



12V DC OPERATED GAS ALARM (HOT WIRE TYPE) WITH AUXILIARY RELAY (Optical)



MODEL : MTG-3000H (GENERAL UNIT)
MODEL : MTG-3000HR (UNIT WITH RELAY)

IMPORTANT! PLEASE READ CAREFULLY AND SAVE.

This owner's manual contains important information on the correct installation and operation of your gas leakage alarm. Read this manual fully before attempting installation and retain for future reference.

PRODUCTION DESCRIPTION

The MTG-3000H Gas Alarm is intended to detect leakage of natural gas, town gas and bottled gas. It is intended for installation in private homes, caravans and motor caravans. The alarm is connected to a power source of 12V DC when used in caravans or motor caravans, and connected to the mains through an external transformer 230V AC/12V DC when used in houses. The alarm is supplied complete with mounting brackets, screws, rawplugs and with a transformer with 2m connection cable.

FOR USING INSIDE A CARAVAN AND MOTOR CARAVAN

Commonly occurring materials like: cleaning detergent, washing powder, serpentine, paraffin, gasoline, vapours of gases, cleaning fluids, polishes, etc. which may affect the reliability of this gas leakage detector. So, the unit must be kept far away from the above materials.

MAIN FEATURES

- Hot Wire Type Sensor
- Modernized Design
- Single &/Or Multiple Station
- Power & Alarm Indicator
- Relay Function, For General System Control Panel Wiring
- Loud Sound Signal of 85 Db At Alarm Mode
- One Normally Open/Normally Closed Form C Relay
- Ideal For All Kitchens
- Durable Sensor Head
- Less Affected By Other Organic Solvent
- Accessory Car Plug (Optional)
- Three-year Limited warranty

SPECIFICATION

Power Source	: DC12V +/-5%
Transformer	: Connected to AC230V, 50Hz, 9W, 12V DC 300mA
Sensitivity	: Corresponds to a concentration of 12% of the relevant lower explosive limit Propane 0.2% Butane 0.17% Methane 0.53%
Power Consumption	: 1.5W (In Alarm) 1W (Standby)
Operation Temperature	: -10°C-40°C
Current	: max. 150mA
Ambient Humidity	: max 95%
Dimension	: 74 x 74 x 36 mm
Horn Level	: 85 Decibels at 3 metres
Standby Mode	: Green LED ON
Alarm Mode	: Red LED flashes and an acoustic alarm
Fault Mode	: Yellow LED ON
Type Of Gas Sensed	: Natural gas, Methane, town gas, LPG (e.g. Butane, Propane)
Relay Rating	: 1A at 120VAC 2A at 24VDC

SUBSTANCES TO BE AVOIDED

- Do not cover the alarm with any object. This could diminish the performance of the sensor.
- Make sure that the alarm does not come into contact with moisture.
- Protect the alarm from strong magnetic or electric fields, or heavy mechanical strain and shocks.
- Commonly occurring materials like: cleaning detergent, washing powder, serpentine, paraffin, gasoline, vapours of gases, cleaning fluids, polishes, paints, cooking operation, etc. which may affect the reliability of this gas leakage detector. So, please keep the unit far away from the above materials.

LOCATING THE GAS ALARM

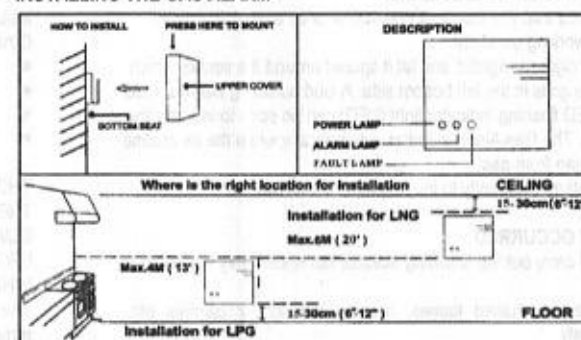
For detecting natural gas, the alarm should be installed 15-30 cm below the ceiling and the maximum distance away from the furnace or gas appliances is 6 metres. Make sure that the mains socket for connection of the 12V DC mains adapter is located max. 2m away from the installation position of the gas alarm. For detecting LPG, the alarm should be installed 15-30 cm above the floor and the maximum distance away from the furnace or gas appliances is 4 metres.

