

# RadioLINK Alarm

**MAINS POWERED 230V~**

Alarm for Deaf & Hard of Hearing

## Model Ei170RF

- Stand-alone unit designed for use with RadioLINK bases, smoke alarms & accessories
- Integral high intensity strobe
- Plug-in vibration pad
- Wireless interconnection to RadioLINK units
- Visual RF transmission and power indicators
- Unique House-Coding
- Rechargeable battery back-up
- Low battery power warning
- Auxiliary sockets for connection of additional devices
- 5 year guarantee



## Product Description

The Ei170RF is a RadioLINK alarm system designed to give warning to the deaf and hard of hearing. It consists of a control box with integral strobe and a plug-in vibration pad.

The Ei170RF is designed to be powered from a permanent mains power supply. It also contains a sealed lead-acid rechargeable battery that provides back-up power in the event of mains failure.

The control box contains RadioLINK RF circuitry. It has a built-in high intensity Xenon strobe with a specially designed lens that provides wide-angle light output. An integral 'Test' button is also present on the front of the unit, allowing an easy means of testing the strobe, vibration pad and the RadioLINK bases/alarms in the system.

The vibration pad has a simple plug-in connection to the control box and is designed to be placed under a pillow to wake people who fail to respond to the visual strobe.

The Ei170RF uses advanced transceiver and signal coding technology to ensure robust and reliable RF signaling. It also has a House-Code feature that allows a system of RadioLINK units to be coded together to prevent interference with neighboring systems.

## Operation

- The green 'Power' indicator light on the front of the control box will illuminate to show mains power is present.
- If the mains power fails the green indicator will extinguish and change to an amber flash every 4 seconds to indicate that the unit is running on battery back-up. If the battery back-up becomes depleted, the amber 'Fault' indicator will flash once every 4 seconds.
- In normal standby mode, the blue 'RadioLINK' indicator will flash every 40 seconds if the battery in one of the RadioLINK smoke alarms it is House Coded with becomes depleted (Ei405 & Ei605 Series RadioLINK alarms only).
- In House-Code mode, the blue 'RadioLINK' indicator will flash to indicate the number of RF units that have been House Coded together as a system.
- On receipt of a RadioLINK alarm or test signal, the strobe will flash and the vibration pad will be activated. The red 'Alarm' indicator light will also flash.
- Pressing the integrated 'Test' button will check and activate the strobe and vibration pad. The unit will also send out a RadioLINK alarm signal that will activate all RadioLINK units in the system. The blue 'RadioLINK' indicator will illuminate for 3.5 seconds as the RF signal is being sent.



Mile End Business Park, Oswestry, Shropshire SY10 8NN  
Phone. 0870 758 4000 Fax. 0870 758 4010  
E-mail. [enquiries@aico.co.uk](mailto:enquiries@aico.co.uk)  
Web. [www.aico.co.uk](http://www.aico.co.uk)

