Product Selector

Fire & Carbon Monoxide Detection

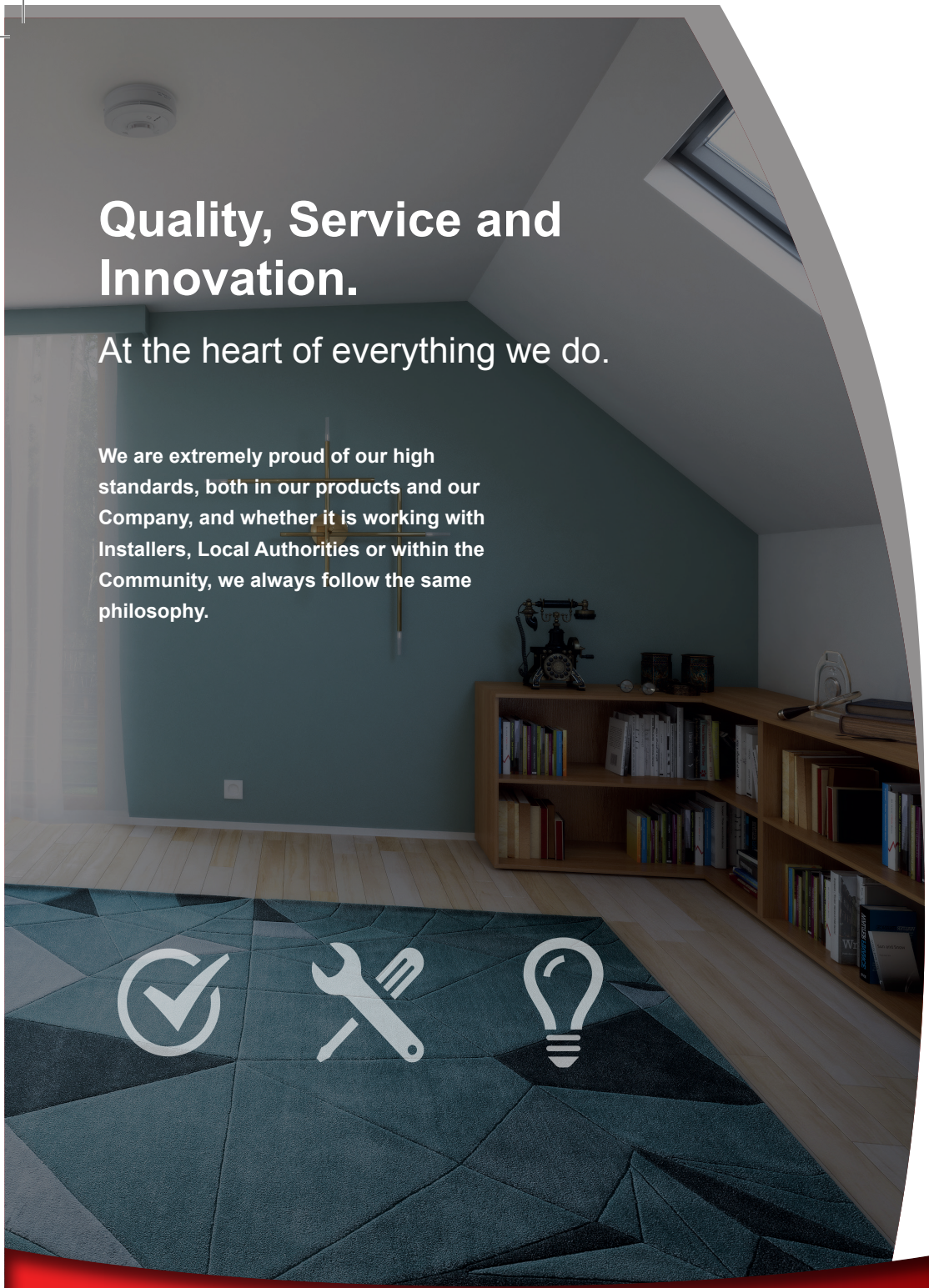
Quality | Service | Innovation

www.eielectronics.ie

Quality, Service and Innovation.

At the heart of everything we do.

We are extremely proud of our high standards, both in our products and our Company, and whether it is working with Installers, Local Authorities or within the Community, we always follow the same philosophy.



Contents

Standards & Regulations

History of Fire Alarm Requirements

1997

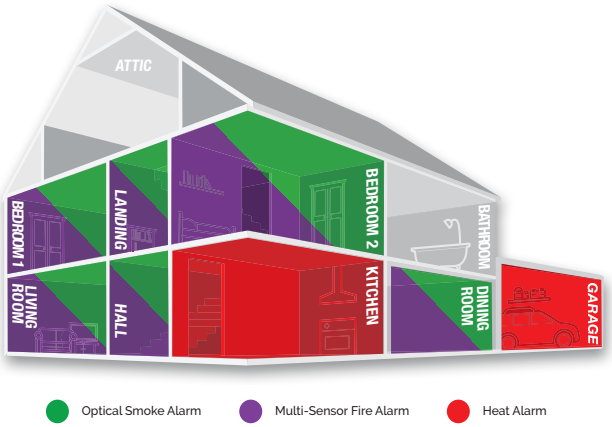
A mains powered Fire Alarm was required in the Hallway, Landing & Kitchen

2006

An interconnected Grade D Fire Alarm was required in the Hallway, Landing, Kitchen and principal Living Room

2017

All New Build, Refurbishments and Rewires require an interconnected Grade D Fire Alarm in every room, except bathroom / shower room / toilet

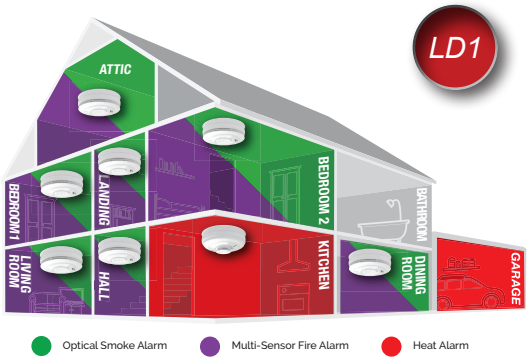


In Ireland the minimum standard for Fire Alarm Systems is Grade D LD2 - which is Interconnected, self-contained mains powered with battery backed Smoke and Heat Alarms required in:

1) All circulation areas that form part of an escape route within the dwelling
2) All high fire risk areas/rooms e.g. kitchen, living rooms, garages, utility rooms
3) All bedrooms

