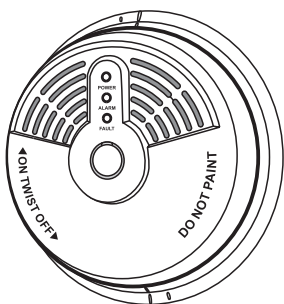


## PRODUCT INTRODUCTION

This product is an indoor combustion gas detector with high stability, hereinafter called detector, used for combustion gas leak detection. It uses highly stable semiconductor gas sensor with features of stable performance and low drift of sensitivity. When it senses combustion gas leak that reaches the set alarm level, it will give out alarm sound with red LED flashing. The detector is applied in indoor places where combustion gas leaks possibly happen.

## PRODUCT PROFILE



Wire harness connection instruction for detectors with relay output:

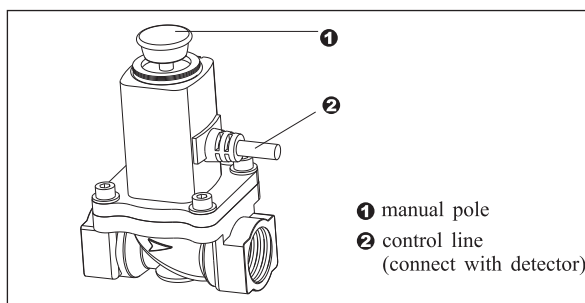


Red: power anode (DC), live wire (AC)  
Black: power cathode (DC), null wire (AC)  
White: COM (relay)  
Yellow: N.C. (relay)  
Orange: N. O. (relay)

Wire harness connection instruction for detectors with pulse output to drive solenoid valves:



Red: power anode (DC), live wire (AC)  
Black: power cathode (DC), null wire (AC)  
Yellow: cathode of solenoid valve  
Orange: anode of solenoid valve



Solenoid Valve (optional accessory)

## FEATURES

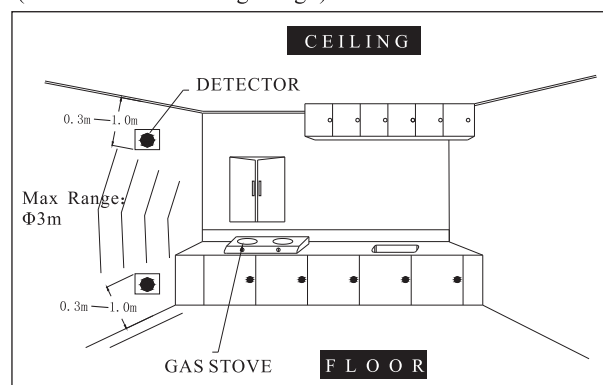
- Detects Natural Gas/LPG
- Ceiling Mounted
- Highly Stable Semiconductor Gas Sensor
- Adopts MCU Processing
- Manual Test/Auto Reset Functions
- Auto Check Malfunction
- High Capacity Relay (3A/250V)
- SMT Manufacture Technology, High Stability
- Comply to GB15322. 2-2003

## TECHNICAL SPECIFICATION

Type	DC Type	AC Type
Voltage	DC9-24V	AC220V
Working Envir.	-10°C ~ +55°C, 10%~95%RH(no congelation)	
Storage Temp.	-25°C ~ +55°C	
Alarm Level	6%LEL	
Error	±3%LEL	
Sensor	Highly Stable Semiconductor Gas Sensor	
Reset	Auto Reset (Leaked Gas Level<Alarm Level)	
Sound level	75dB/1m	
Output	Relay Output	Relay or Solenoid Valve Signal Output
Relay	1C(SPDT), Contact loads: 3 A 250 VAC/30 VDC	
Solenoid Valve Signal	DC12V 300ms	
Indicator	Power: Green LED ON Alarm: Red LED Flashing Fault: Yellow LED ON	
Dimension	Φ122mm*40mm	

## INSTALLATION

1. First identify your gas heavier or lighter than air.  
Heavier gases: LPG etc. Lighter gases: natural gas, marsh gas, artificial coal gas etc.
2. Choose a suitable installing position according to gas specific gravity. Detecting heavier gases, installation height 0.3-1.0m from floor, semi-diameter to gas source <1.5m; Detecting lighter gases, installation height 0.3-1.0m from ceiling, semi-diameter to gas source < 1.5m (refer to the following image).



