Instruction Manual



24-04-72N

Product Specifications

Display method: 4.3" LCD screen display, 270 x 480 pixels
Detection method for Decibel: Condenser microphone
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
Atmospheric pressure: 86Kpa - 106Kpa
Concentration unit for Decibel: dBA
Concentration unit for PM: ug/m³
Power source: Lithium battery with 3000 mAh capacity
5V DC power charging via micro USB port
Product weight: 210g

Product Description

This product is an advanced instrument integrates dust detection and noise measurement.

It can quickly capture dust particles in the air and accurately measure noise decibels, providing you with precise and reliable comprehensive environmental data.

As a scientific dust and noise instrument, it combines multiple sensors with a built-in fan to allow real-time monitoring of noise decibel, PM2.5/1.0/10,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" superior color liquid crystal display(LCD), 480X270 pixels
- Test variables: Decibel, PM2.5/1.0/10, temperature, and humidity
- Display 11 pieces of consecutive history curves of noise
- Large 3000mAh capacity Lithium battery
- On-board fan to draw in ambient air for more accurate real-time results
- Temperature numerical compensation setting
- Temperature units switch between Celcius (°C) and Fahrenheit (°F)
- Two display interfaces switching
- 5V Micro USB charging

Instructions

1. Start Up

When you long-press the power button, the instrument will boot up.



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

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

Press the **Right / Left Button** to switch among data display formats (Figures 1-2) that displays air quality readings in various formats:



Figures 1



Figures 2

3.Setting (Figure 3)

Double-press middle **Power Button** to enter the SET UP interface first. Then single-press **Right / Left Button** to change the original setting and single-press **Power Button** to confirm and go to the next option.



Figures 3

1) **DATE:** change the date by pressing the Right / Left button and confirming with the power button.
2) **TIME:** change the time by pressing the Right / Left button and confirming with the power button.
3) **UNIT:** change the temperature units by switching between Celcius (°C) and Fahrenheit (°F) .
4) **Interval:** change the time interval by selecting among **10Sec, 30Sec, 60Sec, 2Min, 5Min, 10Min.**
5) **TEMP:** change the temperature compensation value by selecting different gears among -5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5.

Notes: Temperature Numerical Compensation Settings is used to compensate for errors in the measurement process.

4.Decibel History (Figure 2)

Graph shows the last 11 data values for Decibel, and taken every 10 minutes over the previous 110 minutes. Time interval can be reset to trace historical record as needed.



Figures 2

5.Decibel Range (dBA) :

Green Color (Good): 30~70.0
Yellow Color (Slight) : 70.1~100.0
Red Color (Serious): 100.1~130.0



6. 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 >=1000mA. Fully charge for at least 2-3 hours before use. Avoid charging with a USB computer port which only outputs 500mA.

7. About Noise Calibration

Our equipment has been calibrated before leaving the factory. Calibration can only be performed in specific environments. Therefore, we do not recommend users to calibrate the device without authorization, as our daily environment does not meet the specific calibration requirements, resulting in unsuccessful calibration.

Parameters

	Measurement Range	Measurement Method	Resolution	Measurement Accuracy
Decibel	30~130dBA	Condenser microphone	0.1dBA	±1.5dBA
PM1.0 PM2.5 PM10	0-999 ug/m³	Laser Scattering	1 ug/m³ ±10ug/m³ (0-100ug/m³)	±10% (±10ug/m³)
Temperature	-10°C - 50°C 14°F - 122°F	Semiconductor	0.1°C/°F ±1°C	±1.8°F
Humidity	20%-85%	Semiconductor	1%	±4%

Product List

Main Device	x 1
Micro USB charging cable	x 1
Product Manual	x 1