

Contains vital information on the product's operation and installation. Read and retain carefully. If you are just installing this product **the manual MUST be given to the householder.**

The **Ei411H** is a RadioLINK Remote Control Switch for use with **Fire Alarm Systems only**. A Fire Alarm may contain a combination of Smoke, Heat & Multi-Sensor Alarms.

The **Ei412** is a RadioLINK Remote Control Switch for use with mixed **Fire & Carbon Monoxide Alarm Systems**.

**WARNING:**

**The Ei411H is for use with the following models of RadioLINK Base / Alarm:**

<b>Ei168RC</b>	Base fitted with <b>Ei161RC</b> Smoke Alarm
<b>Ei168RC</b>	Base fitted with <b>Ei164RC</b> Heat Alarm
<b>Ei168RC</b>	Base fitted with <b>Ei166RC</b> Smoke Alarm
<b>Ei405</b>	RadioLINK Smoke Alarm
<b>Ei405TY</b>	RadioLINK Smoke Alarm
<b>Ei605MRF</b>	Module fitted with Ei605 Series Smoke Alarm
<b>Ei605MTYRF</b>	Module fitted with Ei605TY Series Smoke Alarm

**The Ei412 works with all of the above plus the Ei262 Carbon Monoxide Alarm**

<b>Ei262</b>	CO Alarm with Integrated RadioLINK
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**Do not** use any other models of RadioLINK Base / Alarm

**1. INTRODUCTION**

For use with Ei168RC RadioLINK Bases (fitted with RC Series Alarms) and RadioLINK Smoke and Carbon Monoxide (CO)Alarms.

The Remote Control Switch allows you, without the use of ladders or chairs, to:

- **Test** the Smoke/Heat/CO Alarms.
- **Locate** the Smoke/Heat/CO Alarm sensing fire/CO by silencing all the other alarms (for 10 minutes). This is of great benefit, particularly at night as the source of the fire/CO can be quickly traced audibly. This is ideal for larger systems as people nearest the fire/CO can be quickly evacuated and/or control a fire if it is small.
- **Memory Locate:** The Locate button also identifies which alarms have previously sensed fire/CO. This is very useful when troubleshooting systems of multiple smoke, heat and/or CO alarms (see section 4 - Alarm Memory Function).
- **Hush** Nuisance Alarms: These can be silenced by pressing and releasing the Hush switch.
- **Fire & CO Indicators:** In a Fire only System the Fire indicator on the **Ei411H** will flash to indicate a fire has been detected.

If there is a fire, immediately evacuate the premises and telephone the fire brigade from outside. **Do not silence the alarm unless you are sure there is no fire.**  
 In a mixed RadioLINK Fire & CO System the Fire or CO indicator on the **Ei412** will flash to indicate that Fire (smoke/heat) or Carbon Monoxide has been detected.

If there is a fire, immediately evacuate the premises and telephone the fire brigade from outside. **Do not silence the alarm unless you are sure there is no fire.**

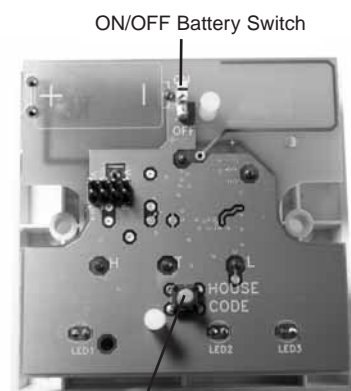
If CO has been detected, open doors & windows while evacuating the premises. Telephone the appropriate authorities to report a Carbon Monoxide alarm has been activated.

**2. INSTALLATION**

1. Position the Remote Control Switch 1.2 metres (approx) up on a wall in a suitable position on an exit route. Avoid locating near metal objects.
2. Securely attach the mounting box of the unit to the wall using the fixing screws supplied. **Note:** The Ei411H / 412 should **not** be recessed mounted - only the surface mounting box supplied should be used.
3. Carefully slide the battery switch into the 'ON' position (see Figure 1). On the Ei411H two red light indicators will flash in sequence to indicate power-up,

on the Ei412 three red light indicators with flash in sequence.

4. It is essential that you House Code your Remote Control Switch with your Smoke/Heat/CO Alarms and any RadioLINK accessories to prevent false alarms and other interference with nearby systems (see below).