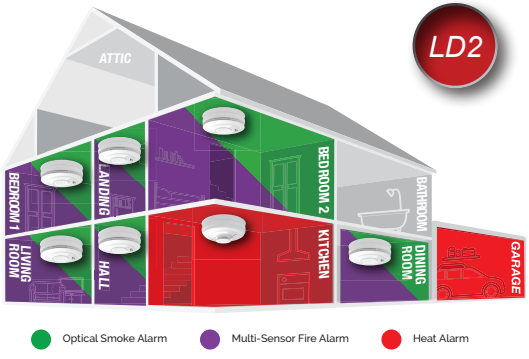
NOTE: Interconnections can be wireless (radio frequency) or wired (physical cable)

The Categories



Interconnected self contained mains powered, battery backed Smoke/ Heat Alarms located as follows:

1. Throughout the dwelling including all circulation areas that form part of the escape route and
2. All rooms and areas (including attics/lofts/other spaces) in which a fire may start, other than toilets, bathrooms and shower rooms.



Interconnected self contained mains powered, battery backed Smoke/ Heat Alarms located as follows:

1. All circulation areas that form part of an escape route within the dwelling, and
2. All high risk areas / rooms e.g. kitchen, living rooms, garages and
3. All bedrooms

Alarm Control Switch

Where the Fire Risk Assessment determines that detectors are to be installed in roof voids/attics or other areas difficult to access for testing or monitoring purposes, then all detectors should have remote control functionality to allow Alarm Testing, Alarm Location and Alarm Silence functions to be controlled from one remote control location.

TEST, LOCATE & SILENCE

Which Alarm where?

When installing or specifying Alarms, it is crucial to make sure you choose the right sensor type for the right location.

Optical
(Single sensor)

- Optical sensors use an infra-red beam to detect smoke and react to slow, smouldering fires such as electrical fires.

Recommended for:

Hallway **Landing** **Living Room**

Dining Room **Bedroom**

Heat
(Single sensor)

- These use a thermistor (heat sensor) which detects changes in temperature, and triggers the alarm at 58°C.

Recommended for:

Kitchen **Garage**

They are not sensitive to cooking fumes and react instead to heat build-up from large flaming fires

Fire Alarm
(Multi-Sensor)

- Contains optical and heat sensors to detect both smoke and heat, so responds to all fire types from fast flaming to slow smouldering.
- Also intelligently monitors both sensors, to virtually eliminate the risk of nuisance alarms.

Recommended for:


Hallway


Landing


Living Room


Dining Room


Bedroom


Attic Spaces

Heat & CO Alarm
(Multi-Sensor)

- Multi-sensor heat and CO Alarms are recommended for kitchens with any fuel burning appliances such as gas boilers or cookers.

Recommended for:


Kitchen


Garage

Fire and Carbon Monoxide Alarm - (Multi-Sensor)

- Contains optical, heat and CO sensors to detect smoke, heat and carbon monoxide.

  Is recommended in rooms with any fuel burning appliances.
- Also intelligently monitors all sensors, to virtually eliminate the risk of nuisance alarms.

Recommended for:


In all rooms with a a fuel burning appliance

Carbon Monoxide
(Single sensor)

You cannot see, smell or taste Carbon Monoxide, but it can kill you.

CO Alarms are required in the room where a fuel burning appliance is installed. Please refer to Technical Guidance Document Part J: IS813.

Product Range

3000 Series

Multi-Sensor & Single Sensor Alarms

The flagship of our range, the 3000 Series is a new generation of intelligent Alarms, yet retains the simplicity installers love. Available in multi-sensor and single-sensor options, every model incorporates our latest features:

Specify a whole property from one series

Quick and reliable interconnection

Mains powered with 10 year rechargeable Lithium battery backup

Sound mimic feature when connected to other 3000 Series Alarms via SmartLINK®

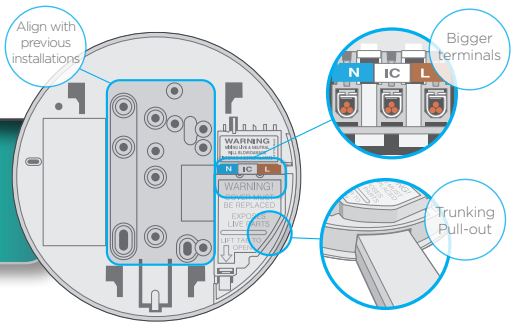
10 YEAR **Product life**

AudioLINK+® **BUILT IN**

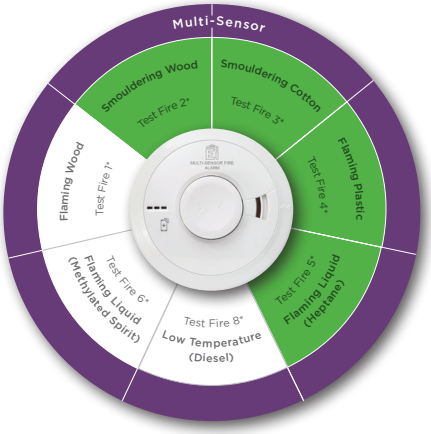
SmartLINK® **COMPATIBLE**

easi-fit base

All Ei Electronics Mains Powered Alarms, are compatible with the Easi-Fit Base meaning you won't need to wire in a new base when you come to re-new or upgrade the Alarms.



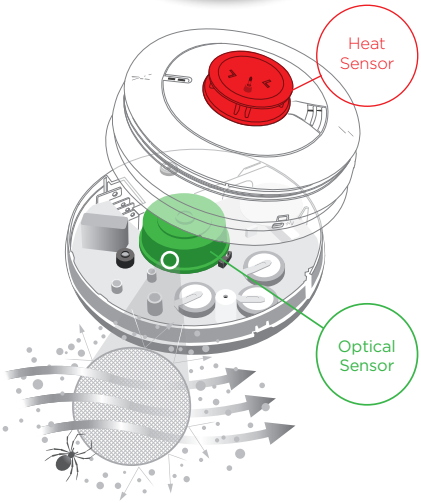
Built in Intelligence



Test Fire Response

The combined heat and smoke sensors are able to detect all test fire types for total fire response. The green sections show the test fires passed by Optical Alarms and Heat Alarms to meet with the domestic British & European Standards.

The Multi-Sensor Fire Alarm passes all these green sectioned test fires, plus three extra test fires.



