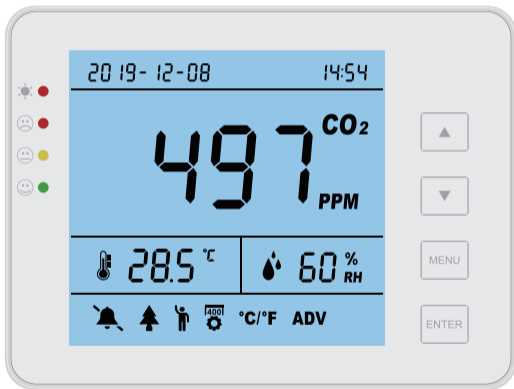


# CO2 MONITOR - SA1300P

## Instruction Manual







RoHS 2.0

REACH

CO2/TEMP/RH

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## Packing List

1. CO2 Monitor Unit



2. USB Cable for Power



3. User's Manual



4. AC Adapter (Optional)



## 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

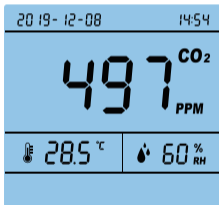
Thanks for purchasing SA1300P air quality monitor(CO2/TEMP/RH). This product is applied to display CO2 concentration, temperature and humidity for indoor air quality monitoring.

## Features at a Glance

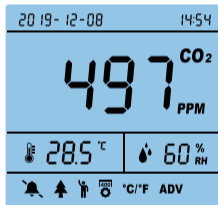
- HD Large Display
- Wall mounted and Desktop
- Touch Button Operation
- 15°Bevel Design, Easy to Read
- Low Drift NDIR Sensor, Long Lifespan
- Audible and Visual Alarm
- Temperature, Humidity and CO2 Monitor, Date and Time Display
- Auto-calibration and Manual Calibration
- Built-in Backup Battery

## General Operation and Settings

- In Detection Panel (See Pic.1), press **MENU** once will bring up the main menu, and press **▼** / **▲** / **MENU** to select each function item. See detail in page 9.
- Enter **🔔** to switch audible alarm **🔔** and mute **🔕**. See detail in Page 9.
- Select plant **🌿** or human **👤** mode, while underlining bar is flashing, pressing **ENTER** will lead to **ADV**. See detail in Page 10.
- Enter **°C/°F** to switch temperature units **°C** and **°F**. See detail in Page 12.
- Press **MENU** once to enter/exit main menu.



(Pic.1: Detection Panel)



(Pic.2: Operation Panel)

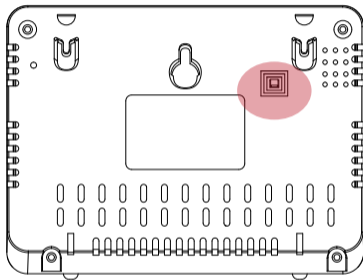
## Restore Factory Defaults

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

## Switch On/Off

Press down the switch to activate this monitor, wait for 3 minutes for warm-up.

Press the switch again to switch it off.



Switch on: 

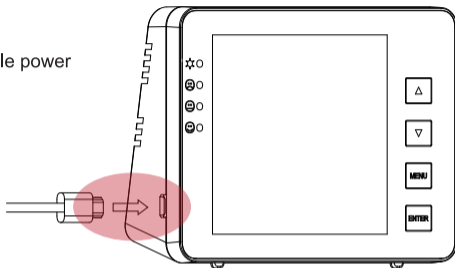
Switch off: 

Switch it off if you don't use it for more than 1 week.

## Power Source

### Plug in USB power

When the device is ON, plug in USB cable power



## Battery

### Battery indicator

Low battery: steady red indicator (Charge the device within 20 minutes to avoid battery damage)

Charging: flashing red indicator

Fully charged: steady green indicator

### Battery recharging

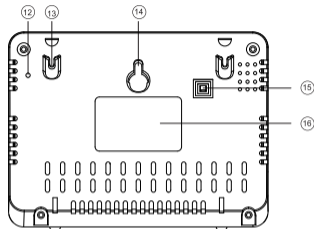
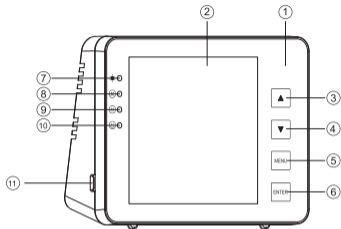
When the device is ON, plug in USB cable power

