

SMOKE & HEAT ALARMS

DETECTION TECHNOLOGY

The GX32Smi (Dicon300I) is a dual ionization smoke alarm, particularly sensitive to fast flaming fires.

The GX32Smo (Dicon 440I) is a photoelectric smoke alarm, particularly sensitive to slow smouldering fires, but resistant to nuisance alarms.

The GX32Hdi (Dicon H380I) is a thermistor heat sensing detector

FEATURES

- Battery operated
- Operating Light (LED) flashes approximately every 45 seconds confirming unit is powered.
- Low Battery Warning beeps approximately every 45 seconds for up to 30 days when the battery needs replacing.
- Sensitivity Test Button. Tests the sensitivity, circuitry, battery & horn.
- Loud 85db Piezo Electric Alarm. Automatically resets when hazardous condition has passed.
- Easy Installation Fixings supplied.
- Interlinkable

BE PREPARED

Properly installed and maintained smoke and heat alarms are an essential part of a good fire safety programme. Review fire hazards and eliminate dangerous conditions whenever possible. When fire strikes, a prepared and practiced escape plan could prove vital. Your local fire brigade may be willing to advise you. Call them and ask for their advice.

- Ensure everyone is familiarized with the alarm signal and the means and route of escape.
- Prepare and practice an escape plan before a fire starts!
- Don't waste time collecting possessions leave the building.
- Warn all occupants using the fire alarm.
- Your life is more valuable!
- Keep everyone in a set meeting place after your escape.
- If trapped inside, stay close to the floor, cover mouth with cloth, conserve breath as you crawl to safety.
- Keep all doors and windows closed except for escape purposes.
- GET OUT. STAY OUT. CALL THE FIRE BRIGADE.

WHERE TO LOCATE

As a minimum, smoke and/or heat alarms should be located in all areas of a building particularly un-occupied areas where there is a potential source of fire. They should be installed between sleeping areas and potential sources of fire such as living rooms and kitchens. In single storey homes with one sleeping area a smoke alarm should be installed in the hallway, as close as possible to the living accommodation. To ensure audibility it may be necessary to install more than one smoke alarm, particularly if the hallway is more than 15m long. In single storey homes with two separate sleeping areas, a minimum of two smoke alarms is required, one outside each sleeping area. In multilevel or split level homes, as a minimum a smoke alarm should be installed on the ground floor between the staircase and any rooms in which a fire might start and on each storey in circulation areas which form part of the escape route (normally hallways and landings). NOTE: Heat alarms should not be used in escape routes instead of smoke alarms. They should only be used in the applications listed below in addition to smoke alarms and should always be interconnected with smoke alarms.

Additional alarms should be installed in bedrooms in anticipation of fires originating there, caused by faulty wiring, lights, appliances, smokers or other hazards.

For best protection, smoke alarms should be installed in every room, apart from those listed in the Locations to Avoid section. Heat alarms should be used in kitchens, boiler rooms, laundry rooms, garages and such like, where smoke alarms would be unsuitable.

Install smoke alarms in circulation areas at a distance no greater than 7.5m from the farthest wall, no greater than 7.5m from a door to any room in which a fire might start and no greater than 7.5m from the next smoke alarm.

When heat alarms are installed in a room, they should be at a distance no greater than 5.3m from the farthest wall, no greater than 5.3m from a door to any room in which a fire might start and no greater than 5.3m from the next heat alarm.

As it is impossible to predict the source of a fire, the best location for an alarm is usually the centre of a room or hallway. If it is necessary to place a smoke alarm on a wall, always locate the detection element of the alarm 150mm to 300mm (6 to 12 inches) below the ceiling and the bottom of the alarm above the level of doors and other openings. NOTE: Heat alarms should not be wall mounted.

In rooms with simple sloped, peaked or gabled ceilings, install alarms on the ceiling 900mm (3 feet) from the highest point of the ceiling. 'Dead air' at the peak of a ceiling may prevent smoke and heat from reaching the alarm in time to provide an early warning.