Dual Sensors

Intelligent software and improved sensor design combine for a reduction in false alarms.

Intelligent Design

Dust compensation – the Alarm automatically re-calibrates the alarm trigger point to compensate for dust.

Ei3016

Optical Smoke Alarm

Best for slow, smouldering fires such as sofas and electronics

Recommended for:

Additional Features

Unique Dust Compensation mechanism to reduce false alarms

AudioLINK+®

SmartLINK®

EN 14604:2005

Ei3014

Heat Alarm

For detecting heat build-up from large flaming fires

Recommended for:

Additional Features

Fast response thermistor

AudioLINK+®

SmartLINK®

BS 5446-2:2003

Ei3024

Multi-Sensor Fire Alarm

Contains both optical and heat sensors for a total fire response

Recommended for:

Additional Features

Unique Dust Compensation mechanism to reduce false alarms

AudioLINK+®

SmartLINK®

EN 14604:2005
BS 5446-2:2003

Ei3030

Multi-Sensor Fire & Carbon Monoxide Alarm

Smoke, Heat and Carbon Monoxide coverage in one Alarm

Recommended for:
In all rooms with a fuel burning appliance

Additional Features

Fire and Carbon Monoxide indicator on Alarm head

AudioLINK+®

SmartLINK®

EN 50291-1: 2018
EN 14604:2005
BS 5446-2:2003

Ei3028

Multi-Sensor Heat & CO Alarm

Heat and Carbon Monoxide coverage in one Alarm

Recommended for:

Additional Features

Heat and Carbon Monoxide indicator on Alarm head

AudioLINK+®

SmartLINK®

EN 50291-1: 2018
BS 5446-2:2003

Ei3018

Carbon Monoxide Alarm

For detecting CO build up from fossil fuel burning appliances

Recommended for:

It is advised to fit to EN 50292:2023 recommendations

Additional Features

Proven electrochemical sensor

AudioLINK+®

SmartLINK®

EN 50291-1:2018

140e Series

Smoke & Heat Alarms

Product Features:

Mains powered with
9V Alkaline battery backup

Battery must be replaced every 2-3 years

easi-fit **base**

10 YEAR **Product life**

RadioLINK™ **COMPATIBLE**

Ei146e	Ei144e
Optical Smoke Alarm	**Heat Alarm**
Best for slow, smouldering fires such as sofas and electronics	For detecting heat build-up from large flaming fires
Recommended for:	**Recommended for:**
EN 14604:2005	BS 5446-2:2003

Ei168RC

RadioLINK™ **Base**

Fit under any 140e series of Alarms to enable RadioLINK wireless interconnection

600 Series

Smoke & Heat Alarms

Product Features:

- Battery powered by a sealed in Lithium cell
- Easy to fit - twist on base and multi-fixings
- 10 YEAR Product life

Ei650iRF

Optical Smoke Alarm

Best for slow, smouldering fires such as sofas and electronics

Recommended for:

Additional Features

AudioLINK+ data extraction enabled

RadioLINK+ wireless interconnection built-in

EN 14604:2005

Ei630iRF

Heat Alarm

For detecting heat build-up from large flaming fires

Recommended for:

Additional Features

AudioLINK+ data extraction enabled

RadioLINK+ wireless interconnection built-in

BS 5446-2:2003

Ei660iRF

Multi-Sensor Fire Alarm

Contains both optical and heat sensors for a total fire response

Recommended for:

Additional Features

AudioLINK+ data extraction enabled

RadioLINK+ wireless interconnection built-in

EN 14604:2005
BS 5446-2:2003

Carbon Monoxide Safety

Signs of potential CO problems:

- Build-up of soot or discolouring around the appliance
- Excessive condensation on walls and windows
- High incidences of poor health in the home

You can't see it,
smell it
or taste it

Carbon Monoxide (CO) is released as a by-product of a combustion process in the following appliance types:

Gas Appliances

Portable Gas or Paraffin Heaters

Oil /Solid Fuel Stoves

Oil/Gas Boilers or Furnaces

Gas/ Solid Fuel Fire Places

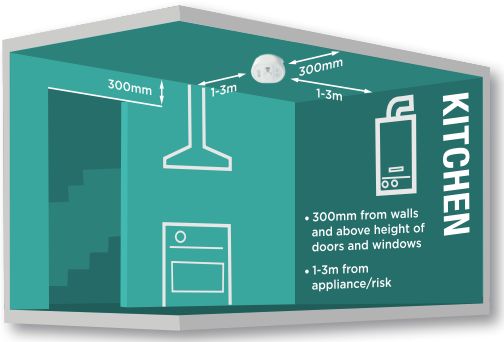
Blocked or Cracked Chimneys

% CO	Parts Per Million (ppm) CO	Effects on an Adult Human Body	% Saturation of COHB in the Bloodstream	A CO Alarm will alert you to a problem
0.01	100	Slight headache after 2 to 3 hours	13	Within minutes 90
0.02	200	Mild headache, dizziness, nausea and tiredness after 2–3 hours	20-30	Within minutes 40
0.04	400	Frontal headache and nausea after 1 to 2 hours. Life threatening after 3 hours	36	Within minutes 3
0.08	800	Severe headache, dizziness, convulsions within 45 mins. Unconsciousness and death possible within 2 – 3 hours	50	Within minutes 3
0.16	1600	Headaches, dizziness, nausea within 20 minutes. Collapse, unconsciousness and death possible within 1 to 2 hours	68	Within minutes 3
0.32	3200	Headaches, dizziness and nausea within 5 to10 minutes. Death within 25–30 minutes	70-75	Within minutes 3

"The Silent Killer"

Where to Install Carbon Monoxide Alarms

- In all rooms where there is a fuel burning appliance and where a flue passes through a room.
- In remote rooms where people spend a considerable amount of time.
- Sealed Garages.



- Ceiling mounted at least 300mm from any wall or light fittings.
- Between 1m to 3m away from the appliance when installed in the same room as the appliance.
- Inside each bedroom or within 5m of any bedroom door. Wall mounted close to the breathing zone.
- Do not install directly above a sink or in an enclosed area (behind a curtain or in a cupboard).

