

# Carbon Monoxide Gas Alarm Detector

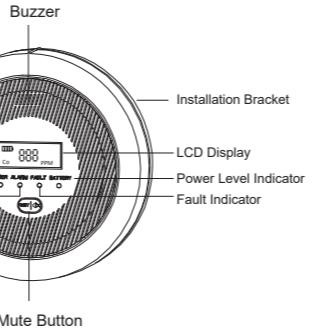
## User Manual

Model: PG-C01 / PG-C02 / PG-C03 / PG-C04 / PG-C05

Thanks for purchasing our CO alarm detector, we're dedicated to improvement and providing quality, secure and reliable products in the field of security.

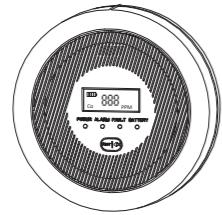
Please take a few minutes to read this manual before installation, and keep the manual for future reference.

\* The product pictures are subject to the actual product.

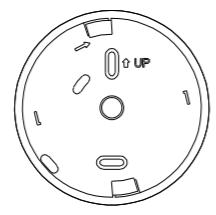


— 01 —

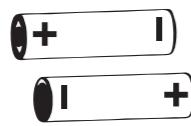
### In the Box



CO detector



Mounting bracket



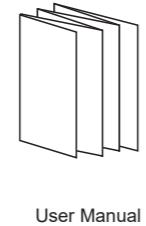
2x AA battery



KA3.5\*25mm  
2x screw



2x anchor



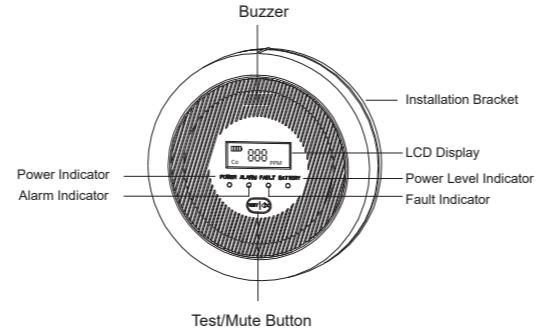
User Manual

### 1. INSTRUCTIONS

#### 1. Product Overview

This carbon monoxide gas alarm detector(CO detector in short) is designed with high performance electrochemical sensor, back-lit LCD screen and AA dry batteries for detection of carbon monoxide gas. It features high reliability, low power consumption, low sensitivity variation and tamper-proof design for battery installation.

#### 2. Product Picture



— 01 —

#### 3. Working Status

1) Preheating: once power on, the buzzer sounds 'Di-', Power, Alarm, Fault and Battery indicators blink once. LCD screen turns on displaying '888PPM' and battery power level (refer to Figure 1). Then 2-min preheating starts with LCD screen displaying countdown from 120 to 0, and Green, Red, Yellow and Blue indicators blinking simultaneously. Detector enters monitoring status after preheating.

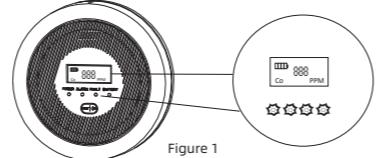


Figure 1

2) Monitoring: after preheating, Power indicator blinks once per 60s, indicating the monitoring status.

3) Alarm: Alarm indicator blinks and buzzer sounds 'Di-Di-Di-'.  
4) Fault: Fault indicator blinks twice per 60s, and buzzer sounds 'Di-Di-' per 60s.

5) Crash: when CO gas detected exceeds the maximum range of 999, LCD screen displays '999' (refer to Figure 2).

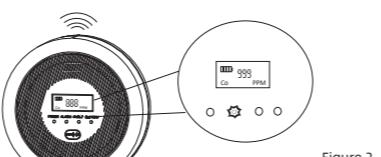


Figure 2

— 02 —

6) Low Voltage: Battery indicator blinks once per 60s, and buzzer sounds 'Di-' per 60s, indicating that you need to replace the batteries (refer to Figure 3).