Closed doors and other obstructions will interfere with the path of smoke and heat to an alarm, and may prevent occupants on one side of a closed door from hearing an alarm on the other side of the door. Install sufficient alarms to compensate for closed doors and other obstacles. READ 'LIMITATIONS OF SMOKE & HEAT ALARMS' in these instructions. For further help and information on types and location of smoke alarms refer to booklet 'Smoke Alarms in the Home' (Ref FB2) produced by Home Office Communication Directorate. Guidance may also be found in BS5839 Part 6.

Research indicates that substantial increases in warning time can be obtained with each properly installed additional alarm. It is strongly recommended that the advice above is followed to ensure maximum protection.

LOCATIONS TO AVOID

DO NOT locate alarms:

In turbulent air from fans, heaters, doors, windows, etc.

In high humidity areas such as bathrooms and shower rooms, or where the temperature exceeds 100°F (39°C) or falls below 40°F (5°C).

At the peak of an 'A' frame ceiling. 'Dead air' at the top may prevent smoke from reaching the alarm in time to provide early warning.

Less than 300mm (12 inches) from the wall when mounted on the ceiling.

In insect-infested areas. Tiny insects may affect performance.

(Smoke alarms) in poorly ventilated kitchen or garage. Combustion particles from cooking or car exhaust could trigger a 'nuisance' alarm.

In very dusty or dirty areas. Dirt and dust can build up and impair performance. 8. Within 300mm 12" of light fittings or room corners.

In locations which would make routine testing or maintenance hazardous (eg over a stairwell).

On poorly insulated walls or ceilings.

Near objects such as ceiling decorations which might impede the path of smoke or heat to the alarm.

Within 1500mm (5 feet) of fluorescent light fittings.

Further help and information may be found in BS5839 Part 6.

INSTALLATION

Open the cover and handle unit with care to avoid damage.

Locate keyhole slots.

Mark holes through alarm base. Then remove alarm. Drill two 4.75mm holes. Do NOT drill with alarm still in position as this will contaminate the unit with dust.

Insert the plastic anchors. Screw alarm base to mounting surface.

NOTE: When wall mounting a unit, ensure that the keyhole fixing slots are positioned with the narrow aperture uppermost, to prevent the unit from being dislodged.

When used on a GX32 system follow the interconnect diagram supplied. The GXS/1 termination unit must be used for correct operation.

HOW TO TEST

Connect battery. **WARNING: ENSURE THAT BATTERY IS CORRECTLY INSTALLED. POSITIVE TERMINAL TO POSITIVE CONTACT (MARKED +), NEGATIVE TERMINAL TO NEGATIVE CONTACT. REVERSING A BATTERY WILL IMMEDIATELY DRAIN THE BATTERY AND COULD DAMAGE THE SMOKE ALARM.**

Storage in low humidity, and certain transportation conditions, may cause electrostatic charges to build up in the alarm system housing. Although harmless, they may increase the length of time that the horn sounds upon battery insertion or test button operation. The condition may be cleared by gently wiping the inside and outside of the plastic cover with a clean, damp cloth.

Check LED operating light flashes approximately every 45 seconds in standby mode.

Depress and hold test button until alarm sounds. Note: It may be necessary to depress test button for up to 20 seconds for alarm to sound. Alarm is indicated by a loud continuing sound. Alarm may continue for up to 10 seconds after button is released.

After installation:

Press test button until alarm sounds, then release. Repeat test weekly. The electronic test button provides a full test of the unit's functionality.

DO NOT try to test the alarm with a naked flame, as this may present a potential fire hazard in itself.

Test each alarm separately in the system.

Determine that initiating alarm triggers all other alarms.

BATTERIES

Your alarm requires one 9 volt Alkaline battery. Under normal use, the battery should last approximately one year. When the battery reaches the end of its normal life, a low battery warning (intermittent beeping) will indicate the need for replacement. **IMPORTANT:** Test alarm using test facility whenever battery is replaced.

SIMPLE MAINTENANCE

Vacuum every six months to help keep the unit working efficiently. Open cover and gently vacuum interior of detector. Keep vacuum nozzle from touching the unit. Problems are indicated by two events: The alarm does not sound upon pressing the test button.

The operating light remains steadily on or off. (i.e. does not flash approximately once every 45 seconds, when the unit is not in alarm).

TRY THE FOLLOWING:

Inspect for obvious damage.

Visually check that unit contains recommended battery type.

Check that battery is properly connected.

Gently vacuum as recommended above.

Replace battery.