Charging time: 2.5 hours (Charge extra 30 minutes after the indicator turning from red to green)

Working time: 8-10 hours

# Overview

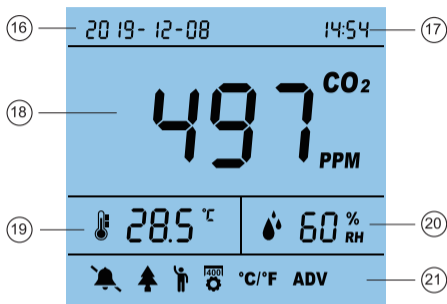
## Drawing Sketch and Components List



Item	Description	Item	Description
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	ON/OFF Switch
⑧	Red Condition Indicator	⑯	Label






## LCD Display

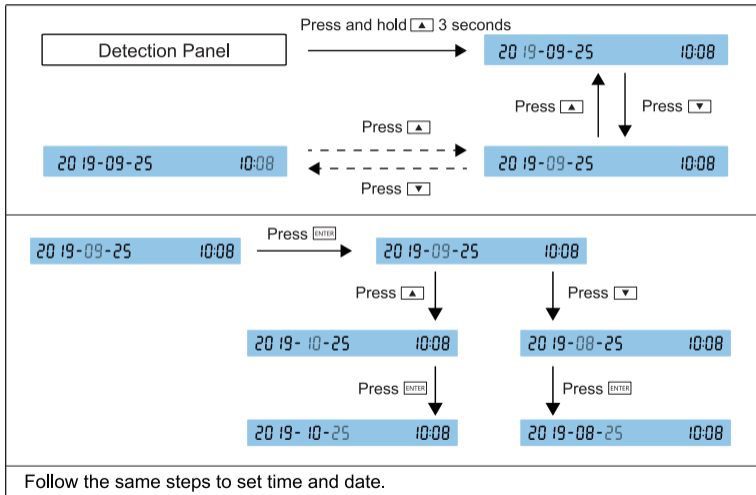


Item	Description
16	Date (Year/Month/Day)
17	Time
18	CO2 Reading
19	Temperature Reading °C/°F
20	Humidity Reading %
21	Main Menu Bar

Icon	Description	Icon	Description
	Mute		Manual Calibration
	Audible Alarm	<b>°C</b>	Degree Celsius
	Plant Mode	<b>°F</b>	Degree Fahrenheit
	Human Mode	<b>ADV</b>	Alarm Point Setting

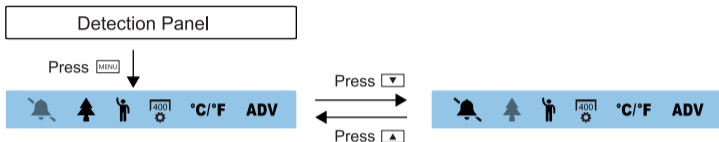
## Time & Date

In detection panel(See Pic.1 in page 3), press and hold  3 seconds to active date and time settings. Press  /  to select each item.