House Code Button **Figure 1**

**To House Code your Remote Control Switch:**

- a) Place all the RadioLINK Smoke/Heat/CO alarms and accessories into House Code mode within 15 minutes, as described in their instruction leaflets.
- b) Also, within the same 15 minutes, place the Remote Control Switch into House Code mode by pressing and holding the House Code button until the RF indicator red light turns on. Immediately release the button and the RF indicator red light will now flash continuously (for 15 minutes) to show it is in House Code mode.
- c) The Remote Control Switch will now send a radio message every 5 seconds to indicate it is in House Code mode. All Smoke/Heat/CO Alarms and accessories within range that are also in House Code mode themselves, will memorise the House Code of the Remote Control Switch.
- d) Check that the number of amber light flashes (for RadioLINK Bases) or blue light flashes (for RadioLINK Smoke Alarms) or RF indicator red light flashes (for CO Alarm & Remote Control Switch) correspond with the number of units in the system (e.g. smoke alarms plus the Remote Control Switch).
- e) The Remote Control Switch and Smoke/CO alarms will exit the House Code mode by itself after approximately 15 minutes without further user intervention.

(However, this could result in problems with nearby systems, if their units are being House Coded at the same time. If this is the case exit House Code mode by pressing and holding the House Code button until the RF indicator red light comes on continuously (i.e. use the same method as to enter House Code mode). Release the button and the RF indicator red light will go out, indicating that the Remote Control Switch and Smoke/CO alarms have exited House Code mode.

f) To remove other RadioLINK accessories from House Code mode follow instructions as described in their installation leaflets.

g) Fix the Remote Control Switch assembly to the mounting box using the screws provided.

h) Using the Test switch, verify that the Remote Control Switch activates all the alarms in the system (If some or all of the alarms have not been activated, then the House Coding procedure should be repeated. If there are still some problems, see the section 5 on "Troubleshooting").

**Clearing the House Codes:**

It may sometimes be necessary to clear the House Codes (e.g. if you wanted to use the Remote Control Switch with different alarms).

To clear the House Codes:

- Unscrew the Remote Control Switch assembly from the mounting box.
  - Press and hold the House Code button for over 6 seconds until the RF indicator red light turns on continuously and then flashes slowly. Immediately release the button and the RF indicator red light will go out.
  - Re-attach to the mounting box.
- Note clearing the House Codes will now reset the Remote Control Switch to the original factory setting. It will now only communicate with un-coded alarms (see base/smoke alarm instruction leaflet for information on how to un-code the bases/smoke alarms).

**3. USING REMOTE CONTROL**

**Ei411H Remote Control Switch Functionality Indicators**

1. When a RadioLINK smoke or heat alarm is activated, the Fire light on the Remote Control switch will flash rapidly for 2 minutes. After this period the rate will change to one flash every 30 seconds and will continue for 24 hours before turning off.

**Ei412 Remote Control Switch Functionality Indicators**

1. When a RadioLINK smoke or heat alarm is activated, the Fire light on the Remote Control switch

will flash rapidly for 2 minutes. After this period the rate will change to one flash every 30 seconds and will continue for 24 hours before turning off.

2. When a RadioLINK Carbon Monoxide alarm is activated, the Carbon Monoxide light on the Remote Control Switch will flash rapidly for 2 minutes. After this period the rate will change to one flash every 30 seconds and will continue for 24 hours before turning off.

**After 24 hours a previously sensed Fire/CO Alarm can be identified by using the alarm memory function (see section 4).**

**What to do when the Alarms sounds**

1. If there is a fire, immediately evacuate the premises and telephone the fire brigade from outside.

If the Carbon Monoxide light is flashing, open doors & windows while evacuating the premises. Telephone the appropriate authorities to report a Carbon Monoxide alarm has been activated.

2. When a Smoke/Heat alarm sounds and the cause is not obvious, immediately press the **'Locate'** switch. This will silence all the alarms except those sensing the fire.

3. Locate the alarm(s) sensing fire audibly. Be careful, check doors are not warm and that there is no sign of smoke before you open them (See escape plan in Smoke Alarm instructions for further details).

4. If you are fully satisfied that there is no fire but the Smoke/Heat alarm is still continuing to alarm then press the **'Hush'** switch.

The Remote Control Switch allows you to Locate, Hush or Test units as follows:-

- **Locate Switch** – primarily used to identify the Smoke/Heat/CO Alarm sensing fire/CO.

When all the alarms are sounding due to a fire/CO (or nuisance alarm):

Press and release the spring loaded Locate switch. The RF indicator red light will come on continuously for 3 seconds to indicate that an RF signal is being transmitted.

