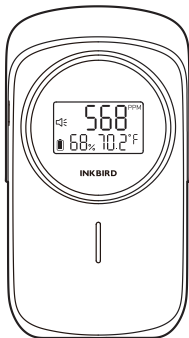# INKBIRD

IAM-02

Smart Indoor Air Quality Monitor User Manual

Please keep this manual properly for reference. You can also scan the QR code to visit our official website for product usage videos. For any usage issues, please feel free to contact us at support@inkbird.com.

Wenn Sie eine Bedienungsanleitung in deutscher Sprache benötigen, scannen Sie bitte den QR-Code und besuchen Sie unsere Website, um sie zu erhalten und ein Video über die Verwendung des Produkts zu sehen.

Se avete bisogno di un manuale di istruzioni in italiano, scansionate il codice QR e visitate il nostro sito web per ottenerlo e vedere un video su come utilizzare il prodotto.

Si vous avez besoin d'un mode d'emploi en français, veuillez scanner le code QR pour visiter notre site officiel

afin d'obtenir et de visionner la vidéo d'utilisation du produit !

Als je een Nederlandstalige handleiding nodig hebt, scan dan de QR-code om naar onze officiële website te gaan en bekijk de video over het gebruik van het product!

Si necesita el manual de instrucciones en español, escanee el código QR para ir a nuestro sitio web oficial y ver el vídeo sobre cómo utilizar el producto.

CATALOGUE

Of the various indoor gases, CO_2 is the one that best represents indoor air quality. High levels of CO_2 can cause headaches, fatigue, rapid heartbeat, and shortness of breath. Prolonged exposure to high levels of CO_2 can have negative effects on the respiratory system and even lead to diseases such as tracheitis and pneumonia. It is therefore vital to maintain an appropriate range of indoor CO_2 concentrations for the sake of health. That's why we introduced the IAM-O2, an intelligent indoor air quality monitor that helps you stay safe and healthy.

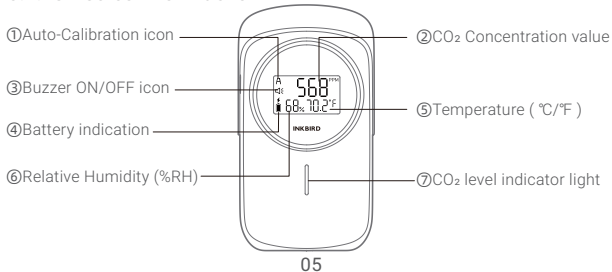| Product name	Smart Indoor Air Quality Monitor
Model	IAM-O2
Battery capacity	3000mAH Lithium Battery
Power supply	DC5V/1A with USB Type C charging cable (the cable length is 1M)
Screen Type	LCD screen with white backlight

Sampling Interval	1min/2min/5min/10min (default 1min)
Production Dimension	111*66*21mm
Production Weight	180g
Package Dimension	178*105*36.5mm
Charging time	About 6 hours
Battery life	more than 12 months

Remarks: When the sampling interval is set to 1 minute, the battery can last for approximately 90 days; when the sampling interval is set to 10 minutes, the battery can last for more than 12 months. The longer the sampling interval, the longer the battery life.

Testing data	Measurement range	Resolution	Accuracy
CO_2 concentration	0-9999ppm	1 ppm	± 40 ppm （±5%）
Temperature value	-9.9℃ - 100℃	0.1 °C (0.1 °F)	±0.2 °C (±0.36 °F)
Relative humidity	0-99%	1%	± 1.8 %

3.1.LCD Screen Definitions

①Auto-Calibration icon ─────────────

②CO₂ Concentration value

③Buzzer ON/OFF icon ─────────────

④Battery indication ─────────────

⑤Temperature (℃/℉)

⑥Relative Humidity (%RH) ─────────

⑦CO₂ level indicator light

$$568^{ppm}$$
$68_{\%RH} \ 70.2^{℃/℉}$

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① **Auto-Calibration icon**:

A When this icon appears, the smart auto-calibration is turned on.
When this icon disappears, the smart auto-calibration is turned off.

