

USER MANUAL

AIR QUALITY MONITOR

PCE-RCM 7

ENGLISH

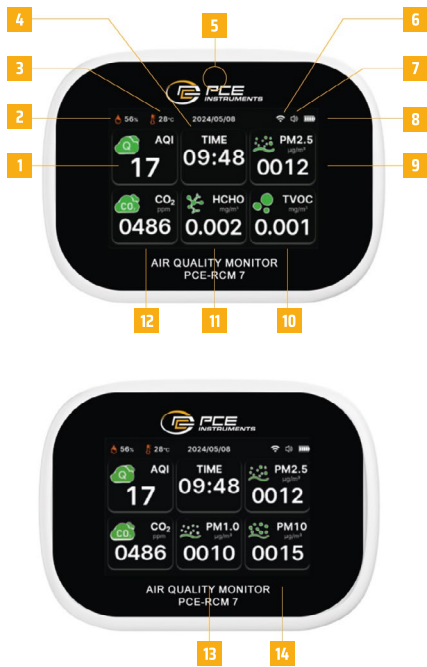


User manuals in various languages (français, italiano, español, português, nederlands, türk, polski) can be found via our product search on:
www.pce-instruments.com

PRODUCT DESCRIPTION

When opening the package, if the product is out of power, please charge it for 5 minutes before using it for the first time, and then press and hold the multi-function button to turn it on. Please calibrate the product to get more accurate before use.

- 1 - AQI Value
- 2 - Humidity
- 3 - Temperature
- 4 - Time
- 5 - Auto Brightness Sensing Area (do not block)
- 6 - WiFi
- 7 - Sound on icon
- 8 - Battery indicator
- 9 - PM2.5 Value
- 10 - TVOC Value
- 11 - HCHO Value
- 12 - CO₂ Value
- 13 - PM1.0 Value
- 14 - PM10 Value



- 1 - Left button
- 2 - Multi-Function button
- 3 - Right button
- 4 - Hook hole
- 5 - Type-C



- » Open it up from the bottom of the back to reveal the Type-C charging port.
- » Insert vertically against the opening and then press down to close the back cover.

CO₂ CALIBRATION

Manual calibration

When the device is switched on, put it in an environment with CO₂ concentration of 400PPM (outdoor or window with convection ventilation) and let it stand for more than 10 minutes, then press the multifunctional button continuously for 3 times, and the calibration is completed after the buzzer sounds long.

- » More than 10 minutes in a ventilated position with the power on
- » Press the multifunction button 3 times in succession

Automatic calibration

After 24 hours of power on, the sensor will set the lowest CO₂ value within 24 hours as zero value, so please ensure that there is some ventilation time within 24 hours.

OPERATING INSTRUCTIONS

Turn ON: In the power-off state, press and hold the Multi-function Button for 2 seconds, the buzzer will beep, and then the current parameters will be displayed on the screen.

Turn OFF: In the power-on state, press and hold the multi-function button to turn off.

Temperature Unit Switching: In the power-on state, touch the multi-function button once to switch the temperature unit (°C and °F).

Sound ON/OFF: In the power-on state, press and hold the right button to turn ON/OFF the sound.

Switching display: Short press the left/right button to switch the display (PM1.0 and PM10 to switch HCHO and TVOC).

Time Setting: Long press the left button and middle button at the same time to enter the time setting interface;

Click the left/right button to set the current value, click the middle button to confirm and move to the next value until the last value is set and return to the main interface;

It will return to the main interface if it doesn't move for a long time, and the modified value will be saved.

Screen Sleep Time Setting: Long press the middle button and the right button at the same time to enter the hibernation time setting interface;

Click the left/right button to set the time, the least value is to turn off the hibernation function, click the middle button to confirm and return to the main interface;

When hibernating, press any button to wake up the screen.

DESCRIPTION OF EACH GAS CONCENTRATION LEVEL

The gas concentration is classified into 4 levels and displayed numerically (the specific numerical classification is shown in the table below), and the color of the icon corresponding to a single gas changes according to the gas concentration;

Default value for AQI alarm: 100

Default value for PM1.0 alarm: 75 $\mu\text{g}/\text{m}^3$

Default value for HCHO alarm: 0.1 mg/m^3

Default value for CO₂ alarm: 1500 PPM

Default value for PM2.5 alarm: 75 $\mu\text{g}/\text{m}^3$

Default value for TVOC alarm: 0.5 mg/m^3

Gas	AQI	PM1.0	PM2.5	PM10	CO ₂	HCHO	TVOC
Good	0 ... 49	0 ... 34	0 ... 34	0 ... 49	400 ... 799	0 ... 0.049	0 ... 0.299
Moderate	50 ... 99	35 ... 74	35 ... 74	50 ... 99	800 ... 1199	0.050 ... 0.099	0.3 ... 0.499
Poor	100 ... 149	75 ... 149	75 ... 149	100 ... 149	1200 ... 1599	0.1 ... 0.149	0.5 ... 0.999
Unhealthy	< 150	< 150	< 150	< 250	< 1600	< 0.15	< 1
Unit		$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	PPM	mg/m^3	mg/m^3

