

# Air Quality Monitor Instruction Manual

# Product Specifications

Display method :

4.3" LCD screen display, 320 x 240 pixels

Atmospheric pressure: 86Kpa - 106Kpa

Detection method for PM: laser scattering

Sampling time: 1.5 seconds

Product Size: 145 x 78 x 97.2mm

Detection temperature: -10 °C to 50 °C; Relative humidity : 20% - 85%

Storage temperature: -10 °C to 60 °C; Concentration unit for HCHO and TVOC: mg/m<sup>3</sup>

Power source: Lithium battery with 3000 mAh capacity;

5V DC power charging via micro USB port

Product weight: 580 g

## Product Description

This product is a multifunctional air quality detector that detects Formaldehyde (HCHO), Total Volatile Organic Compounds (TVOC), Particulate Matter < 2.5 micron-sized particles (PM<sub>2.5/1.0/10</sub>), Temperature, and Humidity with clock and record function. As a scientific air quality detection device, it combines multiple air sensors with a built-in fan to allow real-time monitoring of formaldehyde (HCHO), total volatile organic compounds (TVOC), PM 2.5/1.0/10, temperature, and humidity on its digital LCD display.

## Considerations

Please read the instructions carefully before using this device.

Please let the device work short mins outdoors before use for most accurate results .

Please keep the manual handy for quick reference and troubleshooting.

# Precautions

Avoid covering the air intake areas during use to avoid inaccurate measurements.

Avoid use of solvents to clean the product as residual fumes will skew air quality readings.

Avoid water or other liquids near the product to avoid electrical damage.  
Do not allow unauthorized modification or repair of this product.

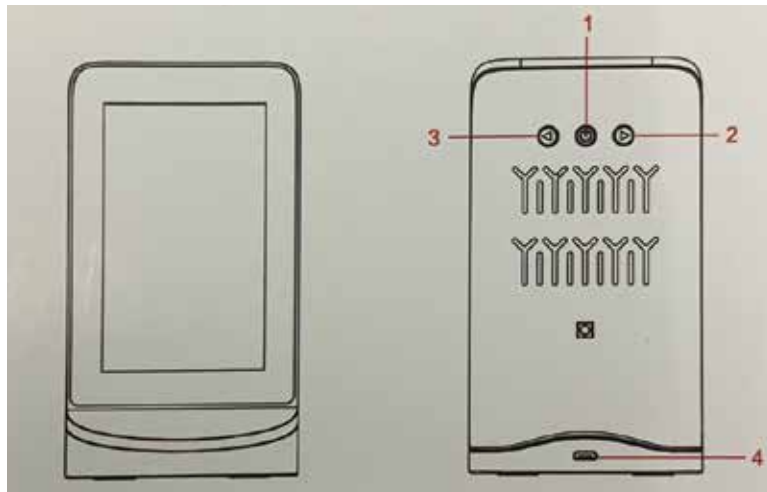
# Features:

- 4.3" color liquid crystal display (LCD), 320x240 pixels
- Test variables: PM2.5/1.0/10, formaldehyde, TVOC, temperature, humidity
- Large 3000mAh capacity Lithium battery
- On-board fan to draw in ambient air for more accurate real-time results
- 5V Micro USB charging
- Low battery warning

# Instructions

## 1. Start Up

When you long-press the center power button, the air quality monitor will boot up. Detector will proceed through its warm-up sequence for about 3 minutes to allow sensors to preheat and fan to draw in fresh ambient air. This is necessary for accurate results



- 1) Power ( I/O )/ OK / Menu Button, used to confirm highlighted options or to turn device on/off by pressing for 3 seconds.
- 2) Down / Switch / Decrease Button, used to scroll between interfaces
- 3) Up / Switch / Increase Button, used to scroll between interfaces
- 4) Micro USB charging Port

## 2. Switching Among Data Display Formats ( Figure 1-5 )

Press the up or down buttons to switch among data display formats (figures 1-5) that displays air quality readings in various formats:



