

Mounting and Wiring

Disconnect the AC mains supply from the circuit that is going to be used.

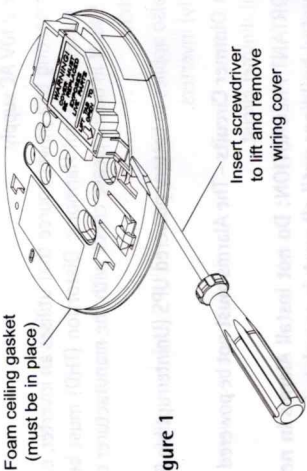


Figure 1

Place the mounting plate exactly where you want to mount the Alarm. With a pencil mark the location of the two screw holes. Taking care to avoid any electrical wiring in the ceiling, drill holes using a 5.0mm drill bit through the centre of the marked locations. Push the plastic screw anchors provided into the drilled holes.

Lift off the wiring cover using a flat head screwdriver as shown in Figure 1.

The wiring must be connected to the terminal block on the mounting plate as follows:

Country	Live	Neutral	Interconnect	Earth
Ireland	Brown	Blue	White	Green/ Yellow
UK	Brown	Blue	Black	Green/ Yellow

Note: Wiring must be installed in compliance with local regulations.

Warning: Mixing the Live and Neutral connections when interconnecting Alarms may damage all the Alarms - ensure that the same colours are used throughout the premises for Live, Neutral and Interconnect wires.

We strongly recommend that you check for the following **before connecting the Alarm:**

- check for Live and Neutral using a two probe tester.
- check for Live using a neon tester.
- check that the Interconnect wire is NOT connected to Live, Neutral or Earth. **Do not use an Earth wire for the Interconnect line.**

N.B. The Alarm does not need to be earthed. However the terminal marked $\oplus$ is provided for the convenience of the installer so that any copper Earth wire or cable coloured green & yellow, can be safely terminated.

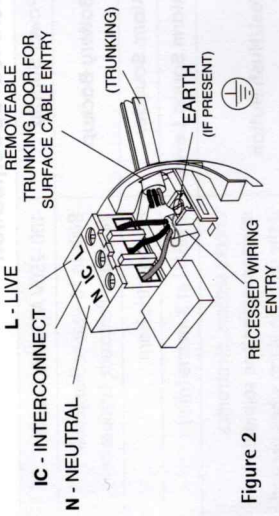


Figure 2

4. If the mains wires are recessed, bring the wires through the rear hole in the mounting plate as shown in Figure 2.

If the mains wires are being brought along the surface:

- position the mounting plate so the cable trunking is as shown in Figure 2.
- the mounting plate has a removable section, take it out to interface directly with 25mm trunking as shown in Figure 3. If interfacing to 16mm trunking carefully cut around the marked section, leaving the top intact and replace the section. (If you are not using surface wiring, the removable section must be left in place for electrical safety reasons).

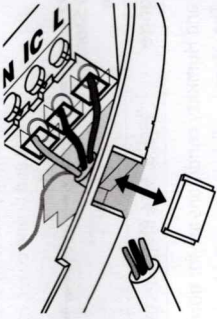


Figure 3

There are two other positions which are also suitable for the surface wiring to enter (and exit) the Alarm, one next to the removable section and another directly opposite.

- Screw the mounting plate into place. If using RF interconnection, ensure that all mounting plates are facing the same orientation as described in the detailed online User Manual *. Connect the wires to the terminal block. With recessed wiring, ensure the rear gasket seals around the edge of the hole in the ceiling or wall. This is to prevent air draughts affecting the smoke/heat entering the Alarm. If the hole is too large or the Alarm does not seal it, it should be sealed with silicone rubber or equivalent.
- Replace the wiring cover, carefully line up the Alarm on the mounting plate and slide on (see Figure 4).
- Connect the mains power to the Alarm circuit. After an initial flash of each LED (green, yellow and red), the green LED will remain lit to confirm the alarm is receiving mains power. Ensure the green LED is on.

* Available to download by scanning the QR code on the front page of this booklet.