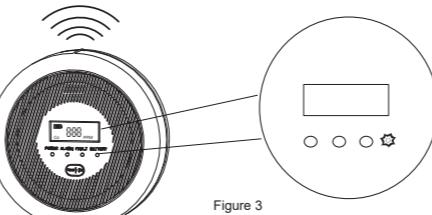


Figure 3

#### 4. Button Operation

1) Self-checking: press 'Test' button, Power, Alarm, Fault and Battery indicators blink 4 times simultaneously, and buzzer sounds 'Di-Di-Di-Di-', LCD screen turns on, displaying '888'. Press and hold 'Test' button, buzzer sounds 'Di-Di-Di-Di-' continuously. Sound level tested to be ≥85db at 3m from the detector.



— 03 —

2) Alarm Mute: on activation of CO alarms below 300ppm, press 'Test' button to mute (refer to Figure 5), Mute function lasts about 10mins.

Warning: if there is any question as to the cause of an alarm it should be assumed that the alarm is due to dangerous levels of carbon monoxide and the dwelling should be evacuated.

Attention: mute only when you are sure it's safe!

3) Fault Mute: buzzer goes off in case of detector malfunction. At this time, press 'Test' button to mute, LCD screen displays 'SFA', the indicator blinks every 60s. Mute feature lasts for 12±1hrs, then buzzer alarm sound continues.

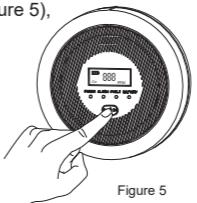


Figure 5

#### 5. What the Display Means

Legend	Indication	Description
	Self-checking	Power, Alarm, Fault and Battery indicators blink 4 times simultaneously and buzzer sounds 'Di-Di-Di-Di-', LCD screen turns on, displaying '888'.
	Preheating	LCD screen displays countdown from 120 to 0, and Power, Alarm, Fault and Battery indicators blink simultaneously. LCD and indicators turn off after preheating.
	Fault	Fault indicator blinks twice, and buzzer sounds 'Di-Di-' at the interval of 60s.
	Low Voltage	Battery indicator blinks once, and buzzer sounds 'Di-' at the interval of 60s.
	Life Over	Fault indicator blinks 3 times, and buzzer sounds 'Di-Di-Di-' at the interval of 60s.
	Crash	Beyond detecting range

— 04 —

### 6. Technical Specifications

Working Voltage	DC3V(2x AA battery)
Standby Current	<10 uA
Alarm Current	≤ 25 mA
Detecting Range	0~999ppm
Alarm Output	Light and acoustic alarm
Sound Level	≥85 db@ 3m
Sensor Lifespan	10 years
Battery Lifespan	3 years
Working Temperature	-10°C ~55°C
Working Humidity	Max.95%RH
Installation	wall mounting
Standards Reference	EN50291-1: 2018
Dimensions	115*28mm
Weight	Approx.168g (incl. batteries)

— 05 —

### 7. Features

- 1) smart alarm
- 2) electrochemical sensor
- 3) digital compensation on temperature
- 4) back-lit LCD screen
- 5) mute function
- 6) low voltage warning
- 7) auto check on CO sensor fault
- 8) tamper-proof design for battery installation
- 9) adopts SMT manufacturing process for higher reliability

### 2. INSTALLATION

#### 1. Installation Positions Recommend

Single-floor building

- 1) 1 detector for each bedroom.
- 2) 1 detector installed 6m from chimneys or gas burning appliances for improved security.

#### Multi-floor building (refer to Figure 6)

- 1) 1 detector for each bedroom.
- 2) 1 detector on ceiling of basement (if available).
- 3) 1 detector installed 6m from chimneys or gas burning appliances for improved security.

