

Mini 3 IN 1 CO₂ Monitor (CO₂+Temp.+RH) Operating Instructions

Device Overview

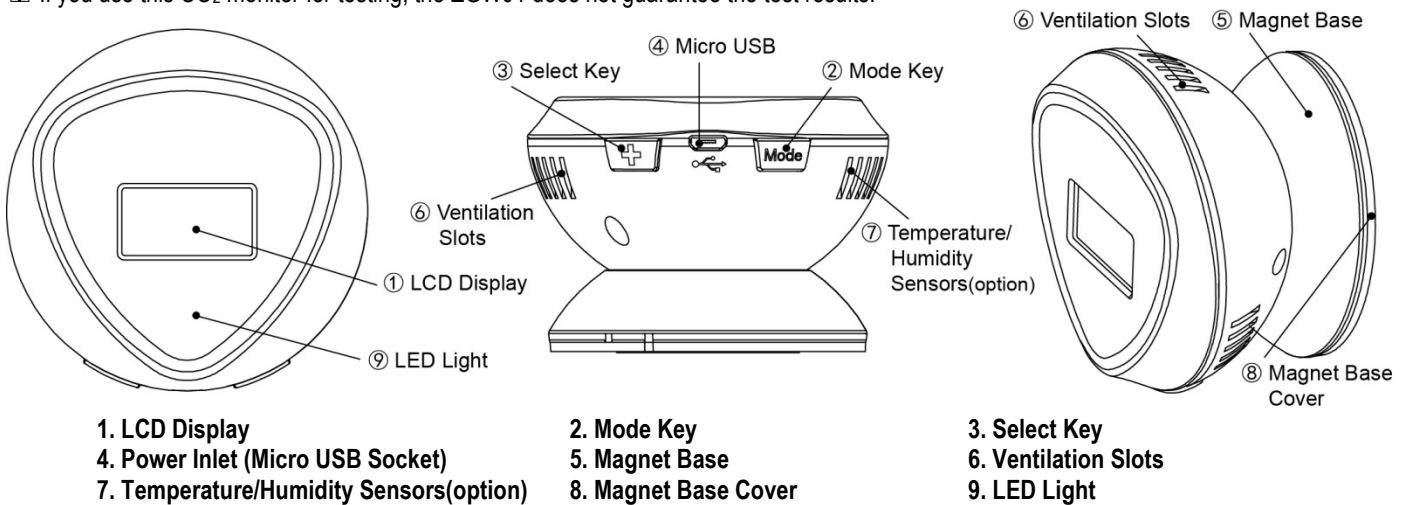
Thank you for selecting ZGW01 desktop & magnetic adhesion CO₂ monitor. ZGW01 CO₂ monitor is a smart, compact and easy-to-use device. In addition to measuring the CO₂ concentration, ZGW01 can also measure the ambient temperature and the relative humidity (CO₂+Temp.+RH). This device is developed to detect the presence of CO₂ in ambient air and helps people to take care of Indoor Air Quality. ZGW01 can be widely used in the office building, school, exhibition hall, shopping mall, meeting room, fitness center, restaurant and other public places where personal comfort and healthy are important.

Features:

- ☑ Dual Beam NDIR (Non-Dispersive-Infrared) technology is being used to measure CO₂ concentration and improve the long term stability.
- ☑ The Large LCD clearly displays the CO₂ concentration, temperature (option), relative humidity (option).
- ☑ 3-Color LED light (green / yellow / red) gradually changes with CO₂ concentration.

Warnings:

- ☑ Please take off the AC power adapter and store it well when this CO₂ monitor left idle for a long time.
- ☑ This CO₂ monitor is for home use, not suitable for certifying the test results.
- ☑ If you use this CO₂ monitor for testing, the ZGW01 does not guarantee the test results.




Key description:

Mode (2)	Select display mode or setting modes.
+ (3)	Adjust the parameters, switch °C or °F (optional).

LCD Display Symbol Description

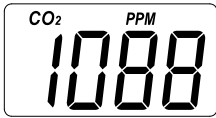
Symbol	Meaning	Description
	CO ₂ concentration, parts per million (ppm)	Ambient CO ₂ concentration
	Ambient temperature	Ambient temperature
	Relative humidity	Relative humidity
	Automatic background calibration	Calibrate the sensor while the reading deviates from the actual gas concentration.
	Buzzer	Turn ON/OFF the Buzzer
	Auto-Switch Display (option)	Auto-Switch Display Setting (Display CO ₂ / Relative humidity / Temperature in sequence)

	IAQ	IAQ Setting (Normal IAQ or Wide Range)
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Operation Instructions

1. Power on and Measure:

Connect a PC power or adapter within the USB cable to start up the device. The LCD will display “---” during warm-up. After warm-up, the LCD shows the CO₂ concentration for Main Display.



2. Automatic Background Calibration:

“OFF” is the default.

