

## 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.
Alarm Sound Level:	85 Decibels at 3 metres.
Hush Facility:	Mutes alarm for 10 minutes, if smoke density increases during this time the alarm will be re-triggered.
Sensitivity to smoke:	58°C fixed temperature only.
Maximum ambient:	45°C
Interconnect Facility:	40 x smoke detectors - over 150 metre maximum.
Recommended coverage:	200m <sup>2</sup>
Recommended spacing:	13.5M
Maximum distance from wall:	7.5M

## 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.

## 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

## EVENTUALLY, YOU MAY WANT TO REPLACE THIS PRODUCT:

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.

WHEN YOUR PRODUCT COMES TO THE END OF ITS LIFE OR YOU CHOOSE TO REPLACE IT, PLEASE RECYCLE IT WHERE FACILITIES EXIST - DO NOT DISPOSE WITH HOUSEHOLD WASTE.

## IF YOU EXPERIENCE PROBLEMS:

If you believe your product is defective, please return it to the place where you bought it. Our Technical Team will gladly advise on any Eterna Lighting product, but may not be able to give specific instructions regarding individual installations.



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### FOR PRODUCT ADVICE:

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Visit our website:

[www.eterna-lighting.co.uk](http://www.eterna-lighting.co.uk)



## INSTALLATION INSTRUCTIONS

### A guide for qualified electricians



Pack Contents
Heat Detector x 1
Mounting Plate x 1
Mains Connector x 1
9V Battery x 1
Fixing Kit x 1

**Model:  
MHDB**

Mains Heat Smoke Detector With Battery Back-Up

These instructions are provided as a guideline to assist you.

**PLEASE READ THESE INSTRUCTIONS BEFORE INSTALLATION  
AND RETAIN FOR FUTURE REFERENCE**

## READ THIS FIRST:

Check the pack and make sure you have all of the parts listed on the front of this booklet. If not, contact the outlet where you bought this product.

**This Heat Alarm must be installed by a competent person in accordance with the building regulations and IEE wiring regulations.**

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

This heat alarm is suitable for indoor use only.

This product is suitable for use in living areas (not for areas constantly subject to moisture).

This product is suitable for installation on surfaces with normal flammability e.g. wood, plasterboard, and masonry.

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 heat alarm should allow for it to be securely mounted (e.g. to a ceiling joist) and safely connected to the mains supply.

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

This product is designed for permanent connection to fixed wiring: this should be a suitable circuit (protected with the appropriate MCB or fuse)

This alarm is double insulated; do not connect any part to earth.

Cable of at least 0.75mm<sup>2</sup> 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

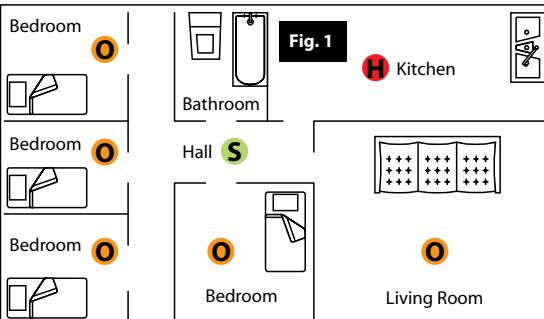
## LOCATING THE HEAT ALARM:

Heat alarms are only intended to be supplementary to smoke alarms and should only be placed in areas where smoke alarms cannot be used.

This heat alarm is a multiple station heat alarm and can be connected to other alarms of the same make and type.

### Placement Key:

- O** Smoke detector optional place
- P** Preferred place for a smoke detector
- H** Preferred place for a heat detector



This interconnect feature allows up to 40 heat alarms and/or smoke alarms to be connected together using the single yellow wire and thus allowing all alarms to sound when only one is activated.

This heat alarm cannot be connected to any other device such as fire alarm panel.

This heat alarm gives a fire warning when the temperature at the unit reaches 58°C. It is ideal for: kitchens, garages, cellars, boiler rooms, attics, and other areas where there are normally high levels of fumes, smoke or dust which preclude the use of smoke alarms due to the risk of false alarms.

All heat alarms and smoke alarms should be interconnected to ensure the early warning will be heard particularly by somebody sleeping. A properly designed early warning fire system ensures the alarm is given before the escape route becomes blocked with smoke. Therefore there must be smoke alarms along the escape routes as heat alarms would not give sufficient warning, however a fire in a closed room (e.g. kitchen) adjoining the escape route can eventually cause the corridor to become smoke-logged due to smoke leaking out from around the door before adequate warning can be given by detectors in the corridor. A heat alarm in the closed room may give early warning of fire in that room.

