Temtop

M2000C

Manual for Air Quality Detector

Product Overview

The hand-held air quality detector is a device which can test the concentration of carbon dioxide and numbers of particles in the air. It adopts a laser particle sensor and a carbon dioxide sensor based on NDIR detection theory and can transform the concentration of air pollutants to visual data directly, providing early air quality warning for you and protecting the health of your family effectively.

Application Scope

Indoors, Outdoors, Vehicles, etc.

Product Appearance

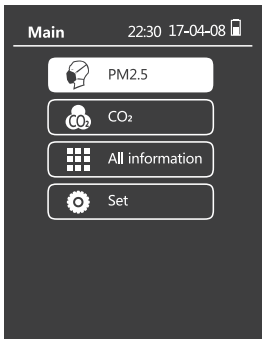
① Buzzer status: "🔊" indicates the buzzer is on. When measured polluant concentration exceeds the upper alarm limit, the buzzer beeps. "🔇" indicates the buzzer is off. When an alarm is triggered, the buzzer will not beep.
② Display the two states of the detector: Paused or Runing. "Runing" indicates data is being detected. "Paused" indicates measurement pauses.
③ Date and time: Current date and time is displayed.
④ Battery power: Display the remaining battery power and the charging status of the detector.
▯: Battery is empty, please charge. ▮ : Battery is full. ▮ : Charging.
⑤ Main display area: Display measured data, curve, menu options.
⑥ Menu button: Press to pop up the menu options or shift the cursor position.
⑦ Up button: Press to increase setting values or shift up to select menu option.
⑧ Return button: Press to close current pop menu or return to the previous interface.
⑨ Power on/off or confirm: Press OK for 2 seconds to turn on/off the instrument. It can also be used to confirm certain operation.
⑩ Down or run/pause button: Press to decrease setting values or move down to select menu option. It can also be used to continue or suspend detection on the detection interface.

Operation Notice

- Please keep the detector away from substances like fluff and hair to guarantee the accuracy of measured data.
- Please do not put the detector in the environment where the concentration of particles is more than 500ug/m^3 and that of CO_2 is over 2500PPM for long time. Long-time exposure to high-concentration air pollutants will damage the sensor and make it work improperly.
- Avoid using the detector in humid environment to make sure the accuracy of test data.
- The product is a precision measurement instrument, so please do not bump, strike or drop the detector.
- Please do not cover the detection port or air outlet during use.

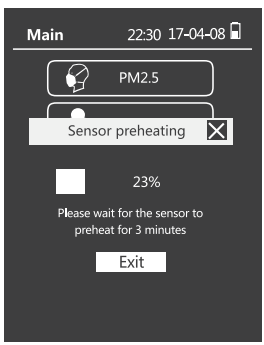
Operation Method

(1): Main menu interface



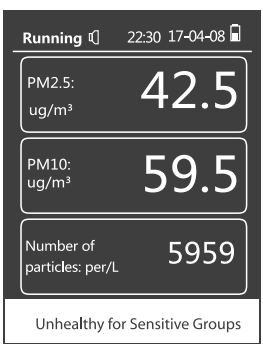
After the detector is turned on, it will enter the main menu interface automatically, displaying the following 4 options:

① PM2.5
② CO_2
③ All information
④ Set

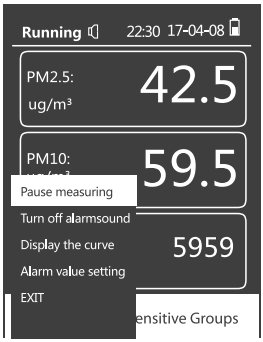


Press ▲ or ▼ key to choose an option and then press OK key to enter the interface. Before entering CO_2 concentration detection interface, the detector will have a pop-up window showing "sensor being preheated" if it is turned on for less than 3 minutes. The interface can be entered only after the sensor's preheating is finished.

(2): Interface of particles' concentration detection

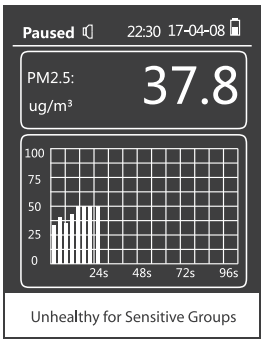


After switching from the main menu to particles' detection interface, the detector will show the real-time concentration of PM2.5, PM10 and particles as well as the level of pollution concentration;
If the value is beyond the set concentration's upper limit, the buzzer will give out the alarm;

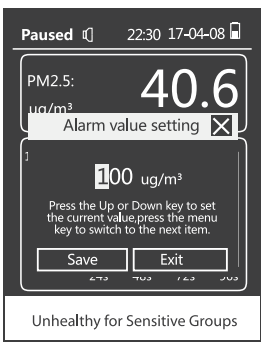


Press key if you intend to pause or begin the detection;
Press key if you intend to return to the interface of main menu;
Press key, and then the following 5 options will be presented.
Press key to enter into the corresponding function;

