











**GB** INSTRUCTION MANUAL**GA102 GAS ALARM 12V DC / 230V AC****"IMPORTANT! READ THE INSTRUCTIONS CAREFULLY BEFORE USE.**

Congratulations on the purchase of your new gas alarm. We recommend that you take the time to read this manual so that you fully understand all the features. You will also find some tips and advice to help you solve any problems and how to avoid them. Please read this entire manual carefully before installing the product and save it for future reference."

**PRODUCT DESCRIPTION**

The purpose of the gas alarm is to detect leaks of natural gas, gas pipes and gas containers. It is intended for installation in homes and caravans. The alarm is connected to a power source with the 230V AC/12VDC adapter or to a 12V-24V DC system. When used in caravans, the batteries in the caravan should be charged regularly to prevent the alarm from running out of power. The alarm comes complete with brackets, screws and mounting plugs."

**FEATURES**

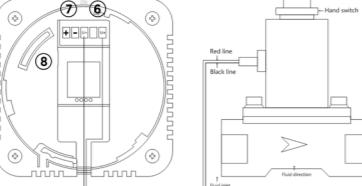
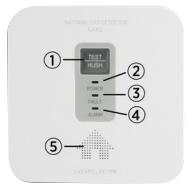
- Easy installation and maintenance
- Detects methane, propane and butane.
- Test and pause function
- Loud alarm signal 85 dB
- Solenoid valve control.
- Sensor with 5 year lifetime
- 5 year limited warranty
- CE, EN 50194-1:2009

**TECHNICAL DATA**

Model number:	GA102
Detection principle:	Electrochemical
Current source:	220-240V AC / 50 Hz or 12V-24V DC
Power consumption:	<=2 W
Alarm level:	10% LEL
Alarm signal:	85 dB / 3 m
Alarm:	Sound, visual & pulse signal for solenoid valve
Pause time:	10 min
Temperature range:	-10 °C to +55 °C
Humidity:	<= 95 %
Dimensions (mm):	99 x 99 x 3
230V adapter:	Included (1.5 metres)"

**THE DEVICE DETECTS METHANE, PROPANE AND BUTANE WITHIN:**

- Liquefied petroleum gas, also called LPG, (composed of C3H8 - propane and C4H10 - butane)
- Natural gas is also called LNG (composed mainly of CH4 - methane).
- Coal gas (composed of CH4 - methane and air)

**NUMBER**

NUMBER	NAME
1.....	Test/pause
2.....	On, Normal (Green)
3.....	Error (Yellow)
4.....	Alarm (Red)
5.....	Sound
6.....	Output to solenoid valve 10VDC
7.....	Input 12-24V 2-pole
8.....	Input adapter

**AVOID**

- Do not cover the gas alarm with any object.
- Make sure that the gas alarm does not come into contact with moisture.
- Protect the gas alarm against strong magnetic or electric fields or strong mechanical stresses and shocks.

**PLACEMENT OF THE GAS ALARM**

The gas alarm is designed for indoor use in dry areas where there may be a gas leak. It is to be mounted on the wall. It is important that the alarm signal can be easily heard in the event of a leak. For natural gas detection, the alarm should be installed 15-30 cm below the ceiling, max 6 m from the gas source.

For detection of LPG (liquefied petroleum gas, propane etc.) the alarm should be mounted 15-30 cm above the floor, max 4 m from the gas source. Priority areas are the kitchen, garage and camper.

**THE GAS ALARM SHOULD NOT BE PLACED IN THE FOLLOWING LOCATIONS:**

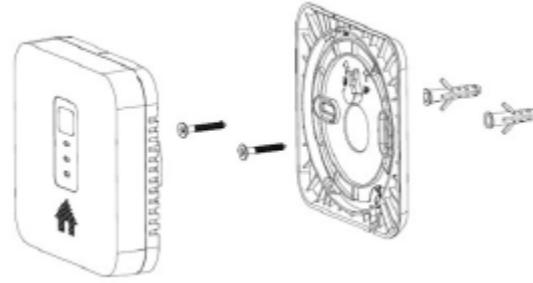
- Locations where the temperature may drop below -10°C or rise to +55°C.
- Do not place the alarm in areas with fans, doors, windows, etc.
- Locations with humid air such as bath and shower rooms, where the relative humidity may reach over 95%.
- Outside the buildings, e.g. monitoring open cans of gas in containers.
- Covered surfaces (e.g., in cupboards or behind curtains), as the gas alarm may be prevented from detecting a gas leak.
- Areas where dust or dirt can enter the sensor.
- Directly over a stove, sink or drain.

**INSTALLATION OF THE GAS ALARM**

Make sure that there are no electrical cables or wires near the mounting location.

- Take the back piece and mark the two mounting holes.
- Drill holes on the markings.
- Insert screw plugs into the holes. Screw the back piece to the surface; do not screw too tight.
- Screw the gas alarm onto the back piece.
- Connect the gas alarm to an outlet with a 230V adapter or a 12V-24V system. The gas alarm first performs a self-test; the LED flashes green for about 3 minutes.

**N.B.!** Once the self-test has been performed, the LED lights green, indicating that the alarm is working properly and ready for use.

**USING THE GAS ALARM**

Important: If you are unsure of the type of gas you are using, or if you have problems with the installation of the alarm, a qualified person must install the gas alarm.

