703 9  
info@pce-instruments.com

[www.pce-instruments.com/english](http://www.pce-instruments.com/english)  
[www.pce-instruments.com](http://www.pce-instruments.com)

# Manual

## Pressure Meter PCE-P 01/05



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**1 Introduction**

Thank you for purchasing a PCE-P01 or PCE-P05 from PCE Instruments.

**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.

- The device may only be used in the approved temperature range.
- The case should only be opened by qualified personnel of PCE Instruments.
- The instrument should never be placed with the user interface facing an object (e. g. keyboard side on a table).
- 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.

This user's handbook is published by PCE Instruments without any guarantee.

We expressly point to our general guarantee terms which can be found in our general terms of business.

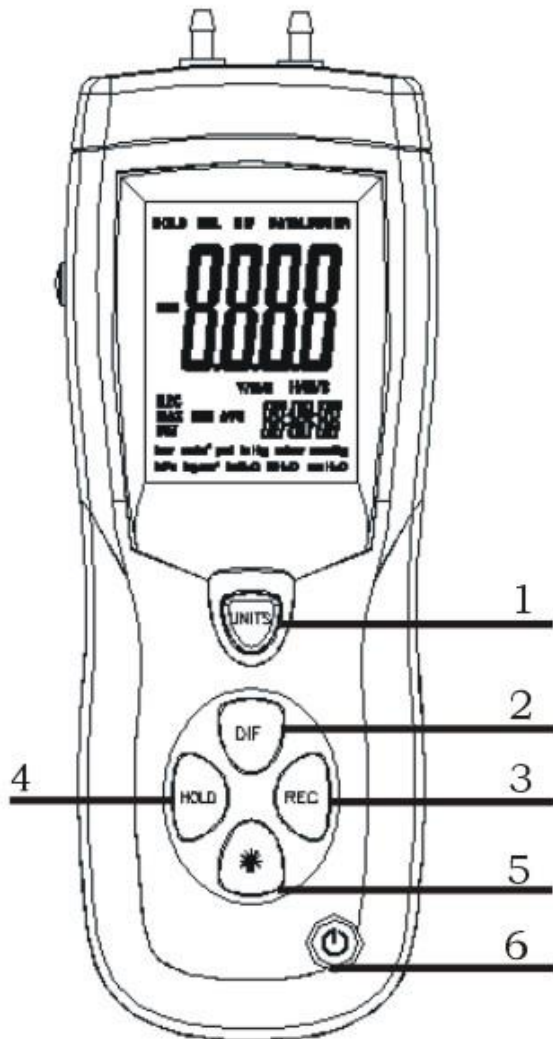
If you have any questions please contact PCE Instruments.

### 3 Specifications

Model	PCE-P01	PCE-P05
Measurement range		
inH <sub>2</sub> O	55.40	138.30
psi	2.000	5.000
mbar	137.8	344.7
kPa	13.79	34.47
inHg	4,072	10.18
mmHg	103.4	258.5
ozin <sup>2</sup>	32.00	80.00
ftH <sub>2</sub> O	4.162	11.53
cmH <sub>2</sub> O	140.6	351.5
kgcm <sup>2</sup>	0.140	0.351
bar	0.137	0.344
Resolution		
inH <sub>2</sub> O	0.01	0.1
psi	0.001	0.001
mbar	0.1	0.1
kPa	0.01	0.01
inHg	0.001	0.001
mmHg	0.1	0.1
ozin <sup>2</sup>	0.01	0.01
ftH <sub>2</sub> O	0.001	0.01
cmH <sub>2</sub> O	0.1	0.1
kgcm <sup>2</sup>	0.001	0.001
bar	0.001	0.001
Maximum pressure	689 mbar	1378 mbar
Accuracy (to 25°C)	±0.3 %	
Linearity	±0.2 %	
Response time	approx. 0.5 s	
Operating temperature	0 ... +50 °C	
Storage temperature	-10 ... +60 °C	
Display	dual LCD	
Dimensions	210 x 75 x 50 mm	
Weight	650 g	
Battery	Battery: 1 x 9 V battery Mains component: DC 9V, 500 mA	