PRODUCT PARAMETERS

CO ₂ Detection Range	400 ... 500 PPM
CO ₂ Detection Accuracy	±(50 PPM + 5% of reading value)
PM1.0 / 2.5 / 10 Detection Range	0 ... 1000 $\mu\text{g}/\text{m}^3$
PM1.0 / 2.5 / 10 Detection Accuracy	±10 $\mu\text{g}/\text{m}^3$ (0 ... 100 $\mu\text{g}/\text{m}^3$) ±10% (100 ... 500 $\mu\text{g}/\text{m}^3$)
HCHO Detection Range	0 ... 1.999
TVOC Detection Range	0 ... 9.999
Temperature Detection Range	0 ... 50°C
Temperature Detection Accuracy	±1°C
Humidity Detection Range	0 ... 99%RH
Humidity Detection Accuracy	±5%RH
Product Size	120x89x35mm
Power Supply	Type-C / 2500mAh

CAUTIONS

Please read the following instructions carefully before using the product for the first time.

- » Since the product uses high-precision sensors and components, please keep the product in a dry environment without direct sunlight.
- » When the user purchases and uses this product for the first time, please place it in a ventilated environment to manually calibrate it manually or turn it on and wait for 24 hours for automatic calibration.
- » Do not block the air inlet when in use.
- » The product is not waterproof, do not immerse or splash water or other liquids on it.
- » Do not insert sharp, flammable or metal objects into the air inlet of the monitor, otherwise it may cause electric shock and burn.
- » This product has an automatic brightness adjustment function, it will adjust the screen brightness according to the ambient brightness. Please do not block the brightness sensing area, it will cause the screen brightness to be too low.
- » Please use the power adapter for power supply when the product is used for a long time. The battery is only suitable for temporary use.
- » Beware of the product being dropped or severely impacted, which may cause the product to fail to work properly.
- » The detection of this product is qualitative rather than quantitative, there will be some deviation in the measurement value. Please refer to the accuracy range for details.
- » Common volatile substances in life can interfere with readings, such as perfume, alcohol, mosquito coils, floral water, detergents, fruit odors, and oil smoke.

Note: Do not hold the product close to your face, as your breath will affect the detector's CO₂ detection concentration.

CONNECT APP

- » Scan the QR code below, download the app and install it.
- » By default, the device will enter the pairing state after it turns on the first time, the WiFi icon will flash.
- » Open the app, register account and log in.
- » Click Add Device or + icon at the upper right corner to add the device. At this time, the connection box will pop up, click Add to start pairing.
- » Click the icon of connected device to view specific data on the App home page. Click the value you want to view, then you can check the data of this value. Slide the screen to the bottom and click on Settings. In the Settings page, you can set the alarm values for AQI, PM2.5, CO2, HCHO, TVOC, alarm sound switch, temperature unit switch, hibernation switch and hibernation time setting.



OR



About resetting WiFi

- » Reset the WiFi in the APP: Click the icon in the upper right corner to enter the product management interface, click Remove Device, after deleting the device, the product will re-enter the pairing status.
- » Reset WiFi on your device: With the device turned off, press and hold the multifunction button (during which the device will turn on and light up the screen and emit the first beep) until the buzzer emits the second beep and the wifi icon blinks rapidly before releasing the button for about 8 seconds.

Notes

- » WiFi icon fast flashing: in pairing status, need to pair with smartphone and wireless router.
- » WiFi icon long light: normal connection status.
- » WiFi icon blinking slowly: not properly connected to the wireless router (e.g. router is not turned on or moved out of range of the paired router), you need to restore the network or reset the wifi on your device.
- » No WiFi icon: The product is a non-wifi version. If the network changes, you need to reset the wifi to re-pair.
- » This product only supports wifi5 and below routers (wifi6 routers need to turn on wifi5 compatibility mode), can only connect to 2.4GHz band, does not support fixed ip setup, need the router to turn on DHCP automatic IP assignment function.
- » A device can only be connected with one smartphone and one router pairing, a cell phone can be connected with more than one device.

DISPOSAL

For the disposal of batteries in the EU, the (EU) 2023/1542 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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