If these procedures do not correct the problem, do **NOT** attempt repairs. If the smoke alarm is within warranty period and terms, indicate the nature of the problem and return the unit with proof of purchase. Units beyond warranty cannot be economically repaired.

FALSE ALARMS

Abnormal air conditions may cause the highly sensitive smoke alarm to give a 'false' alarm. **DO NOT DISCONNECT THE BATTERIES.** If no fire is apparent, ventilate the room.

WARNING: IF THERE IS ANY QUESTION AS TO THE CAUSE OF AN ALARM, ALWAYS ASSUME THAT THIS IS DUE TO AN ACTUAL FIRE AND FOLLOW YOUR FIRE EMERGENCY PLANS. Do not assume the alarm is a nuisance.

Dust can have an adverse effect. Vacuum as recommended above. Do not paint the unit. Other factors such as nicotine contamination may also adversely affect the alarm.

LIMITATIONS OF SMOKE & HEAT ALARMS

Quality smoke & heat alarms are designed to provide the earliest possible warning of fire and smoke at reasonable cost. Early warning can mean the difference between a safe escape and no escape at all. Alarms do, however, have limitations. Alarms cannot work without power. Battery operated alarms will not work without proper

batteries, with dead batteries or if batteries are not properly installed. If you are concerned about the reliability of the batteries you should install a new battery or smoke alarm.

Alarms are incapable of sounding the alarm until smoke or heat reaches the sensing chamber. Anything preventing this from reaching the detector, such as a closed door, may delay or prevent an alarm. A smoke alarm cannot detect fire in the walls, chimney or roof unless and until a significant amount of smoke reaches the alarm. An alarm on any given floor should not be relied upon to detect fire on any other floor. For these reasons a smoke and heat alarm should be installed in every room or at least on every level.

Smoke and heat alarms may not provide protection for a smoker smoking in bed, for children playing with matches, or for violent explosions resulting from escaping gas. Installation of smoke & heat alarms is only part of a complete fire safety programme.

Dicon smoke & heat alarms are manufactured to the highest standards to ensure faultless operation and long life. The manufacturers do, however, recommend that no alarm should be used for more than 10 years, in order to minimise the chance of a fault occurring.

Your smoke and heat alarms are not a substitute for property, disability, life, or other insurance of any kind. Appropriate insurance coverage is your responsibility. Consult your insurance agent.

RADIOACTIVE CONTENTS

The units in the GX32SMi ionization smoke alarm utilises a tiny amount of radioactive material, 0.9 microcuries (30 kilobecquerels) of Americium 241, to detect smoke. This material is in the form of a sealed source and represents no hazard whatsoever to anyone installing or using the smoke alarm. Any stray particles would be unable to penetrate through the dead layer of skin and thus do not constitute an external hazard. (Radiation Protection Guidance for Scientists and Physicians). All Dicon ionization smoke alarms have been rigorously tested by the National Radiological Protection Board to ensure absolute safety.

DISPOSAL

The GX32SMi Smoke Alarm are subject to certain restrictions. An ionization smoke alarm can be disposed of in other refuse, providing that the other waste is not radioactive and that the sum total of kilobecquerels of Americium 241 in any 0.1 cubic metres of the whole mass of the waste and refuse does not exceed 40.

Put simply, you must not dispose of more than one ionization smoke alarm per dustbin full of refuse.

If you have any queries or problems concerning the disposal of your alarm, please contact the manufacturer, to arrange the return of the unit.

GUARANTEE

Your Dicon Alarm, excluding the battery is warranted for five years from the date of purchase against defect in material and workmanship. Units returned to Dicon with a proof of purchase date during this period as a result of such defects will be repaired, or replaced at Dicon's option, without charge. This warranty only covers defects in

material or workmanship in normal use and does not cover damage resulting from negligent handling, misuse or lack of reasonable care.

This warranty does not affect a customer's statutory rights in any way. In the event of a problem with your alarm or you have any questions concerning use and care of the product or concerning service, please re-read these instructions. If you require further help or clarification, please write:

Dicon Safety Products (Europe) Ltd. P.O.Box402 GLOUCESTER
GL2 9YB

**Distributed by Hoyles Electronic Developments Ltd
for use with the GX32 Fire alarm system.**