This will silence all the alarms except those sensing fire/CO.

This is a very useful feature. For example, consider twelve alarms sounding simultaneously, then the unit sensing the fire/CO can be identified audibly and the premises evacuated or the problem quickly resolved.

- **Hush Switch** - used to silence nuisance alarms. This should only be pressed after the Locate switch has been used to identify the Smoke/Heat/CO alarm that triggered the system, and it is determined that no fire or CO is present.

### Do not Hush the alarms unless you are sure there is no fire/CO.

To Hush the alarms, press and release the Hush switch. The RF indicator red light will come on for 3 seconds to indicate that an RF signal is being transmitted.

• **Test / Manual Alarm Switch** – use to test the Smoke/Heat/CO alarms or bases **weekly**.

Switch the Test switch on. The RF indicator red light will come on for 3 seconds to indicate that an RF signal is being transmitted (The RF indicator red light will continue to flash once every 10 seconds while the Test switch remains on).

Then:- with an Ei161RC/Ei164RC/Ei166RC on an Ei168RC RadioLINK Base, the red light on the smoke alarm will flash rapidly (This indicates that the alarm has been tested in exactly the same way as if the test button of the alarm itself had been pressed. The alarm will also now be in Hush mode for the next 10 minutes).

- RadioLINK Smoke Alarms (Ei405 and Ei405TY) will alarm within 10 seconds, with the red light on the smoke alarm flashing rapidly (This indicates that the alarm has been tested in exactly the same way as if the test button of the alarm itself had been pressed. The alarm will also now be in Hush mode for the next 10 minutes).

- RadioLINK Smoke Alarms (Ei605W and Ei605TYW) when fitted with RadioLINK modules (Ei605MRF and Ei605MTYRF) will alarm within 10 seconds and the red light on the smoke alarm will flash. (This indicates that the alarm has been tested in exactly the same way as if the test button of the alarm itself had been pressed. The alarm will also now be in Hush mode for the next 10 minutes).

Turn the Test switch off. The RF indicator red light will come on again for a further 3 seconds to indicate transmission of the alarm cancel signal.

(Note: After 5 minutes with the Test switch on, the Remote Control Switch will stop sending RF alarm signals and therefore the smoke alarms will stop sounding. This prevents the batteries in the Remote Control Switch and in the smoke alarms being depleted).

#### 4. ALARM MEMORY FUNCTION

Using the Locate switch on the Ei411h or Ei412 remote control switch it is possible to identify which alarms have previously been activated. In a mixed Fire & Carbon Monoxide system the Ei412 remote control switch will also indicate if the source is Fire or Carbon Monoxide. This feature is of great benefit in systems with 3 or more alarm units when trying to

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identify the source of alarm from some time previously.

#### Remote Control Switch Memory Feature

1. In a Fire only system pressing the Locate button on the Ei411H will cause the Fire Light to flash rapidly for 2 Minutes.

2. In a mixed Fire & Carbon Monoxide system only system pressing the Locate button on the Ei412 will cause the Fire or Carbon Monoxide light to flash rapidly for 2 Minutes.

#### To use the alarm memory function:

1. To identify which units have previously alarmed press the Locate switch on the Remote Control Switch. The units which have previously sensed fire/CO will sound briefly.

This is particularly useful in tracking down the cause of nuisance alarms such as cooking fumes, steam from bathrooms or contaminated alarms .

2. Finally reset the memory again by pressing the Test switch on the Remote Control Switch.

#### To clear the memory:

1. To clear the memory of the Smoke/Heat/CO alarms press the Test switch on the Remote Control Switch until all the units have alarmed (This must be done if any of the RadioLINK units have been in alarm and whenever any of the RC Series Alarms on Ei168RC RadioLINK bases have been button tested).

2. To clear the memory on the Ei411H Remote Control Switch press and hold the Locate and Hush buttons together until the Fire light starts flashing. Release both keys, the memory is now cleared.

3. To clear the memory on the Ei412 Remote Control Switch press and hold the Locate and Hush buttons together until the Fire and CO lights start flashing. Release both keys, the memory is now cleared.

4. Any alarm now sensing fire/CO will alarm and the memory function will record this event.

#### 5. TROUBLESHOOTING RF LINK

If, when checking the RadioLINK interconnection, some of the alarms do not respond to the Remote Control Switch test, then:

(i) Ensure the Remote Control Switch has been activated correctly and the RF indicator red light has come on continuously for 3 seconds (with the Test switch in the 'ON' position) and then continues to flash red for 5 minutes).

