

Carbon monoxide alarm

User Manual



(1) Features

Electrochemical carbon monoxide detector is used for detecting of the carbon monoxide (CO) gas. CO is a type of colorless, tasteless, non-irritating and imperceptible toxic gas typically produced in combustion environment with insufficient oxygen, such as fireplace,wood, coal, electric heaters and water heaters.Therefore, in order to ensure the household safety, the CO detector is recommended to be installed in kitchens, bathrooms, living rooms and other spaces where the air is not well ventilated for long time.

(2) Working Status

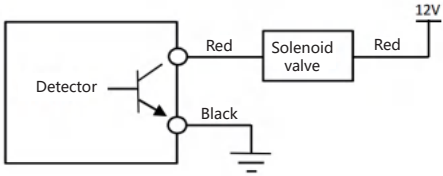
- Preheating status: once powered on, the detector will enter working status after 60s countdown.
- Monitoring status: the green indicator flashes once every 80s.
- Self-checking status: in normal status, press and hold the self-check/mute button on the side of the housing for 1s, detector will sound the alarm, the red/green/ yellow indicators will turn ON simultaneously, and the screen will display 888,a pulse control signal will be generated within 7s. Self-checking is recommended to be done on a weekly basis. If you press the self-check/ mute button but the detector does not work normally, contact your supplier for repair in time.
- Alarm status: when the detector detects CO gas in a certain concentration, the red indicator will flash,current concentration value will display and an external output

passive switch signal will be activated; when gas concentration exceeds the preset alarm activation value, the red indicator will flash, buzzer will beep and current concentration value will display.

- Fault status: the yellow indicator flashes, and the buzzer beeps at the same time.
- Low voltage status: the green indicator flashes, the buzzer beeps and Lo2instantly displays, this process cycles once every 80s. In alarm status, press and hold the self-check/mute button on the side of the housing for 1s.

(3) External Output Interface

This is a passive external drive pulse output interface in this detector to provide automated alarm signals to other dev8ces. or to drive pulse type solenoid valve which works at DC12V 2W (refer to the figure below for wiring).



(4) Technical Specifications

Power supply : DC4.5V (AA alkaline battery or carbon battery *3pcs)	Standby current: <20uA
Alarm current: < 50mA	Working temperature: 0°C ~55°C
Working humidity: 10%-90%RH	Sound Level: > 70dB (1m)
Battery lifetime: up to 1 year	Sensor lifetime: up to 3 years
Low voltage alert: < 3.7V (green indicator flashes, buzzer beeps and Lo2 instantly displays)	
Indicator status:	green indicator: monitoring (interval; 80s) yellow indicator for fault: flashes when fault occurs red indicator: alarm. yellow indicator for lifetime:flashes when lifetime ends
Alarm setting value:	190x10 ⁻⁶ (volume fraction) : alarm activated within 30s
	70x10 ⁻⁶ (volume fraction) : alarm activated within 60-240min
	<50x 10 ⁻⁶ (volume fraction) : no alarm activated
External output interface:	number of interface: 1. interface type: passive switch.

(5) Alarm Record Query

There is an interface inside the detector to be used to read the corresponding record information.

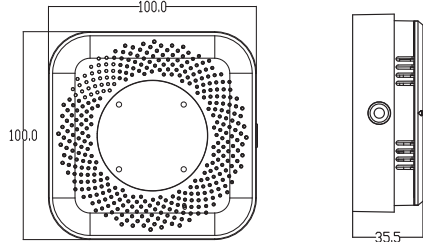
- Detector alarm records: no less than 200
- Detector alarm restoration records: no less than 200
- Detector fault records: no less than 100
- Detector fault restoration records: no less than 100
- Detector power-off records: no less than 50
- Detector power-on records: no less than 50
- Gas sensor failure records: no less than 1

Warranty Provisions

- 1、We provide ONE year warranty from the date of purchase.
- 2、Keep the warranty card and purchase record for future use.
- 3、User caused damages are exempt from warranty.
- 4、Refer to user manual before you install and use the gas detector.