Gas installation such as gas boilers with an extended flue, a type A CO Alarm shall be installed that is capable of shutting down the boiler

Watch our How to Video Guide on where to install Carbon Monoxide Alarms or using the Ei428 Relay to facilitate boiler shutdown

Ei Learning
How To Video Available On:
YouTube

200 Series

Carbon Monoxide Alarms

Product Features:

	Ei208	Ei208WRF
Battery powered by a sealed in Lithium cell	**Recommended for:** It is advised to fit to EN 50292:2023 recommendations	**Recommended for:** It is advised to fit to EN 50292:2023 recommendations
Easy to fit - twist on base and multi-fixings	**Additional Feature** AudioLINK+® data extraction enabled	**Additional Features** AudioLINK+® data extraction enabled; RadioLINK+™ wireless interconnection built-in
10 YEAR Product life	EN 50291-1:2018	EN 50291-1:2018
Proven electrochemical sensor		

Installation & Maintenance at your Fingertips

- Use the SmartLINK app to set up and install the Gateway within a property
- Access previous installations through your phone as well as on desktop
- Get alarm event notifications sent to your phone via email and SMS
- To add SmartLINK technology to your system please email sales@eielectronics.ie

SmartLINK®

Ei1000G

SmartLINK Gateway

Mains Powered with rechargeable battery back-up

10 YEAR Product life

- Enables remote management of RF Alarms
- Transmits data via GSM network
- Includes a SIM
- Wall Mounted
- Compatible with SmartLINK & RadioLINK+ enabled devices and environmental sensors

Ei3000MRF

SmartLINK® **Module**

Plug into the head of any 3000 Series Alarm to enable wireless interconnection and data extraction capabilities.

HomeLINK®

Environmental Sensors (An Ei1000G is required to transmit data)

Ei1020

Temperature + Humidity

- Condensation, Damp, Mould
- Heat Loss
- Excess Cold
- Excess Heat

Ei1025

Temperature + Humidity + CO_2

- Condensation, Damp, Mould
- Heat Loss
- Excess Cold
- Excess Heat
- Draught Risk
- Dust Mite Allergy Risk

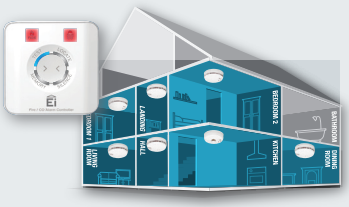
Accessories

Alarm Control

An Alarm control device is required under the standard if:

1: Alarms are fitted in attic spaces or Alarms are not easily accessibly for Test, Locate and Silence functions.

2: If interconnecting Fire and CO Alarms.



Test
all the alarms

Locate
the triggered alarm

Silence
if no fire is present

Ei450

Wireless Alarm Controller

Battery powered

Sealed in Lithium cell

10 YEAR **Product life**

Additional Features:

LED display to show Fire or Carbon Monoxide Alarm activation.

Compatible with all Ei proprietary wireless RF interconnection technologies.

Ei1529RC

Hardwired Alarm Controller

Mains powered

10 YEAR **Product life**

Additional Features:

Dedicated switch for each function.

Hardwire with any Ei mains powered Alarm.

Accessory for Deaf and Hearing Impaired

Mains Powered with 10 year rechargeable lithium battery backup

Product life

This is not an Alarm

Plug in Transformer

180 Degree Strobe

Vibrating Pad

A mimimum of one RadioLINK or SmartLINK enabled Smoke or Multi-Sensor Alarm must be purchased with this device.

Ei170RF

RadioLINK Alarm Kit for the Deaf and Hard of Hearing
(contains strobe light & vibration pad - Smoke Alarm not included)

Installation Video
available on YouTube

Ei Learning
How To Video Available On:
YouTube

Relays and Interface Products

Mains powered

10 YEAR Product life

Product must be connected to an Ei Fire/CO Alarm using any of Ei's propriety wireless interconnection technologies in order to activate

Ei414

Mains Powered RF Interconnect Fire/ CO Alarm Interface

Ei428

Relays allow for Ei Alarms to interface with ancillary devices and systems such as:

Telecare | Security Panels | Boilers

Application Guide

Ei Learning

How To Video Available On: YouTube

Other interface products available

Mains Powered RF Interconnect Relay Module (Triggers ancillary devices if alarms activate)	Ei428
Mains Powered Hard-wired Relay Module with battery back-up (Triggers ancillary devices if alarms activate)	Ei128RBU
Mains Powered Hard-wired Switched Input Module (Triggers ancillary devices if alarms activate)	Ei129
10 Year Battery Powered RF Interconnect Switched Input Module (Triggers alarms if ancillary devices activate)	Ei408
Low Voltage (11-30V) Powered RF Interconnect Panel Interface Module Two-way communication between alarms and panel systems	Ei413

Call Points

MCP401RC

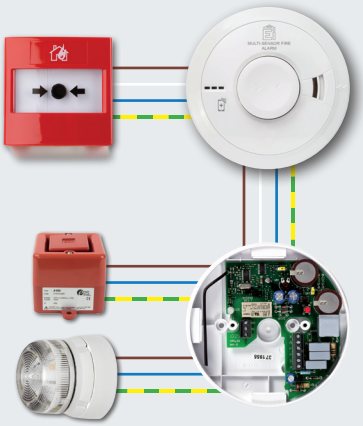
Hardwired Manual Call Point

Mains powered

10 YEAR Product life

- Allows for remote triggering of an Alarm system
- Non-breaking, resettable front plates
- Hardwire with any Ei mains powered Alarms

Hardwired System



Ei407

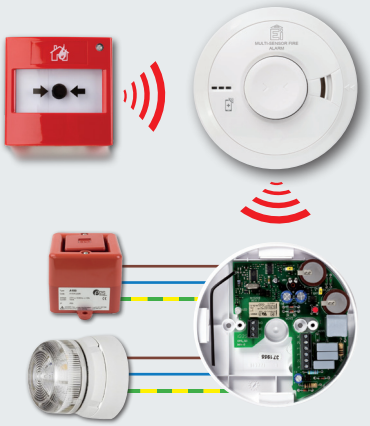
Wireless Manual Call Point

Battery powered

10 YEAR Product life

- Allows for remote triggering of an Alarm system
- Non-breaking, resettable front plates
- Interconnect with any Alarm featuring Ei's proprietary wireless RF interconnection technologies

Wireless System



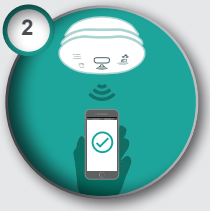
Technology

AudioLINK+®

Download on the App Store | GET IT ON Google Play | Get it from Microsoft

Extract the data in three easy steps...