② **CO₂ Concentration value**:

8888 *CO_2 PPM （parts per million）,CO_2 concentration level in ppm (parts per million).

*Current CO_2 concentration value (ranged from 0 to 9999)

③ **Buzzer ON/OFF icon**

◁≋ When this icon appears, the buzzer is turned on; when this icon disappears, the buzzer is turned off.

NOTE: See Section 4, 《Operating Buttons Definitions》, in this manual for details on switching the buzzer on or off.

④**Battery indication**

🔋 Current battery level.   🔋 The device is charging.

⑤**Temperature (℃/℉)**   The temperature of the air in ℃ or ℉

⑥**Relative Humidity (%RH)**
The relative humidity of the air, expressed in %RH.
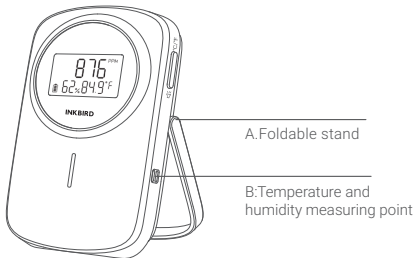
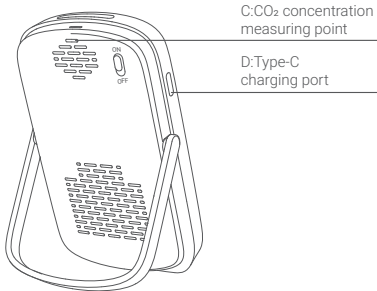⑦**CO_2 level indicator light**

*If the CO_2 indicator light blinks green 3 times each time the CO_2
concentration value is refreshed, it means that the CO_2 concentration level
is in good condition (＜1000 ppm).

*If the CO_2 indicator light blinks yellow 3 times each time the CO_2 concentration value is refreshed, it means that the CO_2 concentration level is in medium condition (1000~1400 ppm).

*If the CO_2 indicator light blinks red 3 times each time the CO_2 concentration value is refreshed, it means that the CO_2 concentration level is in unhealthy condition (>1400 ppm).

3.2 Product Appearance Introduction

A.Foldable stand

B:Temperature and humidity measuring point

C:CO₂ concentration measuring point

D:Type-C charging port

A: ℃/℉ Switch button

Short press: Change the temperature unit between℃ and ℉;

B:Buzzer button

Short press : Turn on/off the buzzer

Long press : Press and hold the button for 3 seconds to turn on/off the CO_2 concentration calibration.

Note:Automatic self-calibration ensures highest long-term stability without the need of manual action steps from the user. The automatic self-calibration algorithm assumes that the sensor is exposed to the atmospheric CO_2 concentration of 400 ppm at least once per week.

Please do not activate automatic calibration if the device has been stored in an environment with CO_2levels≥1000 ppm(e.g., a grow tent) for extended periods. Manual calibration may be conducted when necessary.

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C:Short press both buttons at the same time to go into LCD screen setting mode:

Step 1: Short press both buttons again and the screen will display parameters of 5 modes in turn, i.e. the CO_2 concentration sampling interval "INT", the high CO_2 concentration threshold "Hi", the low CO_2 concentration threshold "Lo", the CO_2 calibration value "CA" and the backlight switch "bLT.

1
Int

Step 2:CO₂ sampling interval setting
Short press both ℃/℉ and buzzer buttons at the same time again, the upper LCD screen will display the interval time, the lower LCD screen will display the the "INT". Short press the ℃/℉ or buzzer button to select the sampling interval(1minute, 2 minutes, 5 minutes, or 10 minutes).At last press and hold the ℃/℉ and Buzzer buttons simultaneously for 2 seconds or wait 30 seconds without operation to exit and save the setting.

1400ᴾᴾᴹ
Hi

Step 3:High CO₂ concentration setting value (range: 300-5000ppm)
Short press both ℃/℉ and buzzer buttons at the same time again, the upper LCD screen will display the high CO₂ concentration setting value, the lower LCD screen will display the character "Hi". Short press the ℃/℉ or buzzer button to modify the high CO₂ concentration setting value.At last press and hold the ℃/℉ and Buzzer buttons simultaneously for 2 seconds or wait 30 seconds without operation to exit and save the setting.

