

Mini CO2 Detector

Operating manual

Attached warranty



Please read this manual carefully before use.
Please keep the receipt and instruction together after reading it.

Instructions

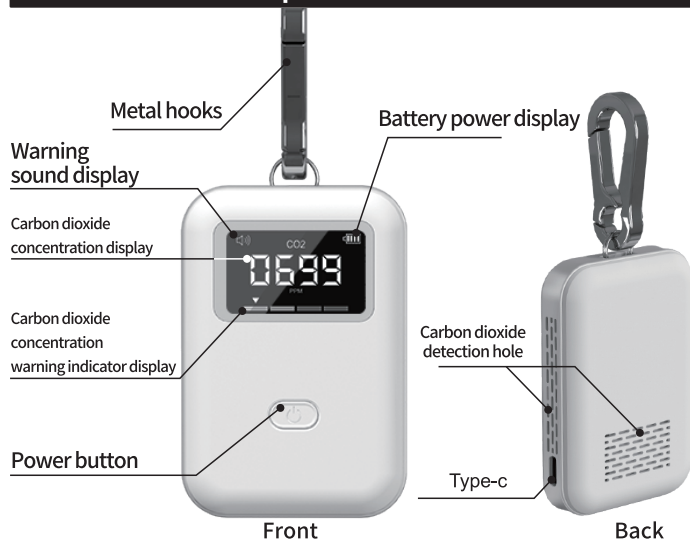
① How to turn on the power

Long press the power button to turn on the power. It takes about 35 seconds for the measurement to stabilize. After that, it is automatically measured and the measured value is displayed on the screen.

② How to turn off the power

Press and hold the power key in the power on state until you hear the beep to turn off the power supply. The screen will automatically turn off without any active within 5 minutes, will be standby mode. And short click to view the CO2 concentration, The screen display lasts for one minute.

The names of the components



Warranty card

Model/Trade name		BCM01	
Customer information	Name	※Please attach a bill certifying the date of purchase	
	Address		
	TEL		
Warranty period	Ontology	Within 1 year from the purchase date	
Date of purchase	Year	Month	Day
Sales shop	Store name	Address	
	TEL		

※ This warranty is a certificate of free warranty agreed under the specified conditions within the express period of this book. *According to this warranty, the issuer (warranty responsible person) and other operators have no restriction on the legal rights of customers.

Product guarantee conditions

- Within the product warranty period (Within 1 year from the purchase date), and the quality can only be guaranteed if it is used in a normal state. In case the product is defective or malfunctioning, we will replace it. Please contact our company. Please contact us in time.
- The warranty card will be invalid under the following situations.
 - ① When the warranty cannot be presented.
 - ② When the prescribed items cannot be filled in, the words and sentences are rewritten.
 - ③ The cause of the failure is a situation caused by negligence or deliberate operation.
 - ④ Failures and damages caused by natural disasters, man-made disasters or all other external factors.
 - ⑤ Failure and damage caused by using outside the normal range of use
- If it is judged that it is the customer's own modification or repair, the return or replacement cannot be accepted even within the warranty period.
- This guarantee refers to a separate guarantee for the product, and all losses (business losses, various expenses, etc.) caused by product malfunctions or malfunctions are not included in the guarantee.
- This warranty does not limit the legal rights of customers
- Warranty will not be reissued, please keep it safe.
- This warranty is valid only in the country local country.

Regarding the indication of the carbon dioxide concentration warning standard

The carbon dioxide concentration ppm of the color displayed on the screen is as follows.

Carbon dioxide concentration warning display guidelines

[Green]	400 ~ 800ppm (±50ppm)
[Yellow]	801 ~ 1200ppm (±50ppm)
[Orange]	1201 ~ 1500ppm (±50ppm)
[Red]	1501 ~ 5000ppm (±50ppm)

The alarm goes off when the measured value exceeds 1000ppm, The alarm will be 1 minute when the measured value exceeds 1500ppm.

About turning on/off the warning sound



After turning on the power, you can turn on and off the warning sound by pressing the "power button" twice in succession.

Manual calibration

- If the measured value is wrong, follow the steps below.
Place it in a well-ventilated place and perform manual calibration manually.

1	Long press the "power button" for 10 seconds	Screen display [8888]
2	With "8888" displayed on the screen, press the "Power button" 3 times within 3 seconds.	Screen display [1230]
3	Press the "power button" immediately	Screen display [400]
4	When the screen changes to 200, the 200-second count starts.	Screen display [200]
5	When "pass" appears on the screen, calibration is completed and the	Screen display [PASS]

About the value of "ppm" carbon dioxide concentration

ppm is a percentage unit that represents parts per million. Mainly used to indicate the concentration of trace substances. For example, the carbon dioxide concentration is 400 ppm, which is 0.04% when converted into a percentage, which is one of the units that express the carbon dioxide concentration.

About the standard value of carbon dioxide concentration

The standard value of carbon dioxide concentration is announced by the Ministry of Health, Labour and Welfare of Japan in 2020. In order to avoid the high risk of mass infection, the standard for good ventilation is the carbon dioxide concentration (CO₂ concentration) below 1000 ppm, which is considered to be the standard for indoor ventilation. One of the values.

