USER MANUAL

FORMALDEHYDE DETECTOR

PCE-VOC 5

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

DEVICE DESCRIPTION

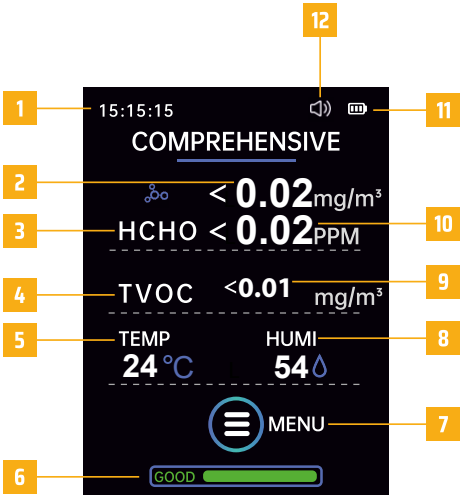
1 - Indicator
2 - Screen
3 - Confirm key
4 - Left key
5 - Volume key
6 - On / Off key
7 - Right key
8 - Main menu
9 - Return key
10 - Charging port



MAIN INTERFACE

The main interface can indicate the values of all sensors, including HCHO, TVOC, temperature and humidity.

1 - Time
2 - Values of formaldehyde mass concentration
3 - Formaldehyde concentration
4 - Concentration of organic matter
5 - Temperature
6 - Current air quality
7 - Menu
8 - Relative humidity
9 - Values of organic matter mass concentration
10 - Values of formaldehyde
11 - Electricity quantity of the battery
12 - Volume



Notes: If TVOC preheating isn't completed, only **under starting** is indicated in any interface.

PRODUCT FUNCTIONS

Turn on/off
Turn on: Long press the POWER key, the screen indicates boot LOGO interface, and then enters using hint interface, which will instruct that the values can't be read until the TVOC sensor is preheated for 5 minutes.
Turn off: You can long press the POWER key for turning off the machine in any interface.

Calibration Reminder
If the user uses this device for the first time or uses it again after 12 hours, a window will pop up on the main interface after booting, and which will remind the user to operate automatic calibration, to ensure that the sensor can provide accurate test data in various environments.

Real-Time Functions
The real-time functions include real-time clock indication, real-time battery status, indication of real-time air quality, and real-time alarm function, in general, the four real-time functions above can be indicated or reminded (Excluding the interfaces of turning on, turning off, and charging interface).

» Real-time Alarm:

Under non-silence condition, when the air quality is indicated as **poor** or **very poor,** the buzzer begins to give alarm at an interval of 5s;
Under non-silence condition, if the conditions are met, which will trigger buzzer alarm (8 kinds).

» Real-time Air Quality:

The air quality is good:



The air quality is poor:



The air quality is very poor:



Silence
Short press the VOLUME key and the buzzer will stop alarm in any case (real-time alarm function, alarm setting interface).

Return to the Main Menu
Because the interface levels are complex, so you can short press the MENU key to return main menu in any interface (Excluding the interfaces of turning on, turning off, and charging interface).

Electricity Quantity
In power-on state, the battery electricity quantity is displayed in real time, during charging, the electricity quantity indication is changed into charging screen; in the shutdown state, shutdown charging screen will last for 5 ... 8s.
In any state, if USB charging is connected, the indicator at upper left corner will flash, alter the machine being fully charged, the indicator will be off.

OPERATION

Menu Interface
Enter into the main menu after power on, long press LEFT key to switch the unit °C/°F.
Under the main menu, press MENU key to enter into function menu.
Press LEFT/RIGHT keys to select the functions of real-time, recording, alarm and setting.

Real-time Measurement
Select **real-time** icon for real-time measuring, the interface will indicate the value of formaldehyde (mg/m3 PPM), value of organic substance (mg/m3), temperature (°C/°F) and humidity (%). Press LEFT/RIGHT keys to switch among formaldehyde, temperature and organic substance options, press CONFIRM key to view real-time reading images of formaldehyde, temperature and organic substance.

Recording and Measuring
Interface: Select **Recording** icon to enter recording and measuring function, the values of formaldehyde (mg/m3 PPM), organic substance (mg/m3), and temperature (°C/°F) will be indicated in the interface. Press the LEFT/RIGHT keys to switch among the options of start, playback, backlight, record interval threshold and collection points threshold, entering the playback viewing interface, the device can indicate completed records last time, and it can indicate previous 5 times of record images at most.
Operating: Enter recording and measuring from the menu, set the record interval and collection points, select **start,** and then, press CONFIRM key, recording will start (when entering playback function or returning to the menu, this measurement will be deemed as actively giving up, if only backlight is closed, the recording will not be interrupted).
The values of record interval and collection points can be used to control the measuring duration, relationship of the three: Total measurement du ration (S)= Record interval value (Point)x value of collection point (Point)+3(S), when the operation of recording and measuring is completed, entering playback interface to view the data recorded last time.

