

# RadioLINK Base

## Mains 230V~ with Rechargeable Battery Back-up

### Model Ei168RC

- For use with 2100, 160RC and 140 series smoke and heat alarms
- Built in tamper proof rechargeable Lithium battery back-up
- Provides wireless interconnection between alarms
- Up to 20 units can be fitted on one system
- Unique "House Code" feature
- RF performance to EN300220-1
- EMC performance to EN301489
- 5 year guarantee



### Product Description

The Ei168RC is designed for use with 2100, 160RC and 140 series smoke and heat alarms to enable a comprehensive system without the need for a cable between any alarms.

The Ei168RC is powered by 230V AC mains. It has a built in tamper proof Rechargeable Lithium cell battery back-up designed to last 10 years and outlast the life of the unit, and can power the unit for up to 8 weeks in the event of mains failure.

The Ei168RC has a unique "House Code" feature which allows the units in a particular building to be coded together so they will not interfere with alarm systems in adjacent properties.

Up to 20 RadioliNK Professional units can be installed on one system.

The Ei168RC has a blue LED low battery warning indicator which will flash once every 10 seconds when the unit is low on charge.

The Ei168RC's unique Easi-fit design allows very quick and simple installation of the alarms, combined with simple removal and replacement.

The Ei168RC has a 'remote' House Code entry that allows units to be put back into House Code mode without having to physically access the House Code button. This feature is ideally suited for blocks of flats where having access to all flats simultaneously can be difficult.

### Operation

- When the attached smoke or heat alarm is activated, the Ei168RC transmits a Radio Frequency interconnect signal to all alarms in the system, setting them into alarm state. When the original alarm stops sounding, it will send a cancel signal silencing all other alarms.
- The unit is activated when the smoke or heat alarm is slid into the base, automatically connecting the batteries.
- The unit has a "Multi-Level Repeater Function" which allows signals to be received and retransmitted, improving the number of signal paths.
- The units when installed must be "House Coded" together. Insert a small screwdriver into the House code slot, until the blue indicator is on, then remove the screwdriver. The blue indicator will now flash once every few seconds. Repeat the process on all other units in the system, You will then after a short time notice the blue indicator should be flashing the correct amount of times for the amount of alarms in the system (4 alarms = 4 flashes, 5 alarms = 5 flashes etc).
- The units will automatically exit House Code after 30 minutes. The system is then set.



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Ei168RC DataSht Rev3 10.12.12

## Technical Specification

1. Allows Ei Professional Mains Easi-Fit alarms, Ei2110, Ei166RC, Ei164RC, Ei161RC, Ei146, Ei144 and Ei141, to be installed without the use of a hard-wired interconnect, instead using a radio signal to operate the interconnect feature.
2. Requires 230V AC mains power supply.
3. Features built-in tamper proof Rechargeable Vanadium Pentoxide Lithium standby cells, capable of lasting at least 10 years and powering the base initially for at least 2 months in the event of mains power failure.
4. The cell manufacturer endorses a minimum 10-year life expectation for the rechargeable cells.
5. The product is CE marked to indicate conformance to BS EN 60065:1998 (Electrical Safety), EN300220-1 V1.3.1 (2000-09) (RF Performance), EN301489 V1.4.1 (2002-08) (EMC) and has been 3<sup>rd</sup> party tested for electrical safety in accordance with Annex K of BS 5446: Pt.1: 2000.
6. Radio frequency: 868 MHz band in accordance with R&TTE Directive 1999/5/EC – this band has been designated for use with security products and only allows a 1% duty cycle, so continuous transmission and interference from external sources is extremely remote, and would be illegal.
7. Range: the type of building will be the major limiting factor e.g. the number and type of walls/ceilings that the radio signal has to pass through. As a guide, 30m should be the maximum distance between any of the alarms in the system. Also see point 13.
8. Up to 20 units can be used in one system. For larger systems contact our Technical Service Department for guidance. Also see sections 7 & 13.
9. Low battery warning signal – LED indicator flashes every 10 seconds to indicate depleted battery.
10. External alarm RF signal: triggers smoke alarm (without red LED flash on alarm) until it receives an alarm cancel signal. Receiver remains on for additional 11 seconds to check for further signals. This ensures integrity of the interconnect function.
11. Units are in factory code when received (they will all communicate with each other). They must be 'House Coded' to eliminate the risk of adjacent properties communicating with each other. After House Coding they will only communicate with other units coded at the same time.
12. House code: operate the 'House Code' switch on all bases in the system. A blue LED on the side of each base will flash. Each base will 'learn' the serial numbers of all units in the system. The units will return to normal standby mode automatically after 30 minutes, or pressing the 'House Code' switch again on any alarm in the system will return all alarms in range to normal standby immediately. Separate zones can be created within blocks of flats and other large buildings. These zones will not communicate with other 'House Coded' zones in the same building, eliminating problems of nuisance alarm affecting all dwellings. If interconnection is required between dwellings, the need to cross property boundaries with mains/interconnect cables is eliminated.
13. Remote House Code entry: pressing the test button on the alarm at the same time as pressing the House Code button will cause the unit to send out a 'remote' House Code signal which will put all units it had previously been coded with back in to House Code mode. This is particularly useful in blocks of flats to put units back into House Code where physical access to individual flats is an issue.
14. Repeater function: where distance or obstructions cause range restrictions, the Ei168RC has a built-in multi-level repeater. On receiving an RF signal from another alarm, the unit will automatically re-transmit the signal to other alarms in the system. This provides multiple signal paths to give a strong and robust system.
15. Unique Easi-Fit design with integral terminal block for connection of mains supply (and hard wired interconnect option). The chosen Smoke/Heat alarm slides into position on the RadioLINK base and will also automatically operate the battery back-up. A 'Knock out' in the side of the base is provided to allow standard or mini trunking to be used.
16. The Ei168RC can be used with the Ei450, Ei411H and Ei412 RadioLINK Alarm Control Switches to allow remote Test, Silence and Locate features with Ei2100, and 160RC Series alarms. A RadioLINK Manual Call Point, Ei407 and a Remote Relay Module, Ei428 are also available for use in the system. See separate specification sheets for further information.
17. Dimensions: 140 diameter x 20mm depth. Weight inclusive of packaging: 230g.
18. Ambient Temperature Range: 4°C to 40°C. Humidity Range: 0 to 90 % relative humidity.
19. 5 year guarantee.
20. Manufactured in Ireland.



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