Detection method of carbon dioxide concentration

The detection method of the CO₂ detector uses the principle of non-dispersive infrared absorption method (NDIR) to detect the presence of carbon dioxide in the air. This product has the characteristics of good selectivity, anaerobic dependence, and long service life.

Product specifications

product name: Mobile CO ₂ Manager	CO ₂ concentration measurement range:
Product size: about W53mm x D18mm x H80mm	400-5000ppm ± (50ppm)
Product weight: about 78g	Number precision: ± (50ppm + 5%)
Material: ABS+PC	Battery capacity: 900mAh lithium ion battery
Display: LCD display	Charging method: USB Type-C
Preparation time: about 35 seconds	Input voltage: DC5V 0.5A
Refresh rate: about 2 seconds	Charging time: about 2.5 hours
Calibration: manual calibration	Use time: about 7 hours

Product details: CO₂ concentration measuring instrument x 1, USB data cable x 1, instruction manual x 1

Precautions for use

Please pay attention to the following matters before using this product.

1. Please use the USB charger sold in the package to charge this product.
2. Do not block the ventilation holes, as this may affect the measurement accuracy.
3. For long-term use, please do not use it frequently in dusty environments and other places with poor air quality.
4. Do not use this product in a high temperature/high humidity environment or an environment near a strong magnetic field. It may cause damage to the product.
5. Hold the product vertically during measurement to ensure correct measurement.
6. This product has no waterproof function.

Attention

- ⚠ If this product is found to be damaged or abnormal, please stop using it immediately. Otherwise, it may cause electric shock or fire due to short circuit, etc.
- ⚠ Be careful not to accumulate dust near the USB plug. Otherwise, it may cause a fire.
- ⚠ Do not pull the stand forcibly, swing it with the stand, apply excessive load, or operate it roughly. Otherwise, it may cause an accident, injury or malfunction.
- ⚠ Please make sure that there is enough space around the product. It may not be possible to obtain correct measurements in poorly ventilated areas.
- ⚠ We do not guarantee the measured value of this product and the research and results using the measured value.
- ⚠ Do not use, install or store this product in the following places.
 - Places exposed to direct sunlight
 - High temperature place
 - Places where the temperature changes rapidly (places that are prone to freezing)
 - Places where static electricity is generated
 - Places near devices or objects that generate magnetism or electromagnetic waves.
 - Dust place
- ⚠ This product is not used for crisis management of carbon dioxide concentration, human and animal health management, life support, and other medical-related facilities.

When the displayed carbon dioxide concentration is abnormally high

In a small space, the value will rise rapidly. In addition, the product may detect its own exhalation, causing the value to rise sharply. If the concentration of carbon dioxide is abnormally high or the high concentration value is measured for a long time, please use outside air for manual calibration.

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.

Safety Precautions

- Please read this "Safety Precautions" carefully before use to ensure correct use.
 - The precautions given here are to ensure the safe and correct use of the product, and to prevent injury or damage to you or others. In addition, in order to clearly indicate the severity and urgency of the hazard or damage, the precautions are divided into "warning" and "caution" that may occur due to improper handling. All of these are important safety issues, so be sure to follow them.
- After reading, be sure to save it where the user can see it at any time.**

Warning Content that may cause death or serious injury.	Attentions Content that may cause personal injury and property damage.
Image display example ⚠ The symbol on the left represents the "mandatory" behavior. It is the content that must be observed.	⊘ The symbol on the left represents "prohibited" behavior. "Prohibited" content that cannot be done.

Warning

- ⊘ Do not disassemble, repair or modify. It may operate abnormally and cause fire, fire or electric shock.
- ⊘ Avoid short-circuiting the USB port. Otherwise, it may cause heat generation, rupture, or fire.
- ⚠ Stop using it immediately when an abnormality occurs.
 - There are abnormal sounds and burnt smells
 - Mobile power cord, sometimes powered on, sometimes not powered
 - USB cable is abnormally hot
 - Abnormal heating of the main body and operating partsIn the above cases, there is a danger of smoke, fire or electric shock. Unplug the power cord while charging.
- ⊘ Do not throw the main body into the fire. Otherwise, it may cause an explosion or fire.
- ⊘ Do not put pins, wires, metal objects and other foreign objects in the USB ports and gaps. Contact with the inside may cause heat, electric shock, injury or burns.
- ⊘ Do not use or store in high temperature, long-term direct sunlight, high humidity or water. Otherwise, it may cause liquid leakage, heat generation, explosion or fire.
- ⊘ Do not let children use this machine alone, and do not use or store it where infants and young children can reach it.
- ⚠ Do not soak or splash water. Otherwise, a short circuit may cause electric shock or fire.
- ⚠ Please wipe the dust on the USB interface with a dry cloth. Otherwise, it may cause fire and heat generation.
- ⊘ Do not use damaged USB plugs. If it is used in a damaged condition, it may cause electric shock or short circuit, which may cause a fire.
- ⊘ Do not plug or unplug the USB plug or operate with wet hands. Otherwise, it may cause electric shock.
- ⚠ Make sure that the USB plug is fully inserted into the base. Incomplete insertion may cause a fire due to electric shock or heat.
- ⊘ Do not drop, vibrate strongly or hit, otherwise it may cause overheating, change of test data, explosion or fire.



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