Alarm setting
Interface: Enter this interface to indicate the values of formaldehyde (mg/m3 PPM) and TVOG (mg/m3), use the LEFT/RIGHT key to select among the options of stop/start, 10s/30s/1 minute, tone 1 /tone 1, backlight open/close and alarm threshold.
Operating: Enter this interface, the system defaults automatic enabling of active alarm function, no matter the active alarm function is closed or not, as long as current interface stays in the interface of alarm setting interface, the real-time alarm function will be closed (at this time, the red light at upper left corner will be on).

The relationship between alarm threshold and the buzzer's alarm class:
When the alarm threshold is set as 0.05:
0.00 ... 0.05 (Glass 0): No alarm voice
0.06 ... 0.20 (Glass 1): Tone 1/tone 2
0.21 ... 0.40 (Glass 2): Tone 1/tone 2
0.41 ... 0.60 (Glass 3): Tone 1/tone 2
0.61 ... 6.25 (Glass 4): Tone 1/tone 2

When the alarm threshold is changed, the threshold of Glass 0 ... 4 is also increased, for example:
When the alarm threshold is set as 0.30:
0.00 ... 0.30 (Glass 0): No alarm voice.
0.31 ... 0.45 (Glass 1): Tone 1 /tone 2
0.46 ... 0.65 (Glass 2): Tone 1/tone 2
0.66 ... 0.85 (Glass 3): Tone 1/tone 2
0.86 ... 6.25 (Glass 4): Tone 1/tone 2

Notes: Judgement of the buzzer's alarm class is also related to the indication value of TVOG, when the alarm threshold is changed, the threshold that TVOG value triggers alarm is also changed.

System Setting
CD Main interface: Press the LEFT/RIGHT key to switch among the functions of sensor, time, about, save, measuring speed, shutdown time, TVOG, active ventilation, screen lightness and factory setting.
Press CONFIRM key to enter options or interface, if the system has entered options, you can press the LET/RIGHT key to switch option contents.

Sensor: Press the LEFT/RIGHT key to switch among the functions of calibration, save, quit, formaldehyde sensor calibration, formaldehyde sensor offset, temperature sensor offset and TVOG sensor calibration.
Press CONFIRM key to enter options or interface, if the system has entered options, you can press the LEFT/RIGHT key to switch option contents.

Calibration: In the sensor interface, select calibration function to execute auto zeroing of TVOG sensor, TVOG senor can be calibrated in normal working state (in the states of preheating, shutdown, it can't be calibrated).
Select **start** to execute zeroing calibration, and the process will last for about 10s, the zero point value will be automatically updated.
During calibration, you can freely select stopping or not, if you want to restart, 10s of countdown for resetting.
Notes: Automatic calibration is an open function, if zeroing calibration fails because of environment, it is normal.

Time: Press the LEFT/RIGHT key to switch among the functions of save, completion, year, month, day, time and minute values (leap year/common year can be identified automatically, illegal time value can be filtered automatically).

About: Some product information about this device.

PRODUCT PARAMETERS

Model	PCE-VOC 5
Display Screen	Colorful screen
Real-time Display	Good, Poor, Bad
Real-time Alarm	Alarm will be given when the air quality is indicated as **Poor** or **Bad**
Real-time Measurement	Formaldehyde (mg/m3 PPM), organic matter (mg/m3), temperature (°C/°F) and humidity(%)
Record Measurement	Maximum supports data playback of 200 Point x 5 Pages
Formaldehyde Measurement	0.00 ... 5.00PPM / 0.00 ... 6.25mg/m3
Organic Matter Measurement	0.0 ... 10.0mg/m3
Temperature and Humidity	0 ... 50°C, 10 ... 90%RH
Backlight Function	Turn off the backlight, the red light at upper left corner will be on
Silence Function	✓
Calibration Remind	First use/reuse after more than 12 hours
Calibration of TVOC Sensor	After about 10s, the zero point value will be updated automatically
Speed Measurement	Fast/normal/slightly slow (0.5s/1s/2s)
Shutdown Time	5 minutes/10 minutes/30 minutes/never
TVOC	✓
Power Supply	3. 7V polymer lithium-ion battery
Product Dimensions	150x67x25mm

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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