



SAFETY AND INSTALLATION INSTRUCTIONS

Model: **SDPHO**

Mains Photoelectric Smoke Detector with Battery Back-up & “Hush” Feature

IMPORTANT! Please read these instructions before installing your new fitting.
Please retain for future reference.



Pack Contents

Photoelectric Smoke Detector	x 1
Mounting Plate	x 1
Mains Connector	x 1
9V Battery	x 1
Fixing Kit	x 1

General Information, Safety and Installation Instructions

Read this first

This smoke alarm must be installed in accordance with the Building Regulations making reference to the current edition of the IEE Wiring Regulations (BS7671). The Building Regulations may be obtained from HMSO or viewed and downloaded from www.communities.gov.uk following the link for Building Regulations.

If in any doubt, consult a qualified electrician.

Switch off the mains before commencing installation and remove the appropriate circuit fuse.

Suitable for indoor use only.

This product is only suitable for use in living areas (not for areas constantly subject to moisture or fumes such as bathrooms, kitchens or garages).

The smoke alarm must not be exposed to dripping or splashing.

Before making fixing hole(s), check that there are no obstructions hidden beneath the mounting surface such as pipes or cables.

The chosen location of your new alarm should allow for it to be securely mounted and safely connected to a mains supply.

Do not attach to surfaces which are damp, freshly painted or otherwise electrically conductive (e.g. metallic surfaces).

If the location of your new alarm requires the provision of a new electrical supply, the supply must conform with the requirements of the Building Regulations with reference to the current edition of the IEE Wiring Regulations (BS7671).

This product is designed for permanent connection to fixed wiring: this should be either a suitable circuit (protected with a 5 or 6 Amp MCB or fuse) or a fused spur (with a 3 Amp fuse) via a fused connection unit.

Make connections to the electrical supply in accordance with the following code:

Live - Brown or Red
Neutral - Blue or Black
Yellow - Connect between multiple alarms

All interconnected smoke alarms must be supplied from a single power circuit.

Note: A common Neutral must be used for the interconnect feature to function.

This fitting is double insulated, it is not necessary to connect any part to earth.

Cable of at least 0.75mm² cross-sectional area must be used to connect to the supply and between alarms.

You are advised at every stage of your installation to double-check any electrical connections you have

made. After you have completed your installation there are electrical tests that should be carried out: these tests are specified in the Wiring Regulations (BS7671) referred to in the Building Regulations.

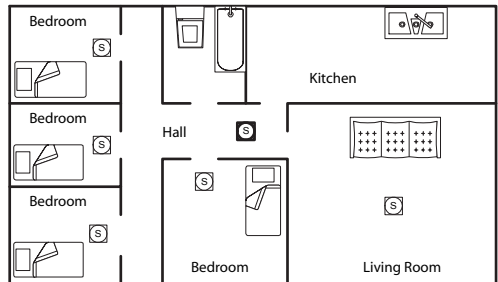
If in doubt, consult a qualified electrician.

Locating the smoke alarm

This smoke alarm is a multi-station photoelectric 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 yellow wire thus allowing all smoke detectors to sound when one is activated. This smoke detector cannot be connected to any other device such as a fire alarm panel.

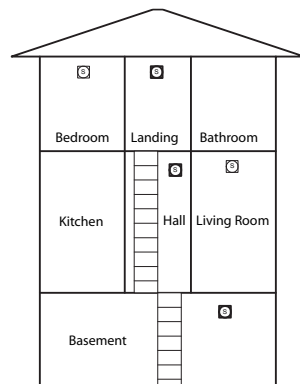
If your dwelling is on a single storey, for minimum protection you should fit an alarm in the hallway between the living areas (including kitchens) and the sleeping areas. Place it as near to the living areas as possible and ensure that alarm is audible when the bedrooms are occupied. See Fig. 1.

Fig 1.



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 Fig. 2.

Fig 2.



Installation Instructions and Care

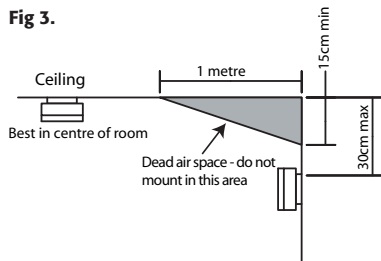
Note: For maximum protection, an alarm should be fitted in every room (except kitchen, bathroom and garage).

DO NOT FIT A SMOKE ALARM IN THE KITCHEN OR BATHROOM, as cooking fumes and steam may trigger the alarm.

DO NOT FIT A SMOKE ALARM IN A GARAGE as exhaust fumes could trigger the alarm.

The smoke alarm should be located at least 300mm away from a light fitting. See Fig. 3.