3. Fix the attached base into a wall firmly with screws and hang the detector.
4. Do not make it close to gas stoves when installing at home in case it is roasted by flame. Neither places with heavy oil or smoke that may cause false alarms or block the gas convection holes and influence the detector sensitivity. Also it is can not be installed near to exhaust fans, windows, doors, and places with great vapor in bathrooms.

5. Connect the wires correctly according to the wire harness instructions. All wiring and installation must accord with the National and Local laws and criteria. Improper connection will cause the detector not alarm while gas leaking.

## OPERATION INSTRUCTION

### 1. WIRING

Confirm the detector working voltage and output type by the label in the detector reverse.

DC type detector: 9-24V DC.

AC type detector: 220V AC.

A 5-PIN wire harness is attached in the gift box.

### NOTICE:

The detector can not have Relay output and Pulse output for Solenoid valve simultaneously. Check the reverse label for the detector output type and pay attention to connect the wires correctly as per the connection instruction.

### 2. FUNCTION

- 2.1 Connecting the power, the power LED constant green on. After the buzzer gives out a Di sound, the circuit enters into warm-up state. The red LED and yellow LED flash alternately during warm-up and stop in about 3 minutes, which indicates that the detector enters into normal working state. Test is forbidden during warm-up time.

- 2.2 When any combustion gas leak happens and reaches the alarm level, the alarm LED flashes red and meanwhile the buzzer gives out “Di...Di” sound. If the detector has output function, the relay output will be activated or pulse signal will be sent out to shut off the connected solenoid valves .

- 2.3 If an inside sensor failure occurs, the yellow LED constant on and the buzzer long beeps. Switch off the power and contact your dealer for maintenance. Do not take the detector apart privately to prevent electrical shocks.

### 3. TESTING

- 3.1 The detector has a self-test button for checking if the LEDs and the buzzer can work normally. When pressing the test button, the red & yellow LED flashes alternately and the buzzer gives out alarm sound and the output is activated if with the function.
- 3.2 It is forbidden to test with a lighter directly toward the gas convection holes. This will cause damage to the inside sensor. Instead, gather the gas from the lighter into an empty plastic mineral water bottle and release the gathered gas toward the gas convection holes for testing.

## FAILURE REASONS & SOLUTIONS

Failure	Reasons	Solutions
Keep warm-up after power on (LED flashing continuously)	1. Unpowered for a long time 2. Test with gas in warm-up time	1. Energized for 24h 2. Do not test with gas in warm-up time
Yellow LED on & buzzer long beeps	Sensor failure	Contact your dealer for maintenance
The solenoid valve not shut off	The cathode and anode of solenoid valve output wires connected wrongly	Connect the wires correctly according to this manual

## ALARM TREATMENTS

When the concentration of natural gas or LPG in ambient air reaches or exceeds the alarm level, the detector will enter into constant alarm state. Below treatments are advised:

1. Shut off pipe valves.
2. Do not plug or unplug electrical appliances.
3. Open windows to circulate air.
4. Inspect the gas leak reason and notify related departments in time to deal with the leak by professionals. If it turns out a false alarm, check if the installation position is improper.

## NOTES

1. The detector is for combustion gases detection. It can not be used to test CO etc. poisonous gases.
2. Correct power supply must be provided and the wires must be connected right. It can not work without normal power supply.
3. Mild heat-up in housing surface is normal at working time.
4. Do maintenance as per this manual Periodically.
5. Vacuum the dirt in the detector surface every month.
6. Do not use cleansers or solvents to clean the detector. Chemicals may cause permanent damage or transient pollution to the sensor.
7. Do not spray air-freshers, hair gels, paints or other aerosols near the detector.
8. To assure the detector sensitivity, the detector should be inspected by a profession every year. If it fails to work, repair or replace the detector asap.
9. The service life of the detector semiconductor gas sensor is 5 years. Replace the detector immediately when the service life expires.
10. The detector can reduce accidents happening, but can not guarantee 100% safety. For your safety, besides proper usage of the detector, pay attention to build up safety conscious and take preventive measures in daily life.