

FireAngel[®]

User Manual

NG-9B NATURAL GAS ALARM

Detects gas from household appliances

NG-9B

**Do not ignore any warning from your Natural Gas Alarm!
Vacate the property and immediately call the UK Gas
Emergency Service Helpline 0800 111 999.**



Designed to meet:
BS EN 50194-1:2009

NG-9B
GN4729 / R2



A Sprue Brand

Sprue Safety Products Ltd.

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Note: This user manual is also available in large text and other formats. Please call **0800 141 2561** for further information.

**This NG-9B alarm detects Natural Gas
(also known as Methane, Flammable or Combustible Gas).**

FEATURES

- Battery powered for simple no fuss installation and maintenance.
- An advanced low power semi-conductor sensor designed to accurately measure Natural Gas in your home before explosive levels are reached.
- Detects Natural Gas continuously.
- Resistant to false alarms caused by normal household contaminants.
- Sounds a loud 85dB alarm (at 1metre (3 feet)) to alert you in case of an emergency.
- SmartTest / Silence & Reset button.
- Designed to meet BS EN 50194-1:2009.
- Will detect Natural Gas for 5 years before the alarm requires replacement.
- 5 year warranty.

NATURAL GAS

Natural Gas which is primarily Methane (CH₄), sometimes referred to as swamp gas, is lighter than air and will rise.

IMPORTANT: The gas alarm you have purchased is calibrated to detect Natural Gas. If your gas supply comes from a portable cylinder or storage tank it is more likely to be propane, butane or a mixture of these two Liquefied Petroleum Gases (LPG). **This alarm is not suitable for detecting LPG.**

Natural gas is dangerous when the concentration is high enough to become explosive. The lowest concentration point at which the combustible gas may become explosive is called the Lower Explosive Limit (LEL). FireAngel gas alarms are set to alarm when the gas concentration reaches 10% of LEL.

Natural gas is odourless, therefore additives known as stench agents are mixed with the gas so it can be smelt. This stench agent may be smelt at very low concentrations of the gas and therefore it may be possible to smell the gas prior to the alarm giving an alarm signal.

If your alarm is in alarm immediately telephone The UK Gas Emergency Service Helpline **0800 111 999**.

Tell the operator that you have a Natural Gas alarm in your home and it is in full alarm indicating that it has detected dangerous levels of gas in the air and you are concerned that gas is leaking.

Common Sources of Natural Gas:

- Cookers or other Gas powered appliances
- Boilers
- Gas Fires

Do not: Ignore any warning from your gas alarm!

WHERE TO INSTALL YOUR ALARM

The Natural Gas alarm is suitable for use in domestic premises and static caravans with a mains gas supply.



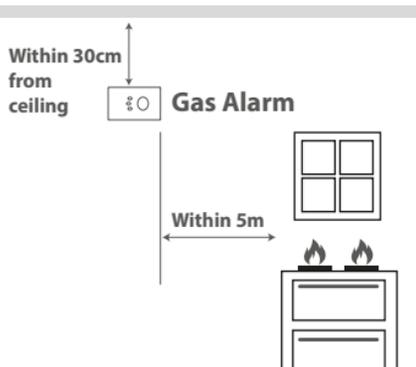
WARNING: This alarm will only indicate the presence of Natural Gas at the sensor. Natural Gas may be present in other parts of the property.

The alarm should be installed in any room where a gas leak is possible to occur. The most likely sources for a Natural Gas leak are cookers, boilers and gas fires.

Where in the room should the alarm be located?

Firstly you must confirm the type of gas in your home.

Your NG-9B alarm is designed to detect Natural Gas and is clearly marked with this gas type.



As Natural Gas is lighter than air it will naturally rise and build up at a high level in the room. The NG-9B alarm should therefore be placed above the highest window, door or vent in the room. Ideally within 30cm of the ceiling.

Do not locate your alarm:

- in an enclosed space (e.g. in a cupboard or behind a curtain);
- directly above a sink;
- next to a door or window;
- next to an extractor fan;
- in an area where the temperature may drop below $-10\text{ }^{\circ}\text{C}$ or exceed $50\text{ }^{\circ}\text{C}$;
- where dirt and dust may block the sensor;
- in a damp or humid location.

The alarm should not be installed immediately above or next to gas appliances since small gas releases may occur before ignition that may result in unwanted alarms. It should be noted that installation near cookers may lead to:

- alarms produced by cooking vapours and not gas escapes;
- contamination by grease that may impede the correct operation of the alarm.



Caravans and boats

IMPORTANT: Your NG-9B Natural Gas alarm has not been designed or calibrated to detect LPG which is most commonly found in caravans and boats and as such is not suitable for these vehicles.

HOW TO INSTALL YOUR ALARM

NOTE: This apparatus should be installed by a competent person who feels able to install it according to the instructions.

Firstly write the installation date on your alarm in the area provided. We recommend that your alarm is installed on the wall.

To mount on a wall:

Please ensure that you use the screws provided, as they were chosen specifically for use with this product. Use the template provided for guidance on marking hole positions. Drill holes into the wall. Insert the plastic wall plugs. Screw in the screws. Ensure screws are protruding from the wall by 3mm to allow alarm to slot onto screws.