650ᴾᴾᴹ
Lo

Step 4:Low CO₂ concentration setting value (range: 300-5000ppm)
Short press both ℃/℉ and buzzer buttons at the same time again, the upper LCD screen will display the low CO₂ concentration setting value, the lower LCD screen will

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display the character "Lo". Short press the ℃/℉ or buzzer button to modify the low CO_2 concentration setting value.At last press and hold the ℃/℉ and Buzzer buttons simultaneously for 2 seconds or wait 30 seconds without operation to exit and save the setting.

Step 5: CO₂ concentration calibration setting value (range: -200-200ppm)

Short press both ℃/℉ and buzzer buttons at the same time again, the upper LCD screen will display the CO_2 calibration value, the lower LCD screen will display the character "CA". Short press the ℃/℉ or buzzer button to modify the CO_2 calibration value.At last press and hold the ℃/℉ and Buzzer buttons simultaneously for 2 seconds or wait 30 seconds without operation to exit and save the setting.

Step 6:Backlight off/on setting

Short press both ℃/℉ and buzzer buttons at the same time again, the upper LCD screen will display the backlight working state, the lower LCD screen will display the character "bLT". Short press the ℃/℉ or buzzer button to to turn off/on the backlight. At last press and hold the ℃/℉ and Buzzer buttons simultaneously for 2 seconds or wait 30 seconds without operation to exit and save the setting.
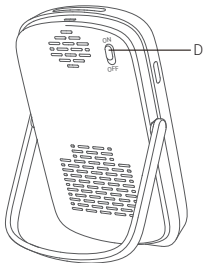
D:Power Button

ON： Turn on the device
OFF： Turn off the device

Two ways to place the IAM-O2 monitor

A：Standing on the table

B：Hanging up

6.1 Push the switch to the "ON" position to turn on the device, and the device LCD will display as shown below:

①：When turning on the device, the LCD screen will display " $\boxed{8888}$ " for 3 seconds.

②：After 3 seconds, the LCD screen will show " $----$ " and flash for 30 seconds at 1 second interval, indicating that the sensor is warming up for collecting data.

③：After 30 seconds, the LCD screen will display the current CO_2 concentration, the ambient temperature, and the relative humidity.
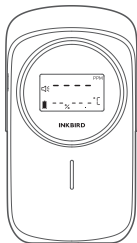
① ② ③

6.2.1 Low battery alarm: When the battery is low, the battery level icon" 🔋 " will flash; after one minute, the device will be automatically turned off.

6.2.2 Unhealthy data alarm:

When the sampled value continuously exceeds the alarm value within a period, the buzzer will sound at the first sampling time when the preset alarm value is judged to be exceeded.

8.1. Do not expose this product to water, or place it in high-temperature environments over 50℃. Keep it away from fire sources.

8.2. This product is a precise measuring instrument, do not disassemble it by yourself.

8.3. Do not place this product in an environment full of dust or corrosive gas for measurement.

8.4. Do not directly expose this product to the sun for long.

ISSUES	POSSIBLE SOLUTIONS
The value of CO_2/temperature/humidity did not change for a long time	**1.** The device samples once per minute at the fastest. Please wait for it. If you need to change the sampling time to 2min/5min/10min, please press the ℃/℉ and buzzer buttons at the same time to enter the LCD screen setting. **2.** At the same place, and when the air environment is slightly flowing, the CO_2 concentration is relatively stable, so the value will not change rapidly. This is a stable and accurate method of air quality detection.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

– Reorient or relocate the receiving antenna.

– Increase the separation between the equipment and receiver.

– Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

– Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This item carries a 1-year warranty against defects in either components or workmanship. During this period, products that prove to be defective will, at the discretion of INKBIRD, be either repaired or replaced without charge. For any problems in use, please feel free to contact us at **support@inkbird.com.** We will do our best to help you.