

SECTOR

MAINS POWERED SMOKE AND HEAT ALARMS OWNERS MANUAL

SD3, SD3PLUS, SD4, SD5, SD14 IONIZATION SMOKE ALARMS SD6, SD12, SD13, SD15 PHOTOELECTRIC SMOKE ALARMS SD9, SD10, SD11, SD16 HEAT ALARMS

IMPORTANT PLEASE READ AND RETAIN THIS OWNERS MANUAL

When installing this alarm for use by others, please leave this manual or a copy of it with the end user.

2502-A0021

CHECKS BEFORE USE

ALARMS WITH REMOVABLE BATTERIES: SD3, SD3 plus, SD10, SD12.

- Check battery has been fitted correctly.
- Check alarm is not beeping.
- Test alarm before switching on the electricity supply.

ALL ALARMS:

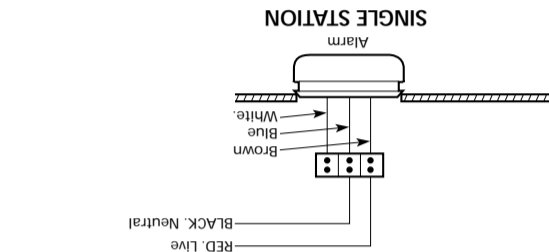
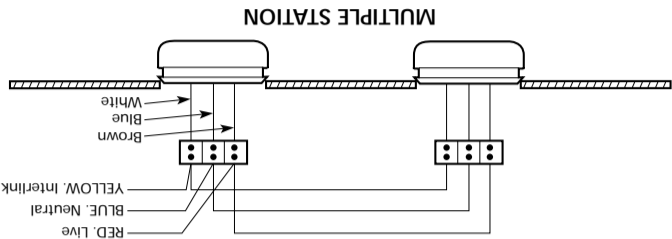
- Check the green light is on (behind the front grille).
- Check the red light flashes every 45 seconds or so.
- When testing linked alarms check that they all interconnect within 10 seconds.

IMPORTANT NOTES

- On the SD3 the alarm will beep for 10 minutes if the pause button has been pressed.
- Alarms with rechargeable batteries or capacitor back up may beep for up to 2 hours while the batteries / capacitors charge.
- Leave a copy of this handbook with the user and ensure they know how to use and maintain the alarm.

1. As a minimum smoke alarms should be located 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 if the hallway is more than 15m long, install more than one smoke alarm, particularly in the bedrooms. It may be necessary to install a minimum of two separate sleeping areas. In a minimum of two smoke alarms is required, one outside each sleeping area. In multi-level or split level homes as well as stairs 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).
2. Additional alarms should be installed in bedrooms in anticipation of fires originating there, caused by faulty wiring, lights, appliances, smokers or other hazards.
3. For best protection, smoke alarms should be installed in every room in your home, 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. All alarms must be interconnected.
4. Install smoke alarms in circulation areas at a distance no greater than 7.5m from the furthest 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.
5. When heat alarms are installed in a room, they should be at a distance no greater than 5.3m from the furthest 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 or smoke alarm.

C: WHERE TO LOCATE



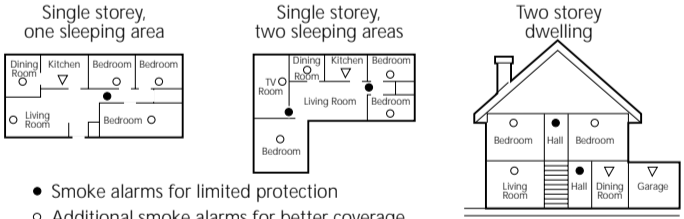
1. ELECTRICAL SHOCK OR EQUIPMENT DAMAGE. The use of 6243V mains cable is recommended when interconnecting alarms.
2. Install a junction box where you plan to install the alarm. The use of 6243V mains cable is recommended when interconnecting alarms.
3. Connect the brown wire to the red (live) in the house wiring and the blue wire to the blue (neutral). NO CONNECTION SHOULD BE MADE TO THE MAINS ELECTRICITY SUPPLY EARTH TERMINAL.
4. For multiple alarm installations use the white wire for interconnection. Use the third core (yellow) in the mains cable for interconnect. DO NOT use the earth wire for the interconnect line. This must be treated as live, i.e. insulated and sheathed. If the alarm is not going to be interconnected, cap the unused wire.
5. Detach the locking pin from the base plate. (Not applicable to the SD3)
6. Attach the flat side of the mounting plate and tighten screws to fit snugly against the junction box and ceiling or wall.
7. Bring the power connector through the centre opening of the plate.

B: INSTALLATION (ALL MODELS)

1. For detailed guidance on the siting of this alarm refer to section C of this handbook.
2. The circuit used to power the alarm must be a 24-hour voltage circuit that cannot be turned off by a switch. BS5839 Part 6 states that:
 - For mains powered alarms, each with an integral standby supply (Grade D), the mains electricity supply should take the form of either:
 - (a) an independent circuit at the dwelling's main circuit board, in which case no other electrical equipment should be connected to this circuit (other than a dedicated monitoring device installed to indicate failure of the mains electricity supply to the alarm); or
 - (b) a separately electrically protected, regularly used local lighting circuit.
3. For mains powered alarms, with no standby supply (Grade E), the mains electricity supply may only take the form of an independent circuit as per a) above.
4. All interconnected alarms should be on a single final circuit.
5. NOTE: The maximum interconnect wiring length is 250 metres. The maximum number of alarms interconnected together is 12. Sector smoke alarms should not be connected to any model produced by another manufacturer.
6. The location of the alarms must comply with the applicable building codes and the advice in section C: WHERE TO LOCATE below.