2.1 Press Mode Key (②) for more than 3 sec. to show “A on/A oFF”, then press Select Key (③) for ON/OFF.

2.2 ON: Turn on automatic background calibration to calibrate the sensor every 24- hour per day.

2.3 OFF: Turn off automatic background calibration.

Note: Automatic background calibration should be used in a well-ventilated environment. It is not recommended to use the function in a greenhouse, wine cellar, narrow or poorly ventilate space, otherwise it will affect the accuracy.

3. Buzzer ON/OFF :

“ON” is the default.

3.1 Press Mode Key (②) for more than 3 sec. to show “A on/A oFF”, then press Mode Key (②) to show “b on”.

3.2 Press Select Key (③) for ON/ OFF(b on/b oFF).

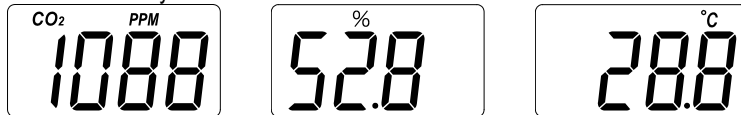
4. Auto-Switch Display (option) :

“OFF” is the default. If select “ON”, the CO₂/ Relative Humidity / Temperature readings will be displayed in sequence.

4.1 Press Mode Key (②) for more than 3 sec. to show “A on/A oFF”, then press Mode Key (②) to show “b on”, press Mode Key (②) again to show “S oFF”.

4.2 Press Select Key (③) for ON/OFF(S on/S oFF).

4.3 When the LCD shows the ambient temperature and relative humidity readings, the LED with CO₂ concentration will be lit off automatically.



5. Manually Display Temperature and Relative Humidity (option) :

5.1 Short press Mode Key (②) to show relative humidity.

5.2 Then short press Mode Key (②) again to show ambient temperature.

6. IAQ Setting:

“OFF” is the default, whose LED light is white. Please select the “Normal IAQ” or “Wide Range” setting.

6.1 Press Mode Key (②) for more than 3 sec. to show “A on/A oFF”, then press Mode Key (②) to show “b on”, press Mode Key (②) again to show “S oFF”, and then press Mode Key (②) to show “I on/--”.

6.2 Press Select Key (③) for “I on” / “I --”.

6.3 I on : 800~1,400ppm for “Normal IAQ” setting with 800ppm(Green LED light)~1,400ppm(Red LED light).

6.4 I -- : 800~3,000ppm for “Wide Range” with 800ppm (Green LED light)~3,000ppm(Red LED light).

7. Switch °C/°F(option) :

On main screen, short press Select Key (③) to show °C/°F.

8. Outside calibration and clear

8.1 Outside calibration

(1) Calibrate the device under 400ppm CO₂ concentration in outdoor environment.

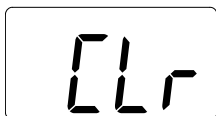
(2) Press and hold Mode Key (②), then press Select Key (③) for more than 3 sec. to show “CAL”.

(3) Press Select Key (③) for 600 sec. to start the countdown for calibration, and then return back to the main screen automatically.



8.2 Clear the calibration value

- (1) Press and hold Mode Key (②), then press Select Key (③) for more than 3 sec. to show "CAL", then press Mode Key(②) to show "CLR".



- (2) Press Select Key (③) to clear the calibration value, and then return back to the main screen automatically.

Note :

- (1) During setting, the LED will light up the white, which means it is under parameters adjustment.
- (2) During setting, the device will return to the main screen if left idle for 20 seconds.

Safety Instructions

Warning: Your safety is very important to us. To ensure to use the device correctly and safely, we would like to draw your attention to read the warning and entire User Manual before using the device. These are important safety information and should be observed at all times.

1. Please handle the device lightly, do not subject the device to impact or shock.
2. Do not immerse the device in water. Water can cause electric shock, fire or malfunction which may result in damage.
3. Do not keep the device under the hot and moisture environment. Keep the device away from the heat source or near water.
4. Please use a standard USB power supply (such as PC's USB port, universal AC adapter with USB port). Improper power supply can cause serious damage to the device, or result in injury or death to the user.

Product Care

To ensure you receive the maximum benefit from using this device, please observe the follow guidelines.

1. Cleaning---Disconnect the power before clean. Use a damp cloth; do not use the liquid cleaning agent, such as benzene, thinner or aerosols.
2. Repair---Do not attempt to repair the device or modify the circuitry by yourself. Please contact with the local dealer or a qualified repairman if the device needs servicing.
3. Air circulation---The vents allow the air circulation liquid for measurement of the CO₂ concentration and the ventilation should not be blocked.

Specifications

Method – Dual Beam NDIR

LCD Display – The current CO₂ concentration, temperature, and relative humidity.