Press the test button on the Alarm 3 times in 5 seconds



The Alarm will emit a number of beeps. The phone/tablet will pick these up (via the microphone)

The AudioLINK+ app will generate and display the Alarm Status Report

The Alarm Status Report

- Alarm activations
- Sensor status
- Record of testing
- Battery and back up cell status
- Carbon Monoxide levels from CO Alarms
- Background levels of Carbon Monoxide from CO Alarms
- Dust levels from Alarms with an optical sensor
- Data can be emailed directly from a phone or tablet

RadioLINK+™

Interconnection technology, but with new functionality, including data extraction and monitoring

- Alarm system data extraction System monitoring to recognise Alarm removal or tampering
- Streamlined interconnection process

HomeLINK®

Our SmartLINK Gateway is the central hub for your data, extracting information from both Fire and Carbon Monoxide Alarm systems and Environmental Sensors. With all data in one place, landlords can benefit from increased efficiency and improved asset management.

Bathroom

A high-risk area for condensation, damp and mould due to high humidity and inadequate ventilation.

Kitchen

A high-risk area for condensation, damp, mould and excess heat due to potentially limited ventilation and increased humidity from cooking.

Living Room

Residents are likely to spend a lot of time here, increasing CO_2 levels from high occupancy and smoking.

Bedroom

Residents spend a significant amount of time sleeping and it can be a risk area for allergens e.g. dust mites.

The Dashboard

Designed in conjunction with Landlords and Housing Associations, the analytics platform displays insights via a holistic, user- friendly dashboard.

From Carbon Dioxide, energy efficiency and indoor air quality to mould risk, allergens and ventilation, there's a wealth of actionable insights available, segmented by high, medium and low risk. View top-level data on the main dashboard or drill down for deeper insights to tackle problems, maintain compliance and enable preventative strategies within housing stock.

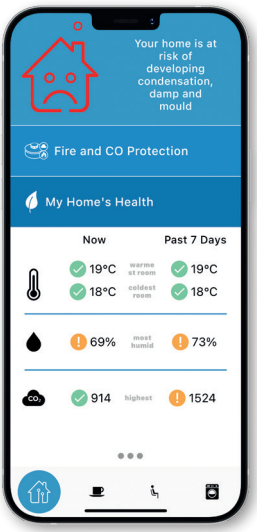
The HomeLINK Dashboard provides detailed property and portfolio views and is designed for multiple user roles.

Empower Residents

By empowering residents with their data and personalised insights, landlords will see improvements in the maintenance and health of their stock with less intervention, while residents can save money by running their homes with energy efficiency in mind.

With the HomeLINK Resident App, residents are provided with a healthy home rating, temperature, humidity and CO_2 data and handy advice on the measures they can take to improve the quality of their home.

When Fire and Carbon Monoxide Alarms are interlinked with the SmartLINK Gateway, the Resident App will notify residents with testing reminders and alarm activation events.



Maintenance

Test & Maintenance

Routine Testing & Maintenance of Fire and CO Alarm Systems

At the installation stage all devices should be visually inspected, and button tested. Mains Powered Alarms display a green LED when connected to the mains power supply. Press and hold the test button for up to 10 seconds, the alarm will sound. Check that all interconnected Alarms also sound within this period.

The Alarm will stop sounding when the button is released, the interconnected Alarms will silence approximately 3 seconds later. Button testing the Alarms simulates smoke, heat and carbon monoxide detection thereby verifying the sensor, electronics, and sounder are working.

Fire & CO Alarms require regular testing by the occupant and after:

- The Alarm system is installed
- Prolonged absence from the premises
- Any electrical work has been carried out in the premises

Cleaning the Alarm

Run a vacuum with a narrow nozzle attachment around the Smoke/Heat/CO entry slots and holes

Alarms should be periodically cleaned – suggested monthly

Avoid using cleaning agents and bleaches

Avoid spraying air fresheners, or other aerosols near the Alarms.

Wireless Interconnection

A Guide to House Coding

Ei Learning
How To Video Available On:
YouTube

Enter House Code Mode

Before beginning this process ensure all RF devices are fitted in their correct location see Instruction manual for reference. Press and hold the house code button until a steady blue light appears, then immediately release. A blue flash will repeat every 5 seconds on all RF devices. Continue this process with all RadioLINK, RadioLINK+ and SmartLINK devices. The flash count will increase by one with the addition of each RF device.

Manually Exit House Code Mode

Check all RF devices have been successfully house coded by counting the number of blue flashes on each of them. The number of flashes should correspond to the number of RF devices in the system. To exit house code mode, select one of the RF devices in the system, press and hold the house code button until a steady blue light appears, immediately release. A signal will be sent to all other RF devices in the system to exit House Code Mode. All flashing will cease.

House Code Entry / Exit
Solid Blue Light

Factory Reset

To resolve any RF communication issue press and hold the house code button until you see a flashing blue light then immediately release. Repeat this procedure with all RF devices in the system. Once all RF devices are reset you can begin the house coding process. Enter House Code Mode.

Factory Reset
Flashing Blue Light

Remote House Code (Advanced Feature available with Radiolink+ and SmartLink)

To add an RF device to an existing RF interconnected system of Alarms. Choose any RadioLINK+ or SmartLINK device already in the system. Press and hold the house code button until you see the light sequence red, blue, green then immediately release. This RF device will send a signal to all previously installed devices to enter House Code mode. Each RF device will start flashing its blue light. Install the new RF device and enter House Code Mode.

Remote House Code Entry
Flashing Red, Blue, Green Light

Alarm Indicator Guides

Alarm Indicator Guides

Ei3000 Series Alarm Indicator Guide

Observe & Hear					Cause	Action
Green LED	Amber LED	Red LED	Icon Display (Ei3028 Only)	Sound		
ON					Standby Condition	None
ON		Flashing rapidly	FIRE Flashing	Full Fire alarm tone	Fire Alarm Condition	Follow Fire Evacuation Procedure
ON		Flashing rapidly	CO Flashing	Full CO alarm tone	CO Alarm Condition	Follow CO Evacuation Procedure
ON				Full Fire alarm tone	Activated by another alarm in the interconnected system. Alarm with the Red LED or icon flashing is the detecting alarm	Follow Evacuation Procedure
Flash x1 Every 48 Seconds					AC Mains off	Reconnect AC mains power
ON	Flash x1 Every 48 Seconds			1 x short Chirp	Low back-up battery	Replace the Alarm. Temporarily silence the Chirps by pressing the Test/Hush button. (Chirp silence last for 12 hours)
ON	Flash x2 Every 48 Seconds			2 x short Chirps	Sensor Fault	Replace the Alarm
ON	Flash x3 Every 48 Seconds			3 x short Chirps	End of Life	Replace the Alarm. Temporarily silence the Chirps by pressing the Test/Hush button. (Chirp silence lasts for 12 hours)

