

# Air Quality Monitor

## Instruction Manual



24-11-V3-502-O3

### Product Description

This product is a multifunctional air quality detector that detects Ozone( O3), Total Volatile Organic Compounds (TVOC), Particulate Matter <2.5 micron-sized particles (PM2.5/1.0/10), 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 Ozone(O3), total volatile organic compounds (TVOC), PM2.5/1.0/10, temperature, and humidity on its digital LCD display.

Description of accessories	
Air Quality Monitor	x 1
Micro USB Charging Cable	x 1
Product Manual	x 1

### Considerations

Please read the instructions carefully before using this device.  
Please calibrate the device 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.



1	PM2.5 Value	2	Ozone(O3 )Value
3	TVOC ( Total Volatile Organic Compound ) Value	4	Temperature
5	Battery	6	Humidity
7	Up Button	8	Exit Button
9	Power Button	10	Down Button
11	PM2.5 pollution grade	12	Time

### Instructions

#### Start Up

Long-press power or 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. Countdown timer showing remaining time for warm-up sequence is shown in the TVOC display area.

**Note 1** : If you can't turn on the monitor, please plug in and charge it for a while first.

**Note 2** : To ensure the accuracy of readings, please keep the product standing when using it and do not lay it flat, which may block the ventilation opening.

#### Shutdown

In the power on state, press and hold the power button for 3 seconds to turn it off.

### Switch Display Formats

#### 1. Switching Among Data Display Formats (Figure 1-3)

Press the up or down buttons to switch among data display formats (figures 1-3) that displays air quality readings in various formats:



Figure ①



Figure ②



Figure ③

#### Temperature Unit

- (1) Navigate to "Temp Unit"
- (2) Press power button to enter
- (3) Choose between °C or °F with up/down button
- (4) Press power button to confirm the selection

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#### 2. Menu Interface (Figure 4)

Press power button to enter the Menu or Options screen.



Figure ④

#### 3. System Settings (Figure 5)

After navigating to and highlighting "System Set" icon with up/down button within the Menu screen (figure 4), press power button to select and enter "Configure System" screen.

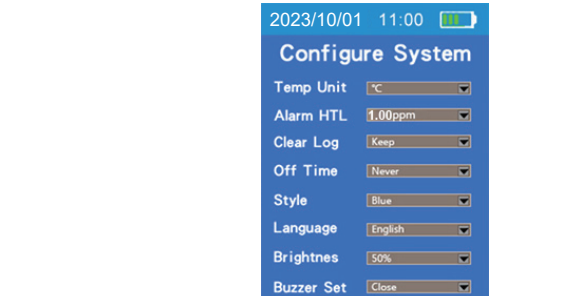


Figure ⑤

#### Language Switching

- (1) Navigate to "Language"
- (2) Press power button to enter
- (3) Choose language options using up/down button
- (4) Press power button to confirm the selection

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#### Alarm Threshold

- (1) Navigate to "Alarm HTL"
- (2) Press power button to enter
- (3) Choose among 4 alarm threshold levels for O3: 1.00,2.00,4.00,8.00 ppm with up/down button
- (4) Press power button to confirm the selection

#### Record Clearing

- (1) Navigate to "Clear Log"
- (2) Press power button to enter
- (3) Use up/down button to choose among options : Keep , Clean
- (4) Press power button to confirm the selection

#### Shutdown Time

- (1) Navigate to "Off Time"
- (2) Press power button to enter
- (3) Choose between the following options with up/down button: never, 30minutes, 60 minutes, 90 minutes
- (4) Press power button to confirm the selection

**Note** : the screen will shut off automatically if there is no user input to help preserve battery life. However, device itself will remain active if set to " never."

#### Interface Style

- (1) Navigate to "Style"
- (2) Press power button to enter
- (3) Choose preferred background style using up/down button there are 6 options : Black ,Purple,Red,Yellow,Blue,Pink .
- (4) Press power button to confirm the selection

#### Language Switching

- (1) Navigate to "Language"
- (2) Press power button to enter
- (3) Choose language options using up/down button
- (4) Press power button to confirm the selection

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#### Screen Brightness

- (1) Navigate to "Brightness"
- (2) Press power button to enter
- (3) Use up/down button to choose from 10% to 80% brightness
- (4) Press power button to confirm the selection

#### Buzzer

- (1) Navigate to "Buzzer Set"
- (2) Press power button to enter
- (3) Use up/down button to choose the options : open , close
- (4) Press power button to confirm the selection

#### 4. Time Setting (Figure 6)

After navigating to and highlighting "Time Set" icon with up/down button within the Menu screen (figure 4), press power button to select and enter "Time Set" screen (figure 6).