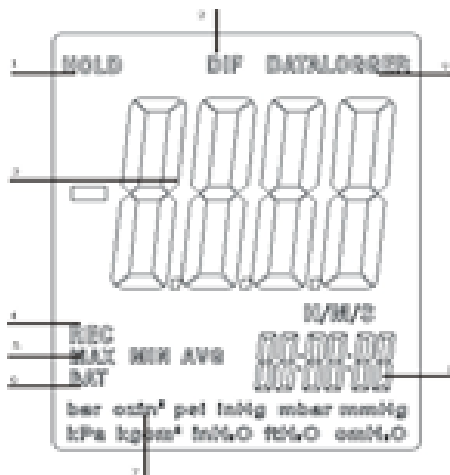
## 4 System description

### Buttons



1. UNITS
2. DIF
3. REC
4. HOLD
5. BACKLIGHT
6. ON/OFF

### Display



1. Hold Function
2. Differential Mode
3. Primary Data screen
4. Record Mode
5. MAX/MIN/AVG
6. Low Battery indicator
7. Pressure Unit indicator
8. Relative Time Clock
9. Data output from RS232

## 5 Instructions

1. Press the On / Off key to switch the pressure gauge on. When switched on, the device will run a short self-diagnostic programme.
2. Before usage, press and hold the HOLD key for 2 seconds to zero the device. The counter will be reset. The display will show "0000".
3. Press the HOLD key to save the current measurement. The HOLD icon will appear on the top left side of the display. If the pressure value exceeds the range, an error message will appear in the display. Press the HOLD key once again to get to the standard setting.
4. In MAX/MIN mode, the user can see the highest (MAX), lowest (MIN) and average (AVG) value.
  1. Press the REC key until REC appears in the display (apart from the Power and Backlight function, no function will be available). The relative time clock starts counting.
  2. Press REC again. MAX will appear in the display. You will now see the maximum pressure and the relative time at which it was recorded.
  3. Press the REC key to see the MIN value along with the relative time.
  4. Press REC to see the average value along with the relative time.
  5. Press REC once again to continue the MAX/MIN/AVG measurements.
  6. To finish the MAX/MIN/AVG setting, press and hold the REC key for 3 seconds.
5. To switch off the backlight, press the Backlight key. The backlight will stay on for 40 seconds.
6. The device will switch off automatically after 20 seconds to save battery life.

The Auto Power Off function can be disabled as follows:  
Press the HOLD key and switch on the device. If "n" is indicated, the Auto Power Off function is deactivated. After switching off, the device will return to its standard setting.
7. By pressing the UNIT key, you can select from 11 available units of measurement.
8. If you press the DIF key, the difference between two pressure values will be measured by zeroing the value first measured.

## 6 Interface

The device is equipped with a serial RS-232 interface. Using the included software, you can transfer the measured data to your PC as graphics or charts.

## 7 Error messages

Error messages are displayed when the device detects internal errors. All keys will be without function. The following errors are possible:

1. Err. 1: The current pressure exceeds the measurement range.
2. Err. 2: The current pressure is below the measurement range.

When the battery capacity is too low, "BAT" will be indicated in the display. Please replace the battery.

## 8 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.



## 9 Contact

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

### 9.1 PCE Instruments UK

**By post:**

PCE Instruments UK Ltd.  
Units 12/13 Southpoint Business Park  
Ensign Way, Southampton  
Hampshire

United Kingdom, SO31 4RF

**By phone:**

02380 987 035

### 9.2 PCE Americas

**By post:**

PCE Americas Inc.  
711 Commerce Way  
Suite 8  
Jupiter  
33458 FL  
USA

**By phone:**

561 320 9162