Sample Method – Diffusion

CO₂ Specification:	
Measurement Range	0~9,999ppm
Accuracy	0~3,000ppm: ±100ppm or ±7% of reading, whichever is greater; over 3000ppm: ±10%
Display Resolution	1ppm
Warm-Up Time	10 sec
Response Time	About 1min
Temperature Specification:	
Temperature Range	0°C~50°C (32°F~122°F)
Accuracy	±1°C (±2°F)
Display Resolution	0.1°C (0.1°F)
RH Specification:	
Measurement Range	0%~99% RH
Accuracy	±3%@25°C (20% RH~80% RH), other ±5%
Display Resolution	1%RH
Operating Conditions:	
Operating Temperature	0°C~50°C (32°F~122°F)
Humidity Range	0~95% RH non-condensing 0%~99%
Storage Conditions:	
Storage Temperature	-20°C~60°C (-4°F~140°F)

Power Supply Requirement:

Power Supply	USB or 5 VDC from external AC/DC adapter which is not included in package. (Please use a standard USB power supply.)
DC Output Voltage	5VDC / ≥300mA
Power Runtime	100mA can be able to continuously use for 1 hour. (Ex: 10,000mA power bank can be able to continuously use for 100 hours.)

⚠️ EMC/RFI

Readings may be affected if the unit is operated within radio frequency electromagnetic field strength of approximately 3 volts per meter, but the performance of the instrument will not be permanently affected.

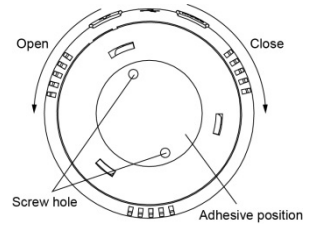
Note: Under the electromagnetic field of 3V/m, the reading will not meet the specification.

Installation Instruction

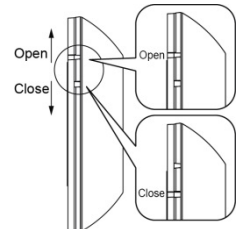
1. You can put ZGW01 on the table or hang it on the wall.
2. Choose a suitable location to install ZGW01, please note the following when hanging it on the wall.

***Note: Mounting height should be ≤ 2 Meter above ground.**

- (1). Use double-sided foam pad (Figure 1)
 - (a) Wipe wall with rubbing alcohol, allow it fully dry for at least 1 minute.
 - (b) Please take out double-sided foam pad from the package, remove a liner and then press adhesive to the back of the magnetic base ⑤.
 - (c) Remove another liner, and press the magnetic base firmly to wall for 30 seconds.
 - (d) Attach the device to the magnetic base ⑤.
- (2). Fix the screws (Figure 1)
 - (a) Remove the magnetic base cover ⑥ by turning it forward (Figure 2) and choose a suitable location to install the magnetic base cover; then fix the two screws to the wall. (Screw size: M3, diameter of wallboard nail is 3mm. Not included in this package.)
 - (b) Put the magnetic base ⑤ on magnetic base cover and turn it clockwise to close.
 - (c) Attach the device to the magnetic base ⑤.



(Figure 1)

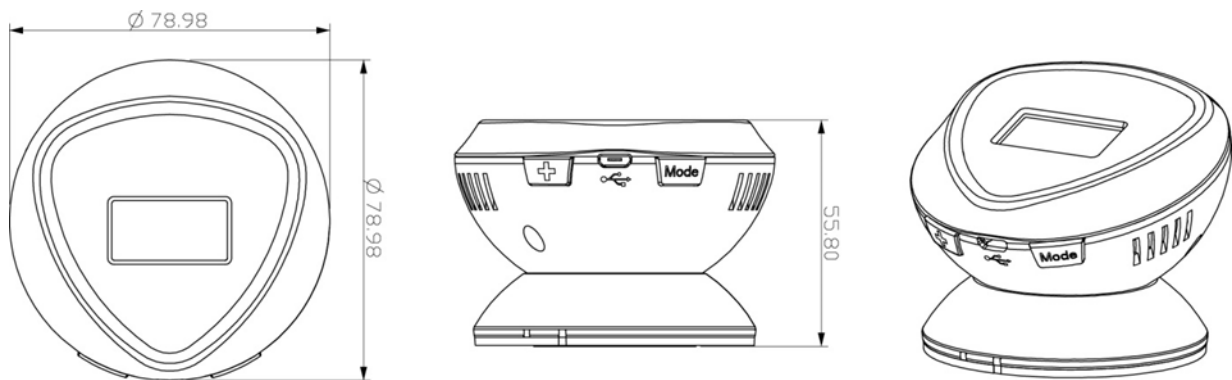


(Figure 2)

Weight & Dimension

Weight: 110g

Dimensions: 3.1 inches*3.1 inches *2.2 inches (79mm*79mm*55.8mm)



Fault Codes & Troubleshooting Guide

This section includes a list of Frequently Asked Questions for problems you may encounter with the ZGW01 CO₂ monitor.

Fault Icon	Description of The Fault	Suggested Action
9999	This device of CO ₂ measurement abnormality. The display is fixed at 9999 and cannot be recovered; the calibration data has been destroyed.	Please contact the Distributor for further assistance.

Package Contents

Mini 3 IN 1 CO₂ Monitor
Manual
USB cable

ZyAura
Monitor the invisible

Radiant Innovation Inc. [Http://www.ZyAura.com](http://www.ZyAura.com)
1F, No.3, Industrial East 9th Road, Science-Based Industrial Park, HsinChu, Taiwan 300.



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