## Technical Specification

1. A strobe and vibration pad kit designed to give warning of fire to deaf and hard of hearing occupants. For use with Ei Professional Mains Easi-Fit alarm models Ei141, Ei144, Ei146, Ei161RC, Ei164RC & Ei166RC when mounted on an Ei168RC RadioLINK base. Can also be used with all other RadioLINK units including the Ei405 & Ei605 Series RadioLINK smoke alarms.
2. Eliminates the need for any cabling between the Ei170RF and the smoke/heat alarms & RF bases used in the system.
3. Requires 230V AC, 50Hz Mains Power Supply.
4. The unit has a built in high-intensity Xenon strobe (flash rate 0.8Hz) with a wide light output angle.
5. Built-in long-life sealed lead acid rechargeable battery to provide back-up power in the event of mains failure. Standby capacity 7 days (followed by 15 minutes alarm), lifespan 5 years in normal use. The battery is connected by plugging it into the socket in the bottom of the battery box.
6. Comprehensive indicating lights on front of the unit:
  - Power – constant green to indicate mains is present, flashes amber every 4 seconds with mains absent.
  - Alarm (red) – flashes every second when unit has been triggered.
  - Fault (amber) – flashes every 4 seconds if fault is detected with panel/vibration pad.
    - flashes every 4 seconds if rechargeable back-up battery is depleted or faulty.
  - RF status (blue) – illuminates when RF signal is being sent, flashes in House Code mode to indicate the number of units 'learned' (see point 16), flashes every 40 seconds if RadioLINK smoke alarms have a low battery (Ei405 & Ei605 Series RadioLINK alarms only).
7. Mains transformer is mounted in separate box and hard-wired to the strobe unit with 4m of low Voltage cable. Supplied with 2m of mains cable and pre-wired 13 Amp plug (with a 3 Amp fuse).
8. Integrated test button on the front of the unit. Pressing this checks strobe, vibration pad and control circuitry and also sends out a RadioLINK alarm signal to other units in the system.
9. The vibration pad is suitable for mounting under mattresses or pillows and produces strong, pulsed vibrations suitable for waking sleepers. Supplied with locking plug and 5m of pre-wired cable.
10. Connecting sockets on rear of unit as follows:
  - Vibration Pad socket – Locking socket (JST type VHR-2N). Output 12V/200mA is pulsed when unit is in alarm. Wiring is monitored so if it is not connected or open circuit the fault light will flash.
  - Auxiliary sockets – Two auxiliary sockets are available on the rear of the unit to allow connection of additional strobes, vibration pads etc. Locking socket (JST type VHR-2N). Each provides 12V/200mA when unit is in alarm. Can be used for any of the following: auxiliary strobe Ei178, auxiliary vibration pad Ei174, or for triggering a radio pager.
11. A Clock Input socket is also available. This is for use with alarm clocks that have a 3.5mm mono jack output and saves the need for multiple vibration pads. An input of 5-12V (AC or DC mains isolated) will turn on the vibration pad and activate the auxiliary sockets but will not activate the strobe.
12. Radio frequency: 868MHz 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. Complies with EN300220-2V2.1.1.
13. RF 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 RadioLINK units in the system. Multiple Repeater units such as the Ei168RC and Ei420 can be used to extend the range.
14. Up to 12 RadioLINK units can be used in one system. For larger systems contact our Customer Services Department for guidance.
15. 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 RadioLINK units coded at the same time.
16. House Code: operate the House Code switch by inserting a small screwdriver through the hole on the cover. Also place all other RadioLINK units into House Code mode – see instructions supplied with the units being used. The blue light on the cover of the Ei170RF will flash slowly: this indicates it is receiving the unique serial numbers being sent by all other RadioLINK units in House Code mode. The number of flashes of the blue light indicates the number of units in the system. The Ei170RF will return to normal standby mode automatically after 30 minutes. Pressing the House Code switch again will return it to normal standby immediately.
17. An optional additional strobe (Ei178) is available for providing warning in additional rooms. The Ei178 is supplied with 10m of pre-wired cable and plug for connection to one of the Auxiliary sockets. An additional vibration pad (Ei174) is also available and is supplied with 5m of pre-wired cable and plug, again for connection to one of the Auxiliary sockets.
18. The control box can also be used as a strobe unit, without the vibration pad, to provide visual warning in daytime rooms etc. A optional dummy plug (Ei17DP) must be connected into the vibration pad socket to disable the fault lights.
19. The product is CE marked to indicate conformance to Directives – EMC (89/336/EEC) tested to EN50130-4; Low Voltage (73/23/EEC) tested to EN60065; R&TTE (1999/5/EC) tested to EN300220-2V2.1.1.
20. Designed for wall or surface mounting.
21. Dimensions: Control Box - 195mm x 125mm x 75mm      Mains Adapter - 60mm x 50mm x 90mm
22. Weight: Control Box - 770g      Mains Adapter - 600g
23. Ambient Temperature Range: 4°C to 40°C. Humidity Range: 0 to 90% relative humidity.
24. 5 year guarantee.
25. Manufactured in the EU.



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