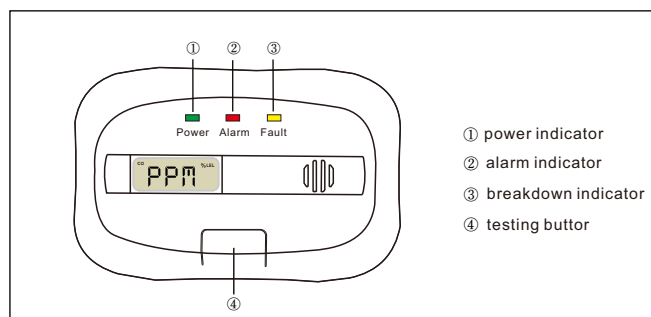


Product Overview

This product is the high stable Carbon monoxide detector (below abbr as the detector), it use for detecting the leakage of the carbon monoxide. It is made of the most advanced electrochemistry carbon monoxide sensor, it with high stability, sensitivity drift small such character. This product use the backlit digital LCD to display the alarm level. The detector can operates with the voltage between AC110-230V, after installing with the standby battery function. When the detector detects the carbon monoxide leaks and the thickness reach the default alarm level, the detector red LED flash and sounds. This product suits for the all the places that might produce the carbon monoxide.



Funtion Feature

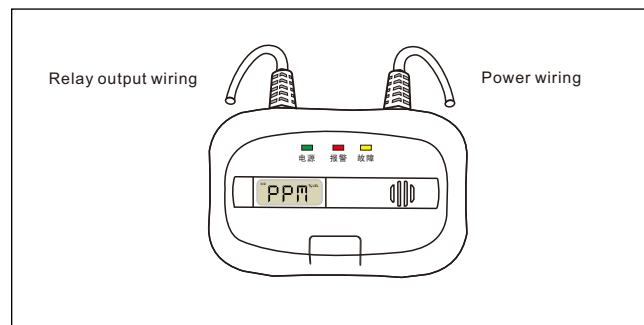
- LCD display the carbon monoxide alarm level
- Use the microprocessor control
- High reliability sensor design
- Breakdown automatic check indicate and display
- Alarm auto reset function
- Use SMT crafting,high stability
- With after-use battery standby function
- Wireless output(315M/433M)
- Relay output(3A/AC220V or 3A/DC30V)

Technical parameter

Operating voltage	AC110-230V,50~60Hz, 9V Ni-Mh rechargeable battery (optional)
Static current	20mA
Alarm current	200mA
Warm up time	about 60s
Alarm sensitivity	Never restart the source of a CO problem until it has been fixed. NEVER IGNORE THE ALARM! The CO sensor sensitivity and setting is: 30ppm within 120 minutes 50ppm within 60-90 minutes 100ppm within 10-40 minutes 300ppm within 3 minutes
Sensor	electrochemistry sensor
LCD display	display the alarm sensitivity/display the detected gas/ display the power supply way/begin to display when the carbon monoxide is more than 25ppm.
Indicator info	AC: the green LED lighting Alarm: the red LED flashing Sensor breakdown: the yellow LED lighting
SPL : ≥85db	≥85db
Enviroment temperature	-10°C~+50°C
Environment humidity	10%-90% (No condensation phenomenon)
Size	138-90-40mm
Mounting	wall mounting or

Wiring installing instruction

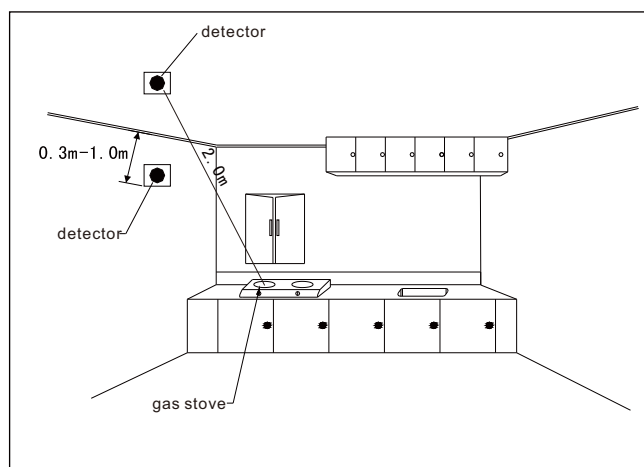
All the wiring installing need to follow the national or the local law and standard. The thickness of the wire stylet need to be properly. the improperly connection may lead the detector does not alarm when the carbon monoxide leak.



Alarm signal wiring connection diagram

Product Installing

1. This product suits for plug type mounting and wall mounting, choose the properly place, generally on the ceiling above where have the carbon monoxide, the distance is about 2m.

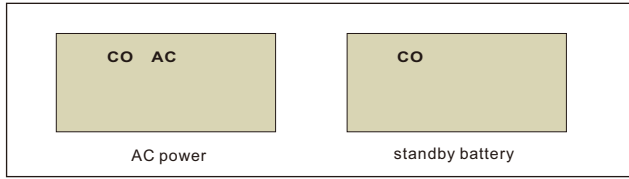


2. Static the installing support fix on the ceiling, and insert the detector on the installing support. Or choose the place where there is the plug board, and plug the detector on the plug board directly.
3. Home usage detector need to avoid installing near the gas stove, to avoid the detector be heated by the fire from the stove; avoid install in the place where has strong smoke, it might lead false alarm or effect the detector sensor's sensitivity; avoid install near the ventilating fans, windows and bathroom these high air flow areas.
4. The wiring connects need to follow the installing diagram, all the wiring need to follows the national and local laws, standards. The wiring thickness should be properly, the wiring connects the detector and the other assisted device should be marked colors, to avoid connect wrongly. The improperly wiring connection might lead the detector don't alarm correctly when it detect the leakage of the carbon monoxide.