Refer to the Instruction Manual for a complete list of indicators

Ei140e Series Alarm Indicator Guide

Observe & Hear			Cause	Action
Green LED	Red LED	Sound		
ON	Flash x1 Every 40 Seconds		Standby Condition	None
ON	Flashing rapidly	Full Fire alarm tone	Fire Alarm Condition	Follow Fire Evacuation Procedure
ON		Full Fire alarm tone	Activated by another alarm in the interconnected system. Alarm with the Red LED flashing is the detecting alarm	Follow Evacuation Procedure
OFF	Flash x1 Every 40 Seconds		AC Mains Off	Reconnect AC Mains Power
ON	Flash x1 Every 40 Seconds	1 x short Chirp	Low Back-up Battery	Replace the 9V Alkaline Battery

Refer to the Instruction Manual for a complete list of indicators

Ei600iRF Series Alarms Indicator Guide

Observe & Hear				Cause	Action
Red LED	Amber LED	Blue LED	Sound		
				Standby Condition	None
Flashing rapidly			Full Fire alarm tone	Fire Alarm Condition	Follow Fire Evacuation Procedure
			Full Fire alarm tone	Activated by another alarm in the interconnected system. Alarm with the Red LED or icon flashing is the detecting alarm	Follow Evacuation Procedure
		Flash x1 Every Minute	1 x short Chirp	End of Life	Replace Ei600MRF Module
	Flash x1 Every 32 Seconds		1 x short Chirp	End of Life	Replace the Alarm
	Flash x2 Every 32 Seconds		2 x short Chirps	Sensor Fault	Replace the Alarm

Refer to the Instruction Manual for a complete list of indicators

Ei208 Alarm Indicator Guide

Observe & Hear						Cause	Action
Green LED	Amber LED	Red LED	Blue LED	Icon Display	Sound		
Flash x1 Every Minute						Standby Condition	None
		Flashing Rapidly			Full CO alarm tone	CO Alarm Condition	Follow CO Evacuation Procedure
					Full CO alarm tone	Activated by another alarm in the interconnected system. Alarm with the Red LED or icon flashing is the detecting alarm	Follow Evacuation Procedure
			Flash x1 Every Minute		1 x short Chirp	End of Life	Replace Ei200MRF Module
	Flash x1 Every Minute				1 x short Chirp	Low back-up battery	Replace the Alarm
	Flash x2 Every Minute				2 x short Chirps	Sensor Fault	Replace the Alarm
	Flash x3 Every Minute				3 x short Chirps	End of Life	Replace the Alarm

Refer to the Instruction Manual for a complete list of indicators

Expert Installer

Typical Domestic Installations

Typical Wired Interconnection with Control as per I.S.3218-2013+A1-2019

Installation Includes:

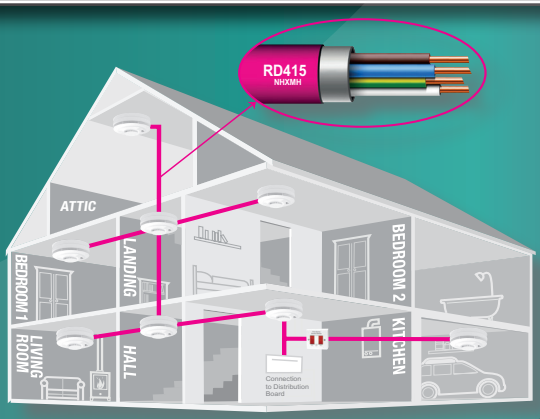
- Interconnected self-contained mains powered with battery backup fire Alarms.
- Interconnection may be wired or wireless (Radio Frequency).
- Alarms difficult to access for testing purposes, an Alarm Control Switch must be incorporated.

Notes:

- There must be a permanent live supply to the mains powered Alarm circuit. Ideally a dedicated circuit from distribution board.
- Required 230V AC Mains Supply.
- Mains powered Alarms and the wired Alarm control switch must have live, neutral and interconnect throughout.
- RD415 Cable is recommended as it provides four cores, the interconnect cable is white and external sleeve is pink and readily distinguishable from other cables in the property a requirement of I.S. 3218:2013 Pt 10.
- The Alarms 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 with the Alarms connected.

Testing & Commissioning:

All mains powered devices should be inspected to ensure the wiring is correct at the terminal block i.e. Live, Neutral and IC are correctly assigned. When mains supply is present a green LED is visible on the device. Test the interconnection by pushing the test button on each Alarm in turn. All other interconnected Alarms will sound. The Alarm sounding on button test verifies that the sensor, electronics, and sounder are working.



Typical Hybrid Interconnection with Control

A hybrid set up provides the means in which to increase the level of detection and audibility, by bridging mains powered wired interconnected Alarms with 10-year battery powered wireless RF interconnection Alarms. Typically, CO Alarms are not interconnected with the Fire Alarms (Smoke and Heat Alarms) to ensure that the appropriate action is taken by the occupants when CO Alarm sounds independently of Fire Alarms. If a hybrid system is used, the interconnected systems should be separated into CO only Alarms and Fire Alarms.

Installation Includes:

A SmartLINK module or RadioLINK Base to one wired Alarm and House Code it to all RF Alarms and Alarm Control Switch for complete interconnection.

Notes:

- There must be a permanent live supply to the mains powered Alarm circuit. Ideally a dedicated circuit from distribution board.
- Required 230V AC Mains Supply .
- The Alarms 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 with the Alarms connected.

Testing & Commissioning:

At the installation stage all devices should be inspected for correct operation by checking the Green LED is lit for mains power and wiring is correct. Test the interconnection by pushing the test button on each head in turn and checking all other interconnected devices sound their alarm in response. This functional test verifies the sensor, electronics, and sounder are working.

