

Qoltec[®]



INSTRUCTION MANUAL

INTELLIGENT GAS AND CARBON MONOXIDE LEAK DETECTOR

Model : 52578

INTRODUCTION

Thank you for choosing the Qoltec Intelligent Natural Gas and Carbon Monoxide Leak Detector. To ensure your personal and system safety and to obtain the best performance from your unit, please read this manual carefully and thoroughly before installing, using or repairing this unit. Pay particular attention to the warnings and cautions in the manual.

ABOUT THE PRODUCT

The combustible gas detector for domestic use uses a high quality gas sensor. The device was made using a powerful single-chip microcomputer, advanced electronic components and modern technology. Thanks to the hardware and software, the detector is able to detect sensor failure while monitoring gas concentration, ensuring a high level of safety and reliability.

The detector is suitable for installation in residential homes where there is a risk of gas leakage. It can continuously monitor the concentration of combustible gases in the premises. When the gas concentration reaches an alarm value, the device will give an audible and light signal, allowing quick action to be taken to prevent a fire, explosion or poisoning.

Figure 1

- 1 Status indicator
- 2 Life indicator
- 3 Button
- 4 Audible alarm openings
- 5 Gas detection openings
- 6 Power cable
- 7 Solenoid valve cable
- 8 Relay cable
- 9 Mounting plate

Note: If the product has an electro-valve and relay function, please note the following information. If not, they can be omitted.

INSTALLATION METHOD

Note : The detector is intended for indoor use only. It should be installed in areas where gas leakage or accumulation may occur. The detector should be mounted horizontally between 1m and 4m from the gas appliance and vertically between 0.3m and 1m from the ceiling. Users can choose the mounting location according to the diagram below, adapting it to the actual conditions.

1. Select a suitable place on the wall to mount the detector;
2. Use the wall plugs to fix the mounting plate;
3. Switch on the detector and check that it is working properly;
4. Mount the detector by hanging it on the mounting plate.

Illustration number 2

Attention:

1. The power cable is terminated with a plug, please plug it directly into a suitable socket.
2. The solenoid valve has polarity - the red wire is the positive pole, the black wire is the negative pole, please connect them according to the markings.
3. The relay has no polarity and does not need to distinguish between poles when connecting - it can be connected directly.
4. If the product has an electro-valve and relay function, take the above notes into account. Otherwise, they can be ignored.

Avoid installation :

- Near ventilation inlets/outlets, exhaust fans, doors or windows with strong air flow,
- Places with high humidity and exposed to water droplets,
- Directly above sources of heat or steam,
- Above gas appliances,
- Places that are easily soiled,

- Areas obstructed by obstacles.

Note : If the room is going to be painted or renovated, please do not install the detector until after the renovation or painting work has been completed.

Illustration number 3

OPERATING INSTRUCTIONS

1. Connect the detector to the power supply. The green power LED will flash during the 3-minute warm-up in which gas detection is disabled. After warming up, the green LED will remain on continuously and the detector will enter normal detection mode.
2. When the concentration of both gases reaches the alarm threshold, the red LED will flash and the detector will beep 4 times repeatedly until the alarm ends.
If the alarm threshold is reached by carbon monoxide only, the red LED will flash and the detector will emit 3 beeps repeatedly.
If the alarm threshold is reached by methane only, the red LED flashes and the detector emits 2 beeps repeatedly.

In the event of an alarm, immediately shut off the gas supply, open the windows, do not use any electrical appliances (including mobile phones) and move to a well-ventilated area. Contact a gas specialist if necessary.

3. The alarm will automatically switch off when the gas level falls below the safe value. An audible and illuminated signal indicates that the gas concentration standard has been exceeded.
4. If the yellow LED lights up continuously and the siren beeps every 10 seconds:
 - 3 signals - both sensors (CO and methane) faulty,
 - 2 signals - methane sensor faulty,
 - 1 signal - faulty carbon monoxide sensor.

In this case, the detector is not working properly. Contact the service centre or distributor.

5. To perform a self-test, press the button once. The siren will give 4 beeps and the yellow, red, yellow and green LEDs will flash in sequence (1 cycle). The detector will return to normal monitoring. If the self-test fails, contact service or the manufacturer.
6. If the yellow LED flashes and the siren beeps 3 times every 10 seconds, briefly press the button to perform a self-test:
 - If the green LED is on continuously and the siren is silent, this indicates the end of life of the CO sensor.
 - If the yellow LED continues to flash and the siren signals 3 beeps every 10 seconds, this indicates the end of life of both the methane and CO sensors.