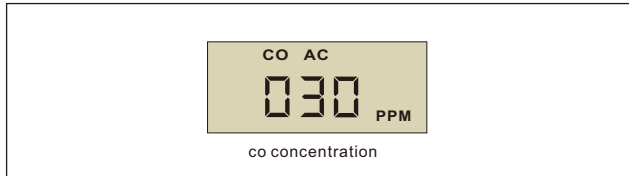
Operating instruction

1. Supply the detector with power. The detector enter the auto-check status, the green LED, red LED, yellow LED indicator flash 1 time at the same time, the buzzer sounds 'di' 1 time. Then the detector enter the warm-up status, LCD symbol display in turn, warm up need about 60s, the LCD back light close, LCD display the power supply and check the gas' chemical symbol, it means the detector enter monitoring status. Warm-up period prohibit use the gas to test. When the outside AC power stop to supply, the detector will automatic change the standby battery to supply. When the battery volume is too low, LCD will display the low battery volume mark, the green indicator will flash 1 time every 12s,and with the buzzer sounds 1 'di'.

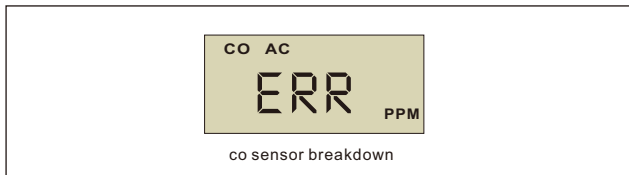
2. Standby status the LCD show as below:



3. When the carbon monoxide concentration level reach 30ppm, the LCD begin the display the concentration.

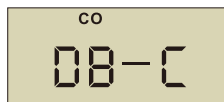


4. The sensor will automatic check the breakdown when it is working, if the sensor breakdown, the detector yellow indicator will lighting and the buzzer with the ceaseless sound 'di', and the LCD display as below:



Reference points calibration

1. The sensor use in the detector, it is the precision device. When it was strongly shocked or knocked, the sensor's reference points will change, and it will effect the detected correction. In this situation need to do reference points calibration.
2. Reference points calibration's operating guide:
 - A. Stop supply the power, if the detector have the standby battery, take it out.
 - B. Press the testing button and supply power to the detector.
 - C. After 4s sounds DEE and release the button, the detector enter calibration status, the green LED light flash quickly, and the LCD display as below:
 - D. After 1 min, the calibration is finish, the detector enter working status.
3. Cautions for reference points calibration
 - A. Before reference points calibration, assure the product have been burned in more than 24 hours.
 - B. Doing the reference points calibration should be in the clean air.



Warming condition and deal

When the concentration of carbon monoxide in the air have reach or access he alarm default concentration level, the detector will automatic enter the continual alarm status, now should do:

1. Turn off the pile valve immediately.
2. Open the windows to assure the room good ventilation
3. Turn off all fire seat, avoid anything that might sparking.
4. Avoid turn on/off all kind equipment.
5. Check the gas leakage reason, inform all related departments and the related professional person to deal immediately. If found it is false alarm, the user need to check the installing location is properly or not.

Lighting information

Red LED light flash	means the carbon monoxide leaks
Green LED light flash	means it is warm-up status
Green LED lighting	means it is working status
Yellow LED lighting	means the detector inside breakdown

Breakdown analysis and remove

Breakdown phenomenon	reason analysis	remove way
after supply power, the detector keep warm-up status	1. long time not supply power	1. supply power burn-in 24 hours
	2. warm-up period use the gas to test	2. prohibit use the gas to test during warm-up period
	3. the sensor reference points drifting	3. doing the reference points calibration
Yellow LED lighting, the buzzer keep sound	the sensor breakdown	contact the supplier to maintain
the magnetic valve can't turn off	the wiring connect wrong	follow the manual to connect the wiring correctly

Harm of the carbon monoxide

The carbon monoxide in the air, it with narcosis effect for the human central nervous system, the serious one might lead asphyxia even dead. When the human body inhale related concentration CO and time, it will have the symptoms as below:

- 50ppm it is the maximum concentration that the health adult can stand during 8 hours.
- 200ppm after 2-3hours, slight headache, feeble
- 400ppm frontal headache during 1-2 hours, after 3 hours, threatening the life.
- 800ppm during 45 minutes, dizzy, nausea, spasm, anesthesia during 2 hours, die during 2-3hours
- 1600ppm during 20 minutes, headache, dizzy, nausea, die during 2hours.
- 3200ppm during 5-10 minutes, headache, dizzy, nausea, die during 30minutes.
- 6400ppm during 1-3 minutes, headache, dizzy, nausea, die during 5-10minutes.
- 12800ppm die during 1-2 minutes.

Cautions

1. This product is the carbon monoxide detector, can't use for testing the natural gas, LPG, etc.
2. This products cant be shook strong or knocked, otherwise it might lead the product can't work correctly.
3. This product must have the correct wiring connection and the correct power supply.
4. This product need to follow the manual to do the scheduled maintenance.
5. Please use the dust collector to clean the dust on the detector's surface 1 time per month.
6. Don't use the detergent or solvent to wipe the s ensor, the chemicals might destroy permanent or temporary pollute the sensor.
7. Avoid sparge the air freshener, hair gel, paint or other sprays near the sensor.
8. The detector's life is not unlimited, should ask the professional person to test 1 time each half year, once find the detector doesn't work, need to maintain or change the new one.
9. This product can reduce the accident happening, but not assure everything. For your safe, except using this product correctly, you need to keep caution and strengthen the safety consciousness.