



INSTRUCTION MANUAL EN

Gas and carbon monoxide ProtectSensor3000 2in1

Operating, storage and transport environment:	-10°C~55°C; <95%
Atmospheric pressure:	86~106kPa
Sampling method:	Natural diffusion
Alarm method:	Sound & light
Alarm volume:	>=85db at 3 meters
Typ:	B

3.WHAT IS CARBON MONOXIDE (CO)

Carbon monoxide (CO) is a highly poisonous gas that has no taste, colour or smell and therefore very difficult to detect with the human sense. CO kills hundreds of people each year and injures many more. It binds to the hemoglobin in the blood and reduces the amount of oxygen being circulated in the body. In high concentration, CO can kill in minutes. CO is produced from poorly burning appliances, such as:

- Wood-burning stoves
- Gas boilers and Gas heater
- Oil and coal burning appliances
- Blocked ues and chimneys
- Waste gas from car garages
- Barbecues

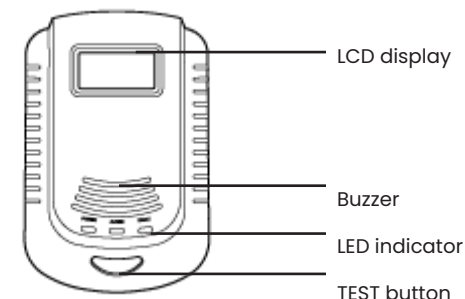
Symptoms Indicated by Carbon Monoxide Concentration Poisoning

CO Concentration	Rough inhalation time and symptoms developed
50ppm	Maximum concentration bearable in 8 hours for healthy adults
200ppm	Light headache, weak, dim eyesight and nausea after 2-3 hours
400ppm	Forehead pain in 1-2 hours, threaten life after 3 hours
800ppm	Dim eyesight, nausea and spasm in 45 minutes, lose consciousness in 2 hours, death in 2-3 hours
1600ppm	Headache, dim eyesight and nausea in 20 minutes, death in 1 hour
3200ppm	Headache, dim eyesight and nausea in 5-10 minutes, death in 25-30 minutes
6400ppm	Headache, dim eyesight and nausea in 1-2 minutes, death in 10-15 minutes
12800ppm	Death in 1-3 minute

4.WHAT IS COMBUSTIBLE GAS (CH4)

Combustible Gas is a general term for gaseous fuels, which are capable of burning and emitting heat for use by urban residents and industrial enterprises. Gas includes artificial gas (commonly known as town gas), liquefied petroleum gas (LPG), natural gas and so on. Methane (CH4): the main component of natural gas. Methane is physiologically harmless to humans, but has an asphyxiating effect. When its concentration in the air reaches 10%, it can suffocate people to death. Natural gas (methane) can explode when exposed to an ignition source when its content in the air reaches 5-15 per cent. The possibility of smelling gas prior to the apparatus giving an alarm.

5. PRODUCT APPEARANCE



WARNING

Demolition, replacement, damage to parts, collisions, may reduce or lose the detection function.

6.WHERE TO LOCATE THE GAS AND CO ALARM

Install the alarm in the kitchen/bedrooms or common activity places, or places where you think may generate or leak gas or carbon monoxide. It's suggested to install at least one alarm in each room of a multistory building to ensure everyone can hear the alarm in sleeping. Ideally, it is advisable to install a detector in every room that has a fuel-use appliance. However, if there are more than one burning appliances and the number of detectors is limited, the following points need to be considered when determining the location:

- If the bedroom has a burning appliance, you need to install a detector in the bedroom.
- If there is a chimney-free or common use gas appliance in the room, a detector must be installed in the room.
- If there is an electric appliance in a more-used room, such as a living room, a detector needs to be installed in the room.
- In a bedroom and living room, the detector should be as far away from cooking appliances and sleeping areas as possible.
- If the appliance in an infrequent room, such as a boiler room, the detector needs to be installed outside the room so that the alarm sound can be heard easily. Detectors and fuel use appliances should be located in the same room. If the detector is mounted on a wall, its height should be higher than any window or door, but it must be at least 150mm from the ceiling. The detector is at least 1m to 3m away from the potential gas source. If there is a partition in the room, the detector should be on the same side of the partition as the source of potential gas. The detector should be located very close to the area that the occupants often breathe.