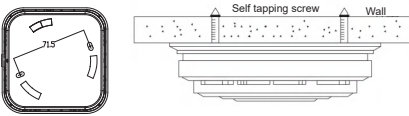
Note: DO NOT disassemble, repair or refurbish the detector by yourself to ensure you qualify for after sales services by the manufacturer. Or we'll not be liable for any loss or damage caused thereof, and the warranty will also be exempted.

(6) Product Dimensions



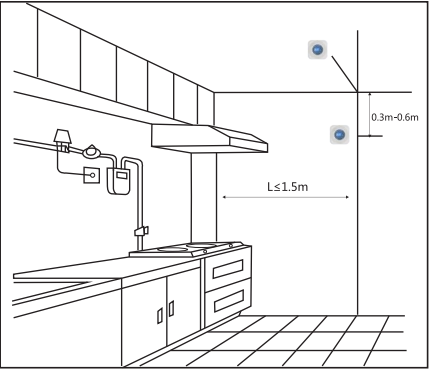
(7) Detector Installation

1. Install the detector near the bedroom and living area or spaces with possible carbon monoxide leakage, and make sure you can hear the alarm.
2. Carbon monoxide is lighter than air, so it should be installed above the gas leakage source and within a radius of 1.5m from the cast center of the source.
3. According to the hole size of the mounting bracket, mark and drill holes on the ceiling or wall, insert anchors into the holes,,then screw the mounting bracket in.
4. Load batteries into the detector as per the positive and negative markings, align the detector with the mounting bracket and turn it clockwise, make sure it's fully locked.



Standalone CO detector

(8) Installation Location Diagram



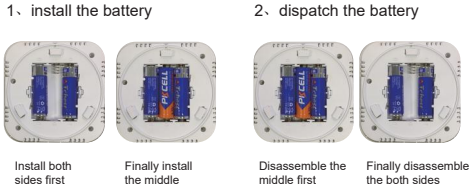
Avoid installation in the following locations:

1. Locations that are too close to the door, windows, fans, etc, since sensitivity of the detector will be affected due to fast air circulation.
2. Locations with high humidity, i.e. next to bathroom nozzle, top floors, or where the temperature is above 50C or below -10C.
3. Locations above gas stove or above stove top with heavy fume.

Maintenance

The detector needs to be cleaned every 6 months to keep excellent working efficiency. Remove the batteries, use a soft brush to sweep the dust, and install the batteries back again

(9) Battery Installation



Warranty Card

Fill in the blanks and keep the card for future warranty service.

Sales Record:
User Name:
Phone Number:
Address:
Product Name:
Date of Purchase:
After sales Telephone:

(10) Regular Troubleshooting

NO.	Problem description	Solution
1	Battery low voltage(<3.7V); buzzer beeps once every 80s, Lo2 displays	Replace with 3x new AA alkaline batteries or carbon batteries
2	Bad contact on batteries: no response after batteries are installed.	Check if the positive and negative poles of the batteries are reversed (refer to the markings on the housing) . Check if the batteries are drained. Check if the batteries and the metal plate are in good contact.
3	Sensor instability;detector displays gas concentration value in clean air, i.e.30ppm /50ppm,alarm sounds afterwards.	Return the detector to supplier for re-calibration or replacement.
4	Sensor fault: the yellow indicator flashes and buzzer beeps continuously.	Remove the batteries and install again 3min later. If the fault resumes, return the detector for repair.
5	Self-checking failure: no response when pressing the self-check button in self-checking status	Check power supply (check if 0 ppm displays or if the green indicator flashes once every 80s), If power supply is bad, fix power supply.If power supply is good, return the detector for repair.
6	False alarm due to irritating gas: alarm activated when there is no gas leakage.	Make sure there are no irritant articles in the room: paint, pigment,alcohol, etc.Check if someone smoked excessive amount of cigarette.Note that excessive amount of hydrogen, Ethylene, nitric oxide, alcohol, hydrogen sulfide, sulfur dioxide, etc can also cause false alarm.

(11) In the Box

Inside the carton: 50x boxes
Detector: 1x User manual: 1x Screws: 2x Batteries: 3x 1.5V

Inside the box: 1x Acchors: 2x

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this 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 followingmeasures:

- 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.

FCC Radiation Exposure Statement

This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.