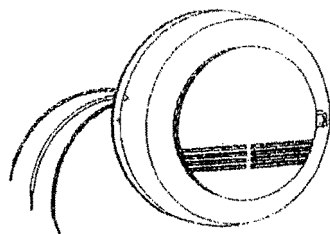


Smoke Alarm Operation Instructions



**220-240V AC 50~60Hz
OPERATED INTERCONNECTABLE
("HUSH" FEATURE)
IONIZATION SMOKE ALARM**



**MODEL: SS-1238S
(With 9V Battery Back-up)**



BS 5446 Part 1: 2000
LICENSE NO: KM 53166



MAIN FEATURES:

- IONIZATION SENSOR FOR FAST FLAMING FIRES
- ALARM "HUSH" FACILITY
- POWER & ALARM TEST BUTTON
- BATTERY BACK UP
- LOW BATTERY WARNING
- INTERCONNECTABLE (UP TO 40 SMOKE ALARMS)
- KITEMARK APPROVED - BS5446 PART 1: 2000
- SUPPLIED WITH FIXING KIT
- ANTI TAMPER LOCK

This instruction leaflet contains important information on the correct installation and operation of your smoke alarm. Read this leaflet fully before attempting installation and retain for future reference.

SPECIFICATION

Power Source	: 220-240Vac~ 50-60Hz with 9V battery back-up
Battery back-up	: 9Vdc Carbon-zinc (IEC 6F22) or Alkaline Battery (IEC 6LR61) or MN1604)
Battery back-up Life	: In the event of a break in the mains supply the battery will give detector operation for 1 year minimum
Operation Current	: <20mA operation (In Alarm)
Sensitivity to smoke	: 0.61-1.92 % per foot obscuration
Operation Temperature	: 4°C-38°C
Ambient Humidity	: 10%-90%
Alarm Sound Level	: 85 Decibels at 3 metres
Interconnect facility	: Allows up to 40 smoke alarms to be connected together over 150 meters
"Hush" facility	: Mutes alarm for 10 minutes, if smoke density increases during this time the alarm will be re-triggered
Approved to	: BS5446:Part1:2000

LOCATING THE SMOKE ALARM

This smoke alarm is a multiple station ionization alarm and can be connected to other smoke alarms of the same make and type. This interconnect feature allows up to 40 smoke detectors to be connected together, using the single white wire, and thus allowing all smoke detectors to sound when any one is activated.

This smoke detector cannot be connected to any other device such as a fire alarm panel.
If your dwelling is on a single storey, for minimum protection you should fit an alarm in the hallway between the living areas (incl. Kitchens) and sleeping areas. Place it as near to the living areas as possible and ensure the alarm is audible when the bedrooms are occupied. See Figure 1 for examples.

If your dwelling is multi-storey, for minimum protection one alarm should be fitted at the bottom of the staircase with further alarms fitted on each upstairs landing. This includes basements but excludes crawl spaces and unfinished attics. See Figure 2 for examples.

NOTE: For maximum protection an alarm should be fitted in every room (except kitchen, bathroom and garage). DO NOT FIT AN ALARM IN THE KITCHEN or BATHROOM, as cooking fumes or steam may trigger the alarm
DO NOT FIT ALARM IN A GARAGE, as exhaust fumes

POSITIONING THE SMOKE ALARM

As smoke rises, it is advisable to mount the alarm on a ceiling in a central position. Avoid areas where there is no air circulation. E.g. Corners of rooms and keep away from items which may prevent the free flow of air. If wall mounting, do not mount tight into the corners.
See figure 3

Areas to be avoided include the following :-

- Situations where the temperature may fall below 4°C or rise above 40°C
- Humid areas such as bathrooms, kitchens, shower rooms where the relative humidity may exceed 90%
- Fume filled environments such as garages. Exhaust gases may cause false alarms.

