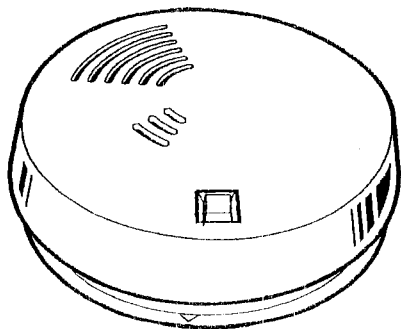




# NL3602N MAINS & BATTERY BACKED IONISATION SMOKE ALARM



### MAIN FEATURES :

- IONISATION SENSOR FOR FAST FLAMING FIRES
- ALARM "HUSH" FACILITY
- POWER & ALARM TEST BUTTON
- BATTERY BACKED
- LOW BATTERY WARNING
- INTERCONNECTABLE (UP TO 12 SMOKE ALARMS)
- KITEMARK APPROVED - BS5446 PART 1 : 2000
- NEUTRAL COLOUR
- SUPPLIED WITH FIXING KIT
- ANTI-TAMPER LOCK

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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 Alkaline or Carbon Zinc battery - GOLD PEAK GP1604S, EVER READY PP3S, DURACELL MN16049V
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	: 55mA operation (In Alarm)
Sensitivity to smoke	: 0.81-1.42 % per foot obscuration
Operation Temperature	: 40°F-100°F (4°C-38°C)
Ambient Humidity	: 10%-90%
Horn Level	: 85 Decibels at 3 metres (10 ft)
Interconnect facility	: 12 smoke detectors max. with a maximum wire length of 40metres between each detector.
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 ionisation alarm and can be connected to other smoke alarms of the same make and type. This interconnect feature allows up to 12 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 audible alarm can be heard 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 are likely to set it off.

For further information, a booklet can be obtained from the Home Office Communication Directorate or from your local fire prevention officer, entitled 'Wake up! Get a smoke alarm' (FB2).

### POSITIONING THE SMOKE ALARM

As smoke rises, it is advisable to mount 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 40°F (4°C) or rise above 104°F (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

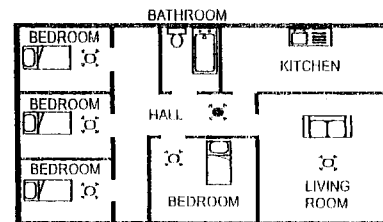
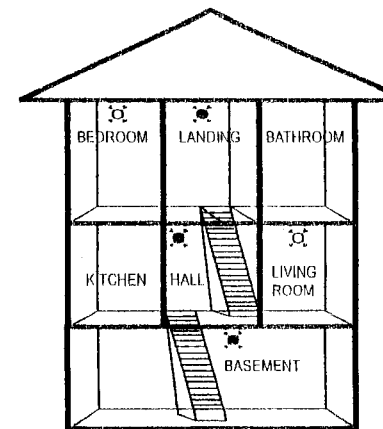


FIGURE 2 - 2/3 STOREY DWELLING



### KEY

- MAXIMUM PROTECTION
- MINIMUM PROTECTION

- Adjacent to or directly above hot components such as radiators or wall vents that can effect 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 termination point. 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. If multiple smoke alarms are not to be interconnected then 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
- Feed connector plug through junction box then 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 plug in socket on the rear of the smoke detector. NOTE - This is a polarised 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.
- Fit the two tamperproof tabs inserting 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.

#### 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. Push and hold the test button for approximately 3 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

If the smoke detector emits a short 'beep' once a minute 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.

#### WARNING : THE USE OF BATTERIES OTHER THAN THOSE RECOMMENDED ON THE BACK OF THE SMOKE ALARM MAY BE DETRIMENTAL TO ITS OPERATION

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.

#### 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 through-out the year.
- Make sure escape routes remain free of any obstructions.

For further information, a booklet can be obtained from the Home Office Communication Directorate or from your local fire prevention officer, entitled 'Wake up! Get a smoke alarm' (FB2).

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

#### YOUR SMOKE ALARM GUARANTEE

This product (excluding the battery) is guaranteed against defects that are due to faulty material or workmanship for a period of three years from the original date of purchase. This guarantee does not include damage to the product resulting from accident or misuse. The company will not accept any liability for incidental or consequential damages resulting from the failure of the smoke alarm.

Figure 3 - Positioning the smoke detector

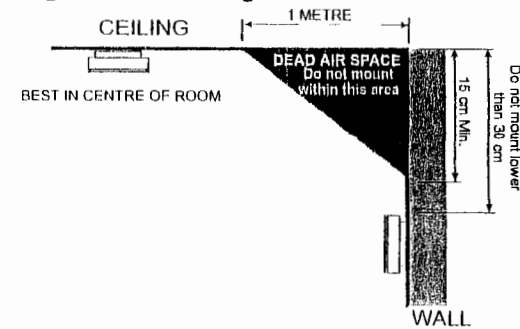


Figure 4 - Wiring & Interconnect facility

Interconnection facilities for up to 12 alarms, using only three wires, including AC power. When one alarm sounds, all properly interconnected smoke alarms follow. NOTE: Maximum interconnect wiring length is 40 metres

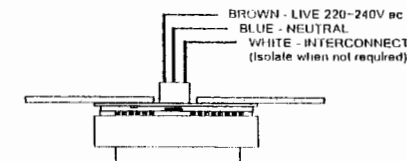


Figure 4.i - Wiring for single smoke detector

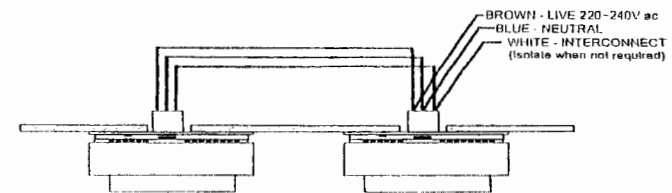


Figure 4.ii - Wiring for multiple smoke detectors (12max)

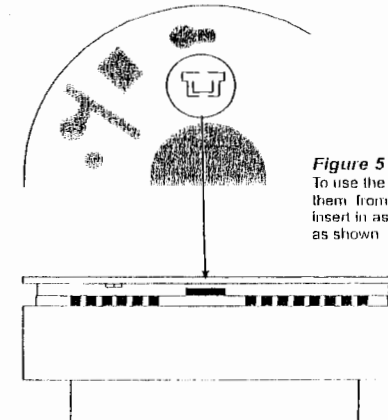


Figure 5 - Fitting tamperproof tabs

To use the two locking tabs remove them from the mounting plate and insert in assembled housing as shown