WARNING

- Drop, collision, may or complete loss of detection function. Please avoid the following places unsuitable to install an alarm to avoid the damage or unnecessary false alarm or no alarm.
- Do not install the alarm behind drape or furniture
- Do not install the alarm in a path of air discharged from a furnace or air conditioning vent or ceiling fan
- Do not install the alarm in places that the temperature can easily drop to -10 °C or rise to over 55 °C
- Do not install the alarm in places with much lampblack or dust, which will easily block its sensor
- Do not install the alarm in too moist places
- Do not install the alarm directly above a sink or cooker

This instruction manual contains important information on starting operation and using the device. store this manual in a safe place for future reference. The instruction manual is a part of the device – bear this in mind if you pass on this device to others. Please take a few minutes to thoroughly read the manual and familiarize yourself and your family with its operation

1. PRODUCT INTRODUCTION

The product is a smart carbon monoxide and combustible gas combined detector with voice prompt, insert the voice chip, microprocessor control, supports displaying of the gas concentration. This product is used to detect both the toxic carbon monoxide gas and combustible gas (such as liquefied petroleum gas, natural gas, methane, etc.). When triggered by the detector, it will alarm with built-in siren. This detector adopts catalytic combustion method sensor and electrochemical sensor which is stable and reliable.

WARNING

Exceeding the temperature and humidity allowable range may reduce or lose the detection function.

2. TECHNICAL DATA

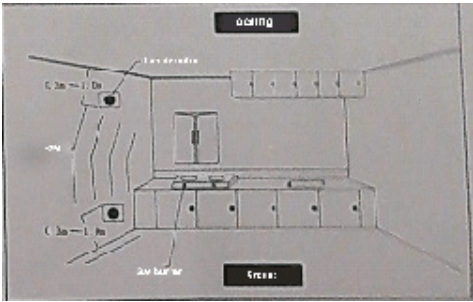
Power supply:	AC 100~240V, 50Hz
Power consumption:	Max 5W
Standard:	EN50194-1:2009 & EN50291-1:2018
Gas detected:	CH4/CO
Max lifetime:	3 years
Sensors:	catalytic & electrochemical

7. INSTALLATION

This Gas and CO alarm is powered by AC 100-240V power supply.

- Please confirm the induced gas is heavier than air, or lighter than air. The gas is heavier than air : LPG etc., the gas is lighter than air: natural gas, marsh gas and etc.
- Choosing the suitable position to install the detector according to the gas specific gravity. Detecting the gas heavier than air: installation height from floor 0,3-1,0m, semi-diameter to gas source <1,5m; Detecting the gas lighter than air, installation height from ceiling, 0,3-1,0m, semi diameter to gas source <1,5m.

ceiling
gas detector
<3m
gas burner
ground



- Avoid installing the detector close to the following sources of interference: direct air flow from vents, fans, doors, windows, sources of steam, oil vapor, etc.
 - All wires installation must accord with the national and local effective laws and criteria. The wires must have the suitable size and colorful marks for avoiding connecting error. And unsuitable connection of wires will result in the alarm error while gas leaking happened.
- WARNING**
- Be sure to test the product to ensure that the detector is functioning properly.
 - Water mist or drip may cause electric shock and reduce the detection function.
 - Cut off the power supply will not be able to play the detection function.

8. OPERATION INSTRUCTION

8.1. First start

Connect the detector to 90V-240V power, then will light up the indicator light and voice prompt as „Welcome to use voice gas and carbon monoxide compound detector, for preheating“. It will display 3 minutes counting a when the gas detector is in starting-up.

8.2. Concentration displaying

The LCD screen will display the concentration when carbon monoxide gas over 30 PPM or combustible gas over 6% LEL (lower explosive limit, equal to 3000 PPM). When carbon monoxide gas over 1000 PPM or combustible gas over 20% LEL (equal to 10,000PPM), the LCD screen will display „HHH“ means the concentration is over 999PPM.

8.3. Alarm

CO-EN50291
50PPM, within 60 to 90 minutes
100PPM, within 10 to 40 minutes
300PPM, within 3 minutes
When the carbon monoxide concentration is above situation, detector will alarm and voice reminding „attention please, carbon monoxide gas leaking, please open the window and the door.“
When the combustible gas concentration is over 6%LEL (equal 3000PPM), this detector will alarming and voice reminding „attention please, gas leaking“, at the same time the LCD screen will show concentration.