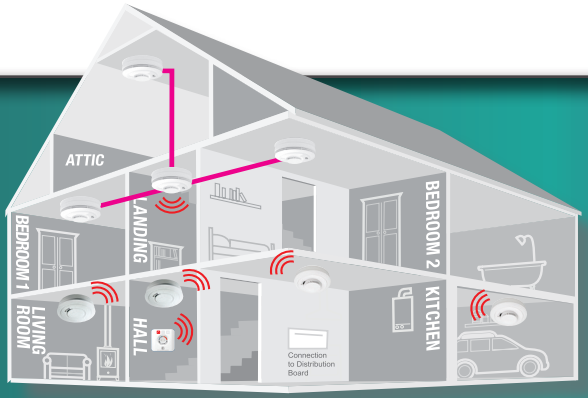
Compatible with Ei's propriety wireless RF interconnection technologies

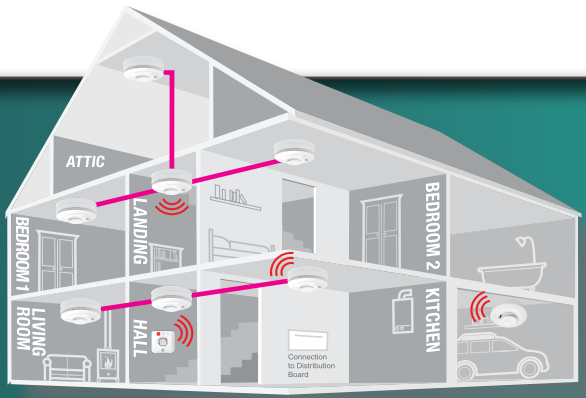
Examples of Hybrid Systems

A mix of mains powered and battery powered Alarms with both RF and wired interconnection to build a single early warning system in case of fire anywhere in the property.

Installation Example 1

A mix of mains powered and battery powered Alarms with both RF and wired interconnection.





Installation Example 2

Mains Powered Alarms with hardwired interconnection using wireless RF interconnection to bridge together the two Alarm systems.

Ei Learning
How To Video Available On:
YouTube

The Ei450 Alarm Control switch is compatible with all Ei proprietary RF wireless interconnection technologies

Specification Type Installation

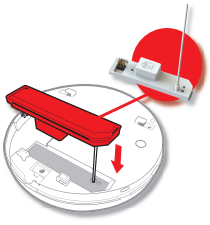
Responsible landlords need to ensure the Alarm system is fully operational throughout its product life. The ability to remotely manage an ever increasing housing stock requires automation wherever possible.

The Ei1000G SmartLINK Gateway provides remote asset management, monitors, and updates alarms performance via a web-based portal. The SmartLINK innovation provides that and much more by installing SmartLINK modules to enable wireless interconnection and communicate with the Ei1000G SmartLINK Gateway.

Wireless interconnection requires House Coding, a process to ensure all the Alarms in your system sound when one is triggered. Refer to House Coding Section.

Installation Includes:

SmartLINK App



Ei3000MRF Module

Ei1000G Gateway

Portal Access

Installation Connectivity Monitoring

Notes:

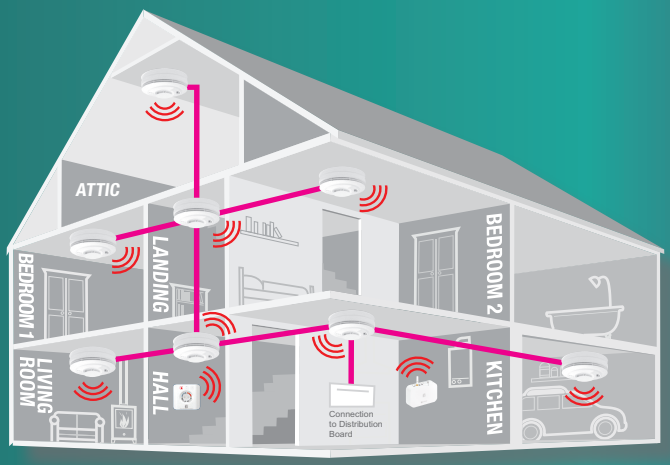
The Alarms must not be connected when the house wiring insulation is being checked with high voltages. i.e. Do not use a high voltage insulation tester with the Alarms connected.

Testing & Commissioning

All mains powered devices should be inspected to ensure the wiring is correct at the terminal block i.e. Live, Neutral and IC are correctly assigned.

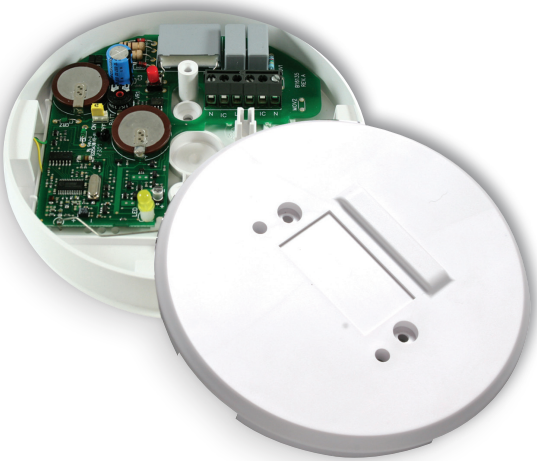
- When mains supply is present a Green LED is visible on the device.
- Test the interconnection by pushing the test button on each Alarm in turn.
- All other interconnected Alarms will sound.
- The Alarm sounding on button test verifies that the sensor, electronics, and sounder are working.

Whole system data collection and wireless RF interconnection via the Gateway and wireless RF enabled Alarms and accessories throughout the property



Ei428 Relay

Connect the relay to ancillary devices such as strobes, fire doors, gas boilers etc. The relay will activate immediately to all Fire & CO Alarm signals it receives from all interconnected Alarms within its system. The relay will remain active until an alarm cancel signal is received.



The Ei428 is 230V AC mains powered with rechargeable battery back-up allows for both RF and wired interconnection to Ei compatible Alarms. The contacts are electrically isolated and are rated at 230V AC, 5 Amp resistive or up to 30V DC.

The relay is primarily designed to work with RF Alarms, but for additional flexibility it can also be used with wired interconnected Alarms. The relays purpose is to electronically open or close a circuit when Alarms are triggered.