A: GUIDANCE ON INSTALLATION

1. Locking pins / keys must be fitted. DO NOT ATTEMPT TO REMOVE THE ALARM FROM THE BASEPLATE WITHOUT FIRST REMOVING THEM.
 11. Switch on the mains electricity supply and that the red light is flashing every 45 seconds or so. The lights are located behind the grille on the front of the alarm.
 12. Check that the green light is on and that the red light is flashing every 45 seconds or so. The lights are located behind the grille on the front of the alarm.
 13. Press and hold the test button until the alarm sounds. NOTE: Pressing this button on all ionization type alarms (except the SD3) also places the alarm in pause mode.
- Test each alarm in the system checking that all other alarms in the system are triggered within 10 seconds.
- WARNING:** Do not attempt to test the alarm with flame heat or smoke, the results may be misleading and may damage the alarm.
- The dust cover must be removed as late as possible before commissioning. This will reduce the chances of the alarm being contaminated by building dust etc.
- Remove the alarm from the system before testing the wiring with high voltage insulation testing equipment. This will damage the alarm and may invalidate the warranty.
- As it is impossible to predict the source of a fire the best location for an alarm is the centre of the room or hallway. If it is necessary to locate the 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 smoke alarms 900mm (3 feet) from the highest point of the ceiling. 'Dead air' at the peak of the ceiling may prevent smoke 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 from hearing an alarm on the other side of a closed door. Install sufficient alarms to compensate for closed doors and other obstacles.
- Your local fire brigade or insurance company may be able to give you further advice. Call them and ask. Further help and information may also be found in BS5839 Part 6 and the Fire Safety guidance given by the Department of Transport, Local Government and the Regions (DTLR).
- CAUTION:** Research indicates that substantial increases in warning time can be obtained with each properly installed additional alarm; it is strongly recommended that the preceding advice be followed to ensure maximum protection.



- Smoke alarms for limited protection
- Additional smoke alarms for better coverage
- ▽ Heat alarms

LOCATIONS TO AVOID

- DO NOT locate alarms: -
1. In high humidity areas such as bathrooms and shower rooms or where the temperature exceeds 39°C (100°F) or falls below 5°C (40°F)
 2. In turbulent air from fans, heaters, doors, windows, etc.
 3. At the peak of an 'A' frame ceiling – dead air at the top may prevent smoke and heat from reaching the alarm to provide an early warning.
 4. Less than 300mm (12 inches) from a wall when mounted on the ceiling.
 5. In insect infested areas. Tiny insects may affect performance.
 6. (Smoke alarms) in poorly ventilated kitchen or garage. Combustion particles from cooking or car exhaust could trigger a nuisance alarm
 7. In very dusty or dirty areas – dirt and excessive dust can impair the performance of the alarm.
 8. Within 300mm (12 inches) of a light fitting or room corners.
 9. In locations that would make routine testing or maintenance hazardous. (e.g. over a stairwell).
 10. On poorly insulated walls or ceilings.
 11. Near objects such as ceiling decorations that might impede the path of smoke or heat to the alarm.
 12. Within 1500mm (5 feet) of a fluorescent light fitting and keep wiring at least 1000mm (39 inches) from these fittings. Do not install alarms on circuits containing fluorescent light fittings or dimmer switches.
- Further help and information may be found in BS5839 Part 6.

D: USER INFORMATION

- Features**
- Operating Lights – A continuous green light indicates the alarm is receiving mains power. The red light doubles as an alarm source indicator and flashes approximately every 45 seconds to confirm circuitry integrity.
 - Alarm Source Indicator – Red light will flash every second in the unit originating the alarm. Red lights on other alarms flash every 45 seconds.

Simple Maintenance

- Vacuum every six months to keep unit working efficiently by firstly turning off the mains electricity supply and vacuuming through the vents using a soft brush attachment. Keep the nozzle from touching the unit. SWITCH POWER BACK ON WHEN YOU HAVE FINISHED.
- Test the alarm once a week by: -
- Checking that the green light is on and that the red light is flashing every 45 seconds or so. The lights are located behind the grille on the front of the alarm.
 - Press and hold the test button until the alarm sounds. NOTE: Pressing this button on all ionization type alarms (except SD3) also places the alarm in pause mode.

SD3 Only.

- If the alarm beeps every 45 seconds for more than 15 minutes, change the battery (remember the alarm also beeps every 45 seconds for 10 minutes when in pause). Turn off the mains electricity supply. Remove the battery drawer locking key by inserting a small screwdriver into the square hole at the top of the battery drawer. Apply pressure at the tip of the screwdriver, pushing it up onto the locking key. The key will pop out. Pull out the battery drawer and remove the old battery, insert the new battery contacts first, according to the markings on the inside of the drawer front, close the drawer and test the alarm using the test button. Refit the locking key and then turn on the mains electricity supply. NOTE: The battery drawer cannot be closed if the battery is missing.

SD3 plus, SD10, SD12.

- Change the battery with a new one when the alarm beeps every 45 seconds. Turn off the mains electricity supply, remove locking key, rotate the alarm approximately 10mm anti-clockwise and remove the alarm from the ceiling. Unplug the alarm from the mains supply. Remove the screw and prise open the battery compartment door on the back of the alarm to replace the battery with one of the following: Duracell MN1604, MX1604, Eveready PP3B PP3S, 6LF22 Gold Peak 1604A, 1604S. Close the battery door refit the screw and re-assemble the alarm to the ceiling ensuring that the mains plug is securely fitted. Test the alarm using the test button then turn on the mains electricity supply. PLEASE NOTE: The alarm cannot be fitted to the baseplate without a battery installed.

SD4, SD6 & SD11.

- High performance capacitors provide a back up power supply in the event of a mains supply failure. The alarm may beep every 45 seconds for a few hours after a mains supply failure while the capacitors re-charge.