FIGURE 1 - SINGLE STOREY DWELLING

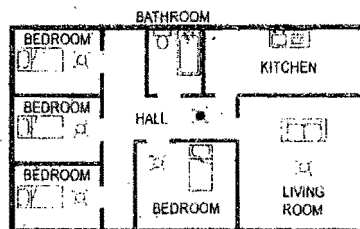
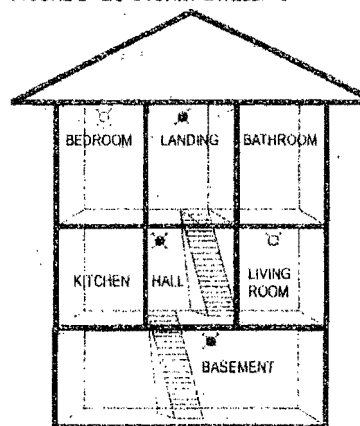


FIGURE 2 - 2/3 STOREY DWELLING



- KEY**
- MAXIMUM PROTECTION
 - MINIMUM PROTECTION

- Adjacent to or directly above hot components such as radiators or wall vents that can affect the direction of air currents.
- In very dusty or dirty environments such as workshops.

INSTALLING THE SMOKE ALARM

WARNING - This smoke alarm is mains powered and requires wiring by a qualified electrician in accordance with the current IEE Regulations for Electrical Installations (BS7671). The circuit used to power the smoke alarm must be a dedicated permanent supply that cannot be switched off accidentally by the normal user. Before installing ensure the electrical supply is isolated.

This smoke detector can be mounted to any standard junction box with a minimum depth of 25mm. A three wire AC power connector (including interconnect) is supplied with each smoke alarm.

- Check electrical supply is isolated.
- Having established the mounting location install a junction box suitable for locating the alarm. Ensure that there is no other electrical wiring or pipe work in the area adjacent to the mounting surface.
- Connect power connector to incoming supply via the junction box. If multiple smoke alarms are not to be interconnected, isolate the white wire in an approved manner. See Figure 4i
- If the smoke alarms are to be interconnected, link out all the white wires. See figure 4ii
- If the detector is to be locked into position the two tamperproof tabs need to be removed from the base plate. Retain until final assembly of detector. See Figure 5
- Having connected to the junction box, feed the connector plug through the hole in mounting plate
- Fix mounting plate in position.
- Feed connector plug through the hole in paper gasket supplied. This paper gasket can then be hooked over the two plastic tabs on the mounting plate to hold it in place. **THIS GASKET MUST BE FITTED TO PREVENT DOWNWARD AIR CURRENTS FROM ENTERING THE REAR OF THE DETECTOR, THUS PREVENTING SMOKE FROM ENTERING THE SMOKE DETECTOR IN THE NORMAL WAY.**
- Insert a 9V battery firmly into battery compartment on the rear of the detector. NOTE POLARITY OF CONNECTIONS. Ensure the metal tab is fully depressed when the battery has been fitted.
NOTE - For the safety of the end user the smoke alarm cannot be fitted without its battery.

Before assembly to base plate test the correct operation of the smoke detector (operating from the battery only) by depressing the test button on the front of the detector. The unit should emit a loud pulsating alarm.

Connect the power connector into the socket on the rear of the smoke detector. NOTE - This is a polarized connector and can only be plugged in one way.

Assemble detector onto the mounting plate by aligning the two projections on the mounting plate with the two keyhole slots in the detector. Lock in position by giving a clockwise quarter turn.

Insert the two tamperproof tabs in the positions provided between the base plate and detector unit. Once fitted the detector can only be removed from the base plate by first removing these tabs by gently prying out with a screw driver. See Figure 5

Restore the AC supply

Test the correct operation of the smoke detector by depressing the test button on the front of the detector. The unit should emit a loud pulsating alarm.

Should use 0.75mm s.g. wire for connection.

No connection should be made to the mains supply earth terminal.

OPERATING YOUR SMOKE ALARM

Once the smoke alarm has been installed a small GREEN indicator light (LED) should be visible through the detector grill indicating that AC supply is healthy. A RED indicator light (LED) should also flash approximately once a minute to indicate the battery is healthy.

If smoke is detected the unit will emit a loud pulsating alarm and a RED indicator light (LED) will be flashing quickly until the air is clear.

The 'HUSH' feature can mute the detector if it has been inadvertently triggered by holding down the TEST button for a few seconds. The smoke alarm will be muted for 10 minutes and then reset into normally mode after this period. NOTE - If the smoke density increases during this time the smoke alarm will be triggered into alarm again.

TESTING YOUR SMOKE ALARM

It is recommended that you test your smoke alarm once a week to ensure the detector is working correctly. Press and hold the test button for approximately 10 seconds. A loud pulsating alarm should sound and a RED flashing indicator light (LED) can be seen to indicate the correct function.