Figure 1

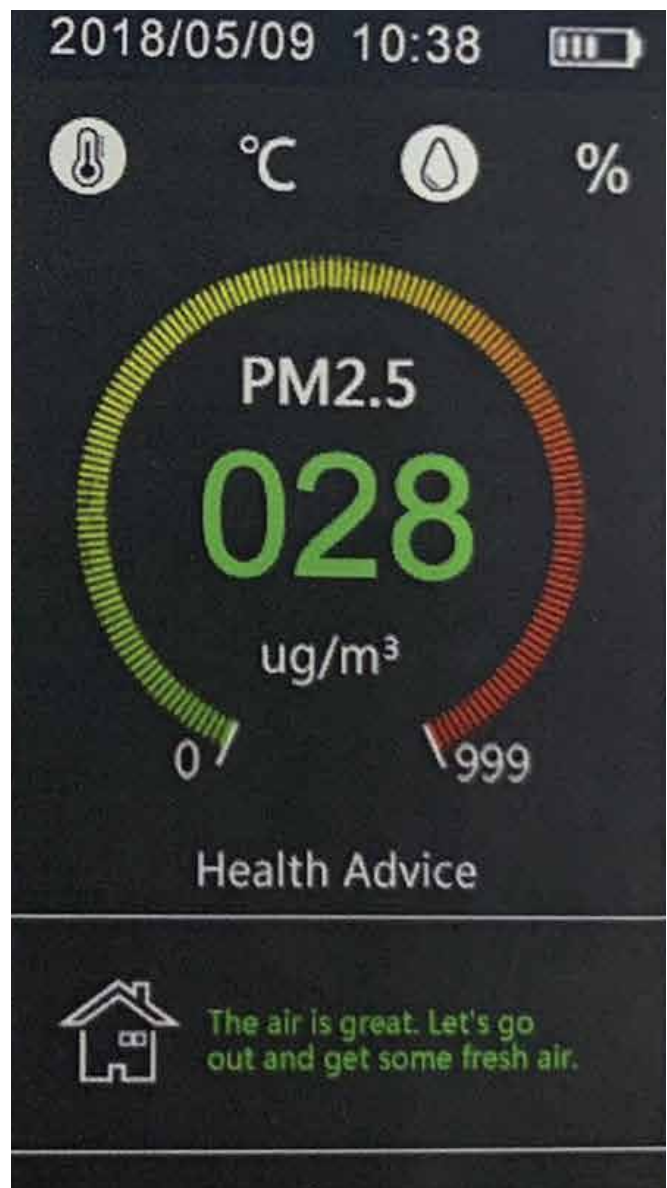


Figure 2



Figure 3

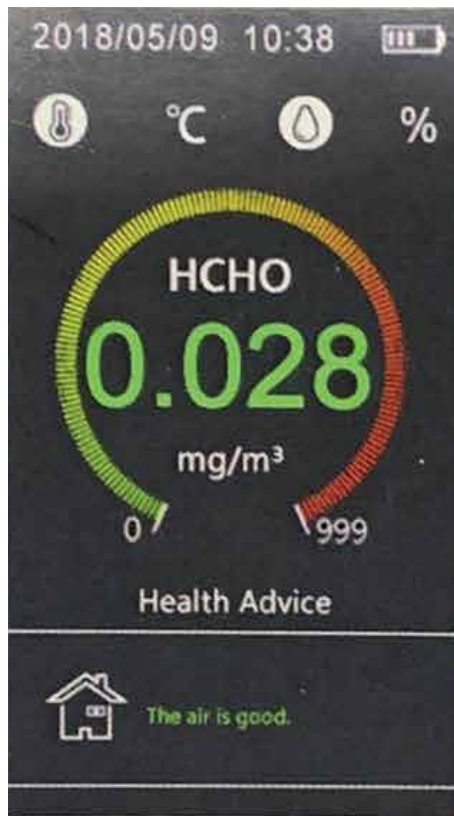


Figure 4

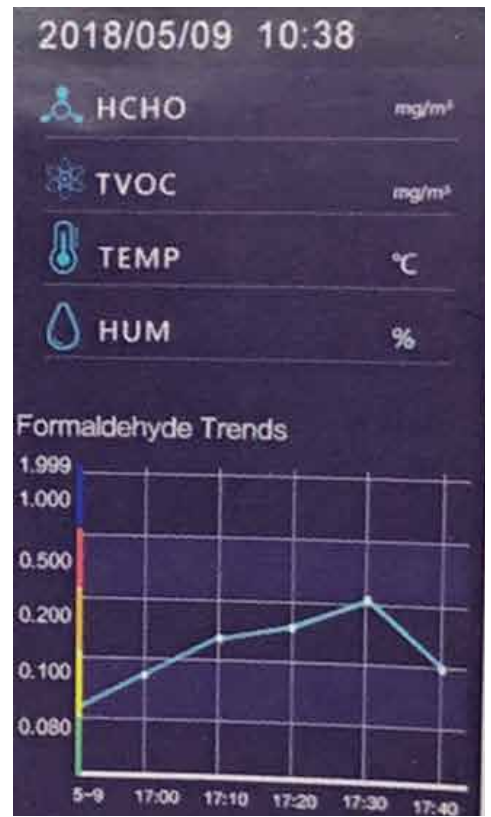


Figure 5

### 3. Time Setting (Figure 6)

Double Press center I/O button to enter the Time Setting screen.