① “Pause or start measuring”
② “Turn on or off the alarm sound”
③ “Display or not display the curve”
④ “Alarm value setting”
⑤ “EXIT”

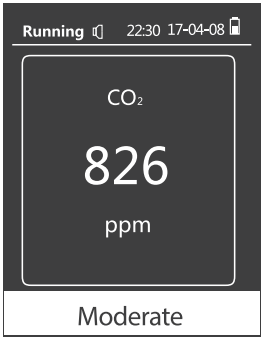


The functions of above menu items are described as below:
① “Pause or start measuring”: Make the detector pause or start measuring the concentration of PM2.5, PM10 and particles as well as the level of pollution concentration.
② “Turn on or off the alarm sound”: When the detected concentration is higher than the pre-set value, the buzzer will give out the alarm. Pressing this key can turn off or on the alarm function.
③ “Display or not display the curve”: If you choose "Display the curve" function, the PM2.5 concentration curve will be shown in a visualized way. If you choose "Not display the curve" function, the curve display will be turned off.

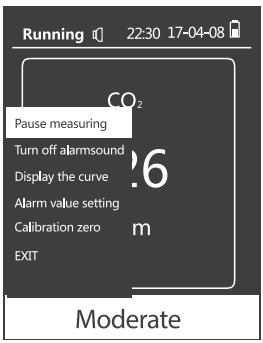


④ “Alarm value setting”:
A window showing “Alarm value setting” will be popped up to remind you to set the upper-limit alarm value of PM2.5 concentration . Press key to switch to the next item . Press ▲ or key to set the upper-limit alarm value . When key is switched to “Save” or “Exit” key , you can press key to choose to save or not save the set upper-limit alarm value of concentration and then close the pop-up window.
⑤ “Exit”: Exit from the menu item and then return to the interface of detecting the concentration of particles.

(3): Interface of CO_2 concentration detection

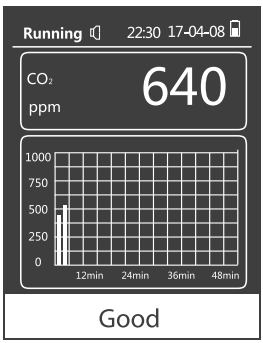


After switching from the main menu to CO_2 detection interface, the detector will show the real-time concentration of CO_2 and the "out of specification" status of pollution concentration; if the value is beyond the set concentration's upper limit value, the buzzer will give out the alarm;

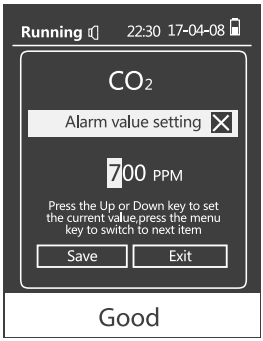


Press key if you intend to pause or begin the detection;
Press key if you intend to return to the interface of main menu;
Press key, and then the following 5 options will be presented.
Press OK key to enter into the corresponding function;

① "Pause or start measuring"
② "Turn on or off the alarm sound"
③ "Display or not display the curve"
④ "Alarm value setting"
⑤ "Calibration zero"
⑥ "EXIT"



The functions of above menu items are described as below :
① "Pause or start measuring": Make the detector pause or start measuring the concentration of CO_2 and the "out of specification" status of pollution concentration.
② "Turn on or off the alarm sound": When the detected concentration is higher than the pre-set value, the buzzer will give out the alarm. Pressing this key can turn off or on the alarm function.
③ "Display or not display the curve": If you choose "Display the curve" function, the CO_2 concentration curve will be shown in a visualized way. If you choose "Not display the curve" function, the curve display will be turned off.

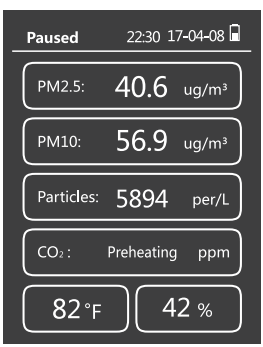


④ “Alarm value setting” Press ▲ or to select this option and then press to enter the interface. Press ▲ or to adjust the upper-limit alarm value of CO_2 concentration. Press to shift. After switching to “Save” or “ Exit ”, press to confirm the settings and back to the interface of settings.

⑤ “Calibration zero”: The window showing "sensor under calibration" will be popped up for 30 minutes to calibrate the Zero point of CO_2 sensor. You can exit calibration by pressing or key.

⑥ “Exit”: Exit from the menu item and then return to the interface of detecting the concentration of CO_2.

(4): Interface of checking all information



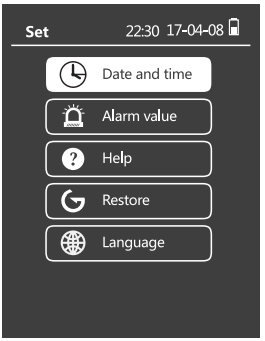
After switching from the main menu to the interface of checking all information, the user will see the concentration of PM2.5, PM10, particles and CO_2 as well as the temperature and humidity shown on the detector.