Contact service or the manufacturer for repair or replacement.

7. Status of the light indicators.

<i>Mode</i>	<i>LED</i>	<i>Life indicator</i>	<i>Audible signal</i>
<i>Heating mode</i>	<i>Green LED flashes</i>	-	-
<i>Normal mode</i>	<i>Green LED on continuously</i>	-	-
<i>Self-test mode</i>	<i>Yellow, red, yellow and green flash in sequence (1 cycle)</i>	-	<i>4 beeps (1 cycle)</i>
<i>Failure mode</i>	<i>Yellow LED on continuously</i>	-	<i>CO+CH4: 3 beeps every 10 sec (continuous cycle)</i>
		-	<i>CH4: 2 signals every 10 sec (continuous cycle)</i>

		-	CO: 1 signal every 10 sec (continuous cycle)
Alarm mode	Red LED flashes continuously	-	CO: 3 signals every 2 sec (continuous cycle)
		-	CH4: 2 beeps every 2 seconds (continuous cycle)
		-	CO+CH4: 4 beeps every 2 seconds (continuous cycle)
Period of use	Yellow LED flashes continuously		3 beeps every 10 seconds (continuous cycle)

TECHNICAL SPECIFICATIONS

Standard	EN 50194-1:2023
Operating voltage	AC 100V~240V / 50Hz~60Hz
Application	Methane (CH4) / Carbon monoxide (CO)
Sampling method	Free diffusion
Sensor type	Semiconductor(CH4) / Electrochemical(CO)
Sensor lifetime	5 years (typical CH4 value) 3 years (typical CO value)
Alarm volume	7%LEL±3%LEL(CH4) / 70±30ppm(CO)
Alarm mode	Sound + light
Alarm sound level	≥85dB (1 metre ahead)
Mounting	Wall-mounted
Storage temperature	-20°C~55°C
Working environment	Temp: -10 °C ~ 40 °C Relative humidity: <95% (non-condensing) Ambient pressure: 86 kPa ~ 106 kPa
Dimensions	112mm*86mm*33.5mm

TROUBLESHOOTING

Fault	Possible cause	Solution
Green power LED is not lit	The power cable is not connected correctly	Check and correctly connect the power cable
	Defective power diode or circuit failure	Contact distributor or manufacturer for repair
No sound or light alarm during self-test	Circuit failure	Contact distributor or manufacturer for repair
No response to the detected gas	Detector is warming up	Wait for warm-up to complete
	System fault	Contact distributor or manufacturer for repair
	Power interruption too long	Switch on power supply and wait at least 4 hours
	Gas concentration has not reached the alarm value	Wait until gas concentration reaches alarm threshold
Continuously alarming after turned on and time-lapse	Presence of large quantities of cigarette smoke, alcohol or volatile organic compounds (e.g. petrol, perfume, banana oil, paint)	Move to a clean, well-ventilated area and try again
	System failure	Contact distributor or manufacturer for repair

For failures that cannot be repaired yourself, do not dismantle the detector. Contact the distributor or manufacturer for assistance.

NOTES:

1. Large amounts of cigarette smoke, alcohol or volatile organic compounds such as petrol, perfume, banana oil or paint in the room can cause false detector alarms;
2. Do not use gases of unknown concentration to test the detector. Gases with very high concentrations can damage the detector, shorten its life and harm your health;

3. Contact your distributor or the manufacturer for assistance and use appropriate gases of the correct concentration to test the detector annually;
4. The product must not be used or stored in an environment containing corrosive gases (e.g. chlorine);
5. Regularly clean the detector surface of dust and oil contamination with a brush or dry, soft cloth;
6. After prolonged storage or transport, switch the detector on and leave it for at least 24 hours to achieve optimum performance;
7. Under normal operating conditions, the solid-state sensor lasts up to 5 years and the electrochemical sensor up to 3 years.

Product maintenance

1. Clean the detector at least once a year, making sure the gas inlet is free of dust and oil;
2. After cleaning, re-mount the detector on the mounting plate and check its operation;
3. Carry out an analogue alarm test every six months to ensure correct operation;
4. Do not expose the detector to high concentrations of gases for long periods of time or frequently, as this can reduce the sensitivity of the detector, shorten its life or damage it;
5. The detector should be connected to a stable power source;
6. In the event of a malfunction, contact the distributor or manufacturer for repair or purchase of a new unit.