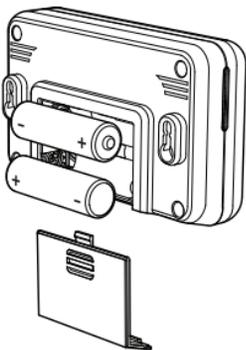
To place on a shelf:

The base of the alarm has been designed to allow it to stand freely on a shelf.

WARNING: When placing on a shelf, please adhere to the same positional recommendations as described above. Ensure the alarm is at the recommended height.

BATTERY INSTALLATION/ REPLACEMENT

- a If the alarm is already wall mounted then unhook it from the mounting screws.
- b Remove the battery cover located on the back of the alarm.
- c Replace the batteries with 2 x approved 1.5 volt AA size lithium batteries (see page 12 for recommended batteries), making sure the batteries are the correct way round.
IMPORTANT: Use of batteries other than those recommended may have a detrimental effect on the alarm's operation.
- d Replace the battery cover and return the alarm to its original position.



Press ridged area in and slide door out to reveal battery compartment

- e** If you have followed all of the above steps correctly, your unit will begin monitoring for Natural Gas immediately. The Power LED will flash green once per minute to indicate that the alarm is receiving power from the batteries and is fully operational.
- f** Test that the sounder is working and the batteries are providing power to the unit by pressing and holding the Test button for 1 second. The sounder should chirp once as soon as the button is pressed, the alarm LED will flash red and the power / fault indicator will flash green and yellow once to indicate that the alarm is working.

WARNING: Prolonged exposure to the sounder in close proximity to your ears may damage your hearing.

Under normal operating conditions, the batteries should last for at least 12 months. The alarm will not detect Natural Gas when the batteries are drained.

WARNING: Prolonged exposure to extreme high or low temperatures may reduce the life of the batteries.

OPERATING FEATURES

Your alarm offers many features which set it apart from other Natural Gas alarms on the market today.

Alarm Test, Silence and Reset Button

- Test the sounder, batteries and circuitry.
- Silence the sounder for 3 minutes (only when the gas detected is less than 20% LEL).
- Reset the red alarm LED after an alarm activation when the air is clear.

Testing the sounder, batteries and circuitry

Test the sounder, batteries and circuitry by pressing and holding the Test button

for approximately 1 second to confirm that the alarm is operating properly. The green, red, then yellow LEDs will flash, and the sounder will sound indicating that the alarm is working and the batteries are providing power to the unit. This test for the sounder, batteries and circuitry should be performed monthly.

Silence the alarm

The alarms loud sounder can be silenced for a short period (3 minutes) by pressing and holding down the Test button for approximately 1 second until the sound stops. The red alarm indicator will continue to flash every second.

To reset the alarm indicator

If the alarm has alarmed, once the air is clear the sounder will stop. It is possible that an alarm event may happen due to an intermittent occurrence when no one is in the building. The red led indicator will remain flashing until it has been manually reset.

To reset the red alarm press the Test button twice within 2 seconds. The red LED will turn off, should gas be detected, an alarm will sound within 30 seconds.

UNDERSTANDING THE PRODUCT'S INDICATORS

The product is designed to immediately alarm when it is exposed to flammable gas at a level of 10% of the Lower Explosive Limit (LEL) or higher.

When flammable gas is detected a loud audible signal will be emitted and the alarm LED will flash red every second.

Fault / End of life signal:

The unit continuously checks the settings of its sensor and circuitry. If any of these settings are found to be incorrect then the alarm will emit a audible chirp twice every 5 minutes for up to 30 days. Replace unit immediately.

IMPORTANT: This does NOT mean that the alarm has detected Natural Gas.

Low battery

If the batteries are low then the alarm will emit a single audible chirp every minute for up to 30 days. Replace batteries immediately.

If the product continues to chirp despite having new batteries and the product is still within warranty then contact **Technical Support on 0800 141 2561**. If the product is no longer in warranty replace it immediately!

LED Indicator Table

Status	 Power LED Green	 LED Red	 LED Yellow	Audible Signal	Action Required
Normal operation	 - every 25-30 secs				
Test button pressed	 - single flash	 - single flash	 - single flash	 - single chirp	
ALARM		 - every second		 - chirps rapidly on and off	Alarm: Check if there is a gas hazard and vacate property. Telephone Gas Emergency Service Helpline 0800 111 999.
Alarm has occurred, pending reset		 - every second			Reset alarm
Low battery			 - every 25-30 secs	 - single chirp every minute	Replace battery within 30 days
Fault / End of Life			 - every 25-30 secs	 - chirps twice every 5 minutes	Replace alarm immediately

MAINTAINING YOUR ALARM

Your alarm will alert you to potentially hazardous Natural Gas concentrations in your home when maintained properly. To maintain your alarm in proper working order, and to ensure that the sensor will last for the lifetime of the product, it is recommended that you:

- Test the sounder, batteries and circuitry of your alarm once per month by pressing and holding the Test button for 1 second.
- Gently vacuum the case with a soft brush attachment every 3 months.