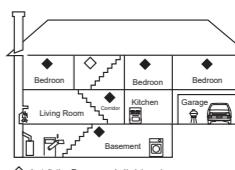
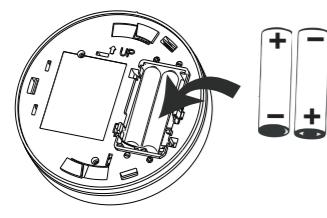


Figure 6

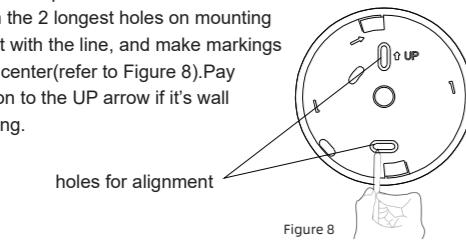
— 06 —

2. Installation Reminders  
 1)Install the detector near the bedroom and living area or spaces with possible CO leakage, make sure you can hear the alarm. Detector is suggested to be installed on each floor for multi-floor buildings. If the detector stays in environments beyond its working temperature(0°C-40°C) for over 30mins, put it in the room for 12hrs at least before use.  
 2)To keep it in operation and reduce false alarms, never install the detector in dirty, dusty or greasy locations such as garages, kitchens, close to fireplaces or heaters. If you must do this, consider a reasonable distance. Grease, dust or household chemical agents could harm the internal CO gas sensor.  
 3)Attention: installation only by qualified technicians.  
 4)Caution: install batteries BEFORE you install the detector, or it fails. Be sure not to install batteries reversely.  
 3. How to Install  
 1) Load AA batteries into battery compartment, pay attention to the '+/-' directions (refer to Figure 7).  
 Figure 7 shows a hand holding the detector with the battery compartment open. Two AA batteries are being inserted, with the '+' terminal facing up.

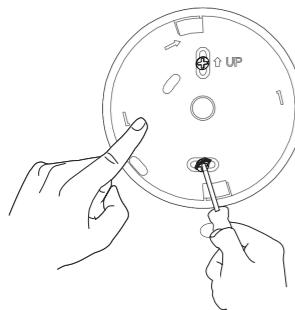


— 07 —

2)The detector is for either wall mounting.  
 3)Draw a horizontal or vertical line of 4in(10cm) on intended positions for installation.  
 4)Align the 2 longest holes on mounting bracket with the line, and make markings on the center (refer to Figure 8). Pay attention to the UP arrow if it's wall mounting.  
 Figure 8 shows a hand holding the detector with the mounting bracket attached. An arrow points to the 'UP' marking on the bracket, with the text 'holes for alignment' nearby.



5)Drill 2 holes on the markings and insert the 2 plastic anchors into the holes, making them flush with the wall.  
 Attention: keep the detector away from dust when drilling.  
 6)Screw the mounting bracket into the wall (refer to Figure 9).  
 Figure 9 shows a hand using a screwdriver to screw the mounting bracket into a wall, with an arrow pointing to the 'UP' marking on the bracket.



— 08 —

7) Align the detector with the mounting bracket through the 2 protruding noses, turn it clockwise to fix (refer to Figure 10).  
 Figure 10 shows a hand holding the detector and turning it clockwise to align it with the mounting bracket.

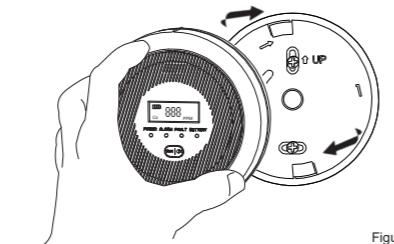


Figure 10

#### 4. Battery Installation & Replacement

Battery: 1.5V Alkaline AA LR6(PAIRDEER),  
 1.5V Alkaline AA LR6(PKCELL),  
 1.5V Alkaline AA LR6(LYNKCELL).

1) Turn the detector anticlockwise to remove it off the mounting bracket (refer to Figure 11). Take out the drained batteries.

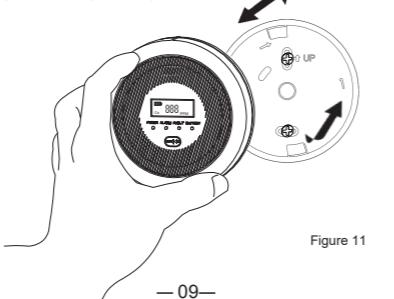


Figure 11

— 09 —

#### 2. Maintenance

- This detector is for CO detection, not for natural gas(methane), butane, propane or other combustible gases.
- Ensure sufficient power supply for the detector to work.
- Conduct periodic maintenance as per user manual.
- Clean the detector monthly with home vacuum cleaner along with a soft brush (refer to Figure 13).
- Never wipe the detector with chemical agents which could cause permanent damage. For example: Alcohol, Deionized water, sodium benzoate.

