

Radio Frequency Base

MAINS POWERED 230V~

Radio Frequency Communication

Model Ei168RC Base

- Designed for use with Easi-fit 'RC' range of alarms
- Allows control of alarm (when used with an Ei411H)
- RF wireless interconnect
- Unique house-coding feature
- 'Smart' System Coding Check
- Multi-level repeater mode
- 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 Ei168RC RadioLINK Base transmits a radio frequency (RF) alarm signal when the unit attached to it senses fire. When it receives an RF signal from another Ei168RC Base, the attached alarm will sound. It therefore eliminates the need to install long interconnect wires between all the alarms on different floors in different rooms.

The Ei168RC RadioLINK Base is designed for use with the 'RC' range of Easi-fit mains powered alarms. The Ei168RC itself is also mains powered and has rechargeable Lithium cells for back-up in the event of mains failure.

The unit also has "multi-level repeater" transmission – the unit first receiving a signal, then re-transmitting the signal to other units. This provides multiple signal paths for a stronger RF system and can also increase the system range. The RF range can also be improved by adjusting the wire antenna.

In addition, the Ei168RC Base also allows system control when used with the optional Ei411H RadioLINK Remote Control Switch. System Test, Hush and Alarm Locate functions are all easily performed from a floor level.

The Ei168RC has built in circuitry to aid suppression of voltage transients and interference.

Operation

- In normal standby mode the amber indicator will light to indicate transmission of an RF signal
- In house-code mode, the amber indicator will flash to indicate the number of RF units that have been "learned" in the system¹
- After house-coding all units together, the amber indicator will continue to flash (to indicate the number of units "learned") until the house code switch is activated on one of the units. The units that have successfully coded will then stop flashing the amber indicator, allowing easily visual checking of correct system set-up.
- The red indicator on the alarm attached to the Ei168 Base will flash rapidly to show an alarm condition for the smoke detector
- The amber light will flash every 10 seconds to indicate that the battery back up is depleted

1. The maximum number of flashes that can be displayed is twenty, Please contact us if you are intending to install a system of more than twelve units



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Model Ei168RC Base

Technical Specification

Sensor	None	Power-On Indicator:	Green light on the attached mains powered alarm can be seen
Supply Voltage:	230V AC	Alarm characteristics:	Available in the attached alarm
Battery back-up:	10Yr+ Rechargeable Lithium cells	Temperature Range:	0 ⁰ to 40 ⁰ C
RF Range²:	150 meters in free space, 600 meters with five units	Humidity Range:	15% to 95% Relative Humidity
Range Improvement:	Adjustable antenna	Interconnect:	Up to 12 RadioLINK products
RF Visual Indicator:	Amber light flashes continuously for 1.5 to 3.5 seconds while transmitting RF signal	Plastic material:	UL94VO flame retardant
RF Frequency:	868.499MHz (1% duty cycle)	Warranty:	5 year (limited) warranty
RF Power:	+5dBm	Approvals:	RF performance to EN300220-3 EMC performance to EMC 301489-3
Dimensions:	150mm diameter x 19mm depth		
Weight:	168g		

Specifications are subject to change

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

Installation & Placement



Place the Ei168RC Base on the ceiling and 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.

If using the Ei411H for system control, place the back box of the Ei411H on a wall at an easily accessible point and mark the screw holes. Again drill with a suitable drill bit, insert the screw plugs and screw the back-box into position. Turn on the Ei411H battery switch (no mains supply is needed).

The RF Bases (and Ei411H if used) should be house coded to prevent possible interference from neighbouring installations – see instructions for more details.

Alarms should be placed in accordance with the general guidelines shown in the diagram above. These recommendations are based on the problem of areas of “dead air” close to corners of rooms and apexes of ceilings, which could result in the prevention of smoke reaching the smoke detector

House-Code Procedure

1. Connect the base to the mains circuit and slide on associated alarm
2. Hold the house code switch (with a small screwdriver) until the yellow light turns on and then release
3. Similarly, repeat steps 1-2 to place other bases into house code mode
4. Check that the number of yellow flashes (on each base) corresponds to the number of bases in your system
5. Operate the house code switch on any of the units until the amber light comes on solidly then release. Visually check that all units yellow indicators have stopped flashing. This indicates that they are coded correctly.
6. Button test each alarm in turn and check that all other alarms in the system sound.