NOTE - For multiple interconnected smoke alarms test each alarm checking that the alarm is triggered on all other smoke alarms installed.

MAINTAINING YOUR SMOKE ALARM

The smoke detector emits a short 'beep' once a minute when the battery is at the end of its life and should be replaced immediately.

This low voltage warning will be given for at least 7 days. A fresh battery should last for approximately one year.

If the red indicator light (LED) does not flash every minute then replace the battery.

Clean your smoke 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.

The apparatus shall not be exposed to dripping or splashing.

IMPORTANT SAFEGUARDS

Installation of your smoke alarm is only one step in your safety plan. Other important steps should be taken to further improve your safety :-

- Install the smoke alarm properly, following this instruction leaflet
- Test your smoke alarm weekly
- Replace the battery immediately once depleted
- Do not smoke in bed
- Keep matches & lighters away from children
- Store flammable materials in a proper manner and never use them near naked flames or sparks
- Maintain emergency equipment such as Fire Extinguishers, escape ladders etc and ensure all occupants know how to use them correctly.
- Plan an escape route/s from your building in advance and ensure all occupants are aware of them. Re-enforce this awareness periodically throughout the year.
- Make sure escape routes remain free of any obstructions.

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.

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 SMOKE ALARM IS NOT A SUBSTITUTE FOR PROPERTY, DISABILITY, LIFE OR OTHER INSURANCE OF ANY KIND. APPROPRIATE COVERAGE IS YOUR RESPONSIBILITY. CONSULT YOUR INSURANCE AGENT.

This does not affect your statutory rights
This alarm is only suitable for single occupancy private dwellings only and not intended for multi occupancy private dwellings or commercial or industrial dwellings.

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)



Figure 3 - Positioning the smoke detector

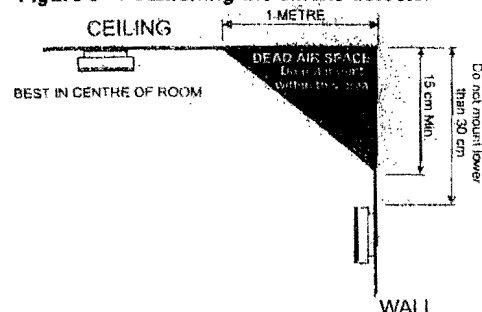


Figure 4 - Wiring & Interconnect facility

Interconnection facilities for up to 40 alarms, using only three wires, including AC power. When one alarm sounds, all properly interconnected smoke alarms follow.

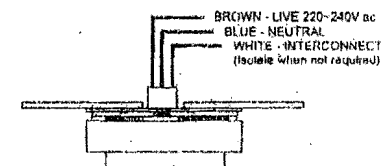


Figure 4.i - Wiring for single smoke detector

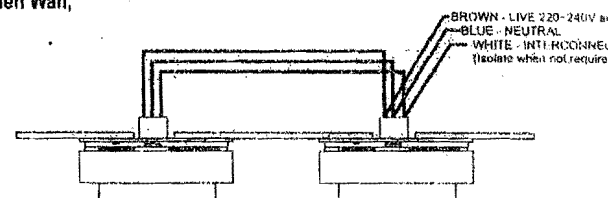


Figure 4.ii - Wiring for multiple smoke detectors (40 max)

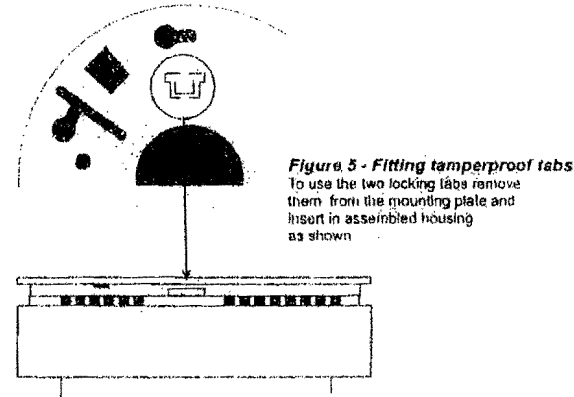


Figure 5 - Fitting tamperproof tabs
To use the two locking tabs remove them from the mounting plate and insert in assembled housing as shown