To prevent the possibility of contaminating the sensor in your alarm and thus affecting its reliability:

- Never use cleaning solutions on your alarm. Simply wipe with a slightly damp cloth.
- Do not paint the alarm.
- Do not spray aerosols on or near the alarm.
- Do not use any solvent based products near the alarm.

Do not attempt to repair your alarm. Do not remove any screws or open the main casing of your alarm. Any attempt to do so may cause malfunction and will invalidate the warranty.

WHAT TO DO IN THE EVENT OF AN ALARM

WARNING: A loud alarm is a warning that potentially dangerous levels of Natural Gas are present. Never ignore this alarm, take immediate action.

Remain calm, and carry out the following actions:

- Extinguish all naked flames, including all smoking material;
- Turn off all gas appliances;
- Do not touch any electrical equipment, including the gas detection apparatus;
- Turn off the gas supply at the gas main control or the storage tank;
- Open doors and windows to increase ventilation;
- Do not use a telephone in the building where the presence of gas is suspected.

If the alarm continues to operate, even after an alarm resetting action where appropriate, and the cause of the leak is not apparent or cannot be corrected, vacate the premises and IMMEDIATELY NOTIFY the gas supplier and the gas emergency 24 hour service so the installation may be tested and made safe, and any necessary repair carried out.

Care should be taken with battery-powered apparatus, since the cessation of an alarm may be due to the battery being discharged, rather than a decrease in ambient combustible gas level.

The premises should be re-entered with care and only after checking combustible gas concentrations to confirm the absence of the hazard.

If the alarm stops and the reason for the alarm having sounded is identified, (for example a gas tap switched on with the burner unlit), after stopping the gas immediately telephone the UK Gas Emergency Service Helpline 0800 111 999. Advise that you have a Natural Gas alarm in your home and it is in full alarm indicating that it has detected dangerous levels of gas in the air and you are concerned that gas is leaking.

TECHNICAL INFORMATION

Alarm Specifications: Model NG-9B

Gas Detected: Type B - Natural Gas Alarm - also known as Methane, Flammable or Combustible Gas.

Sensor Type: Semi-conductor

Sensor Life: 5 years

Calibration: Calibrated to alarm at 10% LEL +/- 2.5% LEL

Alarm Sound Level: 85dB at 1m/3 feet

Recommended Batteries: Size AA Lithium, Duracell Ultra Lithium AA LF1500, Energiser Lithium AA L91, GP Lithium AA GP15LF

Battery Life: Exceeds 1 year under normal operating conditions, replaceable

Temperature Range:-10°C to 50°C

Operating Humidity Range: 5 - 95% RH

Weight (inc. batteries): 125 grams (4.4oz)

Designed to meet: BS EN 50194-1:2009

This Natural Gas alarm is designed to continuously monitor for Natural Gas. Replace unit after 5 years of operation.

DISPOSAL

Waste electrical products should not be disposed of with regular household waste. Please recycle where facilities exist. Check with your local authority, retailer or technical Support for recycling/disposal advice as regional variations apply.

The batteries should be removed before disposal of the alarm. Both the batteries and the alarm should be disposed of in line with current regulations.

WARNING: DO NOT ATTEMPT TO OPEN - DO NOT BURN.

WARRANTY

Warranty coverage

Sprue Safety Products Ltd warrants to the original purchaser that its enclosed Natural Gas alarm be free from defects in materials and workmanship under normal residential use and service for a period of 5 (five) years from the date of purchase.

Provided product is sent back to Sprue Safety products with proof and date of purchase, Sprue Safety Products Ltd hereby warrants that during the 5 (five) year period commencing from the date of purchase Sprue Safety Products Ltd, at its discretion, agrees to replace the unit free of charge.

The warranty on any replacement FireAngel Natural Gas alarm will last for the remainder of the period of the original warranty in respect of the alarm originally purchased – that is from the date of original purchase and not from the date of receipt of the replacement product. Sprue Safety Products Ltd reserves the right to offer an alternative product similar to that being replaced if the original model is no longer available

or in stock. This warranty applies to the original retail purchaser from the date of original retail purchase and is not transferable. Proof of purchase is required.

Warranty disclaimers

This warranty does not cover damage resulting from accident, misuse, disassembly, abuse or lack of reasonable care of the product, or applications not in accordance with the user manual. It does not cover events and conditions outside of Sprue Safety Products Ltd's control, such as Acts of God (fire, severe weather etc). It does not apply to retail stores, service centres or any distributors or agents. Sprue Safety Products Ltd will not recognise any changes to this warranty by third parties. Sprue Safety Products Ltd shall not be liable for any incidental or consequential damages caused by the breach of any expressed or implied warranty. Except to the extent prohibited by applicable law, any implied warranty of merchantability or fitness for a particular purpose is limited in duration to 5 (five) years.

This warranty does not affect your statutory rights. Except for death or personal injury, Sprue Safety Products Ltd shall not be liable for any loss of use, damage, cost or expense relating to this product or for any indirect, or consequential loss, damages or costs incurred by you or any other user of this product. The warranty does not cover the batteries which are considered user-replaceable parts.