Slide on the Alarm

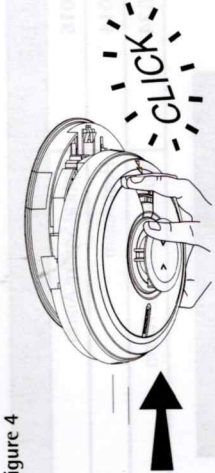


Figure 4

- Press and hold the test/hush button for 10 seconds (see Figure 5). The horn will sound. Check that any interconnect Alarms also sound within this period. The test button sounds the local horn and on release this horn stops immediately, and all the interconnect Alarms can then be heard in the distance as they will continue to sound for a further 3 seconds.

Test Alarms

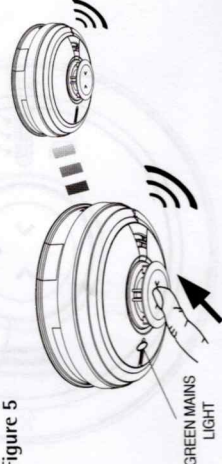


Figure 5

Interconnecting Alarms

With interconnect Alarms, when one Alarm detects fire all will sound. However, only Alarms detecting fire will have a flashing red LED.

Heat Alarms should **always** be interconnect to Smoke or Multi-Sensor Fire Alarms to ensure early warning.

WARNING: Do not hardwire interconnect mains powered Alarms with low voltage or battery powered Ei Electronics Alarms/devices or any other type of Alarm produced by another manufacturer. Doing so may damage the Alarms and could result in a shock or fire hazard.

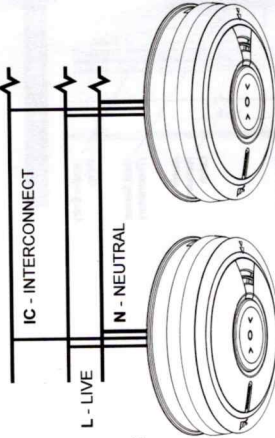


Figure 6

To interconnect Alarms connect all the IC terminals together as shown in Figure 6.



For full User Instructions
for Republic of Ireland Customers
scan the QR code below



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For full User Instructions
for UK Customers
scan the QR code below



Disposal of Alarms

The Alarm must be recycled in accordance with the directive 2012/19/EU on waste electrical & electronic equipment (WEEE).

DO NOT dispose of your Alarm in a fire.

The crossed out wheelee bin symbol that is on your product indicates that this product should not be disposed of via the normal household waste stream. Proper disposal will prevent possible harm to the environment or to human health. When disposing of this product please separate it from other waste streams to ensure that it can be recycled in an environmentally sound manner. For more details on collection and proper disposal, please contact your local government office or the retailer where you purchased this product.

CE 27197		Ei Electronics, Shannon, Co. Clare, Ireland	
DoP No.18-0001			
EN14604:2005 + AC:2008 Smoke Alarm Devices: EI3016, EI3024			
Nominal activation conditions/ sensitivity, response delay (response time) and performance under fire condition Operational reliability Tolerance to voltage supply Response delay and temperature resistance	Fire Safety	Pass	Pass
	Vibration resistance	Pass	Pass
	Humidity resistance	Pass	Pass
	Corrosion resistance	Pass	Pass
	Electrical safety	Pass	Pass
CE		Heat Alarm Devices: EI3014, EI3024	

The Declaration of Performance No. 18-0001 may be consulted at www.eielectronics.com/compliance

Contact Us

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Introduction

This Alarm is intended to be used as a device that provides a loud warning when it detects smoke/heat to alert people of an immediate danger enabling them to evacuate their dwelling promptly.

It must be installed in accordance with the latest standards and is for indoor use only.

This device is mains powered with built-in battery back-up suitable for use in residential applications. It can be interconnected by hardwire or RF and **can only be installed and interconnected by a qualified electrician.**

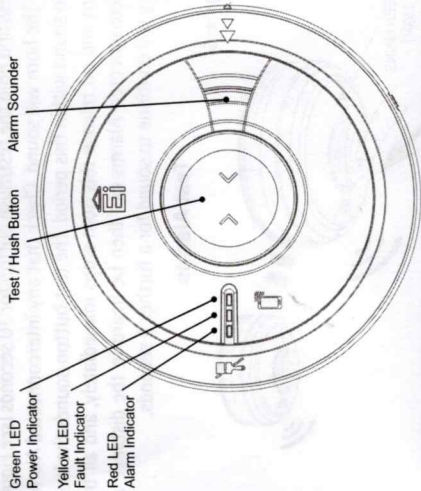
This Alarm can only be used according to the instructions as described in the user manual. All use other than that described in the user manual is seen as unintended use.