The recommended areas are kitchen, garage or recreational vehicle.

Areas to be avoided include the following:-

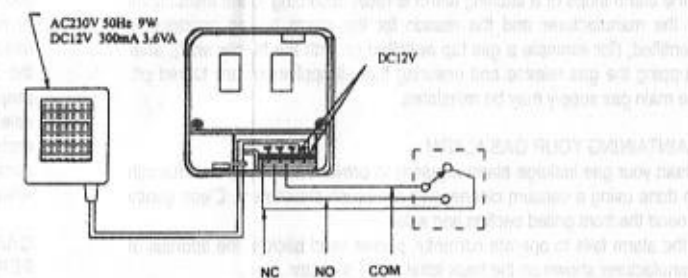
- Situations where the temperature may fall below -10°C or rise above 40°C
- Do not locate Gas Leakage Alarm in turbulent air from fans, doors, windows, etc.
- Humid areas such as bathrooms, shower rooms where the relative humidity may exceed 95%
- Outside buildings, e.g. to guard open crates of bottled gas.
- Enclosed areas (e.g. in cupboards or behind curtains), which could prevent the alarm from responding in the event of a gas leak.
- Areas in which dust or dirt can clog the sensor.
- Directly next to an oven, washbasin or drain.

INSTALLING THE GAS ALARM



- Electricity must be turned off at system supply before beginning installation to prevent electrical shock or equipment damage.
- Having established the mounting location ensure that there is no electrical wiring or pipe work in the area adjacent to the mounting surface.
- Take the mounting bracket and mark the two mounting hole locations.
- Drill holes in the positions marked.
- Insert wall plugs into the drilled holes.
- Screw mounting bracket to mounting surface. DO NOT OVER TIGHTEN.
- Connect the wires. See wiring diagram below)
- Connect the Gas Alarm to the mounting bracket by sliding on it.
- Connect the transformer to a 230V socket outlet. The Gas Alarm sounds within 5 seconds (self-test).
- When it stops, the green LED should light, and the Gas Alarm is ready for use.
- If you are uncertain which type of gas you use or you have problems installing the gas alarm you must have the alarm installed by a suitably qualified person.

FOR MTG-3000HR ONLY: DIAGRAM FOR CONNECTING RELAY



OPERATING THE GAS ALARM

Once the Gas Alarm has been installed a GREEN indicator light (LED) is on, and the Gas Alarm conducts a sound test itself, while the RED indicator light (LED) will be flashing quickly. After a few seconds, the Gas Alarm will be muted and then reset into normally mode after this period. Then the Gas Alarm is ready for use. If gas is detected the unit will emit a loud pulsating alarm and a RED indicator light (LED) will flash until the gas concentration in the air decreased to a certain level. This will happen before any risk explosion. If the power supply of 12V DC to the alarm has been disconnected, and then re-established, the alarm will conduct a self-test again. This function ensures the Gas Alarm is in proper operation when in use.

TESTING THE GAS LEAKAGE ALARM

It is recommended that you test your gas alarm once a week to ensure the detector is working correctly.

Use gas from a cigarette lighter, and let it spread around the sensor which is situated at the grills in the left bottom side. A loud pulsating alarm should sound and a RED flashing indicator light (LED) can be seen to indicate the correct function. The Gas Alarm will stop automatically when the air around the sensor is clean from gas.

Test your Gas Alarm frequently to insure proper operation.

WHEN ALARM OCCURRED

Keep calm, and carry out the following actions, not necessarily in the order given:

- Extinguish any naked flames, burning tobacco or candles etc. immediately.
- When the alarm signals are given under normal conditions, shut off the main gas tap, bottle valve, or leaking source and open windows and doors for perfect ventilation.
- Do not switch any electrical devices (light switch, torch, door bell, telephone, intercom, or other electric consumers) on or off.
- Touching electric switches is inhibited. Only a little spark could cause explosion.
- If leaking gas is indicated constantly or repeatedly, please contact your energy provider. Do not use the telephone or any other electrical device near or around the gas leak to notify the provider.

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

If the alarm stops or a latching alarm is reset according to the instructions of the manufacturer and the reason for the alarm having operated is identified, (for example a gas tap switched on with the burner unlit), after stopping the gas release and ensuring that all appliances are turned off, the main gas supply may be reinstated.