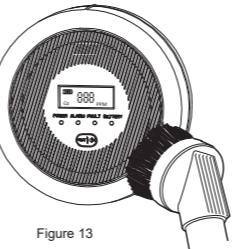


Figure 13

6) Never spray around the detector air freshener, hair gel, paint, etc.

7) This detector comes with limited lifespan, perform test by professionals half a year, and repair/replace in time as needed.

8) This product helps to reduce the occurrence of accidents, though it can't fully eliminate the risk. For your safety, take precautionary measures even if you use the detector properly.

— 11 —

#### 4. MORE ABOUT CO

##### 1. What is CO

1) After entering the human body, carbon monoxide (CO) will combine with hemoglobin in the blood to produce carboxyhemoglobin, which will prevent hemoglobin from combining with oxygen, thus causing hypoxia in the body tissues, leading to suffocation and death of the human body. CO is a toxic, colorless, and odorless gas, hence is easy to be overlooked and to cause poisoning.

##### 2. Symptoms of CO Poisoning

Mild: mild headache, weakness, chest tightness. Severe: severe headache, nausea, limb movement damage, severe headache, irritability, mental confusion, nausea, impaired visual acuity, muscle weakness, dizziness. Extremely severe: spasms, unclear consciousness, coma, collapse, death.

Warning: this detector may not prevent the chronic effects of CO exposure, and will not fully protect individuals with special risks.

##### 2. Basic Information

1) It is necessary to regularly open windows to maintain indoor ventilation, and install CO detector in appropriate positions, so as to detect the concentration of CO in the air in real time. If the detector sounds an alarm, it reminds people to leave the dangerous area to prevent CO poisoning.

2) Spaces where CO is easily present (refer to Figure 14), fuel burning appliances like portable heating appliances, gas or wood burning fireplaces, gas stoves, gas dryers.

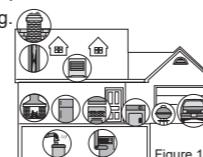


Figure 14

— 12 —

Damaged or poorly ventilated spaces: corroded or disconnected water heater ventilation pipes, leaking chimneys or flues, blocked chimney openings. Improper use of tools/equipment: barbecue in enclosed areas (such as a garage or enclosed porch).

#### 3. Harmful Effects to Human Body

- Nervous system: dizziness, headache, tinnitus, fatigue, Sleep disorder, memory loss and other symptoms of brain weakness.
- Cardiovascular system: Electrocardiograms can cause arrhythmias.
- Mental symptoms: indifferent expression, slow reaction, memory impairment, etc.
- Movement system: muscle weakness, unstable gait, spasm, etc.
- Respiratory system: Increased respiratory rate, increased heart rate leading to systemic hypoxia, etc.
- Visual system: blurred vision, narrowed pupils, etc.

#### 4. Countermeasures

When the concentration of CO in the ambient air exceeds the preset alarm activation value, the detector automatically enters continuous alarm status. At this time, the following measures should be taken:

- Immediately close the pipeline valve.
- Immediately open the window to circulate indoor air.
- Notify relevant departments and professionals in a timely manner for handling. If the alarm is found to be false, check if the installation position is appropriate.

— 13 —

#### 5. Alarm conditions

CO concentration	Without alarm before	With alarm before
30 ppm	120 min	-
50 ppm	60 min	90 min
100 ppm	10 min	40 min
300 ppm	-	3 min

#### 6. Cautions

- Do not disassemble the detector without permission, or it brings a risk of malfunction.
- Do not use heavy objects to suppress the detector, never drop the detector from high altitude.
- The detector cannot be used as a smoke detector.
- Never place it at a damp place.
- Place it beyond the reach of children.
- Avoid exposure to high electric voltage or strong magnetic fields.

— 14 —

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:

- This device may not cause harmful interference, and
- 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.