8.4. Detector fault

When the detector is in a fault, the screen will display „ERR“ and the yellow indication light will light up.

8.5. Alarm in processing

When the concentration of carbon monoxide gas or combustible gas in the air reach over alarm standard, the detector will go into the alarm status, you’d better do as below:

- turn off the valve immediately
- open the door and the window for air circulation
- call your emergency services, if it’s a false alarm please check if your installation place of this detector is suitable or not.

WARNING

Please stop using permanently damaged alarm! Do not make unauthorized disassembly, repairing, or delivery to those authorized service points that are not designated by the manufacturer.

9. MAINTENANCE

This detector has been calibrated before leaving the factory, It is only necessary to clean its housing frequently during use, to ensure that the hole in front of the detector is not blocked by dirt or dust. basic maintenance is not required, when cleaning the detector housing, wipe it with a clean, soft-bristled or dry annel.

Do not use cleaners, bleach, or polishes. Maintained properly, the Gas and CO alarm will alert you to potentially hazardous CO or Combustible gas concentration in the home, for keep the Gas and CO alarm proper working, it is recommended:

- Test your alarm every month.
- Vacuum cleaning regularly to prevent dust.
- Do not use cleaning solutions on the alarm.
- Keep away from solvents or detergents.
- Avoid spraying air-freshener, hair-spray near the alarm.
- Do not paint the alarm.

ATTENTION:

The following substances can affect the sensor and cause false alarms: Benzene, Toluene, Ethyl acetate, Iso-butane, Iso-propanol, Ethylene, Hydrogen Sulphide, Hydrogen, Sulphur Dioxide, alcohol based products, paints, thinners, solvents, adhesives, hair-sprays, aftershaves or perfumes and some cleaning agents.

CAUTION:

This detector is designed for indoor use only, do not expose to rain or moisture, do not open or tamper the alarm as this could cause malfunction and risk of electric shock. Coverage detectors, improper use or maintenance may reduce or lose detection capabilities.

10. WHAT TO DO IN THE EVENT OF THE ALARM SOUND

WARNING:

Activation of the alarm indicates the dangerous CO or combustible gas level presence. If the alarm sounds:

- 1)Immediately move to fresh air outdoor or open all doors and windows to ventilate the area and allow the noxious gas to disperse. stop using all fuel-burning appliances, if possible, ensure that they are turned o.
- 2)Immediately inform all other people to evacuate to safe outdoor regions with fresh air and count noses, ask for help from first-aid agencies by dialing or other means, safely ventilate the house after first-aid personnel arrives to eliminate the dangerous source. non-professional person without oxygen supply and gas defense equipment shall not enter the dangerous regions again before the alarm removes the alarm status. If someone is poisoned or suspected of having been poisoned by carbon monoxide, please turn to the emergency medical institutions for help immediately.
- 3)If the alarm continues to sound, then evacuate the premises, alerting other occupants of the risk. Leave doors and windows open. Do not re-enter the premises.
- 4)Get medical help for anyone suffering the effects of carbon monoxide poisoning.
- 5)Telephone the appropriate appliance servicing and maintenance agency necessary, and the relevant fuel supplier on their emergency number, so that the source of carbon monoxide emissions can be

identified and corrected. Unless the reason for the alarm is obviously spurious, do not use the fuel-burning appliances again, until they have been checked and cleared for use by a competent person according to national regulations

WARNING:

The installation of the apparatus should not be used as a substitute for proper installation, use and maintenance of fuel burning appliances including appropriate ventilation and exhaust systems. This product cannot prevent, detect and control your gas appliance and exhaust system.

WARNING:

Gas and CO alarm could not function as a replacement of smoke alarm.

If multiple alarms occur again in 24 hours after a carbon monoxide leakage has occurred and been eliminated professionally, ask qualified agencies or professionals for troubleshooting your gas appliances and exhaust ventilation systems.

WARNING:

This detector is designed to protect individuals from the acute effects of carbon monoxide exposure. however, It may not prevent the chronic effects of carbon monoxide exposure and will not fully safeguard individuals at special risk or with specific medical conditions. If in doubt, consult a medical practitioner.

11. MANUFACTURER INFORMATION

Malis B. Machoński Sp.K.
Zbożowa 2E, Wysogotowo
62-081, Przeźmierowo, Polska
www.malis.pl

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