Figure ⑥

Change the Year, Month, Date, Hour, Minute, and Seconds using up/down button and confirm each change by pressing power button. When finished, press the Exit key (slender minus-shaped button), after which the following will display:



Press the power button to confirm and save changes. Press the Exit key to cancel any changes.

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#### 5. History (Figure 7)

After navigating to and highlighting "History" icon with up/down button within the Menu screen (figure 4), press power button to select and enter "History" screen (figure 7). Graph shows the last 10 data values for O3, temperature, humidity, and PM2.5 taken every 10 minutes over the previous 100 minutes.

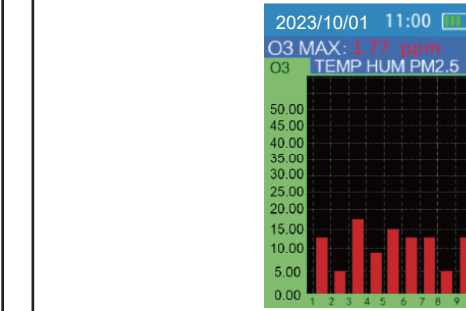


Figure ⑦

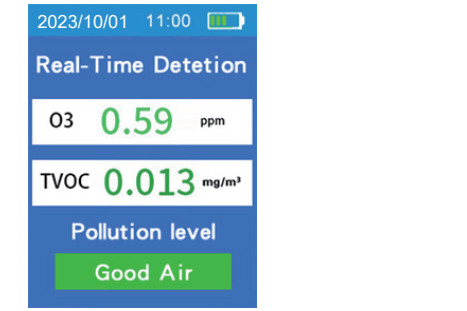


Figure ⑧

#### 6. Real-Time Measurement (Figure 8)

After navigating to and highlighting "Actual Data" icon with up/down button within the Menu screen (figure 4), press power button to select and enter "Real-Time Detection" screen (figure 8). This screen shows the raw data from the TVOC and O3 sensors without any averaging over time that reduce variations and signal noise in the air quality readings.

#### 7. About Us

After navigating to and highlighting "About Us" icon with up/down button within the Menu screen (figure 4), press power button to select and enter "About Us" screen to view our company information.

#### 8. 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 smartphone charger) that outputs DC 5V at ≥1000mA. Fully charge for at least 2-3 hours before use. Avoid charging with a USB computer port which only outputs 500mA.

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### Prameters

	Measurement Range	Measurement Method	Resolution	Measurement Accuracy
Ozone (O3)	0.00-50.00pp	Electrochemistrv	0.01ppm	±10%
PM2.5/1/10	0-999 ug/m³	Laser Scattering	1 ug/m³	±10%
TVOC	0.001-9.999 mg/m³	Semiconductor	0.001 mg/m³	±10%
Temperature	-10°C-50°C (14°F-122°F)	Semiconductor	1°C 0.1°F	±2°C ±2°F
Humidity	20%-85%	Semiconductor	1%	±4%

### PM2.5 pollution grade

Grade	Good	Slight	Moderate	Serious
Value Range	0~75ug/m³	76~150ug/m³	151~300ug/m³	301~999ug/m³

O3(Ozone) ideal range: <1.00ppm  
TVOC ideal range: <0.6 mg/m³  
PM2.5 ideal range: ≤75ug/m³

**Note 1** : The default alarm value of Ozone : 1.00 ppm.  
The Ozone alarm threshold can be set to 1.00ppm ,2.00ppm ,4.00ppm or 8.00 ppm. When the levels of O3 exceed the setted alarm threshold, the device will alarm with short beeps.

**Note 2** : If the "Buzzer Set" is in the "Close" state, the alarm will not be activated even the Ozone ( O3 ) concentration reaches the (set) alarm threshold.

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### Product Specifications

Product Size	155 x 87 x 35mm ( 6.1 x 3.4 x 1.7 Inches )
Product weight	350g ( 12.35 oz )
Material	ABS
Color	White
Display method	2.8" LCD screen display, 320 x 240 pixels
Sampling time	1.5 seconds
Detection method for PM	Laser Scattering
Detection method for O3	Electrochemistry
Detection method for TVOC	Semiconductor
Concentration unit for PM	ug/m³
Concentration unit for O3	ppm
Concentration unit for TVOC	mg/m³
Detection range	PM2.5/1/10 :0-999 ug/m³ Ozone:0.00-50.00 ppm/m³ TVOC :0.001-9.999 mg/m³
Relative humidity	20% - 85%
Detection temperature	-10°C to 50°C; 14°F to 122°F
Storage temperature	-10°C to 60°C; 14°F to 140°F
Atmospheric pressure	86Kpa - 106Kpa
Power source	Lithium battery with 1200 mAh capacity; 5V DC power charging via micro USB port

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