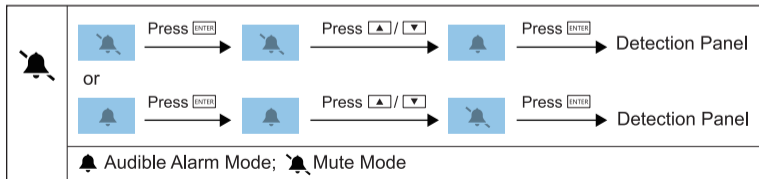


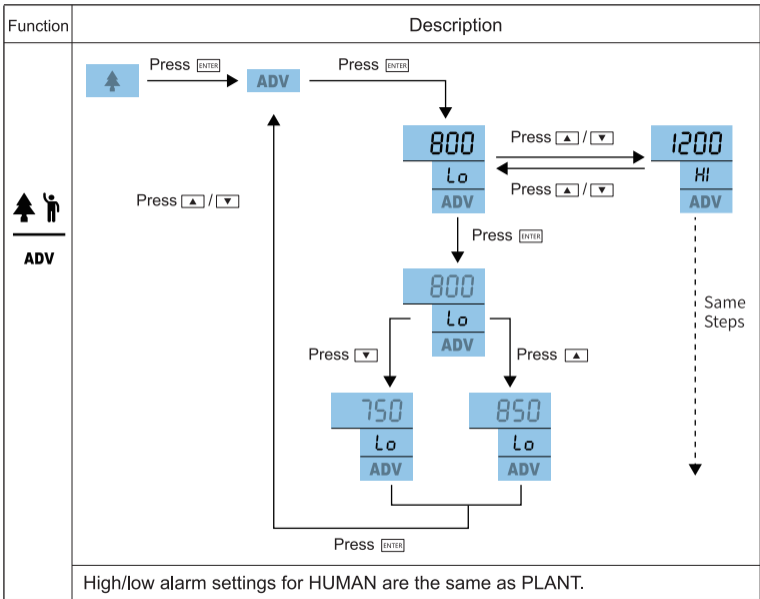
## Main Menu


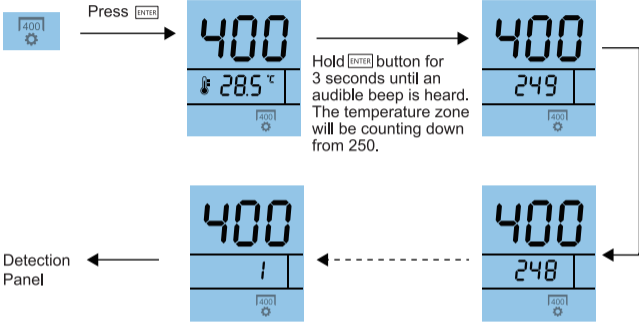
Press **MENU** once to activate the main menu functions. Press **▲** / **▼** / **MENU** to bring up the main menu, with an underlining flashing bar indicating the current choice.

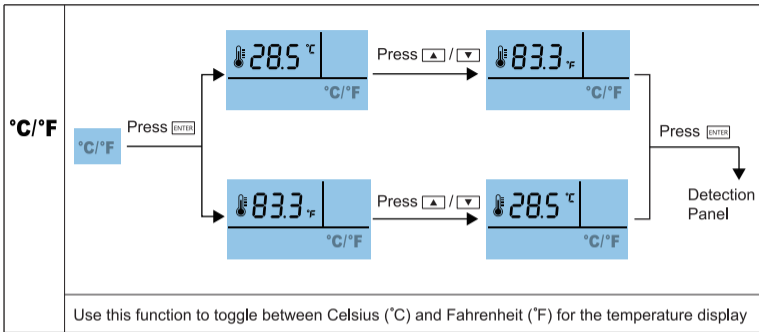


To select a certain function, press **ENTER** when it is underlined by the flashing bar. After the setting is completed, press **ENTER** to confirm and exit. Note: if no operation in 1 minute, the main menu bar will disappear and the device will revert to the normal state (Detection Panel, See Pic. 1 in page 3).





Function	Description
	 <p>Press <b>ENTER</b></p> <p>Hold <b>ENTER</b> button for 3 seconds until an audible beep is heard. The temperature zone will be counting down from 250.</p> <p>Detection Panel</p>
	<p>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 CO<sub>2</sub>. Wait till the CO<sub>2</sub> reading is stable, then follow above steps for calibration. After calibration, leave it 10 minutes before normal use.</p>



## 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	14°F ~ 140°F (-10°C ~ 60°C)
Operating & storage RH	0-95% (non-condensing)
<b>CO2 Measurement</b>	
0~3000ppm	±50 ppm +5% of reading
>3000ppm	±50 ppm +7% of reading
Measuring range	0-5000 ppm
Display resolution	1ppm (0-1000); 5ppm (1000-2000); 10ppm (>2000)
Temp compensation	±0.2% of reading per °C (Reference of 25°C)
Response time	<2 minutes for 63% of step change or <4.6 minutes for 90% step change
Warm-up time	<20 seconds

Temperature Measurement	
Operating temperature	32~195°F (0~90°C)
Display resolution	0.1°F (0.1°C)
Response time	<20 minutes (63%)
Humidity Measurement	
Measuring range	5~95%
Accuracy	±5%
Display resolution	1% main interface display
Operating voltage	DC(5±0.25)V
Dimension	120*90*35mm
Weight	190g with backup battery