Please read the user manual in full before installing or using the Alarm.

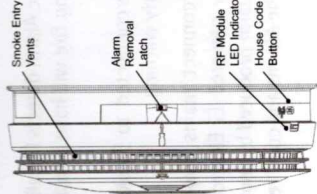
Product Overview

Models	Alarm Type
EI3016	Optical Smoke Alarm
EI3014	Heat Alarm
EI3024	Multi-Sensor Fire Alarm

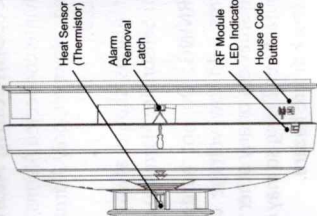
Top View



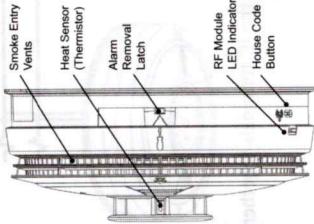
EI3016 Optical Alarm



EI3014 Heat Alarm



EI3024 Multi-Sensor Alarm



Technical Specification

Power Supply	100-250V AC, 50Hz, 0.25W
Battery Backup	Built-in 10-year rechargeable Vanadium Pentoxide Lithium cells
Alarm Sounder	Piezoelectric Horn
Alarm Sound Level	85dB(A) at 3 meters (min)
Test/Hush Button	Checks sensors, electronics, interconnection and sounder. If the unit is in alarm when pressed, it silences the alarm for 10min
Visual Indicators	Green LED – Power supply Yellow LED – Fault, EOL Red LED – Memory or alarm (if coincides with horn sounding)
Operational Life	10 years
Interconnection	Units can be interconnected via a hardwired or wireless system (using optional EI3000MRF SmartLINK module)
Fixings	Supplied with Easi-fit anti-tamper mounting plate with integral terminal block and wiring cover, includes screws and wall plugs
Operating & Storage Temperature	-10°C to +40°C*
Humidity Range	15% to 95% RH (non-condensing)

* Temperature and Humidity conditions are for normal operation and storage. The Alarms will function outside these ranges as required by the specific product standards. Extended exposure to conditions outside these ranges can reduce product life. For advice on prolonged operation outside these range consult the manufacturer.

Important Safety Instructions

WARNING: Mains operated Alarms should be installed and interconnected by a qualified electrician in accordance with the local Regulations for Electrical Installations. Failure to install this Alarm correctly may expose the user to shock or fire hazards and damage the product.

The Alarm is designed to be permanently mounted, using its own built-in terminal block to connect it to the mains. The mounting plate can be screwed directly to the ceiling. Alternatively, it can be screwed to a standard junction box (BS 4662 single gang accessory box). It requires a current of 3mA. The Alarm must not be exposed to dripping or splashing. There are important markings on the underside of the Alarm.

Caution

Alternative Energy Sources – (Wind, Solar, UPS etc.)

This product is designed to be connected to a Pure or True Sine Wave 230V AC supply.

If connecting to a power source that utilises an inverter, e.g. PV solar panel, the Total Harmonic Distortion (THD) must be less than 5%. If in doubt please check with the manufacturer of the inverter.

This also applies to battery powered UPS (Uninterruptible Power Supply) inverters.

Light Dimmer Circuits – The Alarms **must not** be powered from a light dimmer circuit.

IMPORTANT PRECAUTION: Do not install Alarms in new or renovated buildings until all work is completed.

The Alarm must not be connected when the house wiring insulation is being checked with high voltages. i.e. Do not use a high voltage insulation tester on the Alarm.

WARNING: The Alarm must be continuously powered 24 hours a day so it is important that it is not on a circuit that can be turned off by a switch.

Note: Electrical installations must comply with local regulations.

Note: An all-pole mains switch shall be incorporated in the electrical installation of the building.