

# Radio Frequency **Accessory**

**MAINS POWERED 230V~**  
RF Communication

## Model Ei428 RF Relay Base

- Designed for use with Easi Fit range of alarms
- RF wireless interconnect
- Unique house coding feature
- Visual RF transmission indicator
- Advanced suppression and calibration technology
- Radio transmitter and receiver in each base
- Easi-fit design construction
- Tamper proof rechargeable lithium battery back up
- Low power cell warning
- RF performance to EN300220-3
- EMC performance to EMC 301489-3
- 5 year guarantee



## Product Description

The Ei428 Relay Base is a device that switches a relay upon receipt of an alarm signal from a suitable Ei alarm. The electrically isolated contacts can be used for many applications such as signaling, turning on lights, strobes etc.

The Ei428 Relay Base is powered by 230VAC mains and has rechargeable battery backup cells (in the event of a mains failure). As supplied the relay operates continuously but can be easily adjusted to pulse condition.

The Ei428 relay base is primarily designed to work with the other range of RadioLINK products, but for additional flexibility the Ei428 can also be used with conventional hard wired interconnect systems.

The Ei428 uses advanced radio transceiver technology with unique software coding to transmit and receive the radio signals. The transmissions are frequency modulated (FM) and use Manchester coding to ensure robust signal integrity and avoid signal noise interference

The Ei428 has built in circuitry to aid suppression of voltage transients and RF interference.

## Operation

- The green indicator will illuminate to show mains power is present
- In “Continuous” mode, the relay will switch until an alarm cancel signal is received
- In “Pulse” mode, the relay will switch for 5 seconds only and return to standby state
- In code mode, the red indicator will flash to indicate the number of other RF alarms that have been “learned” in the system
- The red indicator on the alarm attached to the Ei168 Base will flash rapidly to show an alarm condition for the smoke detector
- The red light every 10 seconds to indicate that the battery back up is depleted (green light switches off)



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## Model Ei428 RF Relay Base

### Technical Specification

<b>Sensor</b>	None	<b>Power-On Indicator:</b>	Green light on
<b>Supply Voltage:</b>	230V AC, 40mA	<b>Relay Contacts:</b>	250VAC, 5 amps resistive
<b>Battery back-up:</b>	Rechargeable lithium cells	<b>Temperature Range:</b>	0 <sup>o</sup> to 40 <sup>o</sup> C
<b>RF Range<sup>1</sup>:</b>	150 meters (min) free space	<b>Humidity Range:</b>	15% to 95% Relative Humidity - non condensing
<b>RF Visual Indicator:</b>	Red light flashes on receipt of RF signal	<b>Interconnect:</b>	Up to 12 RadioLINK products
<b>RF Frequency:</b>	868MHz (1% duty cycle)	<b>Plastic material:</b>	UL94VO flame retardant
<b>RF Power:</b>	+5dBm	<b>Warranty:</b>	5 year (limited) warranty
<b>Dimensions:</b>	141mm diameter x 26mm depth	<b>Approvals:</b>	RF performance to EN300220-3 EMC performance to EMC 301489-3
<b>Weight:</b>	180g		

Specifications are subject to change

1. *Any obstructions of any sort will result in a reduction in range from the free space specification. As such, the actual range will vary depending on installation.*

### Installation & Placement

Unlike a smoke alarm, the Ei428 Relay Base does not need to sense smoke and so is not restricted in its location on the ceiling/wall. Instead, it is desirable to place the Ei428 Relay base close to the device it is controlling (and so minimizing the wire connection between the units) and with access to a mains circuit.

When a suitable location has been selected, mark the screw holes. Drill with a suitable drill bit, insert the screw plugs, connect to the nearest mains circuit and screw the base into position.

The RF Relay Bases should be house coded to prevent possible interference from neighbouring installations – see instructions for more details.

### House Code Procedure

1. Connect the base to the mains circuit.
2. Hold the house code switch (with a small screwdriver) until the red light turns on and then release
3. Similarly, place other bases into house code mode
4. Check that the number of red flashes (on each base) corresponds to the number of bases/alarms in your system
5. Remove all bases from house code
6. Button test each alarm to check your system



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