MAINTAINING YOUR GAS ALARM

Clean your gas leakage alarm regularly to prevent dust build up. This can be done using a vacuum cleaner with the brush attachment. Clean gently around the front grilled section and sides.

If the alarm fails to operate currently, please send back to the address of manufacturer shown on the back label of the detector.

REPLACEMENT PROCEDURE

With this gas leakage detector, after using for 5 years from the manufacturing date, the user should disconnect the electrical power to this detector, remove it and replace it with a new detector.

CAUTION Do not try to fix the unit yourself – this will void your warranty!
NEVER ATTEMPT TO REPAIR THE UNIT BY YOURSELF IN ORDER TO PREVENT POSSIBLE HAZARDS OF ELECTRIC SHOCK OR MALFUNCTION OF GAS ALARM

IMPORTANT SAFEGUARDS

Installation of your gas leakage alarm is only one step in your safety plan.

Other important steps should be taken to further improve your safety:-

- Install the gas alarm properly, following this instruction leaflet
- Test your gas alarm weekly
- Make sure that your electrical circuits are not overloaded
- You may smell gas prior to the gas alarm giving an alarm.

THIS PRODUCT IS A SEALED UNIT AND CANNOT BE REPAIRED – IF THE UNIT IS TAMPERED WITH IT WILL INVALIDATE THE GUARANTEE. IF THE UNIT IS FAULTY PLEASE RETURN IT TO YOUR ORIGINAL SUPPLIER WITH YOUR PROOF OF PURCHASE.

WHEN FAULT LAMP ON

The device carries out a self-checking routine for your safety. Possible errors are displayed by the FAULT

LAMP flashing and a coincident beeping noise from the device. This fault indicator may also be triggered by problem inside the device.

If a fault is indicated you must check first:

- Whether the ambient temperature is outside the specified range (-10°C to +40°C).
- Whether chemicals present in the air may have caused the fault, e.g. a high concentration of acid or alcohol. If this cannot be confirmed, then try the device in another room. If no fault is indicated there then the problem lies in the surroundings. If the fault indicator is still active then the problem lies within the device itself.
- The gas alarm has suffered internal damage.
- The gas alarm has been used for approximately 5 years. Then, it should be replaced.

LIMITED WARRANTY

These Gas Alarms are guaranteed to be free from defects in materials and workmanships under normal use and service for a period of three years from date of purchase. The company will not be obligated to repair or replace parts which are found to be in need of repair because of misuse, damage or alterations occur after the date of purchase. Send the Smoke Alarm with proof of purchase, postage and return postage prepaid, to local distributor. The liability of the company arising from the sale of this Gas Alarm shall not in any case exceed the cost of replacement of Heat Alarm and in no case shall the company be liable for consequential loss or damages resulting from the failure of the Gas Alarm.

GARVAN ENTERPRISES LTD. SHALL HAVE NO LIABILITY FOR ANY PERSONAL INJURY OR PROPERTY DAMAGE, OR ANY SPECIAL INCIDENTAL, CONTINGENT OR CONSEQUENTIAL DAMAGE OF ANY KIND RESULTING FROM A FIRE. THE EXCLUSIVE REMEDY FOR BREACH OF THE LIMITED WARRANTY CONTAINED HEREIN IS THE REPAIR OR REPLACEMENT OF THE DETECTIVE PRODUCT AT GARVAN ENTERPRISES LTD. OPTION. IN NO CASE SHALL GARVAN ENTERPRISES LTD.'S LIABILITY UNDER ANY OTHER REMEDY PRESCRIBED BY LAW EXCEED THE PURCHASE PRICE. YOUR GAS ALARMS IS NOT A SUBSTITUTE FOR PROPERTY, DISABILITY, LIFE OR OTHER INSURANCE OF ANY KIND. APPROPRIATE COVERAGE IS YOUR RESPONSIBILITY. CONSULT YOUR INSURANCE AGENT

Manufacturer:

Garvan Enterprises Ltd.
Rm 16-17, 21/F., Wing Hing Ind. Bldg.,
83-93 Chai Wan Kok Street, Tsuen Wan,
Hong Kong

Waste electrical products should not be disposed of with normal household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice. New regulation will encourage the recycling of Waste from Electrical and Electronic Equipment (European "WEEE Directive" effective August 2005).