Press to switch between°C or°F.

Press key if you intend to pause or start measuring the concentration of PM2.5, PM10, particles and CO_2.

Press key if you intend to return to the interface of main menu;

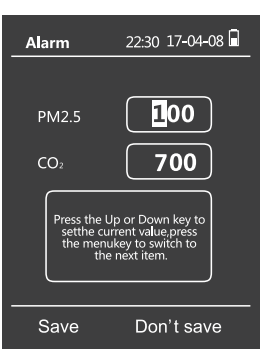
(5): Interface setting



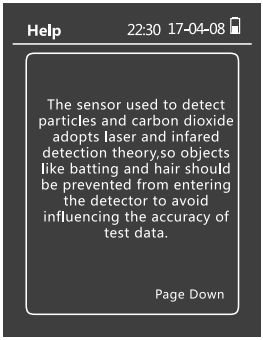
After switching from the main menu to the setting interface, the user will find the following 5 options shown on the screen. Press ▲ or key to choose the option you want to enter. Then Press OK key to enter the corresponding interface or press key to return to the main menu interface.

① "Date and time"
② "Alarm value"
③ "Help"
④ "Restore"
⑤ "Language"

The functions of above menu items are as follows:
① "Date and time": In settings interface, select this option and press OK to enter the interface and then press ▲ or to set the date. Press ☰ to shift. After switching to "Save" or "Don't Save", press OK to confirm the settings and back to the interface of settings.



② "Alarm value": In settings interface, select this option and press OK to enter the interface and then press ▲ or to set the upper-limit alarm value of PM2.5 or CO_2 concentration. Press ☰ to shift. After switching to "Save" or "Don't Save", press OK to confirm the settings and back to the interface of settings.



③ "Help": Press OK to enter the interface and then press ▲ or ▼ to view instructions and notices, then press ↩ to back to the interface of settings.

④ "Restore": Press OK key and then a window showing "Restore factory settings as default" will pop up. Press ☰ key to switch to "Restore" or "Not restore" key, and then you can press OK key to choose to restore or not restore factory settings as default and then return to the interface of setting. Factory default settings include: the upper-limit alarm value of various concentration and languages.

⑤ "Language": Select "Language" and press OK to enter this interface and then press ☰ to shift. Press OK to confirm the language option. Use ☰ to shift between "Save" or "Don't Save". Press OK and return to the interface of settings.

● Note:When the systerm enterns the recording curve display interface,
the data is updated every 2s under the abscissa 0-96s;
When the abscissa is 0-48min,the data is updated every 1min;
When the abscissa is 0-4h,the data is updated every 5min;
When the abscissa is 0-24h,the data is updated every 30min.

Product Specifications

- Name: Hand-held air quality detector
- Model: M2000C
- Display: color TFT LCD screen
- Battery voltage: 3.7VDC
- Overall dimension: 73.5*139*37.5mm
- Power adapter:
  Output voltage: DC5V
  Output current: 1A
- Operating environment:
  Temperature range: 0~50°C(32~122°F)
  Humidity range: 0~90% RH
  Atmospheric pressure: 1atm
- PM2.5 technical specification
  Measurement range: 0-999ug/m³
  Resolution: 0.1ug/m³
- PM10 technical specification
  Measurement range: 0-999ug/m³
  Resolution: 0.1ug/m³
- CO_2 technical specification
  Measurement range: 0-5000PPM
  Resolution: 1PPM

Air Quality Parameter for Reference

Status / Pollutant	Good	Moderate	Unhealthy for Sensitive Groups	Unhealthy	Very Unhealthy	Hazardous
PM2.5 (μg/m³)	≤12	12.1~35.4	35.5~55.4	55.5~150.4	150.5~250.4	≥250.5
PM10 (μg/m³)	≤54	55~154	155~254	255~354	355~424	≥425
CO_2 (ppm)	≤700	701~1000	1001~1500	1501~2500	2501~5000	≥5001

Elitech Technology, Inc.
2528 Qume Dr, Ste 2
San Jose, CA 95131 USA
Tel: +1 408-898-2866
Sales: sales@temtopus.com
Website: www.temtopus.com

Elitech (UK) Limited
Unit 13 Greenwich Business Park ,
53 Norman Road, London, SE10 9QF
Tel: +44 (0) 208-858-1888
Support: service@elitech.uk.com
Website: www.elitecheu.com

Elitech Brazil Ltda
R.Dona Rosalina,90 - Lgara, Canoas - RS
92410-695,Brazil
Tel: +(55)51-3939-8634
Sales: brasil@e-elitech.com
Website: www.elitechbrasil.com.br

V1.2
Made in China