Figure 6



Change the Year, Month, Date, Hour, Minute, and Seconds using up/down buttons and confirm each change by pressing center I/O button , It will save each settings Automatic.

## 4. About Charging

When low battery icon is displayed, the device needs to be charged. Insert the included or another compatible micro USB charging cable into the device. Attach the other end to a USB DC charger (such as a smart phone charger) that outputs DC 5V at  $\geq 1000\text{mA}$ . Fully charge for at least 2-3 hours before use. Avoid charging with a USB computer port which only outputs 500mA.

## 5. History ( Figure 3,Figure 5 )

Graph shows the last 10 data values for PM2.5, Formaldehyde and taken every 10 minutes over the previous 100 minutes.



Figure 7

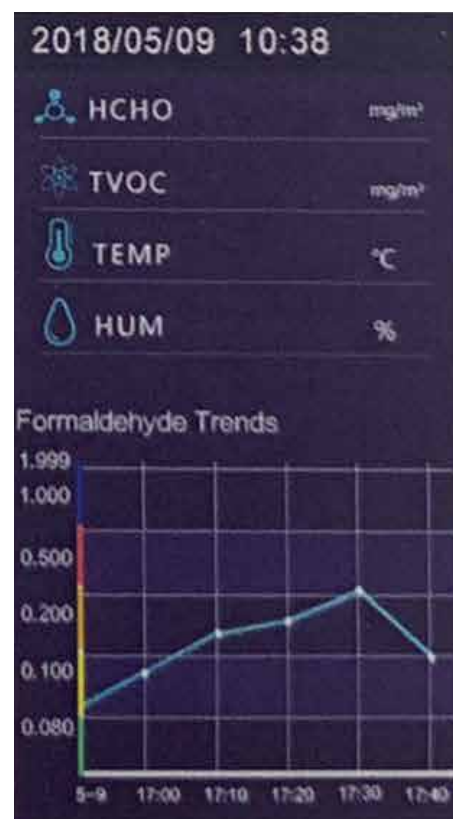


Figure 8

## 6. Alarm Threshold

Default factory value alarm threshold levels for HCHO: 0.1mg/m<sup>3</sup>. when reach 0.1mg/m<sup>3</sup> , Device alarm sounds.

HCHO (formaldehyde) ideal range: <=0.10 mg/m<sup>3</sup>

Air Quality Standard	PM2.5 Air Quality Rating Range	
Formaldehyde Less than 0.100:safety range 0.101-0.200:Slight pollution 0.201-0.300:Moderate pollution 0.301 or more:heavy pollution	Air Quality Level	PM2.5(ug/m <sup>3</sup> ) Average Standard Value
	Excellent	0~35
	Good	36~75
	Light pollution	76~115
TVOC Less than 0,600: safety range Achieve 0.601 or more: Exceeding thestandard can cause respiratory system Abnormal, inflamed, cancerous, etc.	Moderate pollution	116~150
	Heavy pollution	156~250
	Serious pollution	more than 250

## 7. AQI (Air quality index ) :

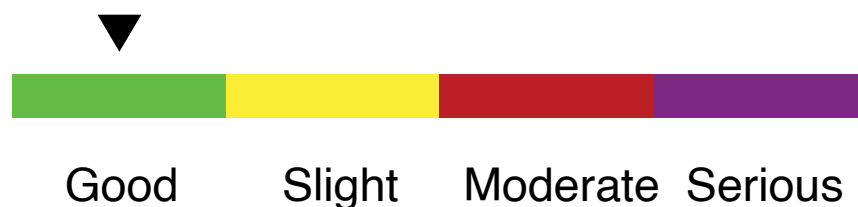
Green Color ( Good ): 0-50

Yellow Color ( Slight ) : 51-100

Red Color ( Moderate ): 101-200

Purple Color ( Serious ): 201-500

Slight Moderate Serious Good



## 8.Parameters :

PM2.5,PM10,PM1.0 Specifications:

Measuring principle: Laser Scattering

Measuring range: 0 - 999 ug/m<sup>3</sup>

Resolution: 1 ug/m<sup>3</sup>

Formaldehyde Specifications:

Measuring principle: Electrochemistry

Measurement range: 0.000 - 1.999 mg/m<sup>3</sup>

Resolution: 0.001 mg/m<sup>3</sup>

TVOC Specifications:

Measuring principle: Semiconductor

Measuring range: 0.000-9.999 mg/m<sup>3</sup>

Resolution: 0.001 mg/m<sup>3</sup>

## Product List

Air Quality monitor	x 1
Micro USB charging cable	x 1
Product Manual	x 1



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