(ii) Repeat House Code procedure (see section 2).

(iii) Relocate the Remote Control Switch and/or rotate/relocate the RadioLINK units. There are a

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number of reasons why the RadioLINK signals may not reach all the alarms in your system (see section 6 on "Limitations of Radio Frequency Signals"). Try rotating the units or relocating the units (e.g. move them away from metal surfaces or wiring) as this can significantly improve signal reception.

Rotating and/or relocating the units may move them out of the range of existing units even though they may have already been House Coded correctly in the system. It is therefore important to check that all alarms are communicating in their final installed positions. If units are rotated and/or relocated, we recommend that all units are returned to the factory settings (see the respective use and care instructions). Then House Code all units again in their final positions. The RadioLINK interconnection should then be checked again.

#### 6. LIMITATIONS OF RADIO COMMUNICATIONS

Ei Electronics radio communication systems are very reliable and are tested to high standards. However, due to their low transmitting power and limited range (required by regulatory bodies) there are some limitations to be considered:

(i) Radio transmitter equipment, such as the Remote Control Switch, should be tested regularly (at least weekly). This is to determine whether there are sources of interference preventing communication. The radio paths may be disrupted by moving furniture or renovations, and so regular testing protects against these and other faults.

(ii) Receivers may be blocked by radio signals occurring on or near their operating frequencies, regardless of the house coding.

The Remote Control Switch has been tested to EN 300 220-1 V1.3.1 (2000-09) in accordance with the requirements of EN 300 220V1.1.1 (2000-09). These tests are designed to provide reasonable protection against harmful interference in residential installations. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause interference to radio and television reception.

However, there is no guarantee that interference will not occur in a particular installation. Interference from the Smoke Alarm system can be identified by temporarily turning the whole system off. See figure 1 for this unit. Refer to the instructions supplied with the other products used for information on these. The user is encouraged to eliminate the interference by one or more of the following measures:

(i) Relocate the unit.

(ii) Increase the distance between the Remote Control Switch and the device being affected.

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(iii) Consult the supplier or an experienced radio/television technician.

#### 7. END OF LIFE

The Remote Control Switch is designed to last 10 years in normal use. However the unit must be replaced if:

1. The unit is over 10 years old (see 'replace by' label on the side of the mounting box).

2. If the Test switch fails to operate the alarms, or the RF indicator red light looks dim or fails to turn on, the battery in the unit may be depleted (excess use of the switch can shorten battery life).

The RF indicator red light flashing once every 40 seconds is an indication that the battery level is low and the unit should be replaced.

The Remote Control Switch must be switched off before disposing/recycling in accordance with the directive 2002/96/EC on waste electrical & electronic equipment (WEEE).

#### 8. GETTING YOUR REMOTE CONTROL SWITCH SERVICED

If your Remote Control Switch fails to work after you have read this leaflet contact Customer Assistance at the nearest address given at the end of this leaflet. If it needs to be returned for repair or replacement put it in a padded box with the battery disconnected. Send it to "Customer Assistance and Information" at the nearest address given on the Remote Control Switch or in this leaflet. State the nature of the fault, where the Remote Control Switch was purchased and the date of purchase.

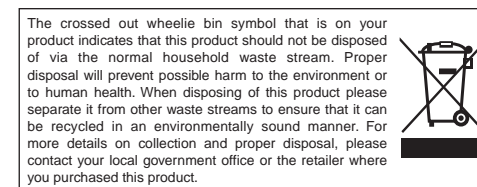
Note: It may be necessary, sometimes, to return a smoke alarm or other RadioLINK accessories (see their instruction leaflet) along with the Remote Control Switch, if you cannot establish which may be the cause of the problem.

#### 9. FIVE YEAR GUARANTEE (LIMITED)

Ei Electronics guarantees this product against any defects that are due to faulty material or workmanship for a five year period after the original date of consumer purchase. This guarantee only applies to normal conditions of use and service, and does not include damage resulting from accident, neglect, misuse unauthorized dismantling or contamination howsoever caused. Excessive use of the Remote Control Switch will shorten the battery life and is not covered. If this product has become defective it must be returned to Ei Electronics (see "Getting Your Remote Control Switch Serviced") with proof of purchase. If the product has become defective during

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the five year guarantee the manufacturer will repair/replace the unit without charge. This guarantee excludes incidental and consequential damages. Do not interfere with the product or attempt to tamper with it. This will invalidate the guarantee.



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