Air Quality Monitor

Instruction Manual

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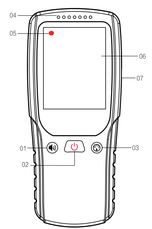
Product Features:

1. PM2.5 dust, formaldehyde and TVOC detection;
2. The range of concentration HCHO: 0~1.999mg/m3;
3. The range of concentration TVOC: 0~9.999mg/m3;
4. buzzer alarm prompt sound;
5. low voltage alarm reset prompt;
6. charging LED indicator prompts;
7. 1000mAh lithium battery



Packing List:

Instrument*1
USB Charging Cable*1
User Manual *1

Instructions:

(1) Power on:
After pressing and holding the power button for 3 seconds, the Device will automatically turn on.

(2) Shutdown:
Press and hold the power button for 3 seconds to shut down.

(3) Preheating: When booting up, there will be 200 seconds on screen automatic countdown. This is the formaldehyde preheating process.

(4) Formaldehyde Calibration:
After booting, take the instrument to a place with good air, such as a balcony.Placed it for 5~10 minutes.Then press and hold the calibration button for 2 seconds, the data of HCHO on screen will return to: 0000 after hear a tone, calibration completed.

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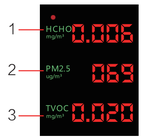
01: Mute
02: Power on/off button
03: Calibration button
04: Air convection hole
05: Charging indicator
06: Screen display
07: USB charging input

(5) Testing:
After the preheating and calibration is completed, put the device to the environment to be tested. The value on screen is the currently detected value. If not exceeded the standard value,No beep sounds; if exceeded the standard value, there will be a beep sound (Note: there is no prompt sound if it is in silent mode, press the mute button to hear a short prompt sound, such beep sound mode is on, press the mute button to hear a long prompt,beep sound mode is off).

Below



1) HCHO display area, showing the current HCHO value. After power-on, it automatically enters the 200 seconds countdown preheating.
2) TVOC display area, showing the current TVOC value. TVOC test also need warm up for 200 seconds.
3) PM2.5 display area, showing the current PM2.5 value.
(HCHO:standard<=0,10mg/m3(0,08ppm/m3)
(TVOC: standard<=0,6mg/m3(0,45ppm/m3).

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(PM2.5 air quality index as follows)

Air quality Level	PM2.5 Average value (ug/m3)
Excellent	0~35
Good	35~75
Mild pollution	75~115
Moderate pollution	115~150
Heavy pollution	150~250
Serious pollution	above 250

(6) Charging:
Insert the USB end into the port (such as mobile phone DC charger, computer USB port) and another Micro end to device by USB charging line. The LED indicator is red when charging; when turn green, means fully charged.

Attention:
Do not disassemble, impact, crush or put into fire.
Do not continue to use if there is severe swelling.
Do not expose to high temperatures.

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Precautions :

1.Any sensor will be disturbed by some External factors when on using. So When testing with this product, avoid to Contact chemical volatilization Gas or smoke like Alcohol, perfume and so on.
2.The indoor air is flowing, the air access to sensors Vents is different at different seconds, so the Formaldehyde content of air is different, the testing value would be floated up and down regular.
3. To avoid strong fans blowing directly to the sensor vent interfere with the accuracy of test results such as fans, hair dryers. It should be placed in a relatively stable area with air flow, To make testing more accurate.
4. Before testing formaldehyde and TVOC for windows, bedroom, living room, cloak room and other spaces. To seal the window door for 24 hours and then tested, the effect would be better. To test for Multiple points of one room, Then calculate the average number of points value, that is the average air content value of the room.

FAQ :

Q: Why do I need to calibrate?
A. Our products work in the form of outdoor formaldehyde-free air sampling as a benchmark,and then get indoor air formaldehyde content as a comparison, so the new machine products for a long time not used, the detection of environmental temperature changes need to change First calibrated and then tested, the value of this calibration for the subsequent detection of the accuracy of a great relevance.
Calibration environment must avoid spices, perfumes, paint, cigarettes, air fresheners,alcohol and other chemical pollutants, so as not to damage the sensor.

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Q: How much range of detection of formaldehyde concentrationdetector,how many square meters?
1. The principle is less than 50m3 ,the room should be set 1 to 3 points;50 ~ 100m3 Set 3 to 5 points;More than100m3 at least 5 points, On a diagonal or plum blossom evenly distributed.
2.Sampling points should avoid the ventilation, from the wall distance greater than 0.5m.
3.The height of the sampling point: in principle, consistent with the human breathing,Relative height of 0,5m ~ 1.5m between.

Q: Why PM2.5 readings with the published value on the site isnot the same?
A: Because the location and conditions of the test is difficult to reconcile with the weather station, the weather station in the city there are several sampling points, each sampling point measured data are also very different, the sampling point of the location is strictly required: height 3 to 30 meters, air circulation, can not be close to the chimney, furnace and other obvious sources of pollution. And there are no high-rise buildings, trees or other obstructions that can impede the flow of ambient air around the instrument.

Q: Why is the PM2.5 test value changing?
A：PM2.5 data are changing all the times, with the air, wind, humidity and other environmental factors change, in the room smoking, cooking fumes, car exhaust emissions, coal, chimney, furnace Such as pollution sources will change the PM2.5 value of this area, resulting in differences in the detection data.

Q: Why is the product sounding when working?
A :Each device has a fan inside ,when it works , this device need to collect a lot of mobile air, in order to ensure accurate detection of the fan needs strong operation, so it is sounding when work.

Q: What is the standard for formaldehyde (HCHO)?
A :HCHO<0,10mg/m3 ("Indoor Air Quality Standard" GB/T 18883-2002)

Q: What is the standard for Total Volatile Organic Compounds (TVOC)?
A :TVOC<0,6mg/m3 (GB/T 18883-2002 and GB 50325-2001 Class Ⅱ Civil Construction Engineering)

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Safety and maintenance:

1. Do not measure the product in a chemically contaminated environment. The product may be damaged.
2. Do not use the product in an environment that exceeds normal temperature and humidity, which will affect the measurement accuracy.
3. Do not disassemble the internal unit and the casing.
4. Clean it by simply wiping it with a dry cloth. (Do not use a damp cloth)
5. Do not subject the product to strong shocks and vibrations. (like falling to the ground)
6. Do not blow the air directly or block the detection hole, which will interfere with the normal operation of the product.
7. Do not allow foreign objects or water to enter the inside of the machine.
8. Do not cover the cloth on the instrument.

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Technical indicators:

Power supply

Battery capacity: 1000mAh polymer lithium battery
Input specification: 5.0V/1000mA
Ambient temperature: -10 ° C ~ 45 ° C

Formaldehyde detection

Test item: HCHO (formaldehyde) in the air
Detection range: 0~1.999mg/m3
Detection technology: semiconductor sensor
Picking Yang method: diffusion collection
Concentration unit: mg/m3

TVOC detection

Test item: TVOC (including benzene) in the air
Detection range: 0.000~9.999mg/m3
Detection Technology: Semiconductor Sensor
Sampling technique: diffusion acquisition
Concentration unit: mg/m3

PM2.5 detection

Detection principle: laser scattering principle
Test particle number: 2.5um
Measuring particle quality: PM2.5
Sampling time: 3 seconds
Detection range: 0~999ug/m3

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Use environment

Atmospheric pressure: 86Kpa~106Kpa
Relative humidity: 20%~85%
Detection temperature: -10 ° C ~ 45 ° C
Storage temperature: -20 ° C ~ 50 ° C

Size

Display mode: digital tube screen
Product size: 164*69*44mm
Product weight: 220g

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