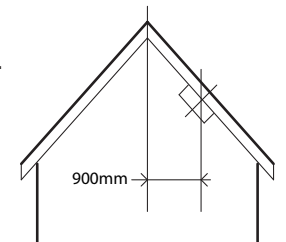
Fig 3.



Positioning the smoke alarm

As hot smoke rises and spreads out, 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 anything that might obstruct the free flow of air. If wall mounting, do not mount tight into corners. On sloping ceilings, mount 900mm from the apex measured horizontally. See Fig. 4.

Fig 4.



Areas to be avoided include the following:

- Locations where the ambient temperature may fall below 4°C or rise above 50°C.
- Humid areas such as bathrooms, kitchens, or shower rooms where the relative humidity may exceed 90%.
- Fume filled environments such as garages. Exhaust gases may cause false alarms.
- Adjacent to or directly above hot objects such as radiators or wall vents that can affect the direction

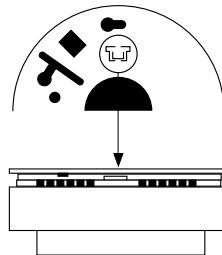
of air currents.

- In very dusty or dirty environments such as workshops.
- Locate the smoke alarm at least 1.5m and route wiring at least 1m away from fluorescent light fittings as electrical noise and/or flickering may affect the unit. Do not connect to the same circuit as fluorescent lights or dimmers.
- Do not locate in insect infested areas. Insects and contamination can increase response time.

Installation

1. 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.
2. Having chosen the mounting location, install a junction box suitable for locating the termination point.
3. Unlock the detector from the base by pushing up the temporary latch with a screwdriver. See Fig. 5

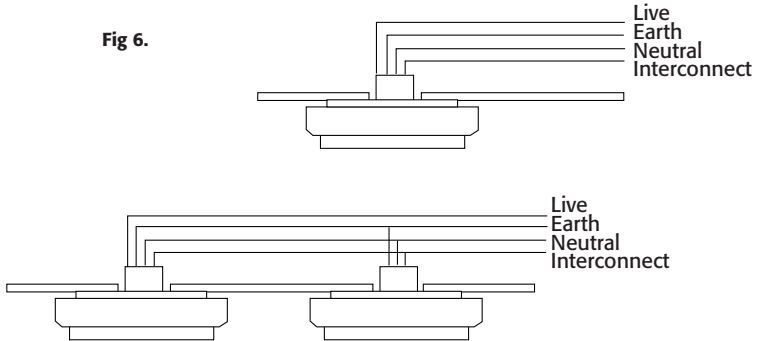
Fig 5.



4. Use the detector base as a template to mark the position of the fixing holes on your mounting surface.
5. Make the connections to the mains supply according to the colour code on page 2 and following the wiring diagram see Fig. 6. Make sure that the screws are tightened securely and that no strands protrude. Note that Live and Neutral connections are required for correct operation of the unit. Use of the interconnect terminal is optional but multiple alarms will not work together unless they are connected by at least the interconnect terminal and the Neutral terminal.
6. Clip the flap closed to prevent accidental contact with live terminals.
7. Fix the mounting plate in position using the fixings supplied. If the fixings supplied are not appropriate to your installation, please select suitable alternatives.

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Fig 6.



8. Insert a 9V battery firmly into the battery compartment in the rear of the alarm. Note the polarity of the connections. Ensure that the tab beneath the battery is fully depressed when the battery has been fitted. For the safety of the user, the smoke alarm cannot be fitted without the battery.
9. Before you fit the smoke alarm onto the base plate, check the operation (in battery mode only) by pressing the test button on the front of the alarm. The unit should emit a loud pulsating alarm.
10. Fit the alarm to the mounting plate by sliding it on in the direction of the arrows.
11. Switch the mains power on.
12. Check for correct operation (in mains supply mode) by pressing the test button.

Operation

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

When smoke is detected, the unit will emit a loud pulsating alarm and a RED indicator light (LED) will flash quickly until the air is clear.

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 that the unit is functioning correctly.

NOTE: For multiple interconnected smoke alarms, test

each alarm in turn checking also that the alarm is triggered on all other smoke alarms. All interconnected alarms should sound, although only the red LED on the alarm being tested will flash rapidly; the red indicator LED's on the other alarms will not flash. To test multiple alarms, it may be necessary to hold the test button after the first alarm has begun to sound.

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 new battery should last for approximately one year. If the red indicator LED does not flash every minute, 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 grille section and the sides.

Important

If there is any question as to the cause of an alarm it should be assumed that the alarm is due to an actual fire and the dwelling should be evacuated immediately.

In the event of fire

1. Leave the building as quickly as possible. Check room doors for heat or smoke. Do not open a hot door. Use an alternative escape route. Crawl along the floor, if possible, breathe through a wet cloth or hold your breath. Do not stop to collect anything.
2. Meet at a pre-arranged meeting place outside the dwelling and check everybody is there.

