

# smanos®

## Gas Leakage Detector

### GD8800



User Manual

#### Introduction

This is a high-stability combustible gas detector (detector in abbr.), which is used for detecting the leakage of combustible gases. The detector adapts up-to-date low current semiconductor gas sensor, with advantages of stable working, long service life, and easy installation. It can detect leaking gas in time and give out alarm signal with voice warning message and strobe light. The product is applicable to residential areas, buildings, villas, hotels, apartments and any places where the combustible gas exits.

#### Features

- High reliability sensor
- Strobe alarming with preset voice warning message
- Auto reset
- MCU processing
- Automatic testing indication for malfunctions
- Natural gas / LPG induced

#### Overview



- ① Malfunction LED (Yellow)
- ② Normal working LED (Green)
- ③ Alarm LED (Red)
- ④ Built-in siren
- ⑤ Reset / Test button
- ⑥ Gas convection window

#### LED Indication

Red LED flashes	Gas leaking
Green LED flashes	Warm-up state, inner sensors operating
Green LED on	Working state
Yellow LED on	Inner malfunction

**Note:** The yellow indicator flashes and the loudspeaker plays the malfunction voice message and siren sound when the invalidity of internal sensor is detected. Press the test button (or shut off the power supply, and then power on again), the detector will power on self-test.

If the malfunction LED indicator still keeps flashing in yellow after the above operation have done, please power off the detector and contact after-sales service centre in time.

#### Pair with Control Panel

Please pair the detector with control panel before use.

- ① Make sure the control panel enters pairing state (Please refer to the relative user manual).
- ② Power on the detector and then press its test button to send out wireless signal, the pairing is successful when a beep is heard from panel.

After Pairing, the control panel will alarm immediately when receive alarm signal from the detector.

#### Working State

While the detector is powered on, it will enter self-testing state first (the green / red / yellow LED indicators flash once at the same time and siren beeps once when testing is normal), and then the detector enters warm-up state ( the green indicator flashes once per second ). In about 3 minutes (3-10 minutes if haven't use it for long time), the siren gives out a long beep, and the green indicator lights up constantly, which indicates the detector enters into the working state.

#### Alarm

The detector will send out wireless alarm signal if any condition below is happened:

Situation	LED indication	Voice warning message	Siren
Press the test button in warm-up state	Yellow and red flash once at the same time first and then off	/	/
Press the test button in working state	Yellow and red indicator flash once at the same time first, then the red indicator keeps flashes until the voice message was played and the alarming was over	Plays twice	Sounds 10 seconds
The gas leakage reaches the alarming density level	Red indicator keeps flashing	Plays in turn	Sounds in turn

**Note:** After the gas is eliminated, the detector returns to normal automatically. When alarming, if you press down the reset button, the loudspeaker stops alarming reminder, but the red indicator keeps flashing until the detector returns to normal working state automatically.

## Testing

Spray a small amount of lighter fluid near the gas detector sensor. Do not spray the sensor directly, just spray near it at least 2.5 cm (1 inch) away from the detector. Spray for at least four seconds more if the detector has not sounded after the initial spray. If it has not turned on after four seconds, the detector is faulty. Replace the faulty detector with a new one.

## Emergency Alarm Treatment

The detector alarms while the gas density in air beyond the set density. The relative treatments are as below.

- 1 Shut down the tube valve right away.
- 2 Open the window and make the air flow rapidly.
- 3 Extinguish all fire sources and do not use anything that can make fire, e.g. lighters, matches, etc.
- 4 Avoiding switch on / off any electrical appliances.
- 5 Check the reason of gas leaking, and inform the relative departments and professional persons in time.

## Maintenance

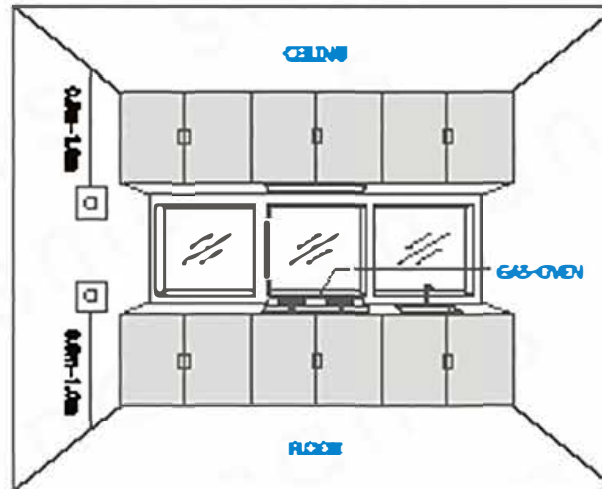
The user must brush and clean the gas convection window with a little cleanser every three months, avoid the cleanser into the detector in the cleaning process, and must reset the detector after cleaning.

## Installation

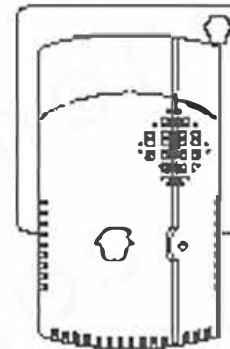
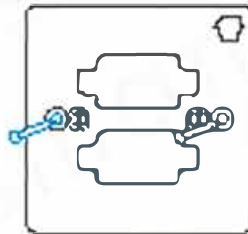
- 1 Mount the detector on the wall according to density of the detecting gas.

To detect gases which is lighter than air (like LPG): mount it 0.3-1.0m below ceiling, within 1.5m radius to gas source.

To detect gases which is heavier than air (like natural gas, marsh and so on): mount it 0.3-1.0m above the floor within 1.5m radius to gas source.



- 2 Fix the mounting plate to a stable position by screws, attach the detector to the plate, and check if it is firm or not.



- 3 Do not mount the detector to the gas oven lest it should suffer roasting from fire; do not mount it in position with much lamp back to avoid false alarm or air inlet louvers clogged which might affect the sensitivity of detector; do not mount it near to exhaust fan, door or window, bathroom, and other places with much water vapor.

## Notices

- 1 The detector must be installed and connected correctly. It can not work if the power supply is missed.
- 2 Please keep maintenance periodically according to the instructions.
- 3 The detector must be tested every half year.

For various reasons, including, but not limited to, changes in environment conditions, electric or electronic disruptions and tampering, the detector may not perform as expected. The user is advised to take all necessary precautions for safety and property protection.

## Specifications

Power supply AC100-240V/50/60Hz

Standby current < 30mA

Alarm current < 120mA

Power rating < 3W

Alarm density 10%LEL

Alarm density difference ±5%LEL

Alarm sound 75dB

Radio frequency 868MHz

Operating temperature -10°C ~ +55°C

Relative humidity < 80% (non-condensing)

Type of alarm voice warning message & strobe light alarm.

Output alarm signal

Dimensions (L x W x H) 120x70x40mm