If your dwelling is on a single storey, for minimum protection you should fit a smoke alarm in a corridor or hallway between the sleeping and living areas. Place it as near to living areas as possible and ensure the audible alarm can be heard when the bedrooms are occupied. See fig. 1 below for examples.

If your dwelling is multi-storey, for minimum protection one smoke 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. below for examples.

### NOTE:

For maximum protection, smoke alarms should be fitted in every room (except kitchen, bathroom and garage).

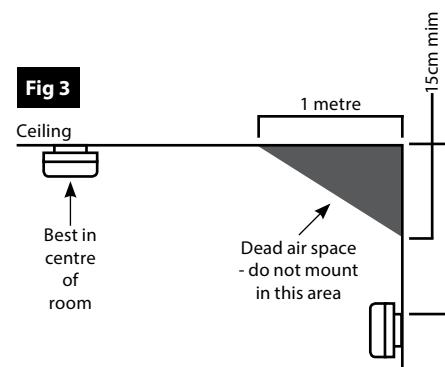
Fit heat alarms in kitchens, garages, boiler rooms etc. within 5.3m (17ft) of potential fire sources.

Do not fit a heat alarm in a bathroom, shower room or other room where the unit may be triggered by steam or condensation.

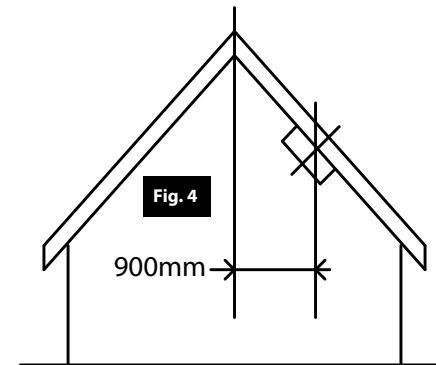
## POSITIONING THE HEAT ALARM:

As heat rises its 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 the detector at least 900mm from the apex measured horizontally see fig 3 and 4 below:

**Fig 3**



**Fig. 4**



Areas to be avoided include the following:

Locations where the ambient temperature may fall below 4°C or rise above 40°C.

Humid areas e.g. bathrooms, shower rooms where the relative humidity may exceed 90%.

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.

Near a decorative object, door, light fitting, window moulding etc that may prevent heat from entering the alarm

Locate the unit at least 1.5cm and route wiring at least 1m away from fluorescent light fittings as electrical noises and/or flickering may affect the unit. Do not wire the detector into the same circuit as a dimmer or fluorescent light fitting.

Do not locate in insect infested areas, insects and contamination on the heat alarm sensor can increase its response time.

## INSTALLATION:

- 01) Remove the mounting plate from the alarm by turning it anti clockwise.
- 02) Use the mounting plate as a template and mark the position of the fixing holes.
- 03) Place the base plate over the fixing holes and secure by using the wall plugs and screws supplied.
- 04) Connect the power connector to the incoming mains supply: blue wire neutral, brown wire live and yellow wire for interconnecting. If multiple heat alarms are not to be interconnected, isolate the yellow wire in a separate terminal block.
- 05) When the heat alarms are to be interconnected, connect all of the yellow wires together.
- 06) If the heat alarms are to be locked into position remove one of the tamper-proof tabs from the mounting plate and retain for use later.
- 07) Insert the 9v battery into the heat alarm noting the polarity of the connections.

### NOTE:

For safety of end user the heat alarm cannot be fitted without a battery.

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

09) Connect the power connector into the socket on the rear of the heat detector.

### NOTE:

This is a polarized connector and can only be plugged in one way.

10) Assemble the detector onto the base plate by aligning the two projections on to the base plate with two corresponding sockets in the detector. Lock in to position by turning clockwise.

11) Insert the tamper-proof tab into the position provided between the base plate and the detector unit. Once fitted the detector can only be removed from the base plate by first removing the tab by gently prising it out with a screw driver. See pg 4 for diagram guide.

12) Replace circuit fuse and restore the power.

13) Test the correct operation of the heat detector by pressing the test button on the front of the detector. The alarm should emit a loud pulsating alarm.

## OPERATION:

Once your heat 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 flash once a minute to indicate battery is healthy.

When the heat alarm senses a temperature above 58°C (plus or minus a few degrees) the unit will emit a loud (85db) pulsating alarm until the temperature drops below 58°C. During the alarm activation the red indicator light will flash quickly.

