# CO2 MONITOR - SA1300P

## Instruction Manual







RoHS 2.0





This manual and its contents are only for the operation and use of this product and cannot be used for other purposes.

This manual and its content inevitably contain errors or discrepancies from reality, and are for reference only. If there are discrepancies or doubts, please contact our company.

The functions and specifications are subject to change without prior notice.

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## **Packing List**

1. CO2 Monitor Unit



2. USB Cable for Power



3. User's Manual



## Warning

- The provided USB cable can be ONLY used as power supply for this device.
- Do NOT disassemble this device or change internal wiring.
- Do NOT store or use this product in high temperature, high humidity, flammable, explosive and strong electromagnetic environment.
- Do NOT run restore factory defaults too often, or it will cause program damage.
- Keep this device away from your face, or the exhaled carbon dioxide will affect its accuracy.

## **Getting Started**

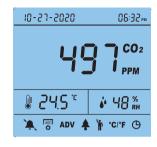
Thanks for purchasing SA1300P air quality monitor (CO2/TEMP/RH). This product is applied to display CO2 concentration, temperature and humidity for indoor air quality monitoring.

#### Features at a Glance

- HD Large Display
- Wall mounted and Desktop
- Touch Button Operation
- 15°Bevel Design, Easy to Read
- Low Drift NDIR Sensor, Long Lifespan
- Audible and Visual Alarm
- Temperature, Humidity and CO2 Monitor, Date and Time Display
- Auto-calibration and Manual Calibration



(Pic.1: Detection Panel)



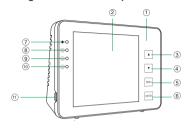
(Pic.2: Operation Panel)

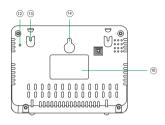
## **Restore Factory Defaults**

In Detection Panel (See Pic.1 in Page 3), hold ENTER for 4 seconds until an audible beep is heard.

### Overview

#### **Drawing Sketch and Components List**





1	Front Panel	9	Orange Condition Indicator
2	LCD	10	Green Condition Indicator
3	UP Button	11)	USB Port
4	Down Button	12	Hole for Buzzer
(5)	Menu Button	13	Hole for Rope
6	Enter/OK Button	14)	Hole for Screws
7	Battery Indicator	(15)	Label
8	Red Condition Indicator		

## **LCD Display**

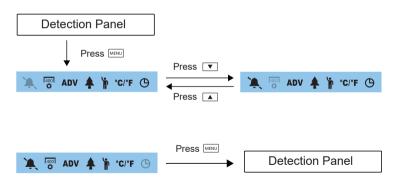


Ť	Mute	'n	Human Mode
<b></b>	Audible Alarm	°C	Degree Celsius
1400l	Manual Calibration	°F	Degree Fahrenheit
ADV	Alarm Point Setting	arm Point Setting 🕒 Time	
<b>*</b>	Plant Mode		

#### Menu Bar

Press  $_{\text{MENU}}$  once to activate the menu bar, press arrow buttons to cycle and switch function options (press  $_{\text{MENU}}$ ) to switch each option in turn until exit).

**Notice:** if the device is not operated in 30 seconds, the menu bar will disappear and the display will return to the normal state.

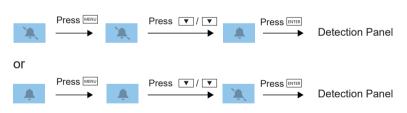


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To set a certain function, press ENTER to enter this function when the icon is flashing, use arrow buttons to adjust the setting or figure, when it's done press ENTER to confirm and exit.

### **Alarm Buzze**

When it displays . , an audible alarm will sound if the co2 level exceeds present CO2 alarm value; `\(\mathbb{\text}\) means MUTE.



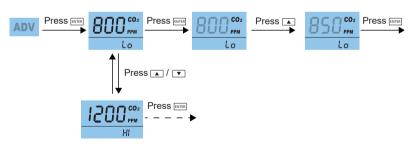
### **Plant Mode and Human Mode**

When  $\clubsuit$  or  $\ref{flashes}$ , press  $\ref{enter}$  to choose and enter certain mode, and it will skip to the next icon.



### **ADV-Alarm Value**

Use this function to set high and low alarm values for Human Mode and Plant Mode Default alarm values are 800ppm and 1200ppm for both modes.



### **Alarm Indicator**

In the Human mode, the GREEN light is on when the CO2 reading is lower than the low alarm value, the YELLOW light is on when it is between the high and low alarm values, and the RED light is on when it is higher than the high alarm value.

In the Plant mode, the RED light is on when the CO2 reading is lower than the low alarm value, the GREEN light is on when it is between the high and low values, and the YELLOW light is on when it is higher than the high value.

### **Temperature Unit**

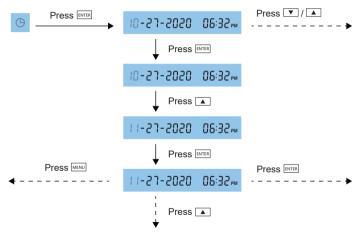
Use this function to choose between Celsius (°C) and Fahrenheit (°F) for the temperature unit display.



#### **Time and Date**

12-hour and 24-hour systems are both available for choice.

24-hour setting: when Am and PM flash at the same time, press INTER to save the setting.



### Calibration

Before calibration, run this device for at least 20 minutes with window open or in outdoor environment with backup battery to reach an atmosphere with 400ppm CO2. Wait till the CO2 reading is stable, then follow above steps for calibration. After calibration, leave it 10 minutes before normal use.



## **Specification**

Typical test conditions: Ambient Temp:23±3°C, RH=50%~70%, Altitude=0~100 meters

Measurement	Specifications
Operating Temperature	32°F ~ 122°F (0°C ~ 50°C)
Storage Temperature	-4°F ~ 140°F (-20°C ~ 60°C)
Operating & storage RH	0-95%(non-condensing)
CO2 Measurement	
Measuringe range	(0-5000)ppm
Display resolution	1ppm (0-1000); 5ppm (1000-2000); 10ppm (>2000)
Accuracy	(0~3000)ppm: ± 50ppm ± 5% of reading (take the Maximum)
	(>3000)ppm: ± 7% of reading
Repeatability	20ppm at 400ppm
Temp compensation	±0.1% of reading per °C
Response time	<2 min for 63% of step change or < 4.6 min for 90% step change
Warm-up time	<20 seconds

Temperature Measurement		
Operating temperature	32°F ~ 122°F (0°C ~50°C)	
Accuracy	±2°F/±1°C	
Display resolution	1°F / 0.1°C	
Response time	<20 minutes (63%)	
RH Measurement		
Measuring range	5~95%	
Accuracy	±5%	
Display resolution	1% Main interface display,1% Max/Min display	
Operating Voltage	DC(5±0.25)V	
Dimension	120*90*35mm	
Weight	170g ( 6.0oz)	