Disposal

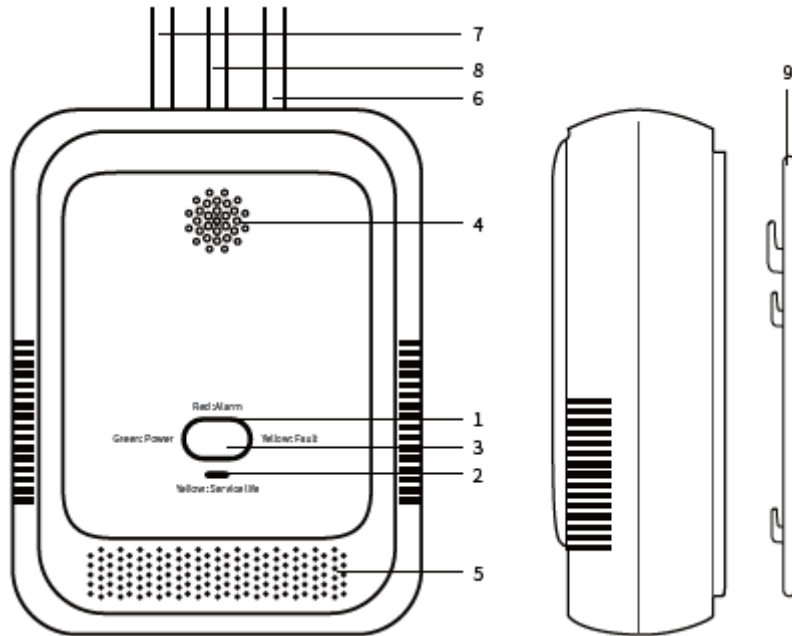
Dispose of in accordance with local electronic waste regulations. Do not throw into fire or incinerate.

Warranty

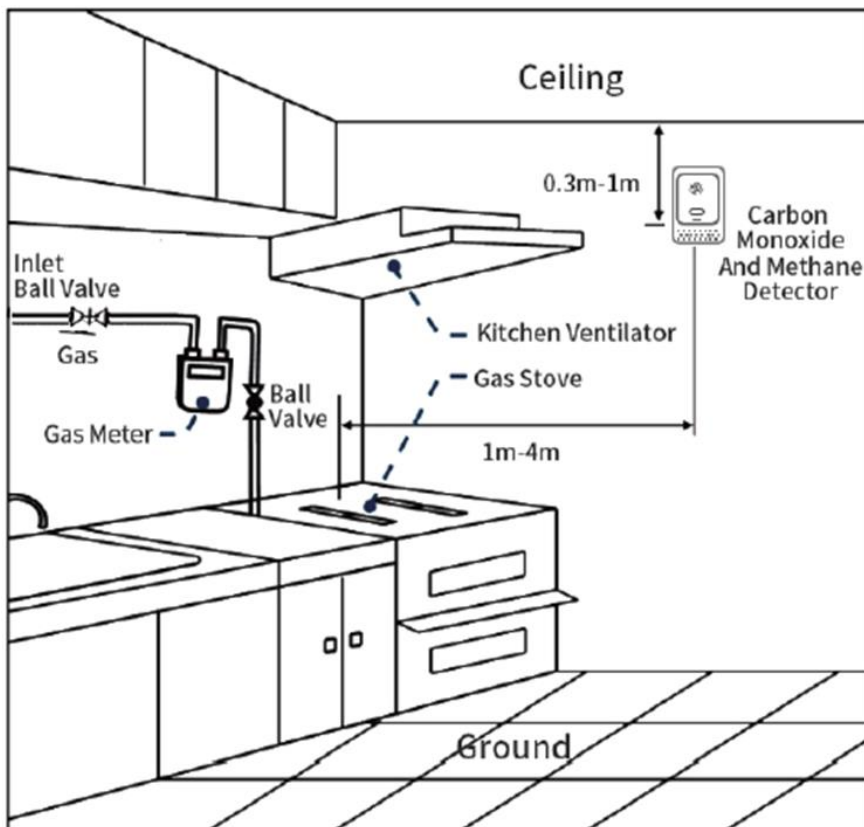
The product is covered by a 24-month manufacturer's warranty from the date of purchase. In case of problems, please contact customer service.

Attachement

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