## FITTING TAMPERPROOF TABS:

To use the locking tab, remove one of them from the mounting plate and insert into the assembled housing as shown below:

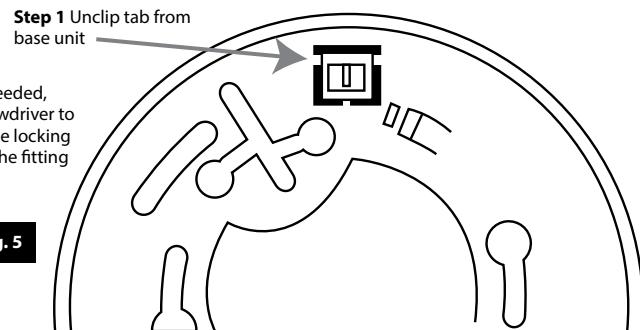
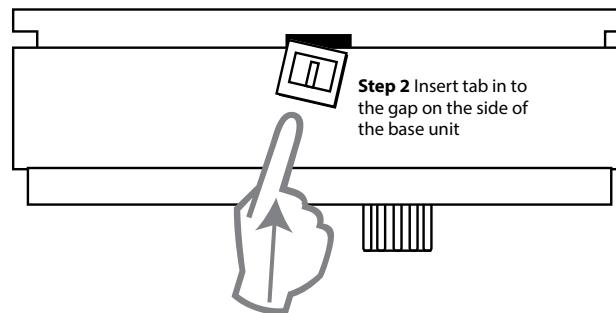


Fig. 5

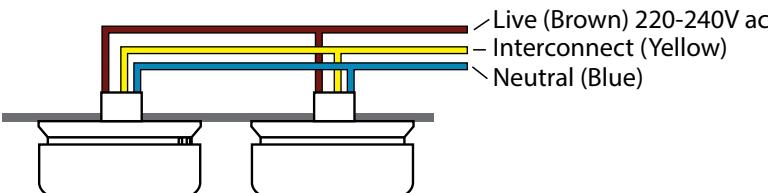
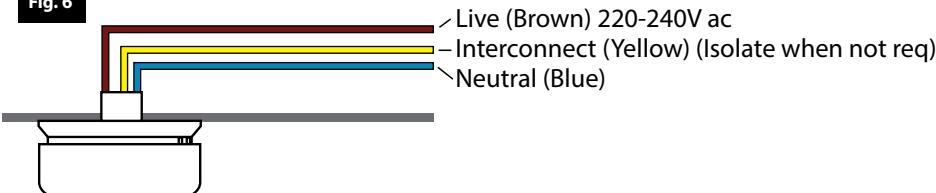


## WIRING AND INTERCONNECT FACILITY:

Interconnection facility for up to 40 alarms, using only 3 wires, including AC power. When one alarm sounds, all properly inter-connected alarms will sound.

See below diagram for wiring instructions:

Fig. 6



## TESTING YOUR HEAT ALARM:

After installation and after reoccupation of the dwelling after a vacation etc; check all alarms for correct operation.

It is recommended that you test your heat 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 heat alarms; test each alarm in turn checking also that the alarm is triggered on all other heat alarms.

## MAINTAINING YOUR HEAT ALARM:

If the heat detector emits a short "beep" once a minute then the battery is at the end of its life and should be replaced immediately. This low voltage warning will continue to sound for at least 7 days.

### WARNING:

The use of batteries other than those recommended on the back of the heat alarm may be detrimental to its operation.

Clean your heat 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 sections and 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 A FIRE:

- Leave the building as quickly as possible.
- Check room doors for smoke or heat 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.
- Meet at a pre-arranged meeting place outside the dwelling and check everybody is there.
- 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.
- Do not go back inside a burning building wait for the Fire Brigade to arrive.

## IMPORTANT SAFE GUARDS:

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

- Install this heat alarm properly by following this instruction leaflet.
- Test your heat 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 the escape routes remain free of any obstructions.

## THIS PRODUCT IS SEALED AND CANNOT BE REPAIRED.

## COMMON CAUSES AND AVOIDING FALSE ALARMS:

The heat alarm may be triggered by steam, condensation or heat. Keep away from these sources to avoid nuisance alarms. (See areas to be avoided in the positioning the heat alarm section on page 2 and 3).

## ACTION IN THE EVENT OF A FALSE ALARM:

Check the house carefully in case there is a small fire smouldering somewhere.

Check whether the alarm was triggered by a source of heat. 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 reason the unit continues to give false alarm it 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.