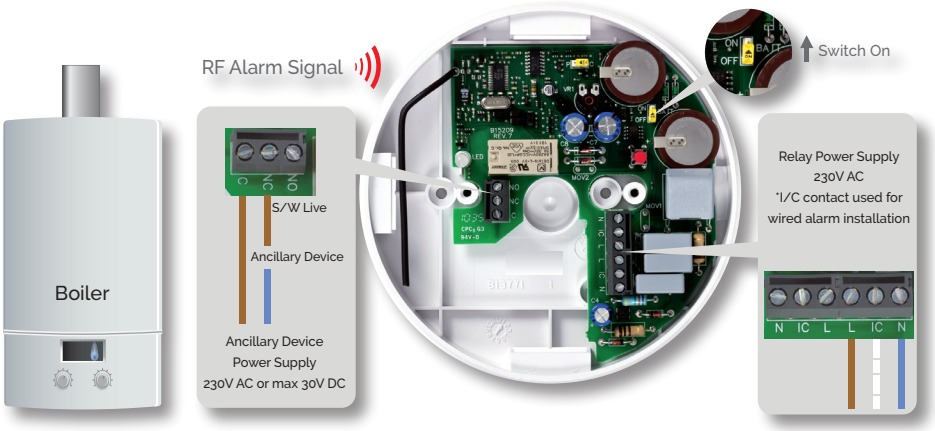
Ei Learning

How To Video Available On: YouTube

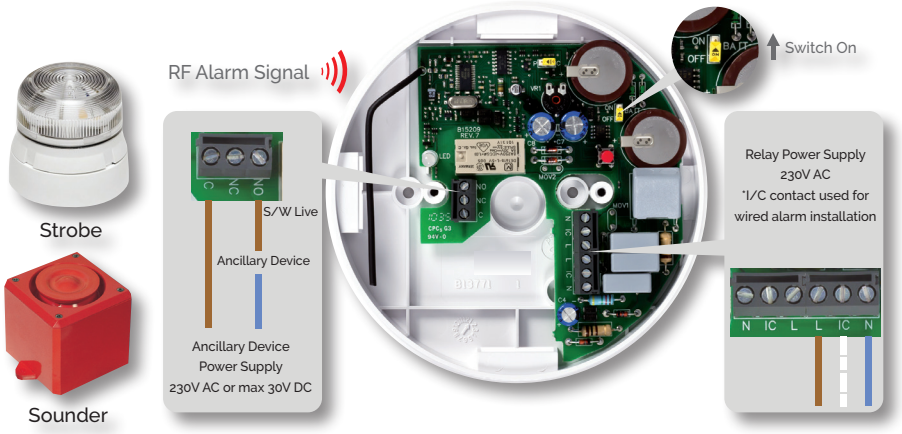
Ei428 Tutorial Video Contents

- Ei Alarm System Integration
- Ei428 Mains Powered Relay
- Beacons & Sounders Application
- Boiler Shutdown Application
- RF Installation Set Up

Normally Closed Wiring Example



Normally Open Wiring Example



Compatible with all Ei proprietary RF wireless interconnection technologies.

Training & Resources

Mobile Training & Demonstration Unit

Expert installer Training

The Ei Electronics Mobile Training Unit travels across Ireland delivering our free CPD accredited Expert Installer Programme in conjunction with Electrical Wholesalers.

The CPD programme is approximately 2.5hrs in duration and there are two sessions to choose from per day. You can choose between:

Morning Session 10am-12.30pm OR Afternoon Session 2pm-4.30pm.

Please contact your local wholesaler to find out when the mobile unit will be on site.

What's Covered?

- Irish Standards – IS 3218:2013 A1:2019
- Building Regulations (TGD – Part B) for Fire Alarm Systems System Categories & Grades
- Smoke Alarm Sensor Types
- Carbon Monoxide Standards and Legislation (TGD – Part J + IS813) System Installation
- Alarm Interconnection
- Alarm Data Extraction

This training can also be completed on-site on our Shannon campus where 100% of our R&D and manufacturing is located.

In-depth factory tours, catered lunch as well as extra training/meeting rooms are also available for groups throughout the day.

Alarm Selector App

Everything you need to correctly select and install domestic Smoke, Heat and Carbon Monoxide Alarms. Create a list of Alarms and Accessories for any job large or small and email it to your preferred Wholesaler for pricing and stock availability saving you valuable time at the wholesaler counter.

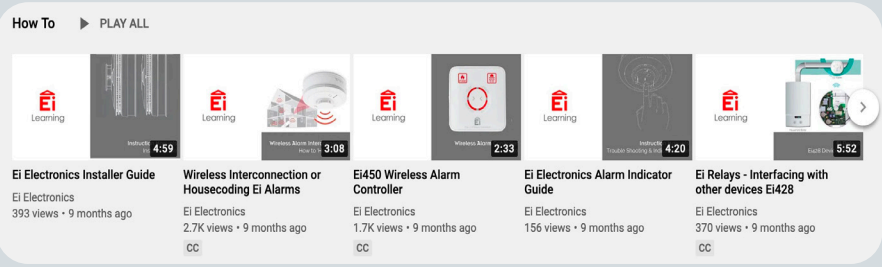
Online Video Tutorials

Learning
A Suite of How-To Videos

Our continuously updated suite of 'How To' Videos are now live on our YouTube channel @eielectronics

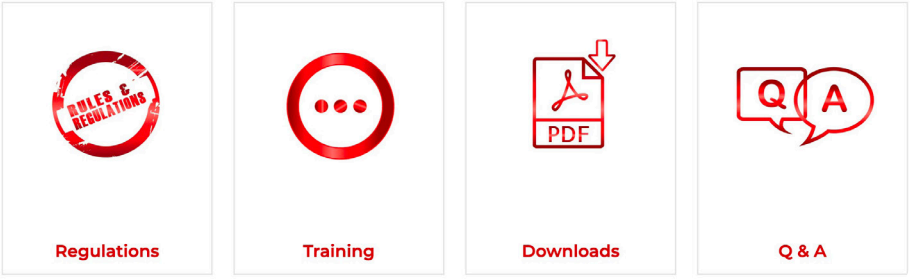
These videos specifically cover our most asked questions and include live house coding demos and product installation.

YouTube



Website

As well as accessing product information, the **www.eielectronics.ie** website also has an expanded support section. Download publications, access upcoming training schedules and keep up to date with Irish Standards and Regulations for Fire & CO Alarm Installations.



Here to Help

Technical Support Contact Details

Our sales and technical support teams are always at hand to deliver the best advice and aftercare service

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(Country Manager Ireland)

Call: +353 (0)86 803 0430

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Email: customerservice@eielectronics.ie

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The Market Leader in Fire & CO Detection

Quality | Service | Innovation

April 2025 | Issue 5

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