- In normal operating mode : Green LED lights up, indicating that the detector is in operation.
- Upon the detection of gas, alarm: Red LED flashes and the detector emits alarm signal & pulse signal for solenoid valve.
- In fault mode: Yellow LED lights up.
- In the event of a low-voltage fault, the yellow LED flashes every 30 seconds and the buzzer beeps simultaneously.

The alarm has a tamper alarm, when the alarm is dismantled, the green LED lights up and the yellow LED flashes three times every 30 seconds and the alarm sounds three times in succession.

When the device has a sensor fault, low voltage fault or tamper alarm, press and hold the test button for more than 1 second; the device will go into interference-free mode and no sound will be heard. Sensor failure, low voltage failure does not interfere for 9 hours, tamper alarm does not interfere until the unit is properly installed.

However, you can prevent it from being disassembled by removing a pin. If you then want to take the unit down, it must be unlocked with an implement such as a screwdriver.

If gas is detected, the alarm output is triggered. The output (6) emits a 10VDC pulse signal that can be used to control e.g., a gas valve or external siren.

**N.B.!** When the alarm has reached its lifetime of 5 years, it should be replaced.

**TESTING THE GAS ALARM**

It is recommended that you test the gas alarm once a week to make sure it is working. Use the gas from a cigarette lighter and let it spread around the sensor located at the bottom of the holes on the left side. You will hear a loud pulsating alarm and you may see the LED flashing red. This indicates that the gas alarm is working correctly. The alarm stops automatically when the air around the sensor is free of gas.

If the output is used for a solenoid valve, also test that this function works correctly. If you use the test button, hold it down for at least 8 seconds.

**WHEN THE ALARM SOUNDS**

- Extinguish all open flames, burning tobacco, candles, etc. immediately.
- If the gas alarm sounds, turn off the main gas tap, the gas valve on the container or the source of the leak, and open windows and doors to provide the best possible ventilation.
- Do not turn on or off any electrical devices (switches, torches, doorbells, telephones, internal communications or other equipment that uses electricity).
- Do not touch any power switches. It only takes a small spark to cause an explosion.
- Contact the supplier if the equipment continuously or repeatedly shows a gas leak. Do not use your telephone or other electronic device near or at a gas leak when notifying the supplier. If the alarm continues to sound even after the device has been properly reset and the cause of the leak is not obvious and/or cannot be corrected, you must leave the site and notify the supplier so that the installation can be tested and made safe and necessary repairs can be made.

**N.B.!** DO NOT open the main gas valve until the cause of the alarm has been identified and corrected.

**MAINTENANCE OF THE GAS ALARM**

Clean the gas alarm regularly to prevent dust accumulation. You can do this by using a vacuum cleaner with a brush. Carefully clean around the area with the holes on the front and sides.

**WARNING**

To prevent possible danger of electric shock or malfunction of the gas alarm, do not attempt to repair it yourself. Do not attempt to repair the unit yourself, as that will void the warranty! The lifetime of the gas detector is approx. 5 years.

**IMPORTANT DIRECTIONS**

- Follow the instructions and install the gas alarm correctly.
- Test the gas alarm every week.
- Make sure that your electrical circuits are not overloaded.
- You may smell gas before the gas alarm sounds. This product is sealed and cannot be repaired - tampering with the unit will void the warranty. If the device is faulty, return it to the store with a receipt.

**WHEN THE LAMP IS ON**

The device performs a self-test routine to ensure your safety. Any errors are indicated by the yellow LED flashing.

If the error indicator is triggered, check the following first:

- Is the ambient temperature outside the specified range (-10°C to +55°C)?
- Are there any other chemicals present in the air that may have caused the malfunction, such as a high concentration of oxygen or alcohol? If this cannot be verified, try the device in another room. If no error is indicated there, the problem is in the environment. If the error indicator is still active, then the problem is in the device itself.
- Has the gas alarm suffered internal damage?
- If the product is at the end of its lifetime? Has the gas alarm been used for approx. 5 years? Then it must be replaced.

**WARRANTY**

These gas alarms are warranted to be free from defects in material and workmanship under normal use and service for a period of five years from the date of purchase. The company has no obligation to repair or replace parts that require repair due to misuse, damage or changes that occurred after the date of purchase. Send the gas alarm with the purchase receipt, postage and return postage to the local dealer. In no event shall the company's liability arising from the sale of this gas alarm exceed the value of replacing the gas alarm, and in no event shall the company be liable for any loss or damage resulting from a defective gas alarm.

Sunmatic The Safety Company AB, shall have no liability for personal injury or damage to property or special, incidental, consequential or punitive damages of any kind resulting from a fire. The sole remedy of this limited warranty is repair or replacement of the detection product at Sunmatic The Safety Company AB's option. Under no circumstances will Sunmatic The Safety Company AB's obligations under other statutory compensation exceed the purchase price. Your gas alarm is not a replacement for property, disability, life or any other insurance. Adequate coverage is your responsibility. Discuss this with your insurance company. This does not affect your statutory rights.

This alarm is only suitable for private single-family dwellings and is not intended for multi-family dwellings or commercial or industrial properties.

Waste electrical equipment should not be disposed of with normal household waste. Recycle the waste if there are possibilities to do so. Check with your local authority or retailer for advice on recycling. New regulations will promote the recycling of waste, under the European WEEE (Waste Electrical and Electronic Equipment) Directive, which applies from August 2005.

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