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3. Call the Fire Brigade immediately from outside the building. The brigade should be summoned regardless of the size of the fire and regardless of whether there is a facility for transmission of alarms to a remote manned centre.
4. Do not go back inside a burning building, wait for the Fire Brigade to arrive.

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 this 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 and 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 that escape routes remain free of any obstructions.

THIS PRODUCT IS SEALED 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.

Action in the event of a false alarm

If there is a false alarm, simply press the test/hush button on the cover to mute the unit for 10 minutes.

1. Check the house carefully in case there is a small fire smouldering somewhere.
2. Check whether there are some sources of smoke or fumes. You should get your family into a safe place before your investigation.

If there are frequent nuisance/ false alarms it may be necessary to re-locate the device. If for some reasons the alarm continues to give false alarm, the units can be silenced by disconnecting the mains power and removing the unit. If cleaning the alarm does not correct the problem it can be returned to the place where you

bought it.

Common causes and avoiding false alarms

The Smoke Alarm may be triggered by steam, condensation, normal smoke or fumes. Small insects getting into the smoke alarm chamber may cause intermittent alarms. Keep away from these sources to avoid nuisance alarms. (See "Areas to be avoided" in the "Positioning the smoke alarm" section.)

Your smoke alarm guarantee

This smoke detector is guaranteed to be free from defects in materials and workmanship under normal use and service for a period of five years from the date of purchase. The company will not be obligated to repair or replace parts which are found to be in need of replacement or repair because of misuse, damage or alterations made after the date of purchase.

In case of a claim under the terms of the guarantee, please return the detector to the place where you bought it complete with all parts and proof of purchase.

The liability of the company arising from the sale of this smoke detector shall not in any case exceed the cost of the replacement of this smoke detector and in no case shall the company be liable for the consequential loss or damages resulting from the failure of the smoke detector.

ETERNA LIGHTING LIMITED SHALL HAVE NO LIABILITY FOR ANY PERSONAL INJURY OR DAMAGE TO PROPERTY, 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 DEFECTIVE PRODUCT AT ETERNA LIGHTING LIMITED. OPTION. THE LIABILITY OF ETERNA LIGHTING SHALL IN NO CASE EXCEED THE PURCHASE PRICE OF THE DETECTOR UNDER ANY OTHER REMEDY PRESCRIBED BY LAW. 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 and not intended for multi occupancy private dwellings or commercial or industrial premises.

Cleaning

Clean this smoke alarm only with a soft dry cloth

Periodically vacuum around the smoke alarm to dislodge and remove dust particles that may have gathered.

Do not use any chemical or abrasive cleaners.

Battery Replacement

1. Switch off the electricity at the mains.
2. Remove the locking tabs from the side of the alarm, twist the Alarm anti clockwise and pull away from the base.
3. Remove the power connector.
4. Remove and replace the battery.
5. Replace the power connector.
6. Fit the alarm back onto the base and twist clockwise, refit the locking tabs.
7. Restore the power at the mains.
8. Check the alarm is functioning by pushing the test button.

Specifications

Power Source: 220-240Vac~ 50-60Hz with 9V battery back-up

Battery Back-Up: 9Vdc Alkaline or Carbon Zinc battery: EVER READY PP3S DURACELL MN1604 9V

Battery Back-Up Life: In the event of a break in the mains supply the battery will give detector operation for 1 year minimum

Operating Current: <20mA operation (in alarm), 15µA in standby mode

Sensitivity to Smoke: 3.0-6.0% per metre obscuration

Operating Temperature: 5°C - 45°C

Ambient Humidity: 10% - 90%

Alarm Sound Level: 85 Decibels at 3 metres

Interconnect Facility: 40 smoke detectors

Hush Facility: Mutes alarm for 10 minutes, if smoke density increases during this time the alarm will be re-triggered.

Approval: EN14604

Safety Markings



Eventually, you may want to replace this smoke alarm:

When your alarm comes to the end of its life or you choose to update or upgrade it by replacing it, please do not dispose of it with your normal household waste, please recycle where facilities exist. When you need to dispose of this alarm, check with your retailer or local authority for suitable options. New regulations require the recycling of Waste from Electrical and Electronic Equipment (European "WEEE Directive" effective August 2005—UK WEEE Regulations effective 2nd January 2007). Environment Agency Registered Producer: WEE/GA0248QZ



If your alarm is defective or develops a fault, please return it to the place where you bought it. You can call our Helpline for advice. The Helpline will gladly give advice on any aspect of any Eterna Lighting product but may not be able to give specific instructions regarding individual installations.

If in doubt, consult a qualified electrician.

Help Line

Tel: 01933 673 144

Fax: 01933 678 083

Email: sales@eterna-lighting.co.uk

